Regional Connector Transit Corridor
Final Environmental Impact Statement/ Final Environmental Impact Report

VOLUME F-2

RESPONSES TO COMMENTS ON THE DRAFT EIS/EIR

State Clearinghouse Number: 2009031043

RESPONSES TO COMMENTS ON THE DRAFT EIS/EIR

Introduction

The Regional Connector Transit Corridor Project Draft EIS/EIR was made available to identified stakeholders, agencies, and the general public for review and comment for a 45-day review period from September 3, 2010 through October 18, 2010. During the public review period, Metro held two public hearings to receive oral and written testimony on the Draft EIS/EIR from the general public.

Volumes F-2 and F-3 of this Final EIS/EIR contain copies of all written comments and public hearing transcripts, and provide written responses to all comments received on the Draft EIS/EIR. A total of 195 comment letters were received during the public review period, including written materials submitted at the two public hearings. Comments were also submitted in the form of oral testimony at those hearings. A total of 44 public testimonies were recorded at the public hearings. Overall, a total of 1,030 individual comments were received on the Regional Connector Transit Corridor Project Draft EIS/EIR.

The format for the responses to comments presents each comment letter/hearing transcript, bracketed into separate comments, followed by corresponding responses to each individual comment of that comment letter/hearing transcript. The comment letters/hearing transcripts and responses are organized and grouped into the following categories based on the affiliation of the commenter as follows:

Letter/Speaker ID Prefix	Description
AF	Federal Agency
AL	Local Agency
AR	Regional Agency
AS	State Agency
BU	Businesses and Business Groups
CN	Community Groups and Non-Profit Organizations
PC	Public Comment
PHA	The first public hearing held on September 28, 2010
PHB	The second public hearing held on October 4, 2010

To assist the reader's review and use of the responses to comments, two indices that provide the commenter name, affiliation, and comment letter/speaker identification designator (e.g., PC1) for each comment letter are provided below. The first index lists all the comment letters by comment letter/speaker identification designator and the second lists all of the comment letters alphabetically by commenter's last name.

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AL7	City of Los Angeles, BSL	Batikian	Silva	F2-102	F2-103
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Fishel	Alan	PHA1		F3-354	F3-422
Fong	Ronald M.	CN9	Asian Pacific Islander Small Business Program	F3-354	F3-422
Frevele	Dave	PC72		F3-178	F3-180
Frevele	Dave	PHA14	Electric Railway Historical Association	F3-388	F3-438
Fujita	James	PC1		F3-7	F3-8
Fukushima	Kristin	CN4	Japanese American Citizens League - Pacific Southwest District	F2-381	F2-383
Fung	Hank	PC103		F3-266	F3-268

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Furlong	Aaron	PC10		F3-26	F3-27
Garcia	Dan	PC42		F3-103	F3-104
Garibay	Darryl	BU21	Advanced Parking Systems	F2-230	F2-231
Garza	Bobby	PC101		F3-260	F3-262
Garza	Don	PHB18		F3-486	F3-509
Gonzalez	Rachel	PC14		F3-34	F3-35
Gove	John	PC43		F3-105	F3-107
Grace	Roger M.	BU1	Metropolitan News Enterprise	F2-134	F2-138
Grace	Roger M. and Jo-Ann W.	BU24	Metropolitan News Enterprise	F2-238	F2-283
Grace	Roger	PHB2		F3-466	F3-492
Grace	Jo-Ann	PHB4		F3-467	F3-494
Grewal	AnnMarie	PC41		F3-101	F3-102
Gross	Spencer	PC51		F3-124	F3-125
Handa	Toshio "Terry"	BU2	Japanese Chamber of Commerce of Southern California	F2-139	F2-140
Handa	Toshio "Terry"	PC115	Japanese American Cultural and Community Center	F3-307	F3-308
Hanks	Keith	AL8	Metro Gold Line Foothill Extension Construction Authority	F2-104	F2-105
Hashimoto	Frances	BU33	Mikawaya	F2-317	F2-321
Havens	Alan D.	PC70		F3-166	F3-173
Havens	Alan	PHA6		F3-368	F3-427
Havens	Alan	PHB7		F3-472	F3-497
Helfand	Morley	PC9		F3-24	F3-25

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Herrasti	Jose	PC12		F3-30	F3-31
Hirase	Kikue	PC81		F3-203	F3-204
Ho	Jean	PC25		F3-60	F3-61
Hogge	Richard	PC29		F3-69	F3-70
Hom	Japhet	PC57		F3-137	F3-138
Howard	Les	PC28		F3-67	F3-68
Howard	Les	PHA24	Gold Line Washington Alignment Advocacy Group	F3-414	F3-448
Hur	Jenny	PC79		F3-199	F3-200
Hymel	Chad	PC23		F3-56	F3-57
Iki	Nobuko	PC86		F3-214	F3-215
Ishida	Hiroshi Brian	BU31	J-WAVE Video	F2-309	F2-311
Ishii	Craig	CN2	Japanese American Citizens League - Pacific Southwest District	F2-372	F2-375
Johnston	Mark R.	PC37	NARP-TRAC-PRS	F3-86	F3-92
Kahn	Aaron	PC62		F3-148	F3-149
Kaji	Jon	PHA17	Nikkei Center, LLC Project	F3-396	F3-441
Kame	Gregory	BU14	Los Angeles Eye Care Optometry Group	F2-187	F2-189
Kassimir	Spencer V.	PC7		F3-20	F3-21
Kassimir	Spencer V.	PC20		F3-46	F3-48
Kawaratani	Kiyoshi	BU11	Rafu Bussan, Inc.	F2-178	F2-180
Kawaratani	Yukio	PC30		F3-71	F3-72
Kawaratani	Yukio	PC76		F3-187	F3-191

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Kawaratani	Yukio	PHA10		F3-475	F3-501
Kay	Greg	PHA4		F3-364	F3-425
Keating	Tim	BU25	LARABA,LaDADspace	F2-284	F2-285
Kerr	John	PHA23		F3-412	F3-447
Kim	Kun Ja	PC82		F3-205	F3-206
Kim	Suk Hee	PC93		F3-228	F3-229
Kito	Brian	BU26	Fugetsu-do Confectionery	F2-286	F2-287
Kito	Brian	PHA22	Fugetsu-Do Confectionery	F3-410	F3-446
Koh	Mija	PC85		F3-212	F3-213
Koh	Sang Soo	PC91		F3-224	F3-225
Kosinski	Ronald	AS2	State of California - Department of Transportation, District 7	F2-126	F2-127
Lee	Nelson	PC33		F3-78	F3-79
Levey	Sam	PC110		F3-289	F3-291
Lim	Teressa	PC39		F3-97	F3-98
Lin	Susan	PC75		F3-185	F3-186
Liu	Huasha	AR2	Southern California Association of Governments	F2-113	F2-120
Liu	Wilson	BU6	Cherry Land Company	F2-162	F2-164
Liu	Wilson	BU7	Ho-Narumi-Taira Investment Company	F2-166	F2-168
Liu	Wilson	BU8	Sho Tokyo Parking LLC	F2-169	F2-171
Liu	Wilson	BU9	Taira Investment Company	F2-172	F2-174
Liu	Wilson	BU10	Taira Services Corporation	F2-175	F2-177

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Liu	Wilson	BU20	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-205	F2-228
Liu	Wilson	PHA3	Little Tokyo Business Association and Little Tokyo Business Improvement District	F3-360	F3-424
Liu	Wilson	PHB14	Little Tokyo Business Association and Little Tokyo Business Improvement District	F3-480	F3-505
Lo	Derrick	PC63		F3-150	F3-151
Lu	Grace	PC65		F3-154	F3-155
Luu-Ng	Kim	PHA18	The Spice Table	F3-400	F3-442
MacMillan	Ian	AR1	South Coast Air Quality Management District	F2-107	F2-110
Magdaleno	George	PC16		F3-38	F3-39
Mandel	John	PC17		F3-40	F3-41
Marks	Wally	PC68		F3-160	F3-161
Martinez	Esperanza V.	CN17	Bus Riders Union	F2-446	F2-449
Maruyama	Yoshinobu	BU38	Shabu-Shabu House Restaurant	F2-338	F2-341
Maruyama	Yoshi	PHB19	Shabu Shabu House Restaurant	F3-488	F3-510
Mason	Matt	PC6		F3-18	F3-19
Masuda	Sotaro	BU13	Joy Mart Restaurant	F2-184	F2-186
Masuda	Etsuko	BU15	Teishokuya of Tokyo	F2-190	F2-192
Masuda	Etsuko	BU40	Teishokuya of Tokyo	F2-344	F2-345
Masuda	Sotaro	BU41	Joy Mart Restaurant	F2-346	F2-348
Mayeda	Kelly	CN3	Japanese American Citizens League - Pacific Southwest District	F2-377	F2-379
Mendiores	Rupert	PC45		F3-111	F3-112

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Metcalfe	Michael	PC84	Metcalf Associates	F3-209	F3-211
Mikuni	Peggy T.	BU4	Yamato Travel Bureau	F2-143	F2-152
Miyoshi	Ellen	PHB11		F3-476	F3-502
Mochizuki	John	PC80		F3-201	F3-202
Mochizuki	Noriko	PC87		F3-216	F3-217
Montijo	Jorge	PC32		F3-76	F3-77
Montijo	Jorge	PC105		F3-274	F3-276
Moore	David G.	PC54		F3-131	F3-132
Moore et. al.	Gary Lee	AL3	City of Los Angeles, DCP, BOE, BSL, DOT, CRA/LA	F2-21	F2-56
Mukai	Susan	BU39	Nishi Center	F2-342	F2-343
Myers	Joseph	PC49		F3-120	F3-121
Nakamura	Ken	BU17	Ken Nakamura, D.D.S.	F2-196	F2-197
Ng	Bryant and Kim Luu	BU22	The Spice Table	F2-232	F2-234
Nishimura	Sakiko	PC89		F3-220	F3-221
Nishimura	Howard	PC116	Little Tokyo Community Council & Tokyo Villa HOA	F3-309	F3-310
Nishio	Alan	PHA20	California Japanese American Community Leadership Council	F3-404	F3-444
Norton	Hilary	CN16	Fixing Angelenos Stuck in Traffic	F2-443	F2-445
Norton	Hilary	PHB1	Fixing Angelenos Stuck in Traffic	F3-465	F3-491
Obana	Yaeko	PC96		F3-234	F3-235
Oh	Jannie	PC66		F3-156	F3-157
Okamoto	Yuji	BU35	Hair Craft Salon	F2-326	F2-327

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Okamoto	Mike	PHA2	Japanese Chamber of Commerce	F3-356	F3-423
Orona	Phil	PC73		F3-181	F3-182
Ortiz	Lupe	PC67		F3-158	F3-159
Ozawa	Michael	CN12	Go For Broke National Education Center	F2-424	F2-427
Park	Jong Hyung	BU16	Favorite Snack	F2-193	F2-195
Percus	Allon	PC48		F3-118	F3-119
Pereyra	Jose	AS3	State of California - Public Utilities Commission	F2-128	F2-130
Perry	Jan	AL2	City of Los Angeles City Council	F2-17	F2-19
Perry	Patrick A.	BU32	Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Tribune Company	F2-312	F2-315
Philibosian	Robert	PHB5	Metropolitan News Enterprise	F3-467	F3-495
Poosti	Ali	AL6	City of Los Angeles - Department of Public Works, Bureau of Sanitation	F2-99	F2-101
Popov	Yuri O.	PC4		F3-14	F3-15
Potter	Meghan	CN5	Japanese American Citizens League - Pacific Southwest District	F2-385	F2-387
Reed	Bart	CN15	The Transit Coalition	F2-441	F2-442
Reed	Bart	PHB9	The Transit Coalition	F3-474	F3-499
Ricci	Thomas S.	BU36	Thomas Properties Group Inc.	F2-328	F2-332
Roderick	Trina	PC15		F3-36	F3-37
Rumme	Daigaku	CN21	Zenshuji Temple	F2-487	F2-488
Sachs	Arnold	PHB13		F3-479	F3-504
Sakamoto	Tadao	PC94		F3-230	F3-231
Sakamto	Yoshiko	PC97		F3-236	F3-237

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Salumbides	Romeo	PC38		F3-95	F3-96
Santana	Elana	PC59		F3-141	F3-142
Schatz	Carol E.	BU29	Central City Association of Los Angeles	F2-305	F2-306
Schumacher	Richard	PC74		F3-183	F3-184
Sein	Christina	PC71		F3-176	F3-177
Shinchi	Masumi	PC83		F3-207	F3-208
Simonian	Irene Tsukada	BU3	Bunkado, Inc.	F2-141	F2-142
Sitty	Rani	PC50		F3-122	F3-123
Smith	Jim	BU27	Japanese Village Plaza	F2-290	F2-291
Springer	Jay	PHA16		F3-394	F3-440
Springhetti	Joan	PC104		F3-270	F3-272
Springhetti	Joan	PHB10		F3-475	F3-501
Suzuki	Kenji	BU23	Suehiro Café, Inc.	F2-305	F2-306
Suzuki	Kenji	PHB6	Suehiro Café, Inc.	F3-471	F3-496
Tae	Susan	PC109	Savoy MTA Committee	F3-285	F3-287
Taiyoshi	Elaine	BU12	Little Tokyo Arts & Gifts	F2-181	F2-183
Takashima	Wilbur	PC69		F3-162	F3-163
Takayama	George	BU37	Rothenberg Sandy Architects	F2-336	F2-337
Todd	John R.	AL1	County of Los Angeles - Fire Department	F2-14	F2-16
Tong	Kam	PC13		F3-32	F3-33
Tooley	Eric	PC8		F3-22	F3-23

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Tower	Carlos	PC5		F3-16	F3-17
Volk	Robert D.	PC88		F3-218	F3-219
Wakayama	Tsutae	PC95		F3-232	F3-233
Walker	Daniel	PC46		F3-113	F3-114
Walker	Justin	PC106		F3-277	F3-279
Wang	Sidney	PC108		F3-283	F3-284
Watanabe	Bill	CN1	Little Tokyo Community Council	F2-351	F2-360
Watanabe	Bill	CN8	Little Tokyo Service Center	F2-395	F2-396
Watanabe	Bill	CN20	Little Tokyo Community Council	F2-477	F2-486
Watanabe	Bill	PHA9	Little Tokyo Community Council	F3-374	F3-430
Watson	Dianna	AS1	State of California - Department of Transportation, District 7	F2-123	F2-125
Westwater	Brady	PC102		F3-263	F3-265
Westwater	Brady	PHA15		F3-390	F3-439
Witte; Broad	William A.; Eli	BU28	Related/Companies, L.P./Grand Avenue L.A., LLC/The Broad Collection	F2-293	F2-300
Wright	Jerard	PC2		F3-9	F3-10
Wright	Jerard	PHB15		F3-482	F3-506
Yamaguchi	Jayson	PHA19	GetFit Little Tokyo	F3-402	F3-443
Yamauchi	Hiroshi	BU5	Koraku Group, Inc.	F2-155	F2-160
Yamauchi	Hiroshi	PHA21	Koraku Group, Inc.	F3-406	F3-445
Yamauchi	Hiroshi	PHB12	Koraku Group, Inc.	F3-477	F3-503
Yano	Akemi Kikumura	CN11	Japanese American National Museum	F2-420	F2-423

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Yasuda	Hiroko	PC78		F3-196	F3-197
Yeh	Paul	PC107	Savoy MTA Committee	F3-280	F3-282
Yen	Brigham	PC21		F3-50	F3-51
Yick	Andrew	PC53		F3-129	F3-130
Yoon	Young S.	PC40		F3-99	F3-100
Yoon	Simon S.	PC92		F3-226	F3-227
Zablen	Nathan	PHA7		F3-370	F3-428
Zhao	Yuqiao	PC36		F3-84	F3-85
		BU18	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-198	F2-201
		BU19	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-203	F2-204

Responses to Federal Agency Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
AF1	U.S. Department of Homeland Security – FEMA	Blackburn	Gregor
AF2	U.S. Environmental Protection Agency - Region IX	Dunning	Connell

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

September 29, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Dear Ms. Saltarelli:

This is in response to your request for comments on the Draft Environmental Impact Statement/Environmental Impact Report for the Regional Connector Transit Corridor Project in Los Angeles County, California.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County (Community Number 065043) of Los Angeles, Maps revised September 26, 2008. Please note that Los Angeles County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

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- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

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cont'd

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Los Angeles County floodplain manager can be reached by calling George De La O, Senior Civil Engineer, at (626) 458-7155.

If you have any questions or concerns, please do not hesitate to call Cynthia McKenzie of the Mitigation staff at (510) 627-7190.

Sincerely,

Gregor Blackburn, CFM, Branch ~~Chief~~
Floodplain Management and Insurance Branch

cc:
George De La O, Senior Civil Engineer, Los Angeles County Department of Public Works
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources, Southern Region Office
Cynthia McKenzie, Senior Floodplanner, CFM, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

AF1

Responses to Comments from the U.S. Department of Homeland Security – FEMA, Blackburn, Gregor

Response to Comment AF1-1

Metro has reviewed the referenced Flood Insurance Rate Maps, and will comply with all applicable federal regulations. Metro will coordinate with the Federal Emergency Management Agency as necessary throughout the project. Metro appreciates the additional floodplain management regulatory information.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

October 8, 2010

Mr. Ray Tellis
Federal Transit Administration
Los Angeles Metropolitan Office
888 S. Figueroa Street, Suite 1850
Los Angeles, California 90017

Subject: Draft Environmental Impact Statement for the Regional Connector Corridor Project, Los Angeles, California (CEQ # 20100352)

Dear Mr. Tellis:

The Environmental Protection Agency (EPA) has reviewed the above-referenced document. As described in the Draft Environmental Impact Statement (DEIS), this project proposes to construct a light rail connector in downtown Los Angeles that will directly link the tracks of the Metro Gold Line light rail system with the Metro Blue Line and future Metro Expo Line. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. EPA has rated this project as Lack of Objections (LO) (see enclosed *Summary of EPA Rating Definitions*). 1

We commend the Federal Transit Administration (FTA) and the Los Angeles County Metropolitan Transportation Authority (LACMTA) for seeking to improve public transportation service, especially in an area of high transit dependence, high traffic congestion, and impacted air quality. We believe this project, with the level of ridership anticipated, has the potential to increase use of multiple transit lines, reduce air quality and greenhouse gas emissions impacts from vehicles, and improve the overall livability of the Los Angeles region. 2

We are particularly encouraged to see the addition of the Fully Underground LRT Alternative, which was identified through community engagement and has evolved to best address community concerns (as evidenced by the Little Tokyo Community Council letter of support; Appendix EE). We believe, based upon the technical analysis presented in the DEIS, that this alternative is likely to provide for the greatest environmental benefit, while also uniquely addressing concerns that were raised during the public outreach effort. As such, we are supportive of the recommendation by Metro staff that the Fully Underground LRT Alternative be designated the Locally Preferred Alternative. 3

We also appreciate that the DEIS uses plain language and illustrative graphics to make the technical information more easily understood by the public. In particular, the comparison and 4

screening of alternatives provides the public and decision-makers with a clear summary of the benefits and impacts of the various alternatives. Our few concerns, as described below, focus on how the DEIS addresses air quality impacts and smart growth. 4 cont'd

Air Quality

Construction Emissions

EPA commends Metro for commitments in the DEIS to mitigate air quality impacts from construction, including:

- Retrofitting off-road engines with add-on control devices such as catalytic oxidizers and diesel particulate filters to reduce NOx and PM10 emissions.
- Requiring contractors to use up-to-date (2014 or later) equipment during project construction to control emissions of VOC and CO.
- Applying water or a stabilizing agent to exposed surfaces in sufficient quantity to prevent generation of dust plumes.
- Requiring contractors to utilize measures set forth in the South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.
- Covering all trucks hauling soil, sand, and other loose materials with tarps or other enclosures that would reduce fugitive dust emissions.
- Limiting traffic speeds on unpaved roads to 15 mph.
- Suspending operations on unpaved surfaces when winds exceed 25 mph.
- Suspending heavy equipment operations during first and second stage smog alerts.
- Covering/watering on-site stockpiles of debris, dirt, or rusty materials.
- Requiring contractors to utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.
- Prohibiting heavy-duty trucks from idling in excess of five minutes.
- Configuring construction parking to minimize traffic interference.
- Limiting construction activity that affects traffic flow on the arterial system to off-peak hours, as feasible.

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As the project is located in the South Coast Air Basin, which is classified as non-attainment for ozone and particulate matter (PM_{10} and $PM_{2.5}$), we recommend that the Final EIS (FEIS) provide commitments for the following additional mitigation measures to ensure air quality impacts from construction are mitigated to the greatest extent possible:

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm.
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with the above-stated commitments.

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- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations. 7
- Where appropriate, use alternative fuels such as natural gas and electric. 8

Administrative controls:

- Identify where implementation of mitigation measures is rejected based on economic infeasibility. 9
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emissions control devices for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) 10
- Identify sensitive receptors in the project area, such as daycare centers, senior housing, and hospitals, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners. 11

Localized Air Quality Impacts due to Increased Congestion

While the project may decrease air quality impacts and concentrations of mobile source air toxics (MSATs) in the area as a result of increased transit ridership and lower automobile use, localized impacts may result from increased congestion at intersections whose level of service would decline as a result of the project. This is particularly concerning for the At-Grade Emphasis LRT alternative which, after mitigation, would continue to have impacts to at least 15 intersections. EPA encourages FTA and LACMTA to consider whether sensitive receptors such as schools, hospitals, or residential facilities for the elderly, are located near those intersections, and if so, implement mitigation measures to protect the impacted populations. 12

Recommendations:

- Determine whether increased congestion at identified intersections would result in air quality impacts on any sensitive receptors in the vicinity of those intersections.
- If adverse impacts would occur, propose mitigation for those impacts and include this information and mitigation measures in the FEIS.

Smart Growth

While the project has great potential to enhance livability in the Los Angeles region, we believe it could be integrated with additional smart growth and sustainability principles, including many of those recommended as part of the HUD/DOT/EPA Partnership for Sustainable Communities (http://www.epa.gov/smartgrowth/partnership/). For additional information on smart growth as it relates to transportation infrastructure, see *Pedestrian and Transit-Friendly Design: A Primer for Smart Growth* (http://www.epa.gov/smartgrowth/pdf/ptfd_primer.pdf). 13

Recommendations:

- The FEIS should include discussion of actions that can be taken during project development to foster the implementation of smart growth strategies in the project area including coordination of different transit options to ensure multi-modal opportunities are available at all station locations, ensuring the ability to easily transfer between transit options, and improving pedestrian and bicycle facilities in the project area.
- We urge FTA and LACMTA to coordinate with local municipalities in the pursuit of zoning ordinances that encourage smart growth in the project area, thereby increasing the project's potential to enhance livability in the downtown Los Angeles area.

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Community Involvement

EPA commends FTA and LACMTA on their involvement with communities in the vicinity of the project area. It appears from the DEIS that coordination between government agencies, the Little Tokyo community, business owners, and other individuals has been ongoing and transformative throughout the project planning process. EPA encourages FTA and LACMTA to continue to consider the long-term needs of, and potential benefits to, the community in determining future project actions.

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Recommendations:

- The FEIS should evaluate all mitigation measures suggested by the Little Tokyo Working Group to determine their effectiveness and feasibility.
- Identify where implementation of community mitigation measures has been rejected and provide a discussion of the reasons for rejection.

We appreciate the opportunity to review this DEIS and look forward to future coordination on the project. When the FEIS is released for public review, please send one copy and one disc to the address above (mail code: CED-2). If you have any questions, please contact Clifton Meek, the lead reviewer for this project, at 415-972-3370 or meek.clifton@epa.gov.

Sincerely,

Connell Dunning

Connell Dunning, Transportation Team Supervisor
Environmental Review Office
Communities and Ecosystems Division

Enclosures:
Summary of EPA Rating Definitions

cc: Dolores Roybal-Saltarelli, Los Angeles County Metropolitan Transportation Authority
Ray Sukys, Federal Transit Administration

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category "1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the review may suggest the addition of clarifying language or information.

Category "2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are wit the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. T identified additional information, data, analyses, or discussion should be included in the final EIS.

Category "3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternativ analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. E believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they sho have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NE and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplementa revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referra the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

AF2

Responses to Comments from the U.S. Environmental Protection Agency - Region IX, Dunning, Connell

Response to Comment AF2-1

Comment acknowledged. Please refer to Responses to Comments AF2-2 through AF2-15, below, for detailed responses regarding concerns raised by the Environmental Protection Agency.

Response to Comment AF2-2

Comment acknowledged.

Response to Comment AF2-3

Comment acknowledged.

Response to Comment AF2-4

Comment acknowledged.

Response to Comment AF2-5

Comment acknowledged.

Response to Comment AF2-6

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site. Metro shall employ CARB anti-idling requirements during construction, which would reduce emissions generated from construction vehicles. Metro shall require the contractor to regularly perform unscheduled inspections of construction equipment and activities to ensure minimization of associated air quality impacts.

Response to Comment AF2-7

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Metro shall require ongoing maintenance and adherence to manufacturer's specifications for all construction equipment engines and vehicles.

Generally, the construction contractor will be required to address this concern.

Response to Comment AF2-8

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Contractors shall utilize electricity supplied by the Los Angeles Department of Water and Power (LADWP) rather than temporary diesel or gasoline generators, as feasible.

Response to Comment AF2-9

Metro will implement all necessary, economically feasible mitigation measures to reduce air quality impacts below significance thresholds. These are shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and will be shown in the Record of Decision as committed mitigation measures.

Response to Comment AF2-10

The use of add-on emissions control devices was identified as a mitigation measure in Section 4.5.4.1 of the Draft EIS/EIR, and has been incorporated into Section 4.5.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, of this Final EIS/EIR.

Response to Comment AF2-11

Metro has identified daycare centers, senior housing, hospitals (none close enough to the proposed alignment to be affected), and other sensitive receptors as part of the noise analysis in Table 4.7-6 of the Draft EIS/EIR and this Final EIS/EIR. Construction activity zones have been proposed in locations that would minimize noise impacts to nearby sensitive receptors, and this would minimize air quality impacts as well.

Response to Comment AF2-12

The traffic analysis for the Locally Preferred Alternative in Figure 3-16 of the Draft EIS/EIR showed that during project operation only one intersection (4th and Flower Streets) would have significantly increased congestion after mitigation(refer to Table 3-2 in this Final EIS/EIR for thresholds of significance), and only during the AM peak period. The At-Grade Emphasis LRT Alternative would have had significant impacts at 18 intersections, despite the implementation of mitigation measures, as shown in Figure 3-14 of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors did not identify this alternative as the Locally Preferred Alternative, and instead designated the Fully Underground LRT Alternative as the Locally Preferred Alternative on October 28, 2010. The CO hot spot analysis in Section 4.5.3.4.3 of the Draft EIS/EIR and this Final EIS/EIR concluded that concentrations of CO would not exceed the California Ambient Air Quality Standards or National Ambient Air Quality Standards for any of the alternatives.

Response to Comment AF2-13

Metro has reviewed the websites and appreciates the additional information. It is Metro's desire to encourage smart growth and sustainability where possible. Discussion of smart growth and opportunities to encourage multimodal transportation has been added to Section 4.1, Land Use and Development, of this Final EIS/EIR.

Response to Comment AF2-14

Metro has been coordinating with the City of Los Angeles to foster the project's potential to enhance livability in downtown Los Angeles. Several smart growth supportive ordinances are already in place in the project area.

Response to Comment AF2-15

Metro appreciates the commendation from EPA. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR includes feasible mitigation measures proposed by the Little Tokyo Working Group. All mitigation measures listed in Section 4.17.5 of the Draft EIS/EIR have been included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, except for direct monetary compensation for business losses. This mitigation measure was not included due to the infeasibility of verifying business losses due to Regional Connector construction activities. However, the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative does include measures to address impacts to businesses. It is Metro's goal to minimize impacts to businesses in Little Tokyo throughout the construction process. Additionally, refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR would avoid cut and cover construction on 2nd Street, and reduce impacts to businesses.

The EPA has been added to the distribution list to receive (at the address stated in the letter) a disc of this Final EIS/EIR. In an effort to meet Metro's sustainability goals, hard copies of this Final EIS/EIR were not included in distributions to agencies.

Responses to Local Agency Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
AL1	County of Los Angeles - Fire Department	Todd	John R.
AL2	City of Los Angeles City Council	Perry	Jan
AL3	City of Los Angeles, DCP, BOE, BSL, DOT, CRA/LA	Moore et. al.	Gary Lee
AL4	County of Los Angeles - Department of Public Works	Duong	Toan
AL5	County of Los Angeles - Department of Public Works	Farber	Gail
AL6	City of Los Angeles - Department of Public Works, Bureau of Sanitation	Poosti	Ali
AL7	City of Los Angeles, BSL	Batikian	Silva
AL8	Metro Gold Line Foothill Extension Construction Authority	Hanks	Keith

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

October 5, 2010

Ms. Dolores Roybal Saltarelli
Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Ms. Saltarelli:

NOTICE OF AVAILABILITY FOR THE REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT, DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT, LOS ANGELES (FFER #201000177)

The Notice of Availability has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. We have no comments at this time. 1

LAND DEVELOPMENT UNIT:

1. The County of Los Angeles Fire Department, Land Development Unit has no comments on this project. This project is located entirely in the City of Los Angeles; therefore, the City of Los Angeles Fire Department has jurisdiction concerning this project and will be setting conditions. 2

2. Should any questions arise, please contact the County of Los Angeles Fire Department, Land Development Unit, Inspector Juan Padilla at (323) 890-4243.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division includes erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. 3

2. Due to the limited amount of information included in your request, we are unable to respond to specific potential impacts.

3 cont'd

HEALTH HAZARDOUS MATERIALS DIVISION:

4

1. The Health Hazardous Materials Division has no objection to the proposed project.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

JOHN R. TODD, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

JRT:ss

AL1

Responses to Comments from the County of Los Angeles - Fire Department, Todd, John R.

Response to Comment AL1-1

Comment acknowledged.

Response to Comment AL1-2

Comment acknowledged. Metro will continue ongoing coordination with the City of Los Angeles Fire Department.

Response to Comment AL1-3

This list has been reviewed and all applicable areas of concern were addressed in the following sections of the Draft EIS/EIR and this Final EIS/EIR: Section 4.8, Ecosystems/Biological Resources; Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials; Section 4.10, Water Resources; Section 4.12, Historic Resources; and Section 4.15, Safety and Security. All associated impacts in the County of Los Angeles jurisdiction, if any, were adequately analyzed in the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment AL1-4

Comment acknowledged.

JAN PERRY
COUNCILWOMAN
NINTH DISTRICT
PRESIDENT PRO TEMPORE

City Council
of the
City of Los Angeles
City Hall

ENERGY AND THE ENVIRONMENT
CHAIR

INFORMATION TECHNOLOGY &
GOVERNMENT AFFAIRS
VICE-CHAIR

HOUSING, COMMUNITY &
ECONOMIC DEVELOPMENT
MEMBER

PUBLIC SAFETY
MEMBER

October 5, 2010

Ms. Dolores Roybal-Salterelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza (MS 99-22-2)
Los Angeles, California 90012

RE: Draft Environmental Impact Study/Report
Downtown Regional Connector

Dear Ms. Roybal-Salterelli:

Of the choices for construction on this project, the only one that I support is the Fully Underground LRT Alternative. 1

The Metro Gold Line Eastside Light Rail Extension opened in November 2009. This opening followed a long and difficult period of time under which the Alameda Street right-of-way was under construction for the ramp coming down from the Santa Ana Freeway (CA 101) bridge and the Little Tokyo/Arts District station at First/Alameda streets.

In addition, as a result of construction, the City still does not have use of the First Street Bridge westbound lanes. This condition will likely persist until late 2011 and possibly 2012. There is no snapshot of what the traffic patterns will be once the bridge's westbound lanes open and the motorists and Gold Line riders interact at the Gold Line station.

I support the Little Tokyo Community Council's letter on this topic, dated September 27, 2010. This is the most impacted region on the route and this is the community that has endured the Gold Line work program issues. 2

This proposed project will have a devastating impact on the Little Tokyo community a critical part of Council District 9. The infrastructure in the Financial Core, on Bunker Hill, in the Civic Center and in Little Tokyo will be torn up for a very long time. This will impact pedestrians, motorists, bicycle riders and truck traffic in a negative way. Residents along the alignment will have to deal with noise, dirt and associated negative impacts. There will be times that streets, sidewalks and other parts of the infrastructure will either have reduced availability or have no access at all. 3

The Little Tokyo business community has reservations about this project as a "cut and cover" project and how construction will impact their businesses. They are concerned about the taking of all or part of Block 6 (First/Second/Alameda streets and Central Avenue) and the loss of those parking spaces. They are concerned about a loss of revenue. They are concerned about the time line and how to deal with the inevitable delays that can't be calculated at this time. 4

The impact may be nothing short of devastating. As one of the few remaining Japan towns left in the United States, Little Tokyo/Los Angeles is a valuable tourist destination and an iconic local hub for the local and regional Japanese and Japanese-American community. I share the community's concern for the impacts they will suffer as a result of the construction process.

I understand the overall benefit to the County by the construction of this proposed project. However, the fact that it is being built as an infill project instead of as a part of a long-term, comprehensive design for fixed rail travel is disturbing. It will be extremely important that we develop a plan that will manage the demands that a project of this scope will produce. 5

I look forward to hearing MTA's reaction to the letters offered on the Draft EIR/EIS process as well as the solutions that MTA has to offer to try to mitigate the issues raised. 6

Thank you for your careful attention to this important matter.

Sincerely,

Jan Perry
Councilwoman, Ninth District

JP/gf

AL2

Responses to Comments from the City of Los Angeles City Council, Perry, Jan

Response to Comment AL2-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL2-2

Comment acknowledged. Please refer to Response to Comment AL2-3 below for a summary of construction impacts on Little Tokyo. A description and analysis of traffic conditions with the 1st Street bridge fully open is provided in Chapter 3 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment AL2-3

Metro acknowledges the seriousness of construction impacts in Little Tokyo and other impacts in the project area, which is why Metro is proposing mitigation measures. In a letter sent in February 2010, the Little Tokyo Community Council commended Metro for adding the Fully Underground LRT Alternative (now the designated Locally Preferred Alternative) to the Draft EIS/EIR to address the community's concerns. Among the improvements cited in the letter was the elimination of the at-grade train crossing at 1st and Alameda Streets. Table 4.18-2 of the Draft EIS/EIR and Table 4.18-1 of this Final EIS/EIR specified that construction activities in the Little Tokyo area consist of cut and cover activities in the vicinity of the new underground station, each lasting from 12 to 24 months. Some of these activities could be performed simultaneously to reduce the overall duration of construction. During this time, Metro will implement mitigation measures to protect the Little Tokyo community and its businesses. Other cut and cover areas include the 2nd/Broadway station site, the 2nd/Hope Street station site, and Flower Street from Wilshire Boulevard to 4th Street. Cut and cover construction would involve temporary concrete decking that could be placed over the cut following the first part of excavation to allow traffic to pass above. Other than the temporary decking, cut and cover activities would not be visible above grade. The 2nd/Hope Street station site could also be constructed using sequential excavation method (SEM). Application of the SEM would have less surface interruption than cut and cover, since the excavation would be performed mostly underground and accessed via a vertical shaft. The other portions of the tunnel would be excavated using tunnel boring machines to minimize disruption, noise, dirt, and other negative impacts. Street and sidewalk access would be maintained continuously throughout construction.

Refinements have been made to the Locally Preferred Alternative since publication of the Draft EIS/EIR. These refinements would reduce the extent of cut and cover activities and associated street lane and sidewalk closures. No cut and cover would occur on 2nd Street in Little Tokyo, and the tunnel under Flower Street between 3rd and 4th Streets would be excavated using a tunnel boring machine instead of cut and cover.

Response to Comment AL2-4

As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce the amount of cut and cover activities in the Little Tokyo area, and to reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. Most of the parking spaces on the block would be retained, and Metro would provide temporary replacement parking during construction as needed. The construction durations shown in Table 4.18-2 of the Draft EIS/EIR and Table 4.18-1 of this Final EIS/EIR are worst-case estimates that include the potential for delays, and Metro is working to shorten them. Metro recently completed a similar tunneling project on the Eastside Extension Phase 1 within schedule and budget.

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro will enact the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to offset adverse business and community impacts during the construction process.

Response to Comment AL2-5

The Regional Connector is part of SCAG's 2008 Regional Transportation Plan as a strategic transit system expansion project. The project is being built as part of a comprehensive long-term public transit design. The purpose of the project is to improve the region's public transit service and mobility by connecting the light rail service of the Metro Gold Line to the Metro Blue Line and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

Response to Comment AL2-6

Comment acknowledged. Metro has responded to all comments received on the Draft EIS/EIR during the public comment period, which are contained herein as part of this Final EIS/EIR. Please refer to Responses to Comments AL2-1 through AL2-5, above, for detailed responses regarding concerns raised by the commenter. Please refer to the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative in Chapter 8 of this Final EIS/EIR regarding mitigation measures that will be implemented as part of the Locally Preferred Alternative.

October 18, 2010

Mr. Art Leahy, Chief Executive Officer
Los Angeles County Metropolitan Transportation Authority (MTA)
One Gateway Plaza
Los Angeles, CA 90012

RE: CITY OF LOS ANGELES COMMENTS ON MTA'S REGIONAL CONNECTOR DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT (DRAFT EIS/EIR)

Dear Mr. Leahy,

The City of Los Angeles is pleased to provide comments on the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Regional Connector project. City departments have reviewed the DEIS/DEIR document and have provided detailed comments and feedback for your consideration. For your convenience, the city departments providing comments are referenced in parenthesis in case your staff and/or consulting team needs to follow-up. The following city departments contributed to this review effort:

- Department of City Planning (DCP)
- Department of Public Works, Bureau of Engineering (BOE)
- Department of Public Works, Bureau of Street Lighting (BSL)
- Department of Transportation (DOT)
- Community Redevelopment Agency of the City of Los Angeles (CRA/LA)

Los Angeles recognizes the importance of the Regional Connector as an integral link in the region's growing transit network. The City looks forward to continuing working closely with MTA in the upcoming design and construction phase of the project.

Sincerely,

Gary Lee Moore
City Engineer, BOE

Michael LoGrande
General Manager, DCP

Ed Ibrahimian
General Manager, BSL

Rita Robinson
General Manager, LADOT

Christine Essel
Chief Executive Officer, CRA/LA

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Alternatives Evaluation

Preferred Alternative

Of the three Build Alternatives studied, the City supports and prefers MTA's Locally Preferred Alternative (LPA), the "Fully Underground Alternative," because it promotes many of the City goals that were discussed in the scoping letter. It preserves the City's street network and allows use of City streets by a variety of users, including pedestrians, bicycles and vehicles. Because it is underground, it does not have the same potential to introduce visual blight, disrupt the function of the streets and the economic vitality of the area but rather serves to enhance the transportation network and create opportunities to reinforce community character and identity through thoughtful station design and location and careful planning of future station area developments on potential joint development sites. Additional comments are provided on the At-Grade and Underground Emphasis Alternatives; however, there are a number of concerns related to these alternatives which are further described below (DCP).

LADOT supports selection of the Fully Underground LRT Alternative as the Locally Preferred Alternative because it provides the best fit for the project's transportation purpose and need, community concerns, and the constraints of the existing street system. It balances the goals of optimizing regional connectivity, reducing transit travel times and serving Downtown's major centers and communities while minimizing impacts on cars, buses, trucks, bicycles and pedestrians (DCP, LADOT). 1

Since a primary focus of the City is on the urban form and design and functionality of Downtown, the City is interested in remaining actively engaged in the ongoing design of the proposed stations and providing input on the use and design of the parcels and the spaces that are leftover after construction is over. the City is interested in working with MTA to develop criteria for the use and design of resulting joint development sites in order to ensure a land use intensity and urban form that is appropriate to the context of the various Downtown neighborhoods in which the stations will be located (DCP). 2

In the description of the "Initial Screening of Alternatives" given on page 2-5, a reference is made to "urban design assessments." Please elaborate on the criteria utilized in performing these assessments (DCP). 3

The Fully Underground LRT Alternative is also superior to the Underground Emphasis LRT Alternative because it maintains the existing design of the intersection of First St. and Alameda St. in Little Tokyo, rather than creating an underpass for Alameda St. under First St. Traffic circulation and access to adjacent institutional and commercial land uses at this intersection would be compromised with the Underground Emphasis LRT Alternative (LADOT). The Fully Underground LRT Alternative provides stations in the Financial District, Civic Center, Bunker Hill and Little Tokyo, as recommended previously by LADOT (LADOT). 4

CRA/LA lauds the proposed below-grade station in Little Tokyo that would accommodate the convergence of the Regional Connector's operations from the Exposition and Blue Lines with the Pasadena and East Los Angeles Gold Line operations (CRA/LA).

5

At-grade Alternative

The City continues to have concerns about the At-Grade alternative for many of the reasons described above. In particular, the frequency of trains using the system will invariably have a significant impact on the built form of Downtown Los Angeles and pedestrian, bicycle and vehicular circulation at street crossings, which are closely spaced along 2nd Street between Hill and Los Angeles Streets. Similarly, the City has concerns about the Underground Emphasis Alternative which requires a grade separation of the 1st and Alameda intersection and will disrupt the built form and circulation patterns in Little Tokyo. As a result the City urges MTA to move forward with the Fully Underground LRT Alternative (DCP). 6

In the description of vehicle and pedestrian circulation under the At-Grade Emphasis LRT Alternative on page 2-21, the report makes reference to "other urban design treatments" that could be employed for wider portions of the roadway. 7

The At-Grade Emphasis LRT Alternative is problematic because the Downtown street system cannot easily accommodate the large number of trains that will travel on the Regional Connector once MTA's LRT system is built out. With tie-ins to the MTA Blue Line, MTA Gold Line Extension and the Expo Line, light rail train volumes on the Regional Connector could reach approximately 36 trains per hour, assuming 10 minute headways in each direction for every line. With an at-grade alignment, this would mean an LRT train passing every 2 minutes through intersections, bringing cross street traffic operations, including transit buses and emergency vehicles, to a virtual standstill along the route. Grade separation will also allow trains to run faster, without constant slowing at signalized intersections, and eliminates the safety and security problems of at-grade train operations in Downtown, where marches, rallies and parades are common. Grade separation also allows for the preservation or widening of sidewalks along the LRT route (LADOT). 8

Transportation

Traffic Analysis and Significant Impacts

Under the Underground Emphasis LRT Alternative, seven intersections would have a significant, adverse change in level of service, while four intersections would have a beneficial change in level of service. Many of the proposed mitigations are not acceptable to LADOT for the reasons described below. LADOT recommends that the traffic impact mitigation program be revised to first evaluate multi-modal solutions that reduce vehicle trips and support transit use, before introducing traditional intersection-level mitigation measures. For example, the mitigation program should propose pedestrian enhancements that facilitate access to Downtown MTA Rail stations. It should also evaluate "first mile/last mile" solutions such as bicycle improvements (e.g., secure bike parking, bike sharing kiosks at strategic locations, bike lanes) and parking spaces for shared cars at MTA transit stations (LADOT). 9

The mitigation measures proposed at the intersections of Flower St./Fourth St. and Flower Street/Fifth St. may be feasible; however, LADOT cannot accept them without reviewing conceptual drawings first. These drawings should indicate the proposed new lane dimensions and whether any on-street parking spaces would be eliminated. Street and sidewalk widths should be consistent with the new Downtown Street Standards adopted by the City Council last year (Section 3.3.4.2.2 – Traffic Circulation) (LADOT, DCP). 10

The traffic impact analysis for this project identified 85 intersections for detailed analysis. For the TSM Alternative, nine of these intersections would be significantly impacted. The At-Grade Emphasis LRT alternative is expected to result in 26 significant impacted intersections. The Underground Emphasis LRT alternative is expected to result in seven significantly impacted intersections. The Fully-Underground LRT Alternative would significantly impact only three intersections (LADOT).

Many of the proposed mitigation measures for the significantly impacted intersections are not acceptable to LADOT for the reasons described below. Mitigations proposed at the intersections of Hill St./Second St., Los Angeles St./ Temple Street, Judge John Aiso Street/Temple Street and Spring Street/Fourth Street may be feasible; however, LADOT cannot accept them without reviewing conceptual drawings first. These drawings should indicate the proposed new lane dimensions and whether any on-street parking spaces would be eliminated. Street and sidewalk widths should be consistent with the new Downtown Street Standards adopted by the City Council last year (See Section 3.3.3.2.2 – Traffic Circulation). 11

LADOT has reviewed the traffic mitigation measures proposed to offset the impacts of the various project Alternatives. However, conceptual mitigation drawings were not 12

included in the traffic analysis, so it is unclear whether the proposals are feasible. Nonetheless, based on our review of the impacted intersections, it appears that many of the proposed mitigations are infeasible and unacceptable (LADOT). 12 cont'd

For example, at several intersections, the study proposes to convert existing left-turn lanes into shared left-through lanes. Exclusive turn lanes have been installed by the City to enhance traffic safety and meet existing traffic demands, so removing them should not be considered for mitigation purposes. LADOT also would like to reduce the use of dual right-turn lanes, especially in Downtown, to minimize potential vehicular/pedestrian conflicts. The proposed installation of dual right-turn lanes as a mitigation measure is therefore not recommended unless pedestrian volumes are low enough to support the removal of crosswalks that would be affected by the dual turn lanes (LADOT). 13

Per LADOT traffic study guidelines, lane re-striping alone is not considered an acceptable mitigation measure. Lane re-striping needs to be coupled with a traffic signal upgrade or other physical improvement. Similarly, changes to traffic signal timing are not acceptable as stand-alone mitigation measures. At several intersections, the DEIS/DEIR indicates that the project will "optimize the signal splits" to reduce traffic impacts. However, the traffic signal system in Downtown has already been adjusted to allow for maximum real-time optimization of the traffic signal timing (LADOT). 14

Under the TSM Alternative, fifteen (15) intersections would have a significant, adverse change in level of service. Many of the proposed mitigation measures for the significantly impacted intersections are not acceptable for the reasons described herein. The mitigations proposed at the intersections of Spring St./Third St., Flower St./Wilshire Bl., Broadway/Temple St. and Alameda St./Los Angeles St. may be feasible; however, LADOT cannot determine their feasibility or accept these mitigation measures without reviewing conceptual plans first. These drawings should indicate the proposed new lane dimensions and whether any on-street parking spaces would be impacted. Street and sidewalk widths should be consistent with the new Downtown Street Standards adopted by the City Council in 2009 (Section 3.3.2.2 –Traffic Circulation Impacts). 15

Under the At-Grade Emphasis Alternative, the entrances for the Flower St./Sixth St./Fifth St. station would require a lane to be removed on Flower St. between Fourth and Sixth Streets. As such, level of service at intersections along this segment of Flower St. would worsen (LADOT). 16

Installation of the at-grade LRT tracks on Second St. between Hill St. and Los Angeles St. would turn Second St. into a limited-access street for emergency vehicles and local access only, resulting in traffic diversion to First St., Third St. and Fourth St. and contributing to the number of project-impacted intersections in Downtown. It would 17

permanently disrupt the local street system which serves this increasingly vibrant urban neighborhood and is not acceptable (LADOT). 17 cont'd

Traffic signals along the LRT alignment would require modifications for at-grade rail operations to provide adequate time for trains to safely clear intersections before traffic could progress. As a result, 26 intersections would experience significant adverse impacts during the PM peak under the At-Grade LRT Alternative (LADOT) 18

Bicycles and Pedestrians (General)

The City is concerned about impact of the At-Grade Alternative on plans for a bike route on Flower Street. (This concern also applies to the Underground Emphasis and the fully Underground Alternative which would eliminate a lane on Flower Street from 4th to 6th Streets to accommodate the underground station. See more discussion below). In particular, proposed re-striping mitigations on Flower (4th, 5th, and 6th) and 2nd Street at Alameda (underground emphasis only) may not be consistent with the City's plans to stripe for bike lanes along these streets. Please refer to the Downtown Street Standards recommendations and Draft 2010 Bike Plan for more details (DCP). 19

In the summary of operational impacts of the Underground Emphasis and Fully Underground Alternatives on "other modes" (see pages 3-44 and 3-51), the document refers to "urban design concepts" that could improve pedestrian and bicycle safety and flow. Please give examples or reference documents explaining specific urban design concepts or examples of concepts. Additionally, the following statement should be revised to be more specific about alignment of station entrances to face toward major streets where possible. "At station areas, pedestrian station entrances would be located and face toward major signalized intersections, where pedestrian crosswalks are currently in place." (DCP). 20

As stated previously, LADOT recommends that the traffic impact mitigation program be revised to first evaluate multi-modal solutions that reduce vehicle trips and support transit use, before introducing traditional intersection-level mitigation measures. For example, the mitigation program should propose pedestrian enhancements that facilitate access to Downtown MTA Rail stations. It should also evaluate "first mile/last mile" solutions such as bicycle improvements (e.g., secure bike parking, bike sharing kiosks at strategic locations, bike lanes) and parking spaces for shared cars at MTA transit stations (LADOT). 21

In summary, consistent with new LADOT traffic study guidelines, the mitigation program should give first priority to trip reduction and transit-supportive measures such as improved pedestrian and bicycle connections to stations, car/bicycle sharing facilities, secure bicycle parking, kiss-n-ride facilities and first mile/last mile transportation connections. Intersection capacity and traffic safety improvements should also be evaluated at key intersections to alleviate known bottlenecks and to enhance at-grade transit service and operations. Stand-alone changes to traffic signal timing are not acceptable as mitigation measures; instead, the project should propose traffic signal upgrades such as left-turn phasing, new signal controllers, additional system loops, closed-circuit television cameras, etc. Please coordinate with LADOT to determine where such traffic signal upgrades are needed (LADOT). 22

We also recommend that the DEIS/DEIR include an analysis and discussion of the project's relationship to the draft 2010 "LA City Bicycle Plan", which can be found at www.labikeplan.org. Though still a draft, the Plan is near adoption and contains recommendations for new proposed/ potential bike lanes, as well as additional proposed Bicycle Friendly Streets. A number of these additional facilities can help improve access to transit stations and should be considered in the project analysis. The Regional Connector project should incorporate these bicycle facilities as appropriate and feasible. Note that the plan is still in draft form and has yet to be adopted by the Council and Mayor (DCP and LADOT). 23

During the final design phase, site- and street-specific Worksite Traffic Control Plans should be developed in conjunction with LADOT's Temporary Traffic Control office to accommodate vehicular, pedestrian and bicycle movements (Section 3.3.3.1 – Construction Impacts). 24

Construction of the At-Grade Emphasis Alternative LRT tracks, stations and proposed Alameda St. underpass at Temple St. would require temporary closure of lanes on Flower St., Hope St. in the vicinity of General Thaddeus Kosciuszko Way, Main St., Los Angeles St., Temple St., Second St. and Alameda Street over and above the number of lanes that would be permanently removed to accommodate the LRT tracks. Track construction along Second St. would close affected segments to through traffic in both directions. This would reduce roadway capacity and modify existing traffic patterns as drivers bypass congested areas. Similar to the construction traffic control measures used in the MTA Gold Line Extension to East LA project, traffic flow patterns should be re-routed appropriately with clearly signed and marked detours (LADOT). 25

Conflicts between trains and pedestrians may also occur at the tunnel portal on Flower St. south of Third St. where pedestrians could attempt to enter the tunnel. Signing, surveillance and protective barriers should be utilized at tunnel portals to reduce the possibility of unauthorized tunnel entry. Safety issues associated with unauthorized pedestrian crossings of the tracks should be addressed during design to minimize possible conflicts. A pedestrian bridge could also be constructed between the Second St./Hope St. station and upper Grand Ave. to improve the pedestrian linkage to Bunker Hill (LADOT). 26

The sidewalk width along Flower St. between Sixth St. and Third St. should be maintained or widened as needed to accommodate passengers accessing the station at this location. In general, station entrances should be easily accessible from nearby signalized intersections where pedestrian crosswalks are available (LADOT). 27

Where the tracks cross Alameda St. at-grade at Temple St., the proposed pedestrian bridge would reduce potential conflicts between pedestrians, trains and motor vehicles. However, safety issues associated with unauthorized pedestrian crossings of the tracks at this location should be addressed during design to minimize possible conflicts (See 3.3.3.2.4 – Other Modes). 28

In addition to addressing safety concerns, the project should support the City's goals to maintain existing pedestrian connections and to maintain and improve existing patterns of pedestrian circulation as much as possible on the streets (DCP). 29

The reduction in roadway capacity for automobiles along the LRT at-grade alignment will divert local traffic to adjacent streets, impacting bicycle traffic in surrounding communities. Potential bicycle impacts would be significant under this Alternative, but no mitigation measures are proposed in the DEIS/DEIR (LADOT). 30

Parking

Portions of the At-Grade Emphasis LRT Alternative alignment would utilize existing roadway for tracks, surface street stations, underground station entrances and a roadway underpass on Alameda St. Traffic lanes and/or parking spaces along these segments would be reduced, resulting in the loss of 80 metered parking spaces and loading spaces and 3 bus zones. These parking and loading space losses would result in a significant, adverse impact on the Little Tokyo community. The impact is considered to be less than significant with implementation of mitigation measures, but no long-term parking mitigation measures are presented in the DEIS/DEIR. The impact should be mitigated with nearby replacement metered parking, loading zones and bus zones (See Section 3.3.3.2.3 – Parking) (LADOT). 31

Traffic Control

During the final design phase for construction, site- and street-specific Worksite Traffic Control Plans should be developed in conjunction with LADOT's Temporary Traffic Control office to accommodate vehicular, pedestrian and bicycle movements (Section 3.3.4.1 – Construction Impacts) (LADOT). 32

Construction of the Underground Emphasis Alternative would require temporary closure of lanes on Flower St., Second St., Alameda St., First St. and Hope St. in the vicinity of General Thaddeus Kosciuszko Way. This would temporarily reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas. Similar to the construction traffic control measures used in the MTA Gold Line Extension to East LA project, traffic flow patterns should be re-routed appropriately with clearly signed and marked detours (Section 3.3.4.1.2 – Traffic Circulation) (LADOT). 33

Construction of the proposed Alameda Street underpass at First Street, in the Underground Emphasis Alternative, would reduce roadway capacity for extended periods during construction. To maintain two through travel lanes in each direction, the two-way left turn median would be eliminated in the mid-block area as would the exclusive right and left turn lanes at the intersection approaches. The north and south intersection lane configurations would consist of a shared through/right lane and a shared through/left lane for the segment of Alameda St. between Temple Street and Second Street (Section 3.3.4.1.2 – Traffic Circulation) (LADOT).

This proposed lane configuration creates the potential for vehicular conflicts between left turners and opposing through movements on Alameda St. Travel times for buses along this segment of Alameda St. would also likely increase due to increased traffic congestion. The project should mitigate this impact by proposing to split the signal phasing to minimize the potential for operational conflicts and prevent the formation of queues by vehicles waiting for a gap in opposing traffic to make a left turn. Also, bus stops within the construction area may need to be temporarily relocated to prevent vehicular delays while passengers are boarding. 34

To accommodate pedestrian station entrances to the underground station at Fifth St., one traffic lane would be removed on the east side of Flower St. between Sixth and Fourth Streets. Intersection impacts should be mitigated per LADOT standards, described above, along this segment of Flower Street (Section 3.3.4.2.2 – Traffic Circulation) (LADOT). 35

The proposed Alameda St. underpass at First St. is expected to result in traffic diversion to adjacent streets because some at-grade turns from Alameda St. to First St. would be 36

eliminated. The DEIS/DEIR should analyze this potential impact (Section 3.3.4.2.2 – Traffic Circulation) (LADOT). 36 cont'd

Portions of the Underground Emphasis LRT Alternative would use existing roadway to create station entrance areas and an underpass on Alameda St. At these locations, there would be a reduction in traffic lanes and/or parking spaces, resulting in the loss of 29 metered parking spaces and loading zones and three bus zones. The impact is considered to be less than significant with implementation of mitigation measures, but no long-term parking mitigation measures are presented in the DEIS/DEIR. The impact should be mitigated with nearby replacement metered parking, loading zones and relocated bus zones (Section 3.3.4.2.3 – Parking) (LADOT). 37

Where the tracks cross Alameda St. at First St. at-grade, the optional pedestrian bridge would reduce potential conflicts between pedestrians, trains and motor vehicles. However, safety issues associated with unauthorized pedestrian crossings of the tracks at this location should be addressed during design to minimize possible conflicts (Section 3.3.4.2.4 – Other Modes) (LADOT). 38

The sidewalk width along Flower St. between Sixth St. and Third St. and along Second St. at the station entrances should be maintained or widened as needed to accommodate passengers accessing the station. In general, station entrances should be easily accessible from nearby signalized intersections where pedestrian crosswalks are available (Section 3.3.4.2.4 – Other Modes) (LADOT). 39

Adequate pedestrian lighting should be provided at station entrances for safety and security (Section 3.3.4.2.4 – Other Modes) (LADOT). 40

The proposed underpass at Alameda and First Streets is expected to divert some local traffic to adjacent streets, such as Central Ave., impacting bicycle traffic in Little Tokyo. Potential bicycle impacts would be significant under this Alternative, but no mitigation measures are proposed in the DEIS/DEIR. 41

The DEIS/DEIR should include an analysis and discussion of the project's relationship to the draft 2010 LA City Bicycle Plan, which can be found at www.labikeplan.org. Station areas should be equipped with bicycle lockers and racks in order to create opportunities for first mile/last mile bicycle connections for travelers (Section 3.3.4.2.4 – Other Modes) (LADOT). 42

Construction would require temporary closure of lanes on Flower St., Second St., Alameda St., First St. and Hope St. in the vicinity of General Thaddeus Kosciuszko Way. This would temporarily reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas. Although this potential 43

impact would be temporary, it would be significant and unavoidable. Similar to the construction methods used for the MTA Gold Line Extension to East Los Angeles project, traffic flow patterns should be re-routed appropriately with clearly signed and marked detours since travel times and intersection operating conditions along these roadways would be impacted (Section 3.3.5.1.2 – Traffic Circulation) (LADOT). 43 cont'd

Construction of the proposed Alameda St. portal north of Temple St. is a major concern since only one through travel lane in each direction would be maintained on Alameda St between Aliso St. and Second St. . during construction. This would be a potentially significant impact. Outside of this segment, all three through travel lanes in both directions on Alameda St. would remain open but would still be subject to intermittent closures (Section 3.3.5.1.2 – Traffic Circulation) (LADOT).

The southbound lane configuration at Alameda St. and Temple St. would consist of a shared through/right lane and a shared through/left lane. Consequently, travel times for vehicles traveling along this segment of Alameda St. would be expected to increase, and operating conditions for the intersection at Alameda St. and Temple St. are expected to deteriorate with increased delays. Existing signal phasing should be coordinated accordingly to split phasing to minimize conflicts between southbound left turns and the opposing northbound through movements and to prevent the formation of queues resulting from vehicles waiting for a gap in the opposing traffic to make a left turn (Section 3.3.5.1.2 – Traffic Circulation) (LADOT). 44

Under the Fully Underground LRT Alternative, three intersections would have a significant, adverse change in level of service, while three intersections would have a beneficial change in level of service. Many of the proposed mitigations are not acceptable to LADOT for the reasons described under General Comments, above. The mitigation measures proposed at the intersections of Flower St./Fourth St. and Flower Street/Fifth St. may be feasible; however, LADOT cannot accept them without reviewing conceptual drawings first. These drawings should indicate the proposed new lane dimensions and whether any on-street parking spaces would be eliminated. Street and sidewalk widths should be consistent with the new Downtown Street Standards adopted by the City Council last year (Section 3.3.5.2.2 – Traffic Circulation) (LADOT). 45

To accommodate pedestrian station entrances to the underground station at Fifth St., one traffic lane would be removed on the east side of Flower St. between Sixth St. and Fourth St. Intersection impacts should be mitigated per LADOT standards along this segment of Flower St. The proposed striping change at the intersection of Flower St. and Sixth St. is not recommended because it would create a trap lane for the #4 lane, which is currently striped as a shared through/right turn lane (Section 3.3.5.2.2 – Traffic Circulation) (LADOT).. 46

After construction of the station portals northeast of Alameda St. and First St., existing traffic lanes would be restored. However, the signalized intersection at First St. and Hewitt St. would be removed, eliminating the ability to cross First St. at that location. This is not identified as a significant impact but will affect local circulation patterns (Section 3.3.5.2.2 – Traffic Circulation) (LADOT). 47

No at-grade train operations would pass through the intersections of First St./Alameda St. and Alameda St./Temple St., and traffic signals would operate under that assumption (Section 3.3.5.2.2 – Traffic Circulation) (LADOT).. 48

Street and sidewalk widths should be consistent with the new Downtown Street Standards adopted by the City Council last year (Section 3.3.5.2.2 – Traffic Circulation) (LADOT). 49

Although this Alternative would be fully grade-separated, portions of the alignment would utilize existing roadway for underground station pedestrian entrances. Thirteen (13) metered parking spaces would be displaced along Flower St. between Fifth St. and Third St. The impact is considered to be less than significant because there are privately-owned parking garages in the vicinity and the project will improve transit access. These are not sufficient reasons to dismiss the significance of the impact, which should be mitigated with nearby replacement metered parking spaces (Section 3.3.5.2.3 – Parking) (LADOT). 50

The sidewalk width along Flower St. between Sixth St. and Third St. and along Second St. at the station entrances should be maintained or widened as needed to accommodate passengers accessing the station. In general, station entrances should be easily accessible from nearby signalized intersections where pedestrian crosswalks are available (Section 3.3.5.2.4 – Other Modes) (LADOT). 51

Signing, surveillance and physical barriers should be utilized at the tunnel portal on the site bounded by First St., Alameda St., Second St., and Central Ave. to reduce the potential for unauthorized pedestrian entry into the tunnel (LADOT). 52

In addition to addressing safety concerns, the project should support the City's goals to maintain existing pedestrian connections and to maintain and improve existing patterns of pedestrian circulation as much as possible on the streets. The project should avoid creating new impediments to pedestrian circulation (DCP). 53

Adequate pedestrian lighting should be provided at station entrances for safety and security (Section 3.3.5.2.4 – Other Modes) (LADOT). 54

Environmental and Mitigation

Pre and post video required, with rehabilitation or replacement required for damaged sewers, MH's, lateral connections and laterals (BOE). 55

Settlement

The settlement shall be limited to 0.25 inch and the following is required (BOE):

- Mitigate by relocating sewers, grouting and soil stabilization.
- Settlement detection required for all major and primary outfalls that are crossed, or paralleled.
- Surveyed settlement detection required for all small sewers and MHs crossed or paralleled. 56
- Cracked pipes, broken joints, induced sags in sewers are not acceptable.
- Replacement of clay sewer pipe damaged by tunnel or surface construction does not constitute a betterment.

Rehabilitation or replacement of damaged T-Lock protected sewers does not constitute a betterment.

Street Lighting

Street along and adjacent to a proposed LRT tracks and subway will require lighting improvements to meet current City of Los Angeles Standards. BSL will require installation of new lighting system in public areas that have no existing lighting before construction of the LRT. BSL will require increase of existing lighting levels for safety reasons. All new street lighting improvements will be installed with LEDs (light emitting diodes) light source (BSL) 57

Any major street work that takes place should give consideration to the impact of existing public lighting and requirements to future lighting improvements. Any modifications of the present street layout (stripping, parking lane removal, right of way acquisition, bike lane, etc.) and circulation of traffic/pedestrians most likely will involve redesign and reconstruction of the lighting system for the new configuration (BSL). 58

Any street/pedestrian lighting improvements that create new assessments or increase existing assessments to property owners will require the Proposition 218 process to take effect. This process not only requires community participation but also their approval throughout a ballot process. This process typically takes about 6 months to complete. The lighting assessment is paid by property owners through the County Property Tax Bill. Assessments must be confirmed by City Council before commencing construction of the street lighting system (BSL). 59

If the project impacts area that contain expensive Historical/Ornamental poles in the City of Los Angeles, these Historical/Ornamental street lights shall be retained and improved (refurbished and upgraded) in the proposed project area. If there are new street lights to be installed along with the existing Historical/Ornamental street lights, BSL will require new street lights for these area to match the existing Historical/Ornamental street lights (BSL). 60

Temporary street lighting is required as part of this project. Number of temporary units installed and the spacing between adjacent locations will match the existing street lighting system in service on a one for one basis. 61

Park and Ride facilities and parking lots design shall include public street pedestrian lighting improvements in and around facilities that meet current BSL standards. 62

Safety

During construction mitigation language should protect pedestrian and bicyclists routes. The routes should be provided for on all sides of streets. Sidewalk and street closures should be limited to late night hours. If sidewalk or street closures are required for longer periods of time, directional signage and lighting is to be maintained (DCP). 63

On pages 4-291 and 4-297, under Safety and Security, reference is made to other urban design methods as follows: "MTA would use other urban design methods to enhance pedestrian safety. This would include creating pedestrian queuing and refuge areas around proposed stations. Adding wide crosswalks would also enhance pedestrian mobility and safety. No disproportionate safety and security impacts are expected." Please describe, give examples or reference language that describes what is meant by "urban design methods" in this statement. Similar language is used on page 4-303, with respect to visual and aesthetic resources, stating that "urban design measures would incorporate the ventilation structure into the existing street environment in a compatible way." Please describe, give example or reference language that describes what is meant here (Section 4.17 – Environmental Justice) (DCP). 64

Land Use

For all the 2nd/Hope Station alternatives, MTA should eliminate the pedestrian bridge over Hope Street. While enhanced pedestrian facilities are desirable, a pedestrian bridge will take people off of the sidewalk and limit the vitality of the street environment. The 2nd and Hope station presents the opportunity to re-activate this area of Bunker Hill by introducing active uses that will enliven an area that is currently a dead zone and one that is pedestrian unfriendly because of an existing street network that is designed for cars rather than people. In addition to the reconfiguration of the street network in that area (proposed as part of the project), another design feature could be to design a crosswalk at Hope/GTK Way intersection and provide a stairway instead up to the planned plaza above GTK Way. This solution would ensure an active pedestrian presence on the street and still help to bridge the topography between Hope Street and Grand Avenue to create a direct pedestrian connection from the future station (DCP). 65

Pedestrian entrances for the 2nd/Hope Station should be located both at 2nd and Hope Streets and 3rd and Flower Streets to extend the reach of the station and allow users access from the north and the south and to help compensate for the substantial topographic changes on the station site (DCP). 66

A mid-block street crossing on Flower Street from Bunker Hill Towers (between 2nd and 3rd) and, potentially, a direct pedestrian undercrossing into the station are appropriate to improve pedestrian circulation from Figueroa Street and the concentration of residential and office uses to the west. Such a connection would align with and taking advantage of an existing pedestrian easement through the Bunker Hill Towers site, between Flower and Figueroa, helping to break down the scale of this large city block. The DEIS/EIR indicates that there are some property impacts to Bunker Hill Towers on the west side of Flower Street (to tennis courts and other facilities); however, the nature of these impacts is unclear. A clarification is requested (DCP). 67

Another important pedestrian facility and design consideration is the need for a connection from 3rd and Flower Streets (near the 3rd Street tunnel) to 3rd and Hope Streets atop Bunker Hill. This is a critical gap in the pedestrian network that constrains circulation in the area, since there are presently no east-west public walkways that link Flower to Hope between 2nd Street and 5th Street. A new pedestrian connection alongside the 3rd Street tunnel would not only facilitate improved pedestrian circulation Downtown, but also improve access to the proposed 2nd/Hope Station by giving users new access to the station from the south and west and helping to reduce distances for pedestrians to access the station. Pedestrian entrances at 2nd/ Hope and 3rd/Flower are necessary to provide access to users coming from both the north and the south. This pedestrian connection would provide another important linkage to the 3rd and Flower station entrance (DCP). 68

In addition to its primary role in assuring that Gold, Blue and Exposition Line trains are swiftly conveyed, we believe that the Regional Connector has an important local objective to serve as well, and that is to effectively connect the cluster of vital cultural 69

and civic institutions at the top of Bunker Hill—the Music Center, Disney Hall, the Colburn School of Music, the Museum of Contemporary Art, the future Broad art museum and the top of the Civic Center's "Great Park"--with the regional transit system. Great care should therefore be taken to insure that the Regional Connector's 2nd/Hope station portal connects patrons to these destinations in a manner appropriate to their prominence (CRA/LA). 69 cont'd

Multiple entrances at the 2nd/Broadway (Underground alternatives) station location are desirable to best serve transit users. Station entrances should be located at both at 2nd and Spring Streets and 2nd Street and Broadway (DCP). 70

In order to expand the reach of 2nd/Central Station (Fully Underground alternative) to users coming from various directions and to span this large block, pedestrian entrances to the station should be located at both 1st and Alameda Streets, and at 2nd Street and Central Avenue. Also, consider that 2nd and Alameda is the closest access point to the Arts District and the growing residential base there. In light of this, the 2nd Street entrance may be best located midblock between Central Avenue and Alameda Street, in order to improve access for Arts District residents and employees (DCP). 71

Given the ultimate potentials of the site that MTA will have acquired, we believe that the Little Tokyo Station should provide additional knockout panels that future development could take advantage of to connect transit patrons to 2nd Street as well (CRA/LA). 72

One potential way to minimize impact to historic resources in the vicinity of this station is to consider retaining and/or relocating the Senor Fish building in a manner that it can serve as a station entrance at 1st and Alameda (DCP). 73

Another important potential pedestrian improvement that will enhance the pedestrian orientation near the station is to consider how to minimize pedestrian crossing distance with the widening of 1st Street to accommodate tracks in center of street (DCP). 74

The intersection configuration proposed for the 1st and Alameda Street intersection for the 1st/Alameda (Underground Emphasis) alternative will limit pedestrian flow across the intersection. The proposed underpass on Alameda Street would make Alameda Street function like an automobile and truck expressway through the area and create an inhospitable pedestrian environment. The proposed pedestrian overcrossing would inhibit pedestrian activity at the street and present challenges to creating the active street environment that currently exists along 1st Street west of Alameda. This desirable environment has the potential to extend to the east side of 1st Street with development of the Mangrove Estates site at the northeast corner of 1st and Alameda Streets and with other proposed projects farther east on the south side of 1st Street (in particular redevelopment of the Megatoys site). The City's land use plans for the area aim to improve the connections and built form east and west of Alameda Street that allow for pedestrian friendly and active ground floor uses to create a vibrant, transit oriented, mixed use environment in proximity to the proposed transit station (DCP). 75

Concerns about the impacts to the Temple/Alameda (At-Grade Emphasis alternative) are similar to those discussed above in reference to the 1st/Alameda (Underground Emphasis alternative) (DCP). 76

Additionally, the City encourages MTA to retain the 5th and Flower Station. This proposed station is located between Bunker Hill and the Financial Core, both districts which contain a variety of intense land uses including office buildings, residential towers, hotels and the Central Library. The 5th and Flower Station can attract a wider array of transit users and relieve overcrowding at the 7th/MTA Center Station, which is currently the only station option for employees and residents of and visitors to these key Downtown districts. Land use plans under development for Bunker Hill will involve further infill and intensification of Bunker Hill with the goal of breaking down existing superblocks and creating a stronger streetwall, where appropriate, to foster a more pedestrian-friendly street environment. A station at 5th and Flower will be consistent with and help promote these long-term goals for the area. The City believes the station at 5th/Flower (All Alternatives) is an integral one because of all of the important land uses in close proximity and asks that MTA keep it in the final design (DCP). 77

The City asks that MTA consider additional measures to mitigate the impacts that At-Grade Emphasis Alternative would have to the historic 2nd Street tunnel when the line surfaces, requiring a new portal through the southern wall of the tunnel. Additional mitigations could include improvements to restore historic fabric, where missing. 78

In reference to potential operations-related mitigation measures on page 4-68, please modify the language as shown below (Section 4.4 – Visual and Aesthetic Impacts) (DCP). 79

- "Urban design measures would be developed" with DCP staff during preliminary engineering drawings for design of stations to integrate the LRT facilities such as station entrances, venting and emergency backup power stations into each community as appropriate.

- Urban Design elements will address enhancements in the public realm, station entrance location, entrance design, connection to bicycle and pedestrian circulation routes, integration into the surrounding area, way finding, catenary poles, materials, or station colors. MTA will coordinate with the DCP staff.

On pages 3-60 and 3-61, proposed mitigations for impacted intersections are summarized; however, there is not a clear discussion of how these mitigation measures would affect pedestrian and bicycle circulation after implementation. Please include a full discussion of possible impacts and mitigations (Section 3.4 – Mitigation Measures) (DCP). 80

Business and Significant Landmarks

While the Fully Underground (as well as the Underground Emphasis) Alternative substantially eliminates some of the serious impacts of the At-Grade Alternative, it will necessitate the dislocation of the present occupants of the block immediately south of Japanese American National Museum. While not as densely built up as some parts of Little Tokyo, there are nonetheless a good number of businesses that would be affected. A few are large, most are small; some are iconic, long-time parts of the community's fabric, some are more recent but nonetheless valued, and a few with considerable promise are just about to open after years of planning and investment. It is the opinion [of the City/of CRA/LA] that none of these businesses can afford to be permanently lost to the Little Tokyo community.

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The City believes that the first priority for the Little Tokyo station portal is to make an effective connection with the civic and business assets along First Street. To effectively marshal the broad resources and expertise needed to retain, relocate and re-situate displaced businesses, to preserve those businesses affected by construction, and to effectively support and respond to resident concerns, the City requests that MTA commit to forming a joint MTA/City business retention and construction impact management team. Given that entities such as CRA have a long history in the Downtown community and will be continuing to exercise broad stewardship long after MTA has completed construction of the Regional Connector, we believe that such a team will be an essential strategy to realizing the Regional Connector with the minimum amount of physical damage and economic disruption (CRA/LA).

Construction

Circulation

While the potential construction impacts of the At-Grade Emphasis LRT Alternative would be temporary, they would be significant and unavoidable (Section 3.3.3.1.2 – Traffic Circulation). 82

Under the At-Grade Emphasis Alternative along Alameda Street, maintaining two through travel lanes in each direction during construction would require that the two-way left turn median be in the mid-block area, as would the exclusive right-turn and left-turn lanes at the intersection approaches. Northbound and southbound lanes along Alameda St. approaching Aliso St./Commercial St., Temple St. and First St. would consist of a shared through/right-turn lane and a shared through/left-turn lane. This proposed lane configuration creates the potential for vehicular conflicts between left turners and opposing through movements on Alameda St. The project should mitigate this impact by proposing to split the signal phasing to minimize the potential for operational conflicts and minimize the formation of queues by vehicles waiting for a gap in opposing traffic to make a left turn (LADOT). 83

During the final design phase of the project, site and street specific Worksite Traffic Control plans need to be completed (LADOT).

Plans should be developed in cooperation with LADOT to accommodate vehicular, pedestrian and bicycle movements (LADOT). 84

While this will achieve more efficient and much less disruptive transit operations, there will understandably be a concern as to how to best contain the short-term disruptions from station and tunnel construction (CRA/LA).

Design Standards

Because of the new, higher-density residential development recently built around the site of the Little Tokyo and Bunker Hill stations, as well as potentially adjacent the Historic Core station, there will need to be very special attention given to the mitigation of noise and dust impacts from construction that might impact Downtown residents. In particular, as desirable as night-time construction activity might be, any night-time activity adjacent residential development must be very strictly controlled so that residents are not disrupted by noise, light and dust from construction activities. 85

The City would urge MTA to avoid in-street, cut-and-cover construction wherever bored tunnel construction might be feasibly accomplished. Where station construction invariably requires cut-and-cover construction, taking advantage of off-street construction opportunities should be pursued where possible. Where in-street cut-and-cover construction cannot be avoided, MTA is urged to apply the very best practices in 86

promptly covering over these construction operations with well-designed decking systems to minimize community and traffic disruption (CRA/LA). 86 cont'd

While the City strongly encourages MTA to fully exploit the potentials of bored tunneling to limit surface disruption to streets and adjacent properties, we would also urge that very special attention be given to preventing any subsidence of adjacent structures, utilities and improvements that might result from tunneling and MTA construction. This may be a particular concern at the intersection of 2nd and Central, where the Regional Connector tunnels have to make a very difficult turn; there may be any number of other locations of risk along the alignment as well and all should be evaluated for application of "best practice" counter measures (CRA/LA). 87

Spoil haul routes and procedures generally and from Little Tokyo station excavation particularly should be configured to minimize to the impacts on Downtown residents and businesses. To the extent possible, MTA should look to sites besides Little Tokyo without residential concentrations to remove tunnel spoil. CRA/LA staff would look forward to working closely with MTA contractors' site management teams on plans, programs and initiatives that will help minimize the adverse short-term effects of MTA construction (CRA/LA). 88

Construction impacts - within the City R/W, all cut and cover, street improvements, facility restorations, underground utility relocations, etc. will require to be restored to City Municipal Codes, Design Standards, Standard Plans, and special construction provisions such as Street S-470-0, Standard Street Dimensions, Special Order No. 003-0201, Requirements For Deep Excavation Construction And Installation of Tiebacks on Sites In or Adjacent To Public Ways, and Special Order No. 04-0408, Underground Utility Location Guidelines (BOE). 89

Haul Routes, currently the Transportation Construction Traffic Management Committee (TCTMC) Impact Area and the Street of Significances for this project has not been established at this time; however, we suggest the project staff to meet with the review committee members to discuss the potential haul routes and their requirements. 90

Road Closures and worksite traffic control plans are need to be reviewed by the TCTMC. Road closures may require the Board of Public Works approval and/or City Council approvals (BOE). 91

Numerous wet and dry utilities were not identified on the conceptual drawings (Appendix II Conceptual Engineering Drawings). This project will impact/disrupt the existing service to the users and utilities will need to be relocated. We would like to know the mitigation to the impact/disruption and how the utilities will be restored (BOE). 92

Attached are Bureau of Engineering current and future projects that are within the vicinity of the proposed alignments. Please review them for potential impacts to your project (BOE). 93

Concerns and Requirements:

This tunnel crosses major outfalls, primary sewers, and small sewers.

- This tunnel parallels primary sewers, small sewers.
- MTA needs to provide a detailed listing of all sewer crossing points. Each sewer segment should be identified by its upstream and downstream SIMMS number.
- MTA needs to provide a detailed listing of all sewer parallels. Each sewer segment should be identified by its upstream and downstream SIMMS number.
- MTA will need to include relocation, bypass, or support in place plans for all sewers impacted by station or other open pit construction.
- Use only City of Los Angeles approved materials for sewer construction or rehabilitation.
- Meet all requirements of the Master Cooperative Agreement between CLA and MTA including sewer encasement and relocation requirements.
- All existing sewer wye connections are to be replaced in sewers that are re-located.

94

All existing sewer wye connections are to be reinstated in sewers that are re-habilitated. Access to the sewer is a property right that runs with the land and may not be arbitrarily taken away without compensation (BOE).

Sewers are NOT foundations for anyone's construction. Bridge piers and all foundations shall be designed so that the influence line for soil loading shall pass below and outside of all sewer easements. The City will not accept any construction that requires the City to shore any future easement excavation to support exterior imposed loading, or to prevent damage to an outside structure which would have been obviated by extending the piers, foundations, piles or other support (BOE).

Sewer plans and detailed information may be obtained from the Navigate LA Website (BOE).

Sewer connection laterals are private sewers owned by the landowner. Access and maintainability may not be removed without approval and provision of an alternate means of maintenance access. Maintain access and maintainability for all HCs and HC laterals (BOE).

Structures or appurtenant features built over the sewer easement or right of way are considered to be temporary structures that may be moved or demolished for necessary sewer repair or maintenance. Any floor shall be built to span and bridge the sewer easement or right of way and to be self supporting with foundations extending below the sewer easement or right of way (BOE).

Plans prepared for sewer rehabilitation or replacement must be prepared with sewer system stationing, not with street stationing (BOE).

94 cont'd

Street Lighting

Temporary street lighting is required as a part of this project. Number of temporary units installed and the spacing between adjacent locations will match the existing street lighting system in service on a one for one basis (BSL). 95

Park and Ride facilities and parking lots design shall include public street and pedestrian lighting improvements in and around the facilities that meet current BSL standards (BSL). 96

Business Impacts

Provisions must be made in insure that these businesses not only survive the construction of the Regional Connector, but have the opportunity to prosper as before (CRA/LA). 97

In addition to those businesses due to be directly displaced by the Regional Connector's construction, there will likely be a fair number of businesses and property owners bordering significant Regional Connector construction that, absent significant counter-measures and mitigation initiatives, could be very seriously affected. These impacts are likely to be particularly pronounced around the Little Tokyo station block excavation as well as other cut-and-cover construction sites. It should be re-iterated that there is no basis for these businesses suffering disproportionately from the Regional Connector's construction and it is essential that broad and well-managed mitigation and counter measures be undertaken to preserve the health and viability of potentially affected businesses and properties during construction (CRA/LA). 98

Given the recent commitments for the new Broad art museum southwest of 2nd Street and Upper Grand Avenue, CRA/LA believes that a special working group needs to be convened to coordinate and integrate the design of the Bunker Hill station, the Upper Grand Avenue portal connection and the construction of this museum. While the joint County-City Grand Avenue Project's schedule is currently in abeyance, it is important that all of the Bunker Hill station's aspects fully anticipate and prepare for the 3.6 million square feet of mixed-used development to be centered on Upper Grand Avenue as identified in the Bunker Hill Design for Development (2008) and the Central City Community Plan (CRA/LA). 99

Other Comments

On pages 1-2, 1-23, and 1-32, please modify the language referencing local land use documents to specify: The adopted General Plan Framework Element, Central City Community Plan, Downtown Design Guidelines and Modified Street Standards (DCP). 100

The Office of Historic Resources concurs with the boundaries of the Area of Potential Effects (APE) determined through the Section 106 review process. Staff has also reviewed the exhaustive survey of conducted of buildings, structures, and sites within the APE and the findings made for historic resource evaluation. Of the various types of historic resources identified, Historic-Cultural Monuments (HCMs) are locally designated resources directly reviewed by the Office of Historic Resources and subject to CEQA review. Buildings and sites on the California Register of Historical Resources and/or National Register of Historic Places are also reviewed by the Office of Historic Resources and also subject to CEQA evaluation (DCP).

As the preferred alternative, the Fully Underground LRT Alternative appears to have the least significant impacts/adverse effects to identified historic resources. Notwithstanding the possibility of potential construction or operational impacts, the nature of this alternative being almost entirely below ground minimizes impact historic resources within the project area (DCP).. 101

However, under the Fully Underground LRT Alternative, the buildings and site most physically impacted occurs at 1st and Alameda in Little Tokyo, adjacent to the Little Tokyo National Historic Landmark District. The DEIS/EIR has determined that a c.1913 commercial building at 422 E. 1st Street is eligible for the California Register of Historical Resources (3CS). Under this alternative, the subject building would be acquired and demolished (DCP).

Section 4.12.1.3.4.1 (CEQA Impact Analysis for Historical Resources), states that "the property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports Building would constitute a substantial adverse change that would impair the significance of the historical resource." Mitigation measures 4.12.1.4.1 (HABS/HAER photo-documentation) and 4.12.1.4.5 (Memorandum of Agreement) are cited to reduce the impacts to a less than significant level under CEQA (DCP).

However, Section 15126.4 of the California Environmental Quality Act (CEQA) states:

> In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur. [14 CCR § 15126.4(b)]

Technical Assistance Series #1 of the California State Office of Historic Preservation (2001) further states that "in most cases the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of an historical resource" (DCP).

A memorandum of agreement developed between the FTA and MTA in consultation with the California State Office of Historic Preservation can only address National Register-eligible historic resources anticipated to experience adverse effects. This memorandum of agreement would be unenforceable to address significant impacts to eligible historic resources under CEQA, such as this property. As such, it appears inappropriate to cite Mitigation Measure 4.12.1.4.5 as sufficient mitigation to offset the demolition of this building (DCP).

101 cont'd

Although not the preferred alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative would adversely affect the 2nd Street tunnel (constructed 1924), found to be eligible for the National Register of Historic Places. Beyond the potential mitigation measures cited in Sections 4.12.1.4.2-5, the Office of Historic Resources suggests exploring a mitigation measure that would restore missing architectural elements to this historic resource, particularly its balustrade and light fixtures. Similar mitigation measures and reconstruction efforts have been implemented with projects involving historic bridges in the City of Los Angeles (DCP).

102

Appendix

Please describe, give examples or reference language that describes what is meant by "urban design enhancements" to be used 1,000 feet around station and portals, as indicated on pages 7, 33, 52, and 55 (Appendix K: Description of Construction) (DCP). 103

Mirroring the CEQA analysis discussion involving mitigation measures for impacts on historic resources, in Appendix X (Cultural Resources-Built Environment Technical Memorandum Section), mitigation measures MM-BE-1 (HABS/HAER documentation) and MM-BE-5 (Memorandum of Agreement) are cited to reduce the impacts to a less than significant level under CEQA. [Page 161] (DCP).

The Office of Historic Resources is compelled to point out the need for clarification with the tables included in the Cultural Resources-Built Environment Technical Memorandum section (DCP). 104

The heading "No Historic Properties Affected" appears to be referring only to National Register of Historic Places-eligible resources. As such, the historic resource located at 1st and Alameda and its proposed demolition are cited as not being a historic property even though it is cited as eligible for the California Register of Historical Resources. This table should be clarified to avoid any possible misconception of how the project is defining "historic properties" (DCP).

The Bureau of Engineering has reviewed all the plans and drawings in the EIR/EIS document and the following comments need to be addressed in the Final Environmental document (BOE): 105

- Drawings C-101 to C106, C-301 to C-306, C-401 to C-405, C-501 to C-505
    - Please call out all active & abandoned utility crossings in profiles. See City as-builts and substructure maps.
    - Call out all active & abandoned SD & Sewer ownership and as-built number. 106

- Use the following substructure maps for reference:

Sub-96-14	Sub-77-15
Sub-96-10	Sub-78-8
Sub-96-6	Sub-78-9
Sub-96-2	Sub-78-10
Sub-75-15A	Sub-79-4
Sub-75-15	Sub-79-5
Sub-75-12	Sub-79-7
Sub-75-8	Sub-80-1
Sub-75-9	Sub-80-2
Sub-77-4	Sub-80-3
Sub-77-5	Sub-63-11
Sub-77-6	Sub-63-10
Sub-129-213-8	Sub-63-5

107

- Use the MTA Gold Line Eastside Extension Composite Utilities Rearrangement Plan As-Builts (U-105, U-106, U-107, U-201) for the utilities located along 1st, Alameda and Temple Street.

108

- Drawings C-101, C-301, C-401, C-501
    - Several conflicting SD are missing in the plan and profile. Please show and call out the existing 33" RCP in Flower St. Show and call out the existing 30" RCP in Wilshire Blvd, 24" & 53" RCP along 6th St, 12" & 24" RCP along 5th St and 72" RCP in 4th St.

109

    - Several conflicting Sewers are missing in the plan and profile. Please show and call out the existing 21, 20 & 15-inch sewer along Flower Street. Show and call out the existing 12" sewer along Wilshire, 8 & 10" sewers along 6th St, 12 & 15" sewer along 5th St and 30" sewer in 4th St.

110

    - Please note that the proposed alignment conflicts w/ existing 20", 21" and 30" primary sewers.

111

    - SD shown in profile is 84" RCP between 6th St & 5th St, and 72" RCP from 5th to 4th St. Please call out accordingly.

112

- Drawings C-102
    - Several conflicting SD are missing in the plan and profile. Please show and call out the existing 18" RCP in Olive St, 33" RCP in Flower St, 45" & 24" RCP in 3rd Street, 24" in Hope St, two-12" RCP in 2nd St and the two-24" RCP in Grand Ave.

113

- Show and call out the conflicting 15" sewer in Flower St and the 8" Sewer in 3rd Street. 114

- Drawings C-302, C-402, C-502 115
  - Call out 2nd Street on plan
  - Several conflicting SD are missing in the plan and profile. Please show and call out the existing 33" RCP in Flower St, 45" & 24" RCP in 3rd Street, 24" in Hope St, two-12" RCP in 2nd St and the two-24" RCP in Grand Ave. 116
  - Show and call out the conflicting 15" sewer in Flower St and the 8" Sewer in 3rd Street. 117

- Drawings C-103, C-303, C-403, C-503 118
  - Please change New Otani Hotel to it's current name, Kyoto Grand Hotel.
  - Call out Los Angeles St on plan. 119
  - The existing SD shown in the profile is a 10'-3" RCArch btwn Hill St and Broadway St, 9.5'x11.5' RCB btwn Broadway St and Los Angeles St, and 11.5'x13' RCB east of Los Angeles St. Please call out accordingly. 120
  - Call out the existing 14" & 31" RCP along 2nd Street and the 18" & 20" RCP crossings on Olive and Hill St. 121
  - Please note that the proposed alignment conflicts w/ an 18" sewer in Spring St, 21" sewer in Main St and a 36" sewer in Los Angeles St. Show and call out these primary sewers. 122
  - Several conflicting minor sewers are missing from the plan and profile. Show and call out the 8, 12 & 14" sewer along 2nd St, 8 & 12" sewer in Hill St, two-12" sewers in Broadway and the 16" sewer in Los Angeles St. 123

- Drawing C-104 124
  - Please show and call out the existing 15" RCP in Main St, 24" RCP in Temple St, and 36 & 42" RCP in Los Angeles St.
  - Please show and call out the existing 18" sewer in Main St and the 12 & 30" sewers in Los Angeles St. Please note the possible conflict with primary sewers in this proposed alignment. 125

- Drawings C-304, C-404, C-504
  - Please show and call out the existing SD and two-8" sewers running parallel to the 11.5'x13' RCB in 2nd Street — 126
  - Does the proposed alignment conflict with the 24" RCP and 8 & 10" sewers running along 1st Street? If so, please show and call out. — 127
  - Identify the location of Banning Street. There are several utilities located in Banning Street that would conflict with the proposed alignment. There is a 15" RCP and 8 & 15" sewer in Banning Street, which connect into the storm drain and sewer lines along Alameda Street. Please show and call out Banning Street and all utilities that would conflict with the proposed alignment on the plan and profile. — 128
- Drawing C-105
  - Please call out the 14 & 16" sewer in Alameda St and 8" sewer in Temple St. — 129
  - Please call out the 18 & 24" RCP in Temple St and 75 & 77" RCP in Alameda Street — 130
- Drawing C-305
  - Please show and call out the two 8" sewers & 44" RCP in 2nd St in the plan and profile. — 131
  - Correct the text for "Mucking Pit" on plan so that it is clearly readable. — 132
- Drawings C-405, C-505
  - Correct that stationing in the titleblock to accurately reflect the stationing shown on the drawing. — 133
  - Correct the matchline call out on the profile to reference Sta 87+00 on DWG C-404. — 134
  - Does the proposed alignment conflict with the 14" sewer in Alameda St? If so, please show and call out. — 135
  - Identify the location of Turner Street. There are several utilities located in Turner Street that would conflict with the proposed alignment. There is an 8" sewer in Turner Street, which connects into the sewer lines along Alameda Street. Please show and call out Turner Street and all utilities that would conflict with the proposed alignment on the plan and profile. — 136

- Drawing C-106
    - Please call out the 16" sewer & 77" RCP in Alameda St in the plan and profile

137

- Drawing C-306
    - Identify the location of Turner Street. There are several utilities located in Turner Street that would conflict with the proposed alignment. There is an 8" sewer in Turner Street, which connects into the sewer lines along Alameda Street. Please show and call out Turner Street and all utilities that would conflict with the proposed alignment on the plan and profile.

138

    - Identify the location of Banning Street. There are several utilities located in Banning Street that would conflict with the proposed alignment. There is a 15" RCP and 8 & 15" sewer in Banning Street, which connect into the storm drain and sewer lines along Alameda Street. Please show and call out Banning Street and all utilities that would conflict with the proposed alignment on the plan and profile.

139

AL3

Responses to Comments from the City of Los Angeles, Moore et. al., Gary Lee

Response to Comment AL3-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Please refer to Responses to Comments AL3-2 through AL3-139, below, for detailed responses regarding concerns raised by the commenter about the At-Grade Emphasis LRT and Underground Emphasis LRT alternatives.

Response to Comment AL3-2

Thank you for your comment. Metro also looks forward to coordinating with the City of Los Angeles during the design phase of the project.

Response to Comment AL3-3

The urban design assessment of the two alternatives carried forward from the Initial Screening of Alternatives was not based on set criteria. Instead it was an assessment of land use regulations, transit connections, vehicular and pedestrian circulation patterns, and proposed local development along each alignment to aid in the development of urban design concepts of the alignments.

Response to Comment AL3-4

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-5

Thank you for your comment. Support for the underground station in Little Tokyo is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-6

Thank you for your comment. These concerns regarding the At-Grade Emphasis LRT and Underground Emphasis LRT Alternatives were addressed in the Draft EIS/EIR. However, the features of the At-Grade Emphasis LRT and the Underground Emphasis LRT Alternatives mentioned in the comment are not proposed as part of the Fully Underground LRT Alternative. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-7

This statement is correct. Comment acknowledged.

Response to Comment AL3-8

Comment acknowledged. Please refer to Chapter 3, Transportation Impacts and Mitigation, and Section 4.15, Safety and Security, of the Draft EIS/EIR and this Final EIS/EIR for traffic, safety,

and security impacts associated with the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative is grade-separated. Therefore, the concerns stated in this comment regarding the At-Grade Emphasis LRT Alternative are not an issue under the Locally Preferred Alternative.

Response to Comment AL3-9

Regional Connector stations would integrate pedestrian and bicycle access through urban design to provide multi-modal alternatives to driving. The introduction of new light rail service in the vicinity of the affected intersections would offset some of the impacts of reduced level of service by providing enhanced transit access. No park and ride facilities would be constructed as part of the Regional Connector project.

Response to Comment AL3-10

Design drawings of the mitigation measures prepared during the preliminary engineering phase of the project will be confirmed during the final design phase for the Locally Preferred Alternative. These drawings will highlight the feasibility of the mitigation measures. Once these drawings are prepared, they will be distributed to the Los Angeles Department of Transportation (LADOT) for review and comment. The drawings will take into consideration the new Downtown Street Standards. Continuous coordination with LADOT will take place throughout the design process.

Response to Comment AL3-11

At the October 28, 2010 meeting, the Metro Board of Directors designated the staff recommended Fully Underground LRT Alternative as the Locally Preferred Alternative for further study in this Final EIS/EIR. Mitigation measures for the significantly impacted intersections of the alternatives that were not designated are no longer applicable and will not be considered further. Design drawings for the mitigation measures of the Locally Preferred Alternative prepared during the preliminary engineering phase of the project will be confirmed during final design. These drawings will be distributed to LADOT for review and comment. As previously noted, the drawings will take into consideration the new Downtown Street Standards.

Response to Comment AL3-12

The Fully Underground LRT Alternative without the Flower/5th/4th Street station, which is the Locally Preferred Alternative, would not significantly impact any intersections after mitigation. Design drawings prepared for these locations during the preliminary engineering phase of the project will be confirmed during final design. Once these drawings are prepared, they will be distributed to LADOT for review and comment. Continuous coordination with LADOT will take place throughout the design process.

Response to Comment AL3-13

The mitigation measures for the Locally Preferred Alternative would result in an improved level of service. The comment has been noted and the Locally Preferred Alternative mitigation measures will be confirmed during final design, and the extent of physical improvements that can be achieved within the existing right-of-way will also be confirmed.

Response to Comment AL3-14

As previously noted, the mitigation measures for the Locally Preferred Alternative would result in an improved level of service. The comment has been noted and the Locally Preferred Alternative mitigation measures will be confirmed in the final design phase of the project, and the extent of improvements that can be achieved within the existing right-of-way to meet the LADOT Traffic Study Guidelines will also be confirmed.

Response to Comment AL3-15

At the October 28, 2010 meeting, the Metro Board of Directors designated the staff recommended Fully Underground LRT Alternative as the Locally Preferred Alternative for further study in this Final EIS/EIR. Mitigation measures for the significantly impacted intersections of the alternatives that were not designated, such as the TSM Alternative, are no longer applicable and will not be carried forward for further consideration.

Response to Comment AL3-16

At the October 28, 2010 meeting, the Metro Board of Directors designated the staff recommended Fully Underground LRT Alternative as the Locally Preferred Alternative for further study in this Final EIS/EIR. Mitigation measures for the significantly impacted intersections of the alternatives that were not designated, such as the At-Grade Emphasis LRT Alternative, are no longer applicable and will not be carried forward for further consideration.

Response to Comment AL3-17

The impacts of the At-Grade Emphasis LRT Alternative operation on 2nd Street were documented in Section 3.3.3.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which does not involve at-grade tracks on 2nd Street.

Response to Comment AL3-18

The impacts of the At-Grade Emphasis LRT Alternative operation were documented in Section 3.3.3.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which would not involve any new grade crossings.

Response to Comment AL3-19

Metro notes the City's concern regarding restriping on Flower and 2nd Streets for the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. These alternatives are not being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro will work with LADOT on developing street restoration plans that are consistent with the goals of the City's approved plans at that time. It is recommended that the proposed bike plan be maintained to provide connectivity and improve access to the transit station.

Response to Comment AL3-20

Urban design work is being performed as part of the preliminary engineering process. Examples include landscaped plazas around station entrances that enhance the pedestrian environment,

lighting configurations to enhance safety, and bicycle parking. Entrances would be oriented toward major intersections where possible.

Response to Comment AL3-21

Regional Connector stations would integrate pedestrian and bicycle access through urban design to provide multi-modal alternatives to driving. The introduction of new light rail service in the vicinity of the affected intersections would offset some of the impacts of reduced level of service by providing enhanced transit access. No park and ride facilities would be constructed as part of the Regional Connector project.

Response to Comment AL3-22

The mitigation measures proposed in Section 3.5.2.2 of the Draft EIS/EIR and Section 3.4 of this Final EIS/EIR would be implemented in conjunction with Metro's overarching goals for station design, which include pedestrian and bicycle connections, bicycle parking where feasible, and connections to nearby bus lines. Metro will continue its ongoing coordination with LADOT on traffic signal related mitigation measures included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment AL3-23

The Draft EIS/EIR and this Final EIS/EIR contained analysis of the project's relationship with all applicable adopted plans. Metro has reviewed the draft LA City Bicycle Plan and finds no inconsistencies with the Regional Connector. Bicycle access would be incorporated into the new Regional Connector stations, with bicycle lockers and racks provided where feasible, as noted in Section 3.3.5.2.4 of the Draft EIS/EIR and this Final EIS/EIR.

Metro considers the bicycle system a key component of the transportation system. Although the draft LA City Bicycle Plan can be mentioned in this Final EIS/EIR, an impact analysis cannot be based on a plan that has not been approved. As the project continues, Metro will continue to develop street restoration plans and station plans which LADOT will review. These plans will take into consideration riders accessing the system by bike by including bike racks and lockers at the stations, means to provide easy access for bicyclists from the platform, mezzanine and plaza areas, and restoration of streets based upon approved plans.

Response to Comment AL3-24

During the final design phase of the project, Metro will develop Worksite Traffic Control Plans in conjunction with LADOT as requested.

Response to Comment AL3-25

Metro would develop detours around construction areas in conjunction with LADOT, and would use visible signage to direct traffic. These temporary roadway closures are associated with the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-26

Protective measures would be implemented as needed at tunnel portals to prevent pedestrian intrusion. The fully underground Locally Preferred Alternative would have minimal opportunities

for unauthorized pedestrian crossings of the tracks because the tracks would be running in tunnels as opposed to on the street. A tunnel portal at 3rd and Flower Streets is part of the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue.

Response to Comment AL3-27

The Locally Preferred Alternative does not include a station on Flower Street in this location.

Response to Comment AL3-28

The fully underground Locally Preferred Alternative would have minimal opportunities for unauthorized pedestrian crossings of the tracks because the tracks would be running in tunnels as opposed to on the street. The at-grade crossing at Temple and Alameda Streets is part of the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-29

Metro agrees with this comment. Metro supports the City of Los Angeles' goals to maintain existing pedestrian connections and to maintain and improve existing patterns of pedestrian circulation.

Response to Comment AL3-30

The reduction in roadway capacity and potential adverse effect on bicycles access associated with the At-Grade Emphasis LRT Alternative was documented in Section 3.3.3.2.4 of the Draft EIS/EIR and this Final EIS/EIR. This alternative is not being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-31

The loss of parking spaces would be offset by the introduction of the new light rail service and stations into the area. These impacts pertain to the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-32

Metro will develop Worksite Traffic Control Plans in conjunction with LADOT as requested.

Response to Comment AL3-33

Although the Underground Emphasis LRT Alternative will not be constructed, any detours associated with construction of the Locally Preferred Alternative would utilize visible signage and would be marked appropriately.

Response to Comment AL3-34

Comment noted. These impacts were discussed in Section 3.3.4.1.2 of the Draft EIS/EIR and this Final EIS/EIR as indicated in the comment. Metro will continue its ongoing coordination with LADOT on any signal phasing modifications required for the Regional Connector. The impacts discussed pertain only to the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-35

The Fully Underground LRT Alternative without the Flower/5th/4th Street station was designated as the Locally Preferred Alternative. Metro would construct an enhanced pedestrian walkway with landscaping, wayfinding signage, art features, and amenities aimed at improving pedestrian experience and safety. These improvements would facilitate and enhance access from the 4th and Flower Streets area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets. Metro will continue coordination with LADOT regarding any traffic lane removal necessary for these improvements, which would be within the impact envelope described in the Draft EIS/EIR.

Response to Comment AL3-36

The analysis in Section 3.3.4.2.2 of the Draft EIS/EIR and this Final EIS/EIR included these traffic diversions, as indicated in the last sentence of the section's first paragraph. These impacts pertain to the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-37

The loss of parking spaces would be offset by the introduction of the new light rail service and stations into the area. These impacts pertain to the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-38

The fully underground Locally Preferred Alternative would have minimal opportunities for unauthorized pedestrian crossings of the tracks because the tracks would be running in tunnels as opposed to on the street. The at-grade crossing at 1st and Alameda Streets is part of the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-39

The Locally Preferred Alternative does not include a station on Flower Street in this location. Sufficient space along 2nd Street has been identified for station entrances and pedestrian access. Station entrances will be designed for easy access.

Response to Comment AL3-40

As part of project design, adequate pedestrian lighting would be provided at station entrances.

Response to Comment AL3-41

The reduction in roadway capacity at 1st and Alameda Streets, and the potential adverse effect on bicycles access associated with the Underground Emphasis LRT Alternative was documented in Section 3.3.4.2.4 of the Draft EIS/EIR and this Final EIS/EIR. This alternative is not being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-42

Please refer to Response to Comment AL3-23, above.

Response to Comment AL3-43

Temporary lane closures would be provided during construction, and would temporarily reduce roadway capacity. Drivers would likely divert to parallel streets to avoid the construction areas. Detours would be clearly marked and developed in conjunction with LADOT. Metro agrees that these construction impacts would be significant and unavoidable, which was discussed in Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR as noted.

Response to Comment AL3-44

Comment noted. Mitigation measures for these impacts are provided in Section 3.4.1.2 of the Draft EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment AL3-45

The comment is noted and design drawings prepared for these three intersection locations during the preliminary engineering phase of the project will be confirmed during final design. The drawings will reflect the issues indicated and raised by LADOT including consistency with the goals of the new Downtown Street Standards. Drawings will continue to be distributed to LADOT staff for review and comment. Continuous coordination with LADOT will take place throughout the design process.

Response to Comment AL3-46

At the October 28, 2010 meeting, the Metro Board of Directors designated the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. However, Metro would construct an enhanced pedestrian walkway with landscaping, wayfinding signage, art features, and amenities aimed at improving pedestrian experience and safety. These improvements would facilitate and enhance access from the 4th and Flower Streets area to the existing 7th Street/Metro Center Station entrance at 7th and Flower

Streets. Metro will work with LADOT on developing street restoration plans that are consistent with the goals of the City's approved plans at that time.

Response to Comment AL3-47

The original Metro Gold Line Eastside Extension environmental document did not propose the signalization of the 1st and Hewitt Streets intersection. The signal was added during the construction phase of the project to accommodate left turns in and out of the Mangrove property. In addition, the proposed LRT alignment for the Locally Preferred Alternative would daylight on 1st Street between Alameda and Garey Streets, thus preventing the ability to cross 1st Street at Hewitt Street. Since there is currently no access to the Mangrove property at Hewitt Street, elimination of the signal and the prohibition of left turns is not considered a significant impact and would not affect local circulation patterns. Left turns from 1st Street to Hewitt Street can be accommodated by using Vignes or Alameda Streets followed by 2nd Street. Right-in, right-out operations would also be maintained to provide access to the Mangrove property.

Response to Comment AL3-48

Comment acknowledged.

Response to Comment AL3-49

Comment acknowledged. Metro will coordinate with the City of Los Angeles to ensure that streets and sidewalks associated with construction of the Locally Preferred Alternative are consistent with the goals of the new Downtown Street Standards.

Response to Comment AL3-50

Metro believes that the privately-owned parking garages have sufficient capacity to absorb the 13 displaced metered parking spaces. It is almost certain that far more than 13 people would switch from driving to transit once the new light rail service is introduced, thereby offsetting the demand for these 13 metered parking spaces.

Response to Comment AL3-51

The Locally Preferred Alternative does not include a station on Flower Street in this location. Sufficient space along 2nd Street has been identified for station entrances and pedestrian access. Station entrances will be designed for easy access.

Response to Comment AL3-52

Mitigation measures confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR include measures to reduce the potential for unauthorized pedestrian entry into the tunnel, such as signage, surveillance, and physical barriers. In addition, design of the Locally Preferred Alternative includes features to increase safety and security.

Response to Comment AL3-53

Comment acknowledged. Metro supports the City of Los Angeles' goal to maintain existing pedestrian connections and to maintain and improve existing patterns of pedestrian circulation as much as possible on City streets. To the extent feasible, design of the Locally Preferred Alternative avoids creating new impediments to pedestrian circulation.

Response to Comment AL3-54

Comment acknowledged. Security lighting would be provided at station entrances as part of the Locally Preferred Alternative.

Response to Comment AL3-55

Comment noted. This will be placed within the Special Provisions (a section in the construction contract documents) as the design is developed.

Response to Comment AL3-56

Comment noted. This will be placed within the Special Provisions (a section in the construction contract documents) as the design is developed.

Response to Comment AL3-57

Metro will work with City Departments including LADOT, Los Angeles Bureau of Engineering (LABOE), and Los Angeles Bureau of Street Lighting (BSL) among others, to develop appropriate street plans both for construction activities and for final restorations. Plans will be submitted to the City for review during the development of the design. Metro will utilize LED lights and provide enhanced lighting around stations per concurrence with the City.

Response to Comment AL3-58

As part of construction of the Locally Preferred Alternative, redesign and reconstruction of the lighting system will occur as necessary.

Response to Comment AL3-59

No new or increased assessments are anticipated. Metro will comply with all applicable state requirements regarding community participation and approvals for street lighting.

Response to Comment AL3-60

At this time, Metro does not anticipate that construction of the Locally Preferred Alternative would affect any existing Historic/Ornamental poles nor would new street lights be installed along with existing Historic/Ornamental street lights in the project area. However, Metro will be consistent with the goals of the City of Los Angeles Department of Public Works, Bureau of Street Lighting criteria as appropriate.

Response to Comment AL3-61

During construction, temporary street lighting would be required in areas where existing street lighting fixtures need to be removed to accommodate activities. Metro will work with the City to meet the City's standards for lighting levels at particular locations where permanent street lights are removed. Physical constraints may not allow for temporary units to be installed to match the existing location; however, number of units and locations would be installed to provide required lighting per the City's standards.

Response to Comment AL3-62

No park and ride facilities are proposed under the Locally Preferred Alternative. Therefore, no further response is required.

Response to Comment AL3-63

Metro would maintain pedestrian and bicycle routes to the fullest extent feasible throughout the construction process. Some sidewalk and street closures would be necessary during daytime hours as well as at night. Detours would be clearly marked, and adequate street lighting would be provided to ensure safety.

Response to Comment AL3-64

As indicated in Section 4.15, Safety and Security, of the Draft EIS/EIR and this Final EIS/EIR, urban design methods would include station and pedestrian pathway lighting leading to/from sidewalks to avoid shadows, adequate pedestrian queuing and refuge areas and wide crosswalks in areas immediately around proposed stations, and monitoring equipment at all proposed LRT stations. These methods will be confirmed for the Locally Preferred Alternative during the final design phase.

Response to Comment AL3-65

The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) from the elevator to Upper Grand Avenue would be constructed as part of the Locally Preferred Alternative in order to facilitate pedestrian circulation to and from Bunker Hill. If the pedestrian connection is built as part of the Locally Preferred Alternative, Metro will work with community stakeholders throughout the design process to ensure that the bridge contributes to the vitality of the street environment rather than detract from it.

Response to Comment AL3-66

Station entrances are proposed at both 2nd and Hope and 3rd and Flower Streets. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a new pedestrian connection (such as a pedestrian bridge) from the 2nd/Hope Street station elevator entrance to Upper Grand Avenue would be constructed as part of the Locally Preferred Alternative, and would provide a pedestrian connection from the 2nd/Hope and 3rd/Flower areas to the top of Bunker Hill.

Response to Comment AL3-67

Metro included multiple options in the Draft EIS/EIR for connecting the 2nd/Hope Street station to the Bunker Hill Towers complex. Placing a station entrance on the Bunker Hill Towers side would require removal of one or two tennis courts. As such, a surface crosswalk was proposed as a way to avoid this impact and still provide access to the complex.

Response to Comment AL3-68

Station entrances are proposed at both 2nd and Hope and 3rd and Flower Streets. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a new pedestrian connection (such as a pedestrian bridge) from the 2nd/Hope Street station elevator entrance to Upper Grand Avenue would be constructed as part of the Locally Preferred Alternative, and would provide a pedestrian connection from the 2nd/Hope and 3rd/Flower areas to the top of Bunker Hill.

Response to Comment AL3-69

Comment acknowledged. During preparation of this Final EIS/EIR, Metro held meetings with community groups and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative which is presented in this Final EIS/EIR.

Response to Comment AL3-70

Comment acknowledged. Station entrances at these locations are under consideration by Metro.

Response to Comment AL3-71

Thank you for your comment. These suggestions will be considered during the design phase of the project.

Response to Comment AL3-72

Thank you for your comment. This suggestion will be considered during the design phase of the project.

Response to Comment AL3-73

The S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building would be offered by Metro for one dollar for one year from certification of this Final EIS/EIR to any party wishing to assume responsibility for its relocation. It is situated above the proposed station box, and must be removed in order for the station to be constructed. Should no parties come forward, Metro would incorporate materials from the building into the project facilities where feasible. Metro would also offer to provide an exhibit commemorating the building at the Japanese American National Museum or other suitable location. Mitigation measures are included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to help reduce the impacts of removing this building.

Response to Comment AL3-74

Comment acknowledged. Pedestrian crossing distance, across the portion of 1st Street that would be widened as part of the Locally Preferred Alternative, would be minimized to the extent feasible.

Response to Comment AL3-75

Comment acknowledged. Traffic, pedestrian, and community impacts associated with the Underground Emphasis LRT Alternative were analyzed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.3, Community and Neighborhood Impacts, of the Draft EIS/EIR and this Final EIS/EIR. The concerns regarding the Underground Emphasis LRT Alternative are not an issue under the Locally Preferred Alternative. The Locally Preferred Alternative would be underground at the intersection of 1st and Alameda Streets and would not include an underpass.

Response to Comment AL3-76

Please refer to Response to Comment AL3-75, above. The concerns regarding the At-Grade Emphasis LRT Alternative are not an issue under the Locally Preferred Alternative. The Locally Preferred Alternative would not cross the intersection of Temple and Alameda Streets.

Response to Comment AL3-77

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment AL3-78

Mitigation measures for the potential impacts to the 2nd Street Tunnel that would occur as a result of the At-Grade Emphasis LRT Alternative were included in Section 4.12.1.4 of the Draft EIS/EIR. Metro believes that these mitigation measures would be sufficient to reduce impacts to the 2nd Street Tunnel below the level of significance. The Metro Board of Directors did not identify this alternative as the Locally Preferred Alternative, and instead designated the Fully Underground LRT Alternative as the Locally Preferred Alternative on October 28, 2010.

Response to Comment AL3-79

Metro will coordinate with City departments as the design progresses. Drawings will be provided to the City for review. Metro will include an element of urban design that will address

enhancements in the public realm, station entrance location, entrance design, connection to bicycle and pedestrian circulation routes, integration into the surrounding area, way finding, catenary poles, materials, or station colors. Approval regarding urban design elements will be made by the agency that would control and maintain the element. For instance, crosswalks, sidewalks, and traffic lanes would be maintained by the City after construction and, therefore, would require City approval. Station entrances, plaza, mezzanine, platform, and ancillary facility design would be maintained by Metro and do not require City approval. Section 4.4.4.2.2, Final Operation-Related Mitigation Measures for the Locally Preferred Alternative, and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, of this Final EIS/EIR include the following:

> Urban design measures shall be developed to integrate the light rail transit (LRT) facilities (stations, portals, entrances, etc.) into each community as appropriate. Designs might address elements such as materials and colors. This process has already begun with community urban design workshops, and Metro shall continue to involve communities in this process. Metro shall coordinate with the City of Los Angeles Department of Planning staff during the design process and regarding urban design elements.

The Draft EIS/EIR and this Final EIS/EIR determined that no significant visual impacts to the Historic Core, Civic Center, or Little Tokyo communities would result from operation of any of the build alternatives. The original mitigation measures in Section 4.4.4.2 of the Draft EIS/EIR were identified to further reduce less than significant impacts. The modified mitigation measures above would still further reduce less than significant visual impacts.

Response to Comment AL3-80

Bicycle and pedestrian facilities would be unaffected by operation of the Locally Preferred Alternative or implementation of its mitigation measures, consistent with the analysis in Section 3.3.5.2.4 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment AL3-81

The Regional Connector project has been in the public domain since 2007, starting with the Alternatives Analysis process. Information about the potential alignments for the Regional Connector has been readily available since this time through public meetings, direct mailings, the Metro website, flyers, newspaper advertisements, and other media as described in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR. Sections 4.2, 4.3, 4.14, and 4.17 of the Draft EIS/EIR and this Final EIS/EIR analyzed the primary impacts to businesses. The mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR will serve to minimize and manage potential impacts. Metro is committed to implementation of these mitigation measures. Metro welcomes the involvement of CRA/LA in implementing the mitigation measures. Metro has made refinements to the Locally Preferred Alternative in response to community input. The refinements would greatly reduce impacts to businesses. As indicated in Section 4.2.1 of the Draft EIS/EIR and this Final EIS/EIR, compensation and relocation assistance will be provided to displaced businesses consistent with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Metro will work closely with the City of Los Angeles to manage impacts to businesses.

Response to Comment AL3-82

This comment is correct. Please refer to Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR for a detailed analysis of traffic circulation impacts associated with construction of the At-Grade Emphasis LRT Alternative.

Response to Comment AL3-83

Comment noted. These impacts pertain to the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AL3-84

Comment acknowledged. As indicated in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR, and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, during the final design phase of the project, site- and street-specific Worksite Traffic Control Plans will be developed in cooperation with LADOT to accommodate the required traffic, pedestrian, and bicycle movements.

Metro will coordinate with LADOT and CRA/LA during final design phase and construction of the project.

Response to Comment AL3-85

Nighttime lighting, air quality, and noise impacts associated with construction were analyzed in Section 4.4, Visual and Aesthetic Impacts, Section 4.5, Air Quality, and Section 4.7, Noise and Vibration, of the Draft EIS/EIR and this Final EIS/EIR, respectively. Additional noise and vibration analysis was provided in Section 4.7 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Nighttime lighting impacts during construction of the Locally Preferred Alternative would not be significant under CEQA or adverse under NEPA. Mitigation measures to reduce air quality and noise (ground-borne noise) impacts associated with construction of the Locally Preferred Alternative have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Special attention has been given to specification of all mitigation measures. During preparation of this Final EIS/EIR, Metro held meetings with community groups and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input gathered during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative.

Response to Comment AL3-86

In the Draft EIS/EIR, cut and cover construction was identified as being limited to the portal areas to the north and east of the 1st and Alameda Streets intersection, the station areas, and Flower Street between Wilshire Boulevard and 3rd Street. Refinements to the Locally Preferred Alternative have reduced the cut and cover areas by extending tunnel boring machine operations to 4th and Flower Streets. Off-street construction staging areas were identified in

Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR, and would be used in a way that minimizes traffic disruption. Decking would be used at in-street cut and cover locations.

Response to Comment AL3-87

Comment acknowledged. A geotechnical investigation was performed for all the alternatives and included in the Draft EIS/EIR. A geotechnical investigation will be performed during final design for the proposed at-grade and below-grade structures and improvements associated with the Locally Preferred Alternative. The investigation will provide additional site-specific data to facilitate final design for maintaining the integrity of existing structures under static and seismic loading and operational demands. In addition, mitigation was identified in Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials, of the Draft EIS/EIR to reduce impacts associated with subsidence to less than significant levels. Limiting movement to less than acceptable threshold values for vertical, horizontal, and angular deformation as a performance standard, require ground improvement such as grouting or other methods to fill voids where appropriate and offset potential settlement, grout tunnel alignment in advance to provide adequate soil support and minimize settlement, and monitor settlement along the project alignment. Since publication of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, mitigation measures to limit ground movement have been refined and confirmed for the Locally Preferred Alternative, as indicated in Section 4.9.4.2, of this Final EIS/EIR. With implementation of mitigation, impacts associated with ground movement would be reduced to less than significant.

Response to Comment AL3-88

Metro looks forward to working closely with CRA/LA staff regarding plans, programs, and initiatives to minimize construction effects.

Response to Comment AL3-89

The comment is noted and will be addressed during the design phase of the project.

Response to Comment AL3-90

Ongoing coordination with LADOT and City of Los Angeles Department of Public Works, LABOE will take place throughout the design process. Preliminary haul routes were identified in the Draft EIS/EIR for all the alternatives and in this Final EIS/EIR for the Locally Preferred Alternative. Once construction lay down areas are identified, haul routes will be finalized and submitted to LADOT, LABOE, and Transportation Construction Management Committee (TCMC) staff, for review and comment. Metro looks forward to working closely with TCMC staff regarding haul routes.

Response to Comment AL3-91

The comment is noted and continuous coordination with LADOT and LABOE will take place throughout the design process. Haul routes will be confirmed and submitted to LADOT and LABOE staff for review and comment.

Response to Comment AL3-92

Potential impacts to utilities during project construction were identified in Section 4.18.2.2, Appendix K - Description of Construction, and Appendix FF - Construction Impacts Technical Memorandum, of the Draft EIS/EIR. They were also included in Section 4.18.2.2 of the Supplemental EA/Recirculated Draft EIR Sections. It is anticipated that utility conflicts and therefore relocation would be necessary as described in the Draft EIS/EIR. As part of the design process, Metro will work closely with City departments and provide the City opportunities to review and provide input on identification of utility conflicts, design solutions to avoid conflicts, proposed relocations, and restoration of service. Metro will minimize utility disruptions. Mitigation measures are shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment AL3-93

The list of the LABOE's current and future projects referenced in the comment was not attached to the comment letter. However, the extensive project list of public works projects maintained by the City of Los Angeles was reviewed for related projects that could contribute to cumulative impacts. Most of the planned projects within the City are related to ongoing maintenance or replacement in-kind of existing infrastructure.

Response to Comment AL3-94

Comment acknowledged. As the drawings progress, these elements will be addressed in the drawings and or placed within the Special Provisions (a section in the construction contract documents) as the design is refined.

Response to Comment AL3-95

During construction, temporary street lighting would be required in areas where existing street lighting fixtures need to be removed to accommodate construction activities. Metro will work with the City to meet the City's standards for lighting levels at particular locations where permanent street lights are removed. Physical constraints may not allow for temporary units to be installed to match the existing location; however, the number of units and locations would be installed to provide required lighting per the City's standards.

Response to Comment AL3-96

No park and ride facilities are proposed under the Locally Preferred Alternative. Therefore, no further response is required.

Response to Comment AL3-97

Metro intends to minimize impacts to businesses in Little Tokyo during construction. Sections 4.14.3.4 and 4.14.3.5 of the Draft EIS/EIR and this Final EIS/EIR projected that the Regional Connector would ultimately have long-term beneficial impacts to businesses throughout the project, including in Little Tokyo.

Response to Comment AL3-98

The potential impacts to Little Tokyo were described in Section 4.17.3.5 of the Draft EIS/EIR and this Final EIS/EIR. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in

order to minimize the construction impacts of the project. Metro believes that these measures are comprehensive and will preserve the health and vitality of the Little Tokyo business community. As described in Chapter 2, Alternatives Considered, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Temporary intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR.

Response to Comment AL3-99

Metro has held urban design workshops for the 2nd/Hope Street station and will continue to involve the community in the design process. Metro has been meeting with the Broad Foundation staff to coordinate the design of the station and alignment.

Response to Comment AL3-100

The commenter suggests that text referencing local land use documents in Chapter 1, Purpose and Need, of the Draft EIS/EIR be modified. The following text of this Final EIS/EIR has been modified to include the following:

Section 1.1: Local land use plans and policies, including the adopted City of Los Angeles General Plan Framework Element, Central City Community Plan, and Downtown Design Guidelines and Modified Street Standards, support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian-friendly design in downtown communities.

Section 1.6, 6th bullet: Local land use plans and policies, including the adopted City of Los Angeles General Plan Framework Element, Central City Community Plan, and Downtown Design Guidelines and Modified Street Standards, support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian-friendly design in downtown communities.

Section 1.6.4: Local and regional land use plans and policies, including the adopted City of Los Angeles General Plan Framework Element, Central City Community Plan, and Downtown Design Guidelines and Modified Street Standards, support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian-friendly design in downtown communities. These are discussed earlier in this section and detailed in Appendix E (Purpose and Need Report) of the Draft EIS/EIR.

Response to Comment AL3-101

Please refer to Response to Comment CN14-3, below, for issues relating to the assessment of impacts and mitigation for the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building. Appropriate mitigation for impacts to historic resources has been addressed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR which was developed in consultation with the California State Historic Preservation Officer and other consulting parties. Additional mitigation measures are included in Section 4.12, Historic Resources, of this Final EIS/EIR and included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative that would reduce the

impacts to the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building to a less than significant level.

Response to Comment AL3-102

Comment acknowledged. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Fully Underground LRT Alternative would not involve a "punch" through the wall of the existing 2nd Street Tunnel as with the At-Grade Emphasis LRT Alternative. Given that the At-Grade Emphasis LRT Alternative is not the designated Locally Preferred Alternative, mitigation measures suggested in the comment letter would not be necessary.

Response to Comment AL3-103

Urban design enhancements that could be used within 1,000 feet of stations and portals include widening of sidewalks, bicycle racks, ornamental landscaping, and decorative lighting and paving. Urban design enhancements incorporated into the stations and portals would be consistent with the goals of all applicable plans, policies, and regulations, and compatible with the surrounding community.

Response to Comment AL3-104

This clarification has been made in the tables in Section 4.12.1.

Response to Comment AL3-105

Comment noted and will be addressed as the design progresses. The City of Los Angeles will be provided opportunities to review and provide input. Metro will work closely with the City throughout this process.

Response to Comment AL3-106

Comment noted and will be addressed as the design progresses. The City of Los Angeles will be provided opportunities to review and provide input. Metro will work closely with the City throughout this process.

Response to Comment AL3-107

Comment noted. Metro reviewed the substructure maps indicated for reference.

Response to Comment AL3-108

Comment noted and will be addressed as project design progresses. The City of Los Angeles will be provided opportunities to review and provide input. Metro will work closely with the City throughout this process.

Response to Comment AL3-109

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-110

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-111

Comment noted. Metro reviewed the alignment and identified potential conflicts and will mitigate as appropriate.

Response to Comment AL3-112

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-113

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-114

Comment noted. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-115

Comment noted. Street name has been corrected. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-116

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-117

Comment noted. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-118

Comment noted. Name of the hotel has been corrected. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-119

Comment noted. Street name is now shown. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-120

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-121

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-122

Comment noted. Metro has reviewed all impacted facilities. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-123

Comment noted. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-124

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-125

Comment noted. Metro has reviewed all impacted facilities. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-126

Comment noted. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-127

Comment noted. Metro has reviewed all impacted facilities. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-128

Comment noted. Metro has reviewed all utilities within Banning Street. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits developed with City review during the final design phase.

Response to Comment AL3-129

Comment noted. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-130

Comment noted. Metro will confirm all impacted storm drains on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-131

Comment noted. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-132

Comment noted. Drawings have been revised accordingly. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-133

Comment noted. Drawings have been revised accordingly. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-134

Comment noted. Drawings have been revised accordingly. Please refer to Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

Response to Comment AL3-135

Comment noted. Metro has reviewed the sewer accordingly. Metro will confirm all impacted sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-136

Comment noted. Turner Street is now identified. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-137

Comment noted. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-138

Comment noted. Turner Street is now identified. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Response to Comment AL3-139

Comment noted. Metro has reviewed all utilities within Banning Street. Metro will confirm all impacted storm drains and sewers on composite utility and utility relocation plans within the proposed project limits during the final design phase with City review.

Tuesday, October 19, 2010 2:46 PM

Subject: RE: Fwd: Metro Regional Connector: REMINDER TO PROVIDE COMMENTS BY OCTOBER 18 CLOSE OF DRAFT EIS/EIR COMMENT PERIOD
Date: Monday, October 18, 2010 4:55 PM
From: Duong, Toan <TDUONG@dpw.lacounty.gov>
To: Regional Connector RSC_RegionalConnector@metro.net
Cc: Yanez, Jarrett JYANEZ@dpw.lacounty.gov, Angeles, Carmen CANGELES@dpw.lacounty.gov, Ibrahim, Amir AIBRAHIM@dpw.lacounty.gov, Burger, Steve SBURGER@dpw.lacounty.gov, Doudar, Phil PDOUDAR@dpw.lacounty.gov
Conversation: Fwd: Metro Regional Connector: REMINDER TO PROVIDE COMMENTS BY OCTOBER 18 CLOSE OF DRAFT EIS/EIR COMMENT PERIOD

Ms. Saltarelli

The following are comments from Los Angeles County Department of Public Works for this project. A signed response will be followed through regular mail.

Services–Traffic/Access

1. The front page of the Executive Summary shows Figure ES-1, Existing and Proposed regional Metro Rail Lines (2035). Figure ES-1 shows a Metro Rail Line Under Study, called the "Crenshaw-Prairie", and another Metro Rail Line under study called the "Westside Extension to Westwood". These two proposals are not mentioned in any detail in this report, "The Regional Connector Transit Corridor". These two proposed rail routes could have an impact on roads in the Los Angeles County Road Maintenance District 3 area, such as Prairie Avenue, Hawthorne Boulevard, Crenshaw Boulevard, and Wilshire Boulevard. 1

2. Chapter 2 of The Regional Connector Transit Corridor report briefly mentions the Metro Crenshaw Line on Page 2-11; it states that the Metro Crenshaw line from the Metro Green Line at Aviation Boulevard to the Metro Expo Line at Crenshaw Boulevard is an approximately 10 mile light rail or bus rapid transit system anticipated to be operational by 2019. Is this line part of another study or proposal? 2

3. We commented on the Crenshaw Transit Corridor Project DEIR on October 26, 2009, see attached. Also the Crenshaw Transit Corridor Project DEIR page ES-9, Figure S-5 "Metro 2008 Draft Long Range Transportation Plan Summary", mentioned the "Crenshaw Boulevard Corridor" under Metro Rail to be open in 2025, which contradicts the date of 2019. This same figure also shows a Wilshire Boulevard Bus Rapid Transitway Construction to be open by 2026. 3

If you have any questions regarding traffic/access comments, please contact Mr. Armond Ghazarian at (310) 348-6448 extension 227 or by e-mail at aghazar@dpw.lacounty.gov.

Hazards–Geotechnical/Geology/Soils

The DEIR acknowledges that all or a portion of the site is located within a potentially liquefiable area per the State of California Seismic Hazard Zones Map – Los Angeles and Hollywood Quadrangles. However, the mitigation measures for the proposed stations/facilities located within the potentially liquefiable areas that are not supported by bedrock appear to be inadequate. Geotechnical reports addressing any future developments at this site shall recommend mitigation measures for geotechnical hazards such as liquefaction and seismic induced settlement. 4

If you have any questions regarding geotechnical comment, please contact Mr. Jeremy Wan at (626) 458-4925 or by e-mail at jwan@dpw.lacounty.gov.

Other–Environmental Safety

There is no landfill within 1,000 feet of the proposed project; however the DEIR indicates that the project will traverse methane zone and methane buffer zones associated with oil deposit. We therefore recommend City of Los Angeles Building & Safety provides mitigation measures, control and protection systems for any excavation and affected enclosed buildings and structures from possible hazardous gas intrusion. 5

If you have any questions regarding environmental comments, please contact Mr. Corey Mayne at (626) 458-3530 or by e-mail at cmayne@dpw.lacounty.gov.

Other-Programs

The proposed High Speed Rail project is in the vicinity of this project. The routing for the Regional Connector appears to be away from the proposed route for the High Speed Rail project. MTA should be consulting with the California High Speed Rail Authority (CHSRA) to verify that no potential conflicts will occur. Please note that the CHSRA was not listed as one of the public agencies consulted. 6

Hazards-Flood

1. Water Resources Technical Memorandum Pages 24 & 25 states "Storm drains within the city are constructed and maintained by both the City and the Los Angeles County Flood Control District. The Los Angeles County Flood Control District constructs the major storm drains and open flood control channels, and the City constructs local interconnecting tributary drains. The City's 7

system is designed to convey storm flows from a ten-year storm event, while the County system is designed for a 50 year storm event."

- Verify design storm frequency of Los Angeles County Flood Control District (LACFCD) facilities potentially affected by the proposed project. The attached memorandum regarding LACFCD standards for level of flood protection is provided for your reference.

7 cont'd

2. Water Resources Technical Memorandum Pages 36 & 41states "Overall however, construction of the At-Grade Emphasis LRT Alternative would be expected to result in minimal impacts and need for relocation of the current drainage system. In the case where construction activities would result in the need to relocate certain drainage infrastructure, temporary lines would be installed during the construction period. Construction of the At-Grade Emphasis LRT Alternative would have no significant impact on the overall drainage pattern in the project area."

   "As described in the analysis of storm drain impacts under the At-Grade Emphasis LRT Alternative, there could be conflicts with the existing storm drain infrastructure along the proposed alignment. Similar impacts would be expected under the Underground Emphasis LRT Alternative. The main conflicts could occur along the pipe backbone along Flower and Streets. However, design measures would be implemented in order to address potential conflicts and there would be no significant impact to the capacity of the existing system or overall direction of storm flows through the drainage infrastructure in the project area."

   - Contact Los Angeles County Department of Public Works, Construction Division for permitting requirements pertaining to any proposed connection(s) or alterations to LACFCD facilities.

   - Contact Los Angeles County Department of Public Works, Design Division for allowable discharge to LACFCD facilities for any proposed connections to LACFCD facilities. Proposed discharges in excess of allowable discharge may require mitigation.

   - Contact Los Angeles County Department of Public Works, Program Development Division for agreements requirements with MTA pertaining to any proposed connection(s) or alterations to LACFCD facilities.

8

If you have any questions regarding flood comments, please contact Ms. LizbethCordova at (626) 458-4921 or by e-mail at lcordova@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact me at (626) 458-4921 or by e-mail at tduong@dpw.lacounty.gov.

From: Hunter, Dennis
Sent: Tuesday, October 12, 2010 11:21 AM
To: Duong, Toan
Cc: Ibrahim, Amir; Burger, Steve; Doudar, Phil; Maselbas, Paul; Cadena, Diego
Subject: RE: Fwd: Metro Regional Connector: REMINDER TO PROVIDE COMMENTS BY OCTOBER 18 CLOSE OF DRAFT EIS/EIR COMMENT PERIOD

Please distribute for comments and prepare a comment letter to MTA by 10/18. Thanks

Dennis Hunter, PLS PE
Assistant Deputy Director
Land Development Division
(626) 458-4900

From: "Ann Kerman" <kermana@metro.net>
Date: October 8, 2010 5:32:06 PM PDT
To: "gfarber@dpw.lacounty.gov" <gfarber@dpw.lacounty.gov>
Subject: Metro Regional Connector: REMINDER TO PROVIDE COMMENTS BY OCTOBER 18 CLOSE OF DRAFT EIS/EIR COMMENT PERIOD

Regional Connector Transit Corridor Study

Conclusion of Public Hearings

On September 3, 2010, Metro released the Draft Environmental Impact Study and Environmental Impact Report (Draft EIS/EIR) for the Regional Connector Transit Corridor Study which analyzed the proposed project and alternatives. Metro is soliciting public comments regarding the Locally Preferred Alternative (LPA) and additional topics discussed in the Draft EIS/EIR. As a reminder, the Regional Connector is looking for the best approach to connect the Blue, Expo and Gold Light Rail Transit (LRT) lines, allowing for increased transit access throughout Los Angeles County.

Metro recently hosted two public hearings to discuss the Draft EIS/EIR. Nearly 200 people attended the hearings, with many submitting written and/or verbal comments. These comments have become a part of the official record and will be responded to in the Final EIS/EIR.

The public hearing at the Japanese American National Museum on September 28, 2010 was recorded and is available for viewing by following this link.

Formal comments on the Draft EIS/R may still be submitted through October 18, 2010, in a number of ways:

•e-mail to: regionalconnector@metro.net

•US Mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012

•visiting the project website

Public comments on the Draft EIS/EIR will be accepted until October 18, 2010. Metro will respond to all comments received during the Final EIS/EIR phase of the project.

If you would like to review information about the Regional Connector, including presentations shared with the public over the last three years, please follow the link.

This message was sent to gfarber@dpw.lacounty.gov by:

Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza
Los Angeles, CA 90012
(213) 922-6000

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COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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12/12/00
From DO

IN REPLY PLEASE
REFER TO FILE:

March 31, 1986

TO WHOM IT MAY CONCERN:

FROM: T. A. Tidemanson
Director of Public Works

LEVEL OF FLOOD PROTECTION
FILE NO. 2-15.321

The following Level of Flood and Drainage Protection Standards has been adopted by the Department of Public Works:

I. Capital Flood Protection (Based on a rainfall with a probability of occurrence of once in 50 years).

A. Natural watercourses -

All facilities that are constructed in or intercept flood waters from natural watercourses shall be designed for the Capital Flood. These include open channels, closed conduits, bridges, and dams or debris basins (not under State of California jurisdiction). See Attachment A for definition of a watercourse.

B. Floodways - All areas mapped as floodways shall be mapped based on the Capital Flood.

C. Natural Depressions or Sumps -

All facilities that are constructed to drain natural depressions or sumps shall be designed for a Capital Flood. These include channels, closed conduits, retention basins, detention basins, pump stations and highway underpasses. See Attachment A for definition of sumps.

D. Culverts under major and secondary highways.

II. Urban Design Storm (Based on a rainfall with a probability of occurrence of once in 25 years).

The Urban Design Storm shall be the level of protection for all developed areas with other than conditions described in I above.

The surface capacity of the street or highway may be used up to a water surface level not exceeding the road right of way line. The available surface capacity of the street, however, may be restricted by vehicular or pedestrian traffic requirements see (Attachment A). If a storm drain is required to reduce the water surface level in the street to an acceptable level, it shall be designed for not less than 10-year frequency rainfall flow rates. The storm drain capacity shall be increased where necessary to lower the water surface level for the 25-year frequency storm to within road right of way or to meet other requirements as indicated in Attachment A.

III. Probable Maximum Flood -

All dams (earth embankment, concrete or other materials) that fall under the control of the State of California laws defining dams shall be constructed to safely pass the probable maximum flood as determined from the probable maximum precipitation as defined by the National Weather Service.

See Attachment B for background and other pertinent data.

GJP:yo

Attach (2)

Attachment A
Level of Flood Protection

Definitions:

1. Natural Watercourses -

A natural watercourse is a path along which water flows as a result of natural topographic features. Furthermore, for the purposes of this definition, a natural watercourse drains a watershed greater than 100 acres and also meets one or more of the following conditions:

a. Experiences flow velocities greater than five feet per second while carrying a Capital Flood.

b. Has flow depths greater than 1.5 feet while carrying a Capital Flood.

c. Would have water surface elevations, while carrying a Capital Flood, within one foot of the bases of adjacent habitable structures, if such water surface elevations would result from construction of facilities with less than a Capital Flood capacity.

2. Depression or sump -

A depression or sump is an area for which there is no surface route to outlet flows. Furthermore, for the purposes of this definition, a depression or sump also meets one or more of the following conditions:

a. Would have a ponded water surface elevation, during a Capital Flood, within one foot of the bases of adjacent habitable structures, if such elevation would result from construction of facilities with less than a Capital Flood capacity. This condition does not apply if there is a surface route for outflow such that the ponded water surface cannot reach the bases of adjacent structures during a Capital Flood.

b. In a roadway, would have a ponded water surface elevation higher than the elevation of the public right of way line if facilities with less than a Capital Flood capacity were constructed. This condition applies to flows which reach the roadway upstream of the sump and are conveyed to the sump by the roadway.

c. Has a ponded depth of three feet or greater.

3. Street Capacity -

Maximum street capacity as defined herein is the capacity of the street section to carry flows within street right of way (depth of flow does not exceed either property line). See Highway Design Manual for criteria on quantity of water to be removed from the road surface to provide favorable conditions for vehiclular and pedestrian traffic for particular level of protection. This may increase the level of protection required to be provided by the drain.

Attachment B
Level of Flood Protection

Background

The Hydrology SubCommittee has reviewed the level of protection standards of the three former Departments (County Engineer, Road, and Flood) as well as all major agencies in Southern California. In addition, we have met with the County Counsel for legal advice.

The Flood Control District (FCD) in cooperation with the United States Army Corps of Engineers (C of E) has constructed the major flood control facilities in Los Angeles County. These facilities which have channelized the rivers and major streams have been designed for Capital Flood protection and, in the case of the C of E, their Standard Project Flood (SPF). Analysis has indicated that these are comparable levels of protection. In most cases, the SPF equals or exceeds the Capital Flood.

The Los Angeles County Road Department has also used the criterion of the FCD Capital Flood when providing facilities to cross over (bridge) major streams.

The County Engineer required Capital Flood protection in all instances where the FCD had indicated a comprehensive plan channel or had hydrology for a major stream. They required the developers to use FCD flow rates.

The level of protection for urban areas differed between the three Departments. The County Engineer required all new tract developments to use the 25-year frequency level. This could be obtained with a combination of storm drain and surface street capacity. However, if off site capability to accept the excess surface flows was limited, they required the drain exiting the development to carry the 25-year frequency flows. In the majority of the cases, therefore, the developers chose to construct the entire storm drain system for the 25-year frequency flow rates. The Road Department followed the County Engineer requirements for new tract developments. Road Department Cash Contract projects utilized a 10-year frequency protection level obtained by a combination of a storm drain and street surface capacity. The quantity of surface flow varied dependent upon whether the project fell under local or federal requirements. Sumps were designed to the Capital Flood protection level.

The FCD required the 10-year frequency level for storm drains in streets for the four Storm Drain Bond Issue Programs 1952-1970 and/or District projects constructed since the 1970's. Prior to these Storm Drain Bond Issues, the FCD was not involved to any great extent in other than major drainage channels. However, all projects including tributary storm drains in this period were constructed to the 50-year frequency level.

This background suggests that certain standards have been determined to be reasonable levels of protection. Our opinion, based on discussions with County Counsel, is that any lower levels of protection in future projects or approvals would increase the chances of liability should damage occur.

Compatibility to Federal Flood Insurance Requirements

The Federal Insurance Agency (FIA) has set the 100-year flood as their standard. The hydrology is based on historical runoff records to produce the 100-year flow rate. There is no allowance made for future urbanization. In developed areas the standard requires the finished floor elevation of proposed habitable structures to equal or exceed the water surface of the 100-year flood.

Our investigation indicates the recommended levels of protection, Capital Flood and Urban Design Storm, will meet or exceed FIA requirements.

A frequency analysis of the entire County shows that the FIA standard is between the 25-year and 10-year rainfall frequency levels. In most areas, facilities designed for the 10-year rainfall frequency level, when combined with the available street capacity, provide sufficient protection to meet FIA requirements. However, if development of an area changes and FIA restudies the area, 10-year rainfall frequency facilities may prove inadequate.

The proposed 25-year rainfall frequency level will meet FIA standards even if development changes.

The recommended protection levels are based on meeting FIA standards.

Compatibility with Existing Systems

The level of protection standards recommended may have to be modified in cases where the capacity of the conduit into which the proposed drain outlets has limited capacity. Where no relief drain is planned, it is recommended that the drain be restricted to the capacity available at its outlet. In cases where a relief drain is anticipated, the proposed drain is recommended to be sized for the appropriate level of protection.

There are enumerable possible situations, and all cannot be covered in this policy statement. The appropriate Section Head in the Department should review the proposed drainage system and the outlet conditions based on this policy and determine the required level of protection. In situations where the determination may not be clear-cut, the Section Head should recommend to his Division Head that it be referred to the Q Committee for its recommendations to the Director of Public Works.

Economics

We believe the proposed level of protection will not result in a change in cost for either design or construction for Department-constructed drains or developer-constructed drains in a majority of the situations.

The Urban Design Storm (25-year) will not increase requirements for drains required in new developments. The Department-constructed drains may increase in size in areas where the terrain is very flat and street capacity is limited. We have analyzed a number of different situations on prior projects and concluded that design costs would not increase more than one percent and construction costs would increase between two percent and five percent. However, we believe the number of projects affected will be fewer than 20 percent.

There may be some situations where under previous County Engineer policy construction in or intercepting watercourses used a 25-year level, whereas now a 50-year level will be required. It is difficult to determine exactly what percentage of the projects will be affected. In any event, the cost increase for these projects would be approximately 8 percent.

Rainfall vs. Runoff Records

The Committee recommends the continued use of rainfall records to determine the design storm. The major reason for this is that rainfall records are not affected by urbanization, whereas runoff records tend to be poor predictors of future runoff in areas where development is changing. Although we now have considerable length of runoff records, there has been constant urbanization throughout the record period. In addition, there is continued urbanization in the Santa Clara Valley, Antelope Valley, and certain areas on the south slope of the San Gabriel Mountains and in the West County area.

Discussion of Comments

Comment: Use a straight 10-year rainfall level of protection for all storm drains in streets.

Reply: The proposed level of protection should in the majority of the cases result in storm drains designed for 10-year Q's. The proposed level of protection is a combined system of utilizing street capacity and drain. It will in all cases meet Federal Flood Insurance standards. It will not lower present levels of protection required by the County Engineer, whereas a straight 10-year would in some cases.

Comment: The proposed level of protection will increase cost.

Reply: An analysis of drains in a number of different areas indicate that in the majority of the cases, the street sections have adequate capacity for the difference between a 25-year and 10-year Q. In the areas with flat street slopes or other areas where street capacity may be limited for one reason or another, the increased costs for the drain and appurtenances range between two percent and five percent. Design costs will be increased approximately one percent.

Comment: We feel you must prepare a precise policy regarding the handling of the situation where the new hydrology method produces flows that are greater than the outletting system's capacity. We feel the new method will produce greater Q's in almost all cases based on the results of hydrology reviews made during the Bond Issue Programs. As you are aware, the Bond Issue Programs guideline was to accept flow rates based on the County Engineer's hydrologic method when the resultant Q's were as much as 15 percent lower than the Q's generated by the District's short-cut rational method. It is recommended that you adapt this 15 percent figure as a guideline for future hydrologic studies.

Reply: A policy regarding the compatibility of a proposed drain to an existing outletting system is given in this statement and if interpetation is required, it will be given by the appropriate Department Section Head. Difficult situations will be referred to the Q Committee for its recommendation to the Director. The 15 percent guideline would no longer be appropriate. It was used up through the 1964 Bond Issue Projects. At that time, there was a difference in some coefficients used, and on very large areas the Q's near the end of the drain using the County Engineer method were sometimes lower than the District method. However, the Q's at the upper end of the drain were usually larger than the District's using the County Engineer method.

Comment: Will a 10-year rainfall frequency drain result in acceptable flooding levels during the FIA 100-year flood? Will the flooding levels be below finished floor elevations? Can we use a standard that will adjust the drain size to account for this if necessary?

Reply: Our investigation indicates that in most cases 10-year drains will give protection such that flooding levels will not exceed FIA standards. A frequency analysis when considering the entire County indicates that the FIA flooding levels are between the 10-year and 25-year rainfall frequency flooding levels. A standard could be developed to adjust drain sizes to meet FIA standards, however, it would be more complex. It also would not produce uniform results throughout the County.

Summary

The Hydrology SubCommittee has evaluated all the comments received on the proposed level of protection policy. After careful consideration of all points of view, we believe we have recommended a policy that is in the best interests of the public and the Department. We believe this policy will provide adequate flooding protection for Los Angeles County with insignificant, if any, increase in costs and minimize future Department liability.

GJP:yo

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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GAIL FARBER, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

October 26, 2009

IN REPLY PLEASE
REFER TO FILE: LD-1

Mr. Roderick Diaz
Project Manager
Los Angeles County Metropolitan
Transportation Authority
One Gateway Plaza, M/S 99-22-3
Los Angeles, CA 90012-2952

Dear Mr. Diaz:

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
CRENSHAW TRANSIT CORRIDOR PROJECT
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

We reviewed the DEIR for the Crenshaw Transit Corridor project. The project would improve transit services in the corridor and connect corridor residents and employees with existing transit lines such as the Metro Green Line or approved transit lines such as the Exposition Light Rail Transit Line thereby improving mobility and access to regional activity centers.

The following comments are for your consideration and relate to the environmental document only.

Hazards-Flood/Water Quality

1. The DEIR should note how the project will comply with National Pollutant Discharge Elimination System permit.

2. Once a project alternative is selected, submit a hydrology study for review and approval to the County of Los Angeles Department of Public Works. The hydrology study should also address applicable Standard Urban Stormwater Mitigation Plan and Total Maximum Daily Load requirements.

3. The area of the proposed project contains Los Angeles County Flood Control District facilities. If encroachments, connections, or alterations to Los Angeles County Flood Control District facilities are proposed, contact Public Works' Construction Division for permitting requirements.

If you have any questions regarding flood comments, please contact Ms. Lizbeth Cordova at (626) 458-4921 or by e-mail at lcordova@dpw.lacounty.gov.

Hazards-Geotechnical/Soils/Geology

The site is located within a potentially liquefiable area per the State of California Seismic Hazard Zones Map–Hollywood and Inglewood Quadrangles. Also, all or portion of the site is located within the Alquist Priolo Earthquake Fault Zone. Site-specific geotechnical and geologic reports addressing the proposed development and recommending mitigation measures for geotechnical and geologic hazards should be included as part of the DEIR.

If you have any questions regarding geotechnical comments, please contact Mr. Jeremy Wan at (626) 458-4925 by e-mail at jwan@dpw.lacounty.gov.

Services-Road/Flood Maintenance

1. Page ES-12, Executive Summary: Alignment option C-2 would impact County road maintenance services. This alignment travels north on Hawthorne Boulevard from the Green Line Station to Florence Avenue. This section of Hawthorne Avenue is maintained by the County and has a landscaped median in the center of the alignment from 111th Street to 104th Street. This median would have to be removed if Route C-2 was approved for the alignment. In addition, this segment of Hawthorne Boulevard was resurfaced less than three months ago by the County.

   All other alignments are either in the City of Los Angeles or the City of Inglewood. Page ES-14 summarizes the proposed alignments, and Alignment C-1 is listed as the most favored route; Alignment C-2 is the second more favored route. We would agree with the rankings and prefer Alignment C-1 since it has the least impact to the County.

2. Pages ES-16 and ES-17 discuss the alternatives considered for a Maintenance and Operations Facilities Site. The report ranks Site D the highest. We concur with this assessment since Site D is a vacant lot of 14.8 acres on Rosecrans Avenue in the City of El Segundo, has access to the rail, and is privately owned. A facility at this site would minimize the impact of the project on the county in terms of facility, relocations, and on-going maintenance operations.

   The report ranks Site B as the next highest. The selection of Site B could have a major operational impact to Public Works since Site B would require Public Works' Road Maintenance District 3 (Westchester, RD233, Fleet, Construction Division, Permits; Operational Services' warehouse) and Flood Maintenance Division (83rd Street yard) to be relocated. If Site B is selected, a suitable site of equivalent size and functionality should be identified for relocation

of these critical facilities to minimize the potential impacts. Additionally, plans should be made to allow construction of the replacement facility and relocation such that on-going operations are not significantly impacted.

Of the four sites in the Executive Summary, Site C should be argued as the next best site after Site D. It is larger than Site B and does not require any "buffers" to make the site useable. Table ES-2 lists the pros and cons of each site and Site C looks more favorable than B from the data in the table.

3. The DEIR should explore other potential sites not listed in the Executive Summary that could be better potential sites than Site B including expansion of existing MTA-owned facilities. If Site B is chosen as the Maintenance and Operations Facility Site for the Crenshaw Transit Corridor project, the DEIR should discuss the relocation, financial, logistic, and operational impacts to Public Works.

   If you have any questions regarding comments, please contact Mr. Joe Young at (310) 348-6448 by e-mail at jyoung@dpw.lacounty.gov.

When the final Environmental Impact Report is available, we would like the opportunity to review it for comment. If you have any other questions or require additional information, please contact Mr. Toan Duong at (626) 458-4945 or by e-mail at tduong@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

for DENNIS HUNTER, PLS PE
Assistant Deputy Director
Land Development Division

MA:ca
P:\ldpub\CEQA\CDM\ METRO - MTA_CRENSHAW TRANSIT CORRIDOR PROJECT_DEIR.doc

AL4

Responses to Comments from County of Los Angeles - Department of Public Works, Duong, Toan

Response to Comment AL4-1

These separate projects are discussed in their own EIS/EIR documents.

Response to Comment AL4-2

Yes, the Crenshaw Line is a separate project, and has its own EIS/EIR. The opening dates listed in the Long Range Transportation Plan (2009) were used in the Regional Connector Draft EIS/EIR.

Response to Comment AL4-3

Final Long Range Transportation Plan opening dates were used in the Regional Connector Draft EIS/EIR. The opening dates shown in the Draft Long Range Transportation Plan were revised in the Final Long Range Transportation Plan due to the passage of Measure R.

Response to Comment AL4-4

Preliminary evaluation of liquefaction was performed on the alignment based on the available geologic and subsurface exploration data. In-situ tests, such as standard penetration tests will be performed during the final design phase and liquefaction potential will be further evaluated to confirm findings made during preliminary engineering. Metro will commit to implementing the following mitigation measures as needed to avoid impacts: support of some structures on deep foundations such as drilled piles, or ground improvement such as deep soil mixing or stone columns.

Response to Comment AL4-5

As indicated in Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials, of the Draft EIS/EIR, with the implementation of mitigation, the Fully Underground LRT Alternative would result in less than significant impacts associated with hazardous materials. In addition, the Draft EIS/EIR included mitigation measures involving consistency with the goals of the City of Los Angeles Municipal Code and Methane Mitigation Standards, which control methane intrusion emanating from geologic formations and require testing of all underground segments. Mitigation requirements will be implemented according to the actual methane levels and pressures detected on a site. Metro will commit to implementing the following mitigation measures as needed to avoid impacts: both active and passive ventilation systems to ensure exchange of air, gas barriers (membranes around basements and foundations), and sensors in interior spaces to monitor the presence of gas and its pressure. Specific precautions to protect workers and the public from exposure to toxic gases would be required, and specialized excavation methods would be needed to prevent explosion.

Response to Comment AL4-6

The Los Angeles portion of the California High-Speed Rail project was considered in the analysis of cumulative impacts. As indicated in Section 4.19, Cumulative Impacts, of the Draft EIS/EIR and this Final EIS/EIR, the Regional Connector project would be constructed and operated in

coordination with the California High-Speed Rail project. Metro would also coordinate and interface with the County of Los Angeles portion of the California High-Speed Rail project.

The California High Speed Rail Authority is a participating agency and has been included in the recipient list for notices soliciting input on the project during the environmental review process.

Response to Comment AL4-7

This will be verified and identified in Special Provisions (a section in the construction contract documents).

Response to Comment AL4-8

Metro will contact the Los Angeles County Department of Public Works, Construction Division for permitting requirements pertaining to any proposed connections or alterations to Los Angeles County Flood Control District (LACFCD) facilities, and the Los Angeles County Department of Public Works, Design Division for allowable discharge to LACFCD facilities for any proposed connections to LACFCD facilities. Metro will implement specific measures if quantity of water discharged is in excess of allowable discharge. Finally, Metro will contact the Los Angeles County Department of Public Works, Program Division for agreements/requirements with Metro pertaining to any proposed connection or alterations to LACFCD facilities. This language will also be included in Special Provisions (a section in the construction contract documents).

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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GAIL FARBER, Director

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P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

October 20, 2010

IN REPLY PLEASE
REFER TO FILE: LD-1

Mr. David Mieger
Project Director
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-5
Los Angeles, CA 90012

Dear Mr. Mieger:

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
REGIONAL CONNECTOR TRANSIT CORRIDOR
METROPOLITAN TRANSPORTATION AUTHORITY (MTA)

Thank you for the opportunity to review the DEIR for the Regional Connector Transit Corridor project. The project is looking for the best approach to connect the Blue, Expo, and Gold Light Rail Transit (LRT) lines, allowing for increased transit access throughout the City of Los Angeles.

The following comments are for your consideration and relate to the environmental document only.

Services–Traffic/Access

1. The front page of the Executive Summary shows Figure ES-1, Existing and Proposed Regional Metro Rail Lines (2035). Figure ES-1 shows a Metro Rail Line Under Study, called the "Crenshaw-Prairie," and another Metro Rail Line under study called the "Westside Extension to Westwood." These two proposals are not mentioned in any detail in the report, "The Regional Connector Transit Corridor." These two proposed rail routes could have an impact on roads in the County of Los Angeles' Road Maintenance District 3 area such as Prairie Avenue, Hawthorne Boulevard, Crenshaw Boulevard, and Wilshire Boulevard. 1

2. Chapter 2 of The Regional Connector Transit Corridor report briefly mentions the Metro Crenshaw Line on page 2-11; it states that the Metro Crenshaw Line from the Metro Green Line at Aviation Boulevard to the Metro Expo Line at

Crenshaw Boulevard is an approximately 10 mile light rail or bus rapid transit system anticipated to be operational by 2019. Is this line part of another study or proposal?

3. We commented on the Crenshaw Transit Corridor Project DEIR on October 26, 2009, enclosed. Also the Crenshaw Transit Corridor project DEIR, page ES-9, Figure S-5, "Metro 2008 Draft Long-Range Transportation Plan Summary," mentioned the "Crenshaw Boulevard Corridor" under Metro Rail to be open in 2025, which contradicts the date of 2019. This same figure also shows a Wilshire Boulevard Bus Rapid Transitway Construction to be open by 2026.

If you have any questions regarding traffic/access comments, please contact Mr. Armond Ghazarian at (310) 348-6448, Extension 227, or by e-mail at aghazar@dpw.lacounty.gov.

Hazards–Geotechnical/Geology/Soils

The DEIR acknowledges that all or a portion of the site is located within a potentially liquefiable area per the State of California Seismic Hazard Zones Map–Los Angeles and Hollywood Quadrangles. However, the mitigation measures for the proposed stations/facilities located within the potentially liquefiable areas that are not supported by bedrock appear to be inadequate. Geotechnical reports addressing any future developments at this site shall recommend mitigation measures for geotechnical hazards such as liquefaction and seismic induced settlement. 1 cont'd

If you have any questions regarding geotechnical comment, please contact Mr. Jeremy Wan at (626) 458-4925 or by e-mail at jwan@dpw.lacounty.gov.

Other–Environmental Safety

There is no landfill within 1,000 feet of the proposed project; however, the DEIR indicates that the project will traverse methane zone and methane buffer zones associated with oil deposit. We, therefore, recommend that the City of Los Angeles' Building and Safety provide mitigation measures, control, and protection systems for any excavation and affected enclosed buildings and structures from possible hazardous gas intrusion.

If you have any questions regarding environmental comments, please contact Mr. Corey Mayne at (626) 458-3530 or by e-mail at cmayne@dpw.lacounty.gov.

Other-Programs

The proposed High Speed Rail project is in the vicinity of this project. The routing for the Regional Connector appears to be away from the proposed route for the High Speed Rail project. MTA should be consulting with the California High Speed Rail Authority to verify that no potential conflicts will occur. Please note that the California High Speed Rail Authority was not listed as one of the public agencies consulted.

Hazards-Flood

1. Water Resources Technical Memorandum pages 24 and 25 states, "Storm drains within the City are constructed and maintained by both the City and the Los Angeles County Flood Control District (LACFCD). The LACFCD constructs the major storm drains and open flood control channels, and the City constructs local interconnecting tributary drains. The City's system is designed to convey storm flows from a ten-year storm event while the County system is designed for a 50 year storm event."

   - Verify design storm frequency of LACFCD facilities potentially affected by the proposed project. The enclosed memorandum regarding LACFCD standards for level of flood protection is provided for your reference.

2. Water Resources Technical Memorandum pages 36 and 41 states, "Overall, however, construction of the At-Grade Emphasis LRT Alternative would be expected to result in minimal impacts and need for relocation of the current drainage system. In the case where construction activities would result in the need to relocate certain drainage infrastructure, temporary lines would be installed during the construction period. Construction of the At-Grade Emphasis LRT Alternative would have no significant impact on the overall drainage pattern in the project area."

   "As described in the analysis of storm drain impacts under the At-Grade Emphasis LRT Alternative, there could be conflicts with the existing storm drain infrastructure along the proposed alignment. Similar impacts would be expected under the Underground Emphasis LRT Alternative. The main conflicts could occur along the pipe backbone along Flower and 2nd Streets. However, design measures would be implemented in order to address potential conflicts and there would be no significant impact to the capacity of the existing system or overall direction of storm flows through the drainage infrastructure in the project area."

1 cont'd

- Contact the County of Los Angeles Department of Public Works' Construction Division for permitting requirements pertaining to any proposed connection(s) or alterations to LACFCD facilities.

- Contact Public Works' Design Division for allowable discharge to LACFCD facilities for any proposed connections to LACFCD facilities. Proposed discharges in excess of allowable discharge may require mitigation.

- Contact Public Works' Programs Development Division for agreements requirements with MTA pertaining to any proposed connection(s) or alterations to LACFCD facilities.

1 cont'd

If you have any questions regarding flood comments, please contact Ms. Lizbeth Cordova at (626) 458-4921 or by e-mail at lcordova@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact Mr. Toan Duong at (626) 458-4921 or by e-mail at tduong@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

for DENNIS HUNTER, PLS PE
Assistant Deputy Director
Land Development Division

JY:ca
P:\ldpub\CEQA\CDM\ METRO_ REGIONAL CONNECTOR TRANSIT CORRIDOR_ DEIR.doc

AL5

Responses to Comments from the County of Los Angeles - Department of Public Works, Farber, Gail

Response to Comment AL5-1

Comment acknowledged. These comments were emailed to Metro prior to submittal of this letter. Please refer to Responses to Comments AL4-1 through AL4-8, above.

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WASTEWATER ENGINEERING SERVICES DIV.
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210 OR 6211

October 14, 2010

Dolores Royball Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

File: SC.CE.

Dear Ms. Royball Saltarelli:

Regional Connector Transit Corridor Project - Draft EIR

This is in response to your September 13, 2010 letter requesting wastewater service information for the proposed project. The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) has conducted a preliminary study of the existing sewer lines and gauges located within the vicinity of the proposed project location.

The City of Los Angeles sewer system consists of primary sewers (16-inches and larger in diameter) and secondary sewers (less than 16-inches in diameter). The secondary sewers service the property laterals and feed into the primary sewer lines. The primary sewers constitute the trunk, interceptor, and outfall portions of the system. These sewers ultimately convey the wastewater to the Hyperion Treatment Plant which has sufficient capacity for current and future development. 1

The majority of sewer lines within the proposed project area consist of secondary lines. The secondary reaches run along W 7th St, S Hill St, E Cesar E Chavez Ave, E Commercial St, and S Alameda St. The primary sewer reaches run along Flower St, E Cesar E Chavez Ave. and Alameda St near the 7th St/Metro Center, Union Square, and the Little Tokyo Stations, respectively. Gauging within the project area show relatively low flows which indicates the existing sewer system might be able to accommodate future discharges related to this project. Figure 1 shows the existing sewer lines and gauging locations along the alignment of the proposed project.

Currently, the project description lacks sufficient detail for us to conduct a detailed wastewater capacity analysis. Should the project descriptions change or more details

related to the construction dewatering flows become available, please continue to send us information so that we may determine if a sewer assessment is required in the future. 1 cont'd

If you have any questions, please call Abdul Danishwar of my staff at (323) 342-6220.

Sincerely,

Ali Poosti, Acting Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

Encl: Figure 1 – Regional Connector Transit Corridor Project Sewer Map

cc: Kosta Kaporis, BOS
Daniel Hackney, BOS
Rowena Lau, BOS

AL6

Responses to Comments from the County of Los Angeles - Department of Public Works, Bureau of Sanitation, Poosti, Ali

Response to Comment AL6-1

Metro will coordinate with the City of Los Angeles and its departments as the design of the project progresses. Metro will provide more details related to construction dewatering flows as they become available so that a sewer assessment may be determined. This will also be listed in Special Provisions of the contract document (a section in the construction contract documents).

Regional Connector Transit Corridor

Street Lighting

Street along and adjacent to a proposed LRT tracks and subway will require lighting improvements to meet current City of Los Angeles Standards. BSL will require installation of new lighting system in public areas that have no existing lighting before construction of the LRT. BSL will require increase of existing lighting with LEDs (light emitting diodes) light source (BSL). LED lights provide beneficial environmental impact with improved energy efficiency.

Any major street work that takes place should give consideration to the impact of existing public lighting and requirements to future lighting improvements. Any modifications of the present street layout (stripping, parking lane removal, right of way acquisition, bike lane, etc.) and circulation of traffic/pedestrians most likely will involve redesign and reconstruction of the lighting system for the new configuration (BSL).

Any street/pedestrian lighting improvements that create new assessments or increase existing assessments to property owners will require the Proposition 218 process to take effect. This process not only requires community participation but also their approval throughout a ballot process. This process typically takes about 6 months to complete. The lighting assessment is paid by property owners through the County Property Tax Bill. Assessments must be confirmed by City Council before commencing construction of the street lighting system (BSL).

If the project impacts area that contain expensive Historical/Ornamental poles in the City of Los Angeles, these Historical/Ornamental street lights shall be retained and improved (refurbished and upgraded) in the proposed project area. If there are new street lights to be installed along with the existing Historical/Ornamental street lights, BSL will require new street lights for these area to match the existing Historical/Ornamental street lights (BSL).

Temporary street lighting is required as a part of this project. Number of temporary units installed and the spacing between adjacent locations will match the existing street lighting system in service on a one for one basis (BSL).

Park and Ride facilities and parking lots design shall include public street and pedestrian lighting improvements in and around the facilities that meet current BSL standards (BSL).

1

AL7

Responses to Comments from the City of Los Angeles, BSL, Batikian, Silva

Response to Comment AL7-1

Comment acknowledged. Please refer to Responses to Comments AL3-57 through AL3-62, above.

Metro Gold Line Foothill Extension
Construction Authority

406 E. Huntington Drive, Suite 202
Monrovia, CA 91016-3633

626-471-9050 ph
626-471-9049 fx

www.foothillextension.org

October 18, 2010

BLCA-MTA-085

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F2-104

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan
Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Mr. Ray Tellis
Federal Transit Administration
888 South Figueroa Street
Suite 1850
Los Angeles, California 90017

Subject: Regional Connector Transit Corridor Project
Draft Environmental Impact Statement/Environmental Report

Dear Ms. Saltarelli and Mr. Tellis:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement/Environmental Report for the Regional Connector Transit Corridor Project.

Throughout the Regional Connector DEIS/EIR , the regional Connector is described to allow a "one seat ride from Long Beach to Azusa" , however the Foothill Extension according to Measure R and the Authority's enabling legislation defines the project to Claremont. The Metro Gold Line Foothill Extension Construction Authority recently adopted a resolution to support the 30/10- initiative with the same clarification. As you know, Metro unanimously approved a resolution on October 22, 2009 stating "As a first priority, pursue other potential funding sources, excluding federal New Starts, which are not currently included in the 2009 LRTP, to be programmed to close the funding gaps on the Gold Line Foothill Extension and Crenshaw/LAX Transit Corridor." This commitment to the Project to Claremont allows for an additional 11.5 miles of light rail to the county line providing a one seat ride from Long Beach to Claremont. 1

Again, we thank you for this opportunity and look forward to the project's successful completion from Long Beach to Claremont.

Sincerely,

Keith Hanks
Chairman

Cc: Construction Authority Board of Directors
Habib F. Balian

AL8

Responses to Comments from Metro Gold Line Foothill Extension Construction Authority, Hanks, Keith

Response to Comment AL8-1

The Draft EIS/EIR studied a future baseline year of 2035, at which time the Metro Gold Line Foothill Extension would be completed to Azusa per the 2009 Metro Final Long Range Transportation Plan. The extension farther to Claremont was not included in modeling assumptions because it is expected to be completed after 2035. The eventual terminus of the Foothill Extension project is now expected to be Montclair. For purposes of consistency in identifying the project, the North-South Line is now described in this Final EIS/EIR as running from Long Beach to Montclair.

Responses to Regional Agency Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
AR1	South Coast Air Quality Management District	MacMillan	Ian
AR2	Southern California Association of Governments	Liu	Huasha

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

E-mailed: October 15, 2010
roybald@metro.net

October 15, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza MS 99-22-2
Los Angeles, California 90012

Review of the Draft Environmental Impact Report (Draft EIR) for the Regional Transit Corridor Project

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comment is intended to provide guidance to the lead agency and should be incorporated into the final Environmental Impact Report (EIR) as appropriate. 1

Based on a review of the draft EIR the AQMD staff is concerned about the significant regional construction air quality impacts from the proposed project. In order to reduce regional air quality impacts, AQMD staff recommends that the lead agency require additional mitigation to reduce diesel equipment exhaust emissions during construction activities. 2

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the final EIR. Further, staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments. 3

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:DG

LAC100909-02
Control Number

Cleaning the air that we breathe...

AR1

Construction Equipment Mitigation Measures

1. Given that the lead agency's regional construction air quality analysis demonstrates that the criteria pollutant emissions will exceed the AQMD's daily significance thresholds for NOX, VOC, CO, and PM2.5 for each build alternative and PM10 for the At-Grade Emphasis LRT Alternative AQMD recommends that the lead agency consider adding the following mitigation measures to further reduce air quality impacts from the project, if feasible: 4

   - Configure construction parking to minimize traffic interference,
   - Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow, 5
   - Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site, 6
   - Reroute construction trucks away from sensitive receptor areas, 7
   - Improve traffic flow by signal synchronization, 8
   - Ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications, 9
   - Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, and 10
   - Consistent with measures that other lead agencies in the region (including Port of Los Angeles and Port of Long Beach) have enacted, require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following: 11

     ✓ April 1, 2010, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

     ✓ January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- ✓ Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- ✓ A copy of each unit's certified tier specification, BACT documentation, and CARB or AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

11 cont'd

- ❖ For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.

12

- ❖ The lead agency should consider encouraging construction contractors to apply for AQMD "SOON" funds. As an example, incentives could be provided in the bidding process for those construction contractors who apply for AQMD "SOON" funds. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm

13

AR1

Responses to Comments from the South Coast Air Quality Management District, MacMillan, Ian

Response to Comment AR1-1

Comment acknowledged. Please refer to Responses to Comments AR1-2 through AR1-13, below, for detailed responses regarding concerns raised by the South Coast Air Quality Management District (SCAQMD).

Response to Comment AR1-2

Metro has added additional air quality mitigation measures in Section 4.5.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. These are described in Responses to Comments AF2-6 through AF2-9, above, and AR1-4 through AR1-11, below. However, even with implementation of these additional mitigation measures, significant construction-related air quality impacts may still occur, as shown in Table 4.5-6 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment AR1-3

Comment acknowledged. In accordance with Public Resources Code Section 21092.5, Metro will provide the SCAQMD written responses to their comments ten days prior to certification of this Final EIS/EIR.

Response to Comment AR1-4

After mitigation, construction emissions for all build alternatives would exceed SCAQMD thresholds of significance for VOC, NO_x, and CO, as shown in Table 4.5-6 of the Draft EIS/EIR and this Final EIS/EIR. None of the build alternatives would exceed the PM10 threshold of significance.

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Construction worker parking shall be configured to minimize traffic interference. This measure would minimize vehicle idling time, which would reduce emissions generated from construction vehicles.

Generally, the construction contractor will be required to address this concern.

Response to Comment AR1-5

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Construction activity that affects traffic flow on the arterial system, including the transportation of excavated materials, shall be primarily limited to off-peak hours. This measure would

minimize vehicle idling time, which would reduce emissions generated from construction vehicles.

Generally, the construction contractor will be required to address this concern.

Response to Comment AR1-6

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Dedicated turn lanes for the movement of trucks and equipment to and from construction sites shall be provided where appropriate. This measure would minimize vehicle idling time, which would reduce emissions generated from construction vehicles.

Generally, the construction contractor will be required to address this concern.

Response to Comment AR1-7

This mitigation measure was identified in Sections 3.4.1.2 and 4.7.4.1 of the Draft EIS/EIR and Sections 3.4.2 and 4.7.4.2 of this Final EIS/EIR for noise and vibration sensitive receptors, and would have a similar mitigating effect for air quality impacts.

Response to Comment AR1-8

As discussed in Section 3.4.1.2 of the Draft EIS/EIR and Section 3.4.2 of this Final EIS/EIR, Metro will work with the Los Angeles Department of Transportation to accommodate the required traffic movements in the vicinity of construction activities. This includes adjustment of traffic signal coordination where appropriate. Generally, the construction contractor will be required to address this concern.

Response to Comment AR1-9

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Metro shall require ongoing maintenance and adherence to manufacturer's specifications for all construction equipment engines and vehicles.

Generally, the construction contractor will be required to address this concern.

Response to Comment AR1-10

The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Contractors shall utilize electricity supplied by the Los Angeles Department of Water and Power (LADWP) rather than temporary diesel or gasoline generators, as feasible.

Response to Comment AR1-11

Metro will adhere to all applicable EPA requirements. The following mitigation measure has been added to Section 4.5.4.2 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Metro shall require on-site construction equipment to meet EPA Tier 2 or higher emission standards according to the January 1, 2012 to December 31, 2014 and post-January 15, 2015 criteria.

Response to Comment AR1-12

Metro has reviewed the website and appreciates the additional information, and has incorporated the mitigation measures at www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html to the extent feasible.

Response to Comment AR1-13

Metro has reviewed the website and will consider encouraging construction contractors to apply as requested, and will incorporate incentives where feasible.

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

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October 20, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
roybald@metro.net

RE: SCAG Comments on the Draft Environmental Impact Report for the Regional Connector Transit Corridor Project [SCAG No. I20100309]

Dear Ms. Roybal Saltarelli,

Thank you for submitting the **Draft Environmental Impact Report for the Regional Connector Transit Corridor Project [SCAG No. I20100309]** to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372 (replacing A-95 Review). Additionally, pursuant to Public Resources Code Section 21083(d) SCAG reviews Environmental Impacts Reports of projects of regional significance for consistency with regional plans per the California Environmental Quality Act Guidelines, Sections 15125(d) and 15206(a)(1). SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) under California Government Code Section 65080 and 65082. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies. 1

SCAG staff has reviewed this project and determined that the proposed project is regionally significant per California Environmental Quality Act (CEQA) Guidelines, Sections 15125 and/or 15206. The proposed project would implement a light rail connector in downtown Los Angeles that will directly link the tracks of the Metro Gold Line light rail system with the Metro Blue Line and future Metro Expo Line.

We have evaluated this project based on the policies of SCAG's Regional Transportation Plan (RTP) and Compass Growth Vision Principles that may be applicable to your project. The RTP and Compass Growth Visioning Principles can be found on the SCAG web site at: http://scag.ca.gov/igr. The attached detailed comments are meant to provide guidance for considering the proposed project within the context of our regional goals and policies. We also encourage the use of the SCAG List of Mitigation Measures extracted from the RTP to aid with demonstrating consistency with regional plans and policies. Please send a copy of the Final Environmental Impact Report (FEIR) ONLY to SCAG's main office in Los Angeles for our review. If you have any questions regarding the attached comments, please contact Bernard Lee at (213) 236-1895. Thank you.

Sincerely,

Huasha Liu, Director
Land Use and Environmental Planning

October 20, 2010
Ms. Roybal Saltarelli

SCAG No. I20100309

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT [SCAG NO. I20100309]

PROJECT LOCATION

The project area is located in downtown Los Angeles. It is bounded on the west by State Route (SR) 110 (Harbor Freeway); on the north by US 101 (Hollywood Freeway); on the south by 7th and 9th Streets; and on the east by Alameda Street between 7th and 4th Streets and the Los Angeles River between 4th Street and US 101.

The project area is the largest regional employment center in Los Angeles County, and is densely developed with multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and high-rise office towers. The corridor crosses several distinct community areas including the dense urban core of the Financial District; the residential high rises and regional entertainment centers of Bunker Hill; the Civic Center with a concentration of federal, state, and local government offices; residential and retail uses located in the historic structures of the Historic Core; and the culturally unique, mixed uses of Little Tokyo.

Depending on which alternative is selected, the Regional Connector Transit Corridor project could involve construction and operation of a 1.6 to 1.9 mile light rail transit (LRT) connector that would link the Metro Blue Line, Metro Gold Line, and future Metro Expo Line into a single consolidated system. All proposed build alternatives would begin underground at the existing Metro Blue Line (and future Metro Expo Line) platform at 7th Street/Metro Center Station and extend in a northeastern direction to a new junction with the Metro Gold Line near Alameda Street. In addition to the LRT alternatives, a No Build Alternative and a Transportation System Management (TSM) Alternative are being studied.

2

PROJECT DESCRIPTION

The Regional Connector project would implement a light rail connector in downtown Los Angeles that will directly link the tracks of the Metro Gold Line light rail system with the Metro Blue Line and future Metro Expo Line. The connector would run from the current Metro Blue Line terminus at 7th Street/Metro Center Station to a point on the Metro Gold Line near the Little Tokyo/Arts District Station.

Alternatives under consideration include a No Build Alternative, Transportation Systems Management (TSM) Alternative, At-Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, and Fully Underground LRT Alternative.

- No Build
  The No Build Alternative is the future scenario without the proposed build alternatives. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 LRTP.

- TSM
  The TSM Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center and Union Stations. These buses would run frequently, just a few minutes apart, especially during peak hours. Enhanced bus stops would be located every two to three blocks, so as to maximize coverage of the area surrounding the routes. Rail service would remain the same as described for the No Build Alternative.

- At-Grade Emphasis LRT Alternative
  The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda

Streets with three new station locations. This alignment includes a combination of underground and at-grade segments, with 46 percent of the route underground. New stations would serve the Civic Center, Grand Avenue, and the Financial District. Portions of 2nd Street along the alignment would be converted to a pedestrian-friendly transit mall. To implement this alternative, the number of traffic lanes and on-street parking spaces would be reduced on 2nd Street between Figueroa and Los Angeles Streets. Roadway capacity along adjacent streets such as 1st and 3rd Streets would remain unchanged, as with the No Build Alternative.

- Underground Emphasis LRT Alternative
  The Underground Emphasis LRT Alternative would provide a direct connection from 7th Street/Metro Center Station to the Metro Gold Line tracks at the Little Tokyo/Arts District Station with three new station locations. The alignment would extend underground from the 7th Street/Metro Center Station beneath Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to a new portal on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. It is anticipated that some of this parcel would need to be acquired to construct the portal and stage construction of the tunnels beneath 2nd Street. The new tracks would then connect to the tracks of the Metro Gold Line at grade. The Underground Emphasis LRT Alternative would be entirely located underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets. The tracks would cross in the same type of three-way (wye) junction as proposed for the At-Grade Emphasis LRT Alternative.

- Fully Underground LRT Alternative
  The Fully Underground LRT Alternative is essentially the same configuration as the Underground Emphasis LRT Alternative, except that it provides for four new underground stations instead of three. It travels under the intersection of 1st and Alameda rather than crossing at-grade, and it then connects to the Metro Gold Line within 1st Street and north of Temple Street. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. At 2nd Street and Central Avenue, the tracks would continue underground heading northeast under 1st and Alameda Streets. An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Unlike the Underground Emphasis LRT Alternative, two portals would be needed because the junction between Regional Connector and the Pasadena/Azusa and East Los Angeles/I-605 branches of the Metro Gold Line would be located underground. The new portals would be located to the north and east of the junction, where trains would rise to the surface to connect to the Metro Gold Line heading north to Azusa and east to I-605.

2 cont'd

CONSISTENCY WITH REGIONAL TRANSPORTATION PLAN

Regional Growth Forecasts

The Draft Environmental Impact Report (DEIR) should reflect the most recently adopted SCAG forecasts, which are the 2008 RTP (May 2008) Population, Household and Employment forecasts. The forecasts for your region, subregion, and city are as follows:

3

Adopted SCAG Regionwide Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	19,418,344	20,465,830	21,468,948	22,395,121	23,255,377	24,057,286
Households	6,086,986	6,474,074	6,840,328	7,156,645	7,449,484	7,710,722
Employment	8,349,453	8,811,406	9,183,029	9,546,773	9,913,376	10,287,125

Adopted City of Los Angeles Subregion Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	4,057,484	4,128,125	4,204,329	4,277,732	4,348,282	4,415,773
Households	1,366,985	1,424,701	1,485,519	1,532,998	1,578,850	1,616,578
Employment	1,820,092	1,864,061	1,892,139	1,925,148	1,960,393	1,994,134

Adopted City of Los Angeles Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	4,140,516	4,214,082	4,292,139	4,367,538	4,440,017	4,509,435
Households	1,386,658	1,445,177	1,506,564	1,554,478	1,600,754	1,638,823
Employment	1,860,672	1,905,337	1,933,860	1,967,393	2,003,196	2,037,472

1. The 2008 RTP growth forecast at the regional, subregional, and city level was adopted by the Regional Council in May 2008.

3 cont'd

SCAG Staff Comments:

As indicated in Section 4.16 (Growth Inducing), employment and population growth projections are based on the SCAG 2008 RTP growth forecast.

The **2008 Regional Transportation Plan (RTP)** also has goals and policies that are pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The RTP continues to support all applicable federal and state laws in implementing the proposed project. Among the relevant goals and policies of the RTP are the following:

Regional Transportation Plan Goals:

RTP G1 *Maximize mobility and accessibility for all people and goods in the region.*
RTP G2 *Ensure travel safety and reliability for all people and goods in the region.*
RTP G3 *Preserve and ensure a sustainable regional transportation system.*
RTP G4 *Maximize the productivity of our transportation system.*
RTP G5 *Protect the environment, improve air quality and promote energy efficiency.*
RTP G6 *Encourage land use and growth patterns that complement our transportation investments.*
RTP G7 *Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.*

SCAG Staff Comments:

SCAG staff finds that the proposed project meets consistency with Regional Transportation Plan Goals.

4

The proposed project meets consistency with RTP G1. Mobility pertains to the speed at which one may travel and the delay, or difference between the actual travel time and travel time that would be experienced if a person traveled at the legal speed limit. The proposed project is expected to improve mobility by reducing delays at several intersections in the study area during AM and PM peak periods, relative to the No Build and TSM scenarios (indicated in Table 3-11). Accessibility measures how well the transportation system provides people access to opportunities, such as jobs, education, shopping, recreation, and medical care. The proposed project would provide a faster and more reliable connection between Pasadena/Azusa and Long Beach and East LA and Culver City. In addition, depending on the alternative selected, the project may add additional stations serving Downtown Los Angeles, which would provide increased access to employment and other opportunities in that area.

With regard to RTP G2, the proposed project meets consistency. The RTP aims to improve safety by minimizing accidents. Mitigation measures described in Section 4.15.4 would be incorporated to ensure passenger safety. Reliability reflects the degree to which travelers experience variation in trip times from day to day. As indicated on page 3-2, "Transit impacts and consequences include estimated benefits associated with each alternative, such as travel speeds and times, greater service reliability, and estimated higher ridership."

The proposed project meets consistency with RTP G3. Programmed funds for the operations and maintenance of the project are identified on pages 6-12 to 6-15.

With regard to RTP G4, the proposed project meets consistency. Productivity is a system efficiency measure that reflects the degree to which the transportation system performs during peak demand conditions. As mentioned previously, the proposed project would reduce delays at several intersections in the study area during AM and PM peak periods.

4 cont'd

The proposed project meets consistency with RTP G5. Per page 4-80, "All of the build alternatives would have no adverse or significant effects from operational emissions. Although regional construction emissions under the build alternatives would be significant and unavoidable, the net benefits to air quality associated with the reduction in regional VMT would override the temporary adverse construction impacts and provide a net beneficial effect."

With regard to RTP G6, the proposed project meets consistency. As indicated on page 1-2, "Local land use plans and policies support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian friendly design in downtown communities."

The proposed project meets consistency with RTP G7. Mitigation measures described in Section 4.15.4 would be incorporated to ensure security of the system.

COMPASS GROWTH VISIONING

The fundamental goal of the **Compass Growth Visioning** effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. Thus, decisions regarding growth, transportation, land use, and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity. The following "Regional Growth Principles" are proposed to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Each principle is followed by a specific set of strategies intended to achieve this goal.

Principle 1: Improve mobility for all residents.

5

GV P1.1 *Encourage transportation investments and land use decisions that are mutually supportive.*
GV P1.2 *Locate new housing near existing jobs and new jobs near existing housing.*
GV P1.3 *Encourage transit-oriented development.*
GV P1.4 *Promote a variety of travel choices*

SCAG Staff Comments:

Where applicable, SCAG staff finds that the proposed project meets consistency with Principle 1. GV P1.2 is not applicable.

The proposed project meets consistency with GV P1.1 as it would improve access to destinations along the entire rail network and per page 1-2, "The LRT alternatives would also correct the lack

of rail system access to important business, cultural and residential destinations in downtown Los Angeles, enhancing access to and from these destinations and community resources."

With regard to GV P1.3, the proposed project meets consistency. Per page 1-2, "The Regional Connector LRT alternatives would enhance and leverage the existing regional rail system investment by making travel easier and attracting ridership systemwide, and by indirectly enhancing development potential at all system stations including the new downtown Regional Connector stations."

The proposed project meets consistency with GV P1.4, as it would enhance transit service, supporting the use of public transit as a travel mode.

5 cont'd

Principle 2: Foster livability in all communities.

GV P2.1 *Promote infill development and redevelopment to revitalize existing communities.*
GV P2.2 *Promote developments, which provide a mix of uses.*
GV P2.3 *Promote "people scaled," walkable communities.*
GV P2.4 *Support the preservation of stable, single-family neighborhoods.*

SCAG Staff Comments:

Where applicable, SCAG staff finds that the proposed project meets consistency with Principle 2. GV P2.4 is not applicable.

SCAG staff finds that the project is consistent with GV P2.1, as it would promote development and redevelopment of infill properties located near potential new rail stations, as well as increase the desirability of infill properties along the entire rail network.

With regard to GV P2.2 and P2.3, the proposed project meets consistency because it would promote pedestrian-oriented mixed-use developments throughout the region. As mentioned on page 1-33, "Improving public transit connectivity in the project area offers opportunities to increase ridership through access to regional transit markets. Balanced local land use and transportation policies can reduce auto travel and support more pedestrian-friendly, mixed-use and transit-oriented developments throughout the region."

6

Principle 3: Enable prosperity for all people.

GV P3.1 *Provide, in each community, a variety of housing types to meet the housing needs of all income levels.*
GV P3.2 *Support educational opportunities that promote balanced growth.*
GV P3.3 *Ensure environmental justice regardless of race, ethnicity or income class.*
GV P3.4 *Support local and state fiscal policies that encourage balanced growth*
GV P3.5 *Encourage civic engagement.*

SCAG Staff Comments:

SCAG staff finds that this project is consistent with P3.3. The Little Tokyo Working Group developed a list of mitigation measures that have not been evaluated or accepted by Metro and FTA, but as mentioned on page 4-311, "will be evaluated to determine efficacy, cost, community acceptance, and relevance to specific impacts" during preparation of Final EIR/EIS.

Principles GV P3.1, P3.2, P3.4 and P3.5 are not applicable.

7

Principle 4: Promote sustainability for future generations.

GV P4.1 *Preserve rural, agricultural, recreational, and environmentally sensitive areas*
GV P4.2 *Focus development in urban centers and existing cities.*
GV P4.3 *Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.*
GV P4.4 *Utilize "green" development techniques*

SCAG Staff Comments:

Where applicable, SCAG staff finds that the project is consistent with Principle 4. Principles GV P4.1 and P4.4 are not applicable.

The proposed project meets consistency with GV P4.2, as it would encourage development within urban centers.

The proposed project meets consistency with GV P4.3. As mentioned earlier, the proposed project would improve overall air quality. Per page 4-160, "all of the alternatives would result in a net decrease in VMT throughout the region when compared to the No Build Alternative. This decrease in VMT would result in a net decrease in energy consumption, with the Fully Underground LRT Alternative having the greatest decrease. 8

CONCLUSION

Where applicable, the proposed project meets consistency with SCAG Regional Transportation Plan Goals and also meets consistency with Compass Growth Visioning Principles. 9

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA. We recommend that you review the SCAG List of Mitigation Measures for additional guidance, and encourage you to follow them, where applicable to your project. The SCAG List of Mitigation Measures may be found here: http://www.scag.ca.gov/igr/documents/SCAG_IGRMMRP_2008.pdf 10

When a project is of statewide, regional, or areawide significance, transportation information generated by a required monitoring or reporting program shall be submitted to SCAG as such information becomes reasonably available, in accordance with CEQA, Public Resource Code Section 21081.7, and CEQA Guidelines Section 15097 (g). 11

AR2

Responses to Comments from the Southern California Association of Governments, Liu, Huasha

Response to Comment AR2-1

Comment acknowledged. Please refer to Responses to Comments AR2-2 through AR2-11, below, for detailed responses regarding concerns raised by the Southern California Association of Governments (SCAG). Metro has reviewed the SCAG List of Mitigation Measures and incorporated guidance where applicable in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Response to Comment AR2-2

Comment acknowledged.

Response to Comment AR2-3

Comment acknowledged. Section 4.16, Growth-Inducing, of the Draft EIS/EIR reflected the most recently adopted SCAG Integrated Growth Forecasts for population, household, and employment. Tables 4.16-1, 4.16-3, and 4.16-4 of the Draft EIS/EIR have been updated in this Final EIS/EIR to correct minor typographical errors with the forecasts.

Response to Comment AR2-4

Comment acknowledged. Metro concurs with SCAG's determination that the project is consistent with the 2008 Regional Transportation Plan (RTP), including the Regional Transportation Plan Goals. This letter, along with the consistency analysis, is incorporated by reference in Volume F-2 of this Final EIS/EIR.

Response to Comment AR2-5

Comment acknowledged. Metro concurs with SCAG's determination that the project is consistent with SCAG's Compass Growth Visioning report. This letter, along with the consistency analysis, is incorporated by reference in Volume F-2 of this Final EIS/EIR.

Response to Comment AR2-6

Please refer to Response to Comment AR2-5, above.

Response to Comment AR2-7

Please refer to Response to Comment AR2-5, above.

Response to Comment AR2-8

Please refer to Response to Comment AR2-5, above.

Response to Comment AR2-9

Comment acknowledged. Metro concurs with SCAG's determination that the project is consistent with SCAG RTP and Compass Growth Visioning report.

Response to Comment AR2-10

Comment acknowledged. Mitigation measures identified in the Draft EIS/EIR to reduce significant impacts associated with the Locally Preferred Alternative have been included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has reviewed the SCAG List of Mitigation Measures and incorporated guidance where applicable in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative.

Response to Comment AR2-11

Comment acknowledged. Metro will send SCAG any transportation information generated by the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in accordance with Public Resources Code Section 21081.7 and CEQA Guidelines Section 15097(g).

Responses to State Agency Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
AS1	State of California - Department of Transportation, District 7	Watson	Dianna
AS2	State of California - Department of Transportation, District 7	Kosinski	Ronald
AS3	State of California - Public Utilities Commission	Pereyra	Jose

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, OFFICE OF PUBLIC
TRANSPORTATION AND REGIONAL PLANNING
IGR/CEQA BRANCH
100 SOUTH MAIN STREET
LOS ANGELES, CA 90012
PHONE (213) 897-1726
FAX (213) 897-1337

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October 6, 2010

IGR/CEQA DEIR/DEIS CS/100923
Regional Connector Transit Corridor Project
Vic. LA-101-S0.9/0.7, SCH# 2009031043

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Draft Environmental Impact Statement/Draft Environmental Impact Report for the Regional Connector Transit Corridor Project. The project would directly link the Gold Line from the San Gabriel Valley to the Blue Line in Long Beach and the Gold Line in East Los Angeles to the Expo Line to Santa Monica. Based on the information received, we have the following comments:

The fully underground alternative would have less impact on peak period traffic circulation in the downtown area. Also, street events such as parades, demonstrations, street fairs, etc., in various downtown venues would be impacted by an at-grade light rail transit facility. 1

The location of a transit station along 2nd Street between Main Street and Los Angeles Street will need to be coordinated with affected owner/operators in the area including Caltrans. 2

Traffic Management Plans involving lane closures or street detours which will impact the circulation system affecting traffic to and from freeway on/off-ramps should be coordinated with Caltrans. 3

We recommend that construction related truck trips on State Highways be limited to off-peak commute periods. Transport of over-size or over-weight vehicles on State Highways will need a Caltrans Transportation Permit. The contractor should avoid 4

platooning of truck trips on mainline freeways, on freeway on/off-ramps and at freeway ramp intersections. 4 cont'd

If you have any questions regarding our comments, contact Carl Shiigi, Project Coordinator, at (213) 897-1726 and please refer to record number 100923/CS.

Sincerely,

DIANNA WATSON
IGR/CEQA Program Manager
Office of Regional Planning

cc: Scott Morgan, State Clearinghouse

AS1

Responses to Comments from the State of California - Department of Transportation, District 7, Watson, Dianna

Response to Comment AS1-1

Comment acknowledged. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative is grade-separated. Therefore, the concern stated in this comment regarding operation of an at-grade LRT system is not an issue under the Locally Preferred Alternative.

Response to Comment AS1-2

The comment is noted and will be addressed during the final design phase of the project once the construction sequence is identified and construction activities are determined. Continuous coordination with Caltrans will take place throughout the design process.

Response to Comment AS1-3

The comment is noted and continuous coordination with Caltrans will take place throughout the final design process. Once the construction sequence is identified and construction activities are confirmed, a traffic management plan (TMP) will be developed showing potential lane closures and street detours. The TMP will be submitted to Caltrans staff for review and comment.

Response to Comment AS1-4

As indicated in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR, truck haul trips would be scheduled along existing freight routes during off-peak hours. Metro will continue to coordinate with Caltrans throughout the design and construction process and will acquire appropriate permits for construction of the Locally Preferred Alternative, which may include a Caltrans Transportation Permit if over-size or over-weight vehicles travel on State Highways during construction. Once construction lay down areas are identified, haul routes will be finalized and submitted to Caltrans for review. The platooning of truck trips on mainline freeways, freeway on/off-ramps, and freeway ramp intersections would be minimized.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF TRANSPORTATION
DISTRICT 7, Division of Environmental Planning
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PHONE (213) 897-0703
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Flex your power!
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October 18, 2010

Ms. Dolores Roybal Saltarelli, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012-2952

Re: Comments on Draft EIR / EIS for the Regional Connector Transit Corridor Project

Dear Ms. Roybal Saltarelli,

Thank you for the opportunity to comment on the Draft Environmental Impact Statement / Environmental Impact Report (EIR / EIS) for the above referenced project. The California Department of Transportation (Caltrans), Division of Environmental Planning (DEP) has the following comments for consideration in the Final EIR / EIS:

1. As this project moves forward please be advised that construction activities adjacent to the Caltrans facility need to be investigated / reviewed with State Structural Engineers and the Department of General Services (DGS) to determine the potential consequences of construction on our facility and daily operations. 1

2. During construction the notification and coordination on closures and detours plans would need to be review by Caltrans to minimize disruption at the Caltrans District 7 office building. 2

3. In the Appendix D section; please remove Gary Iverson and Garrett Damrath as a contact persons for the Caltrans DEP organization and add Dawn Kukla, Senior Environmental Planner to the project list. Also, please include the title "Associate Environmental Planner" to Brian Manor in the same Appendix D section. 3

We trust that you will continue to inform our office of any future meetings and we look forward to working with you on this important transportation project. 4

If you have any questions regarding these comments, please do not hesitate to contact Dawn Kukla at 213-897-3643.

Sincerely,

Ronald Kosinski

RONALD KOSINSKI
Deputy Director
Division of Environmental Planning
Caltrans-District 7

AS2

Responses to Comments from the State of California - Department of Transportation, District 7, Kosinski, Ronald

Response to Comment AS2-1

Construction impacts associated with the project were analyzed in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. As indicated in Section 4.3, Community and Neighborhood Impacts, mitigation to reduce community and neighborhood impacts during construction of the Locally Preferred Alternative involves the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. In addition, Metro will continue coordinating with Caltrans regarding this project, including construction coordination.

Response to Comment AS2-2

The comment is noted and continuous coordination with Caltrans will take place throughout the design process. Once the construction sequence is identified and construction activities are confirmed, a traffic management plan (TMP) will be developed showing potential lane closures and street detours. The TMP will be submitted to Caltrans staff for review and comment.

Response to Comment AS2-3

Appendix D, List of Draft EIS/EIR Recipients, of the Draft EIS/EIR has been revised in Appendix D of this Final EIS/EIR as shown below.

~~Garrett~~	~~Damrath~~	~~Senior Environmental Planner~~	~~California Department of Transportation~~	~~Draft EIS/EIR~~
~~Gary~~	~~Iverson~~	~~Senior Environmental Planner~~	~~California Department of Transportation~~	~~NOA~~
Brian	Manor	Associate Environmental Planner	California Department of Transportation	Draft EIS/EIR
Dawn	Kukla	Senior Environmental Planner	California Department of Transportation	NOA

Response to Comment AS2-4

Comment acknowledged. Metro will continue to provide Caltrans notice of any future meetings and will continue coordinating with Caltrans regarding this project.

STATE OF CALIFORNIA
Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013
(213) 576-7083

October 20, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Draft Environmental Impact Statement/Report for the Regional Connector Transit Corridor Project

Dear Ms. Roybal Saltarelli:

Thank you for providing us with a copy of your Draft Environmental Impact Statement/Report (DEIS/R) for the Regional Connector Transit Corridor Project. The California Public utilities Commission (CPUC or Commission) has been interacting with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the project. The CPUC provided written comments to the Notice of Preparation for this project on May 11, 2009, and we appreciate the opportunity to provide the following additional comments: 1

The project is subject to a number of rules and regulations involving the CPUC. These may include: Sections 1201 et al, and 99152 of Sate of California Public Utilities Code, which requires Commission authority to construct rail lines over existing streets. The design criteria of the proposed project must comply with CPUC General Orders (GOs), such as, GO 72-B rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads and highways; GO 75-D regulations governing standards for warning devices for at-grade highway-rail crossings; GO 143-B Safety Rules and Regulations governing Light-Rail Transit; and GO 164-D regulations governing State Safety Oversight of Rail Fixed Guideway Systems. 2

As part of its mission to reduce hazards associated with at-grade crossings, the Commission's policy is to reduce the number of at-grade crossings on rail corridors. 3

In acquiring Commission approval for construction of at-grade rail crossings, Expo Authority has two options: (1) Filing a Rail Hazards Analysis Report (RHAR), or (2) Filing formal applications in accordance with the Commission's Rules of Practice and Procedure. These options are contained in greater detail in Commission GO 164-D. 4

The Light Rail Transit Alternatives described in your DEIS/R pass through the high density downtown Los Angeles core. The heart of downtown's business and civic districts is comprised of a mixture of business, civic, commercial, retail, residential and industrial areas. High density areas near rail tracks lead to a high amount of pedestrians around the tracks. Constructing tracks at-grade is likely to result in trespassing issues and pedestrian conflicts similar to those currently experienced along other Metro Rail corridors in Los Angeles. Elevating or lowering the tracks would mitigate this concern. Additionally, fencing any remaining at-grade portions of the rail alignment selected should be a requirement of the project. 5

Commission staff favors the Fully Underground Light Rail Transit (LRT) Alternative which is the Metro staff-recommended Locally Preferred Alternative. This alternative proposes a complete underground Regional Connector with no street level crossings. Commission staff believes this alternative provides the utmost in safety by eliminating any possibility for LRT conflicts with vehicle or pedestrians. 6

The other 2 LRT Alternatives include segments proposed for street-running configurations. Street-running or center median configurations present more problematic interaction between vehicles and Light Rail Trains, usually resulting in vehicle-train collisions, such as have been experienced along the Metro Blue Line's Washington Boulevard segment and street-running segment in downtown Long Beach, and Metro's newly operational Gold Line Eastside extension. 7

While we understand the cost of grade separating a highway-rail at-grade crossing makes for a perceived detriment to your project, the CPUC normally does not take cost into its consideration of the practicability of grade separating a crossing. We understand that this is a highly complex and challenging project with funding, design and environmental approval for the downtown Los Angeles area. It is imperative that the CPUC be involved with the details of this project from its inception in order to be informed and to be of greater assistance in the future. 8

The CPUC will need to provide applicable regulatory oversight for all phases of the project. This will require early consultation with not only Metro staff but contracted consultants as well in order to provide early consultation on all proposed design and engineering of the proposed project improvements on the corridor. 9

This will assist with the review of the environmental documents and final CEQA approval of the project by the CPUC, since we are a responsible agency under CEQA section 15381 with regard to this project and in complying with any and all General Order requirements as they apply to the Regional Connector Transit Corridor Project. 10

Thank you very much for the opportunity to review and comment on your DEIS/R. Commission staff is available to meet with you and discuss our concerns.

We look forward to working with Metro on this project. Should you have any questions, please contact me at (213) 576 – 7083 or email at jose.pereyra@cpuc.ca.gov

Sincerely,

Jose Pereyra
Utilities Engineer
Rail Crossings Engineering Section
Rail Transit and Crossings Branch
Consumer Protection and Safety Division

AS3

Responses to Comments from the State of California – Public Utilities Commission, Pereyra, Jose

Response to Comment AS3-1

Comment acknowledged. Please refer to Responses to Comments AS3-2 through AS3-10, below, for detailed responses regarding concerns raised by the California Public Utilities Commission (CPUC).

Response to Comment AS3-2

Comment acknowledged. The Locally Preferred Alternative does not include any at-grade crossings. The Locally Preferred Alternative would be constructed in compliance with rules and regulations involving the CPUC.

Response to Comment AS3-3

Comment acknowledged. The Locally Preferred Alternative does not include any at-grade crossings and will be designed in accordance with the CPUC's policy to reduce the number of at-grade rail crossings on rail corridors.

Response to Comment AS3-4

Comment acknowledged. The Locally Preferred Alternative does not include any at-grade crossings and would not be required to file a Rail Hazards Analysis Report or formal applications regarding at-grade crossings.

Response to Comment AS3-5

Comment acknowledged. Concerns raised in this comment are associated with the At-Grade Emphasis LRT Alternative and were addressed in Section 4.15, Safety and Security, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Fully Underground LRT Alternative would result in the entire LRT facility being placed underground, eliminating all potential conflicts with at-grade roadway and pedestrian infrastructure. Therefore, the Locally Preferred Alternative and associated design would avoid potential safety effects related to both pedestrian and motorist crossings during operations.

Response to Comment AS3-6

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment AS3-7

Street-running light rail introduces the possibility of problematic interaction between motor vehicles and trains. Metro designs its grade crossings to minimize the potential for collisions. No grade crossings would be constructed as part of the Locally Preferred Alternative.

Response to Comment AS3-8

Comment acknowledged. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative does not include any at-grade crossings. Metro will continue to coordinate with the CPUC regarding the Regional Connector project.

Response to Comment AS3-9

Comment acknowledged. Metro and contracted consultants will continue coordinating with CPUC during project design and engineering of the Locally Preferred Alternative.

Response to Comment AS3-10

Comment acknowledged. The Locally Preferred Alternative will be developed in compliance with all applicable CPUC General Order requirements.

Responses to Business and Business Groups Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
BU1	Metropolitan News Enterprise	Grace	Roger M.
BU2	Japanese Chamber of Commerce of Southern California	Handa	Toshio "Terry"
BU3	Bunkado, Inc.	Simonian	Irene Tsukada
BU4	Yamato Travel Bureau	Mikuni	Peggy T.
BU5	Koraku Group, Inc.	Yamauchi	Hiroshi
BU6	Cherry Land Company	Liu	Wilson
BU7	Ho-Narumi-Taira Investment Company	Liu	Wilson
BU8	Sho Tokyo Parking LLC	Liu	Wilson
BU9	Taira Investment Company	Liu	Wilson
BU10	Taira Services Corporation	Liu	Wilson
BU11	Rafu Bussan, Inc.	Kawaratani	Kiyoshi
BU12	Little Tokyo Arts & Gifts	Taiyoshi	Elaine
BU13	Joy Mart Restaurant	Masuda	Sotaro
BU14	Los Angeles Eye Care Optometry Group	Kame	Gregory
BU15	Teishokuya of Tokyo	Masuda	Etsuko
BU16	Favorite Snack	Park	Jong Hyung
BU17	Ken Nakamura, D.D.S.	Nakamura	Ken
BU18	Little Tokyo Business Association and Little Tokyo Business Improvement District		
BU19	Little Tokyo Business Association and Little Tokyo Business Improvement District		
BU20	Little Tokyo Business Association and Little Tokyo Business Improvement District	Liu	Wilson

Comment Letter/ Speaker	Affiliation	Last Name	First Name
BU21	Advanced Parking Systems	Garibay	Darryl
BU22	The Spice Table	Ng	Bryant and Kim Luu
BU23	Suehiro Café, Inc.	Suzuki	Kenji
BU24	Metropolitan News Enterprise	Grace	Roger M. and Jo-Ann W.
BU25	LARABA,LaDADspace	Keating	Tim
BU26	Fugetsu-do Confectionery	Kito	Brian
BU27	Japanese Village Plaza	Smith	Jim
BU28	Related/Companies, L.P./Grand Avenue L.A., LLC/The Broad Collection	Witte; Broad	William A.; Eli
BU29	Central City Association of Los Angeles	Schatz	Carol E.
BU30	Thomas Properties Group Inc.	Berryhill	Glen
BU31	J-WAVE Video	Ishida	Hiroshi Brian
BU32	Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Tribune Company	Perry	Patrick A.
BU33	Mikawaya	Hashimoto	Frances
BU34	Levy Affiliated Holdings, LLC	Balkin	Arlene Akemi
BU35	Hair Craft Salon	Okamoto	Yuji
BU36	Thomas Properties Group Inc.	Ricci	Thomas S.
BU37	Rothenberg Sandy Architects	Takayama	George
BU38	Shabu-Shabu House Restaurant	Maruyama	Yoshinobu
BU39	Nishi Center	Mukai	Susan
BU40	Teishokuya of Tokyo	Masuda	Etsuko
BU41	Joy Mart Restaurant	Masuda	Sotaro

Subject: FW: Protest of MTA Underground Alternative, Second Street Project
Date: Tuesday, September 14, 2010 12:18 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Roger M. Grace [mailto:rmgrace@metnews.com]
Sent: Monday, September 13, 2010 5:17 PM
To: Regional Connector; Roybal, Dolores; ray.tellis@dot.gov
Subject: Protest of MTA Underground Alternative, Second Street Project

By mail (to Delores Roybal Saltarelli) and e-mail

Sept. 13, 2010

Ms. Dolores Roybal Saltarelli
Project Manager, Metro
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Wilcox Building (APN 5149007006)
Olender Building (APN 5149007005)

Dear Ms. Saltarelli:

This is to protest the proposed taking of the historic Wilcox Building, at 200-210 South Spring Street, and the Olender Building, at 212-218 S. Spring Street, as part of a possible Second Street underground rapid transit project. My wife, Jo-Ann W. Grace, and I are owners of those properties.

It is my understanding that an underground rail system is contemplated, with a subterranean depot placed in the area boarded by Broadway on the west, Second Street on the east, Spring Street on the north, and the Times parking structure on the south. Under the plan, our land at the southeast corner of Second and Spring Streets would be confiscated and the historic structures upon that land would be razed in order to provide parking for construction vehicles and equipment. The ultimate disposition intended to be made of our land (at a commercially desirable location) is not revealed. 1

I bring to your attention that information concerning the 1896 Wilcox Building, as well as the Olender Building, as contained in the "Regional Connector Transit Corridor Displacement and Relocation Technical Memorandum," is wholly inaccurate. The gross misimpressions generated by the report flaw it, necessitating that it be withdrawn—including its removal from the Internet—and reissued only after being corrected. In the course of making, and considering, the corrections, the infeasibility of the present proposal to raze our buildings and use the space for temporary parking should become manifest.

The report sets forth at Page 35, with respect to the Wilcox Building:

"This parcel is occupied by a commercial structure that includes five businesses. The businesses located

in this parcel include two restaurants, a cigar shop, a credit union, and the City Employees Club....[A taking] would result in no significant adverse impact related to job loss."

The businesses located in this parcel include *one* restaurant, a cigar shop, a credit union, and the City Employees Club. Not mentioned in the report is the primary occupant of the building, at 208-210 S. Spring Street: the Metropolitan News Company (owned by my wife and myself), which publishes eight California newspapers, including its flagship publication, the *Metropolitan News-Enterprise*, founded in 1901.

The company has its printing press in the basement. It would cost in the hundreds of thousands of dollars to move the press and, after being dissembled and jostled, it is likely that its functionality would be diminished. Locations where it would be possible to secure approval for installation of the press would be severely limited, in light of EPA requirements. Propinquity of the operations to the Civic Center is essential not only for news-gathering purposes, but the processing of legal notices at the Mosk Courthouse. Viable alternative sites might not exist. The present proposal is life-threatening to the company, thus to its newspapers, and to the jobs of its employees. (The report mentions a total of 40 persons being employed by all businesses in the building. The Metropolitan News Company, alone, employs a number greater than 40.)

Too, a building would be demolished that is part of the history of Los Angeles County. In the very space occupied by the Metropolitan News Company, there was from 1896-1914, the premier grocery store on the west coast, owned by Hans Jevne, a civic leader. Persons came by train from the various western states to stock up on goods, which were sent to them by rail. 1 cont'd

Among the original tenants were 13 lawyers, one of whom, Joseph Scott, is depicted in the form of a statue in front of the Mosk Courthouse, and another, Isidor Dockweiler, has a county beach named after him. Although the upper stories were removed in 1971 after an earthquake, the bottom floor, mezzanine, and basement remain. The credit union, in essence a bank, is in the very space occupied by the First National Bank of Los Angeles (which later became Security Pacific) from 1901 to Oct. 19, 1929.

Where cigars are now being sold, at 124 West Second Street, steam ship tickets were sold 114 years ago. The building was the home of the California Club, Southwestern University (now Southwestern Law School), and the law firm of Graves, O'Melveny & Shankland (now O'Melveny & Myers).

The Olender Building is likewise an historic Los Angeles structure (and is not vacant).

The MTA knows that 208-210 S. Spring Street is occupied by a newspaper publishing company, *not a restaurant*. Two meetings were held with the MTA staff—on March 23, 2010, and April 28, 2010. My wife, Jo-Ann Grace, represented herself and me, as owners of the property, and represented the Metropolitan News Company, of which she is president, with the company also being represented by Vahn C. Babigian, our general manager.

You subsequently advised my wife that our needs and concerns are appreciated and would be accommodated.

Yet, the report, dated March 19, 2010, and released on Sept. 3, includes as an alternative the confiscation of our buildings, with no acknowledgment that a newspaper publishing company, and its printing press, are on the premises; that one of the newspapers was established in 1901; and that the buildings—which are not even lent the dignity of their names being reflected—have enormous historic value. (The names of the buildings were made known to the MTA at the meetings.)

Parking space is available for vehicles and equipment without raising multi-million dollar structures. There are parking lots close by. It might even be possible to lease space in them, rather than using powers of condemnation. There exist:

-— A multi-level public parking lot on Spring Street, immediately to the south of our buildings (east side), with additional street-level parking south of there, to the end of the block, with some parking in a lot across the street (west side of Spring Street, extending to Broadway).
--— --Massive public lots behind our buildings (east of them, extending south of them), across from the LAPD parking on Main Street.
-— A block-long parking lot south of the Kyoto Grand Hotel, on Second Street, bounded by Los Angeles Street on the West and San Pedro on the east.
-— An empty, excavated lot between Second and First Streets, bounded on the east by Broadway and the west by Hill Street.

1
cont'd

There is a vague allusion in the "Displacement and Relocation Technical Memorandum" to the *possibility* of "optional station entrances locations" on our property. To demolish historic buildings on the mere chance that someone would later decide to put an escalator there to an underground depot defies reason. Access could be gained from the lawn of the new LAPD Building, the vacant lot at the northwest corner of Second and Broadway, from the bottom floor of the Los Angeles Times' multi-story parking lot, or from our site through a minimal *partial* taking or leasehold.

It truly does not make sense to raze historic structures when land devoid of structures is located nearby —and, with respect to the vacant land at Second and Broadway, is as close to the site of the proposed depot (Second Street between Broadway and Spring Street) as we are.

With respect to a possible transit system that is above-ground, the closing of Second Street to traffic would preclude the delivery to our premises of newsprint. Delivery is made at the rear of our building from Harlem Place which, though officially a street, has the appearance of an alley. It's one-way, with entry on Third Street and exiting on Second. A truck carrying such loads could not back up for an entire block to Third Street. Without newsprint, a newspaper cannot be printed.

As a first step, I ask that the "Regional Connector Transit Corridor Displacement and Relocation Technical Memorandum" be withdrawn, and that it be redrafted, with attention lent to the matters discussed above. I would hope that in light of these considerations, an alternative location be chosen for an area on which to park vehicles and equipment.

Yours truly,

Roger M. Grace
RMG/mt

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Roger M. Grace Editor/Co-Publisher

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MetNews Website <http://www.metnews.com> Perspectives Columns <http://www.metnews.com/perspectives-index.htm>
History of DA's Office <http://www.metnews.com/DAs.htm> Reminiscing <http://www.metnews.com/rem.htm>

BU1

Responses to Comments from Metropolitan News Enterprise, Grace, Roger M.

Response to Comment BU1-1

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

JCC

JAPANESE CHAMBER OF COMMERCE OF SOUTHERN CALIFORNIA
南加日系商工会議所
244 S. San Pedro St #504, Los Angeles, CA 90012 Tel:(213)626-3067, Fax: (213)626-3070

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Subject: METRO Regional Connector EIS/EIR

Dear Ms. Dolores Roybal-Saltarelli,

I fully support the underground alternative as the best performing choice and strongly oppose to others. 1

Thank you for your attention and cooperation.

Sincerely,

Toshio "Terry" Handa
President

BU2

Responses to Comments from the Japanese Chamber of Commerce of Southern California, Handa, Toshio "Terry"

Response to Comment BU2-1

Thank you for your comment. Support of an underground alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Bunkado, Inc.
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bunkado@sbcglobal.net
www.bunkadoonline.com

Since 1946

Irene Tsukada Simonian

October 4, 2010

Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli,

I originally planned to send the prepared letter in support of the LTBA/LTBID position regarding the Regional Connector Transit Corridor Project. However, on second thought I am writing in support of a **no build** option. I respect the LTBA/LTBID's position and their responsibility to the Little Tokyo Community, but I would like to communicate my concern that many of our family-owned businesses may not survive this project. I own a business that has been in my family for over 65 years, and I am barely hanging on due to the bad economy. Business is down 40% from where we were in the 1990s, and a further hit would be the end for us. The threat to businesses that will be displaced from the project is already having a negative effect, and the impact on traffic, parking, and detritus from the construction stretched over years will be overwhelming to area businesses. 1

Is it too much to ask, after all the work that has already been done to leave things the way they are? Perhaps, but that's my vote.

Thanks for this opportunity to give my opinion.

Sincerely,

BU3

Responses to Comments from Bunkado, Inc., Simonian, Irene Tsukada

Response to Comment BU3-1

Metro acknowledges the impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. Construction activities in the Little Tokyo area would consist of cut and cover activities in the vicinity of the new underground station, the new portals, the junction beneath 1st and Alameda Streets, and a portion of Central Avenue between 1st and 2nd Streets. Refinements made to the Locally Preferred Alternative would reduce the extent of cut and cover activities and associated street lane and sidewalk closures. Activities at these locations could be performed simultaneously to minimize the overall duration of the construction process. Tunnel boring machine activities would be staged at the Mangrove property for a period of two to four years, and would not cause impacts anywhere else in the Little Tokyo community.

Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

YAMATO TRAVEL BUREAU ®
250 East First Street, Suite 1112, Los Angeles, CA 90012-3827

Phone: (213) 680-0333. (800) 334-4982 Fax: (213) 680-2825
E-mail: groups@yamatotravel.com

October 14, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a member of The Little Tokyo Community Council (LTCC), we appreciate the opportunity to comment on the Draft EIS/EIR for the proposed Regional Connector. The positive working relationship and open dialogue have helped the community actively participate in the process to date. We offer the following general comments, which are followed by specific comments on the EIS/EIR: 1

1. The LTCC strongly believes that the Fully Underground alternative is the only acceptable option as the Locally Preferred Alternative that addresses its concerns about the environmental, economic, social, and cultural impacts to the community. As such, it supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis in the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, noise, safety, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. Please note that our support for the Fully Underground alternative is contingent on satisfactory acceptance of LTCC's proposed mitigation measures identified on April 27, 2010. The other alternatives pose significant, disproportionate impacts on Little Tokyo that are unacceptable. 2

2. The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would 3

place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts. 3 cont'd

3. In its letter to Metro dated April 27, 2010, the LTCC strongly urged Metro to initiate tunnel boring activities from 2nd/Flower/Hope to minimize construction impacts on the Little Tokyo community. If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. 4

4. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5. The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses: 6

    a. Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
    b. Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
    c. How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
    d. Redevelopment of the Office Depot block.

6. The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010: 7

    a. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders. 8
    b. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community, avoid adverse business interruptions, and ensure rapid resolution of unforeseen problems. This committee shall include local businesses and property owners. 9

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns. 10

Sincerely,

Peggy T. Mikuni, President
Yamato Travel Bureau

Encl. Detailed comments on Draft EIS/EIR

Little Tokyo Community Council
Detailed Comments

Executive Summary

7. The LTCC supports the statement that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community" (Page ES-5). We concur that it "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, and social impact perspective. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo.
8. The EIS/EIR incorrectly characterizes the impacts of the At-Grade analysis by understating its environmental impacts on the Little Tokyo community. Specifically, the project would place disproportionate burdens on a minority community in the areas of:
    a. Transit Service Equity Deterioration
    b. Community and Neighborhood Impacts.
9. The EIS/EIR incorrectly concludes that there would not be any significant unavoidable environmental justice impacts for the At-Grade Emphasis alternative. The EIS/EIR should conclude that the impacts are significant for two reasons:
    a. The grade separation of a vehicle underpass and pedestrian overpass at Temple and Alameda to route traffic under the rail tracks would physically divide Little Tokyo along Alameda. This would significant affect the cultural integrity of the community by separating the many temples and residents east of Temple from the core of Little Tokyo. The pedestrian overpass would be a significant barrier to elderly residents who travel east-west across Alameda.
    b. The grade separation plan is comparable to the Underground Emphasis alternative, which was found to have significant "Community and Neighborhood" impacts. The EIS/EIR should be revised to be consistent with this finding for the At-Grade emphasis alternative.

11

Chapter 1 (Purpose and Need)

10. The Draft EIS/EIR fails to acknowledge the existence of Little Tokyo in Section 1.4.2 (Project Area Ethnicity). Given its status as one of only three Japantowns in the nation and the environmental justice concerns that are important to Metro, Little Tokyo should be mentioned in the Purpose and Need chapter.

Chapter 2 (Alternatives Considered)

11. Page 2-21, Section 2.3.4.4. The analysis of pedestrian circulation impacts at Temple and Alameda Street from the At-Grade Emphasis alternative fails to adequately describe

likely impacts. The construction of a pedestrian overpass to "minimize delays (of rail service) at the intersection of Temple and Alameda" comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation.

12. Page 2-31, Section 2.3.6.4. The EIS/EIR understates the impact of the Underground Emphasis alternative on pedestrian circulation at Alameda Street by stating it will "require relatively small changes to surface traffic and pedestrian circulation patterns." The construction of a pedestrian overpass at 1st and Alameda comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation.
13. Page 2-34, Section 2.4.5. The EIS/EIR remains silent on whether tunneling would involve single boring followed by a reverse boring in the other direction, use of two TBMs concurrently, or use of a single, wider boring. It is assumed that the EIS/EIR assumes the boring approach that would result in a worst-case scenario for construction impacts.
14. Page 2-38, Figure 2-13. The EIS/EIR depicts the block between 1st, 2nd, Central, and Alameda as being the site for an open cut. However, Metro has indicated that the existing development on the east side of Central between 1st and 2nd may be spared from demolition during construction. Given the orientation of any subway alignment under the property, every effort should be made to avoid demolishing existing buildings that front on 1st Street, including the former Café Cuba restaurant, Weiland's Brewery, and other nearby buildings.

11 cont'd

Chapter 3 (Transportation Impacts and Mitigation)

15. Page 3-4, Section 3.1.3. The EIS/EIR should clarify that the assessment of parking impacts also considers off-street parking spaces that would be affected by the construction or operation of the project. Chapter 4 in fact accounts for off-street parking.

16. Page 3-4, Section 3.1.4. The determination of significance for pedestrian circulation should be clarified to include detours that might lengthen bicycle commutes or pedestrian routes or travel time..."

17. Section 3.2.2.1, Table 3-9. Please confirm the existing LOS B and C at Alameda/1st Street in the morning and evening peaks, respectively. These don't correspond with empirical observations. If these are correct, please note that this is due in large part to the closure of westbound lanes over the Los Angeles River.

18. Page 3-8, Table 3-3. The overview of ridership on bus lines servicing the project area omits LADOT Commuter Express 438, DASH, and possibly other LADOT lines. If Table 3-3 is intended to exclusively identify Metro lines, it should be labeled as such.

19. Page 3-17, Section 3.2.3. As noted earlier, any assessment of existing parking conditions in the study area must include an inventory of any parking facilities that would be affected by the proposed construction or operation of the project. This includes off-street spaces on the block bounded by 1st, 2nd, Central, and Alameda. Chapter 4 in fact accounts for off-street parking.

20. Page 3-37, Section 3.3.3.2. As noted earlier, the operation of an At-Grade Emphasis LRT system would require construction of a pedestrian overpass at Temple and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant.

21. Section 3.3.3.2.2, Figure 3-7. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

22. Section 3.3.4.2.2, Figure 3-9. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

23. Section 3.3.4.2.2. Although this section concludes that the alternative would have a significant impact because of the seven intersections that would be impacted, the analysis needs to analyze and discuss the impact that the creation of the portal and the at-grade alignment to access the station at Alameda/1st. This is a huge impact on the area and should be discussed in terms of the operational impact this configuration has on the local street system. The actual impacted intersections in terms of LOS is minor in comparison to this potential impact. It must be evaluated in terms of operations, safety, access, etc., not just LOS.

11 cont'd

24. Page 3-43, Section 3.3.4.2.3. In the analysis of the Underground Emphasis, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking.

25. Page 3-44, Section 3.3.4.2.4. The operation of an Underground Emphasis LRT system would require construction of a pedestrian overpass at 1st and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant.

26. Page 3-47, Section 3.3.5.1.1. The EIS/EIR should clarify whether construction of the Fully Underground alternative would require temporary closure of lanes on 2nd Street and Central for relocation of utilities and cut-and-cover activities. The Draft does not indicate closure will be needed on these two streets.

27. Page 3-48, Section 3.3.5.1.2. The EIS/EIR remains silent about where tunnel boring activities would be initiated, stating that "[r]outes and disposal sites will be confirmed during the preliminary engineering phase..." If Metro cannot confirm that tunnel boring will not be initiated from Little Tokyo, the EIS/EIR should assume a worst-case scenario of impacts for Little Tokyo so that the full extent of traffic impacts, including dirt hauling operations, during construction is understood.

28. Page 3-49, Section 3.3.5.1.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during construction. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed.

29. Page 3-50, Section 3.3.5.2.2, Figure 3-11. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

30. Page 3-51, Section 3.3.5.2.2. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

31. Page 3-51, Section 3.3.5.2.2. It should be noted that there are only three impacted intersections from this alternative, none of them in Little Tokyo. From the LTCC's perspective, this alternative has no impacts on Little Tokyo.

11 cont'd

32. Page 3-51, Section 3.3.5.2.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during operations. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking.

33. Section 3.4.1.3. The analysis of parking and mitigation measures is too qualitative and conceptual to accurately gauge project impacts. There needs to be a much more detailed description of at least the mitigation options that should be considered for this program. The EIS/EIR should be more quantitative in the parking analysis, with the locations and the type of users for the various types of parking provided, both for the interim during construction and for the permanent during operation of the system. It is impossible to evaluate the parking program that does not discuss any of these items

Chapter 4 (Environmental Analysis, Consequences, and Mitigation)

34. Page 4-23, Section 4.2.3.4.3. LTCC agrees that the removal of off-street parking spaces from the Underground Emphasis alternative could be an "adverse effect with respect to environmental justice" if impacts are not fully mitigated.

35. Page 4-30, Section 4.2.4.4. While the issue of loading spaces at JANM is discussed in Chapter 3, the issue should be cited again in the displacement discussion, with appropriate mitigation included in this section.

36. Page 4-42, Section 4.3.2.4.6. The EIS/EIR should note that the Little Tokyo community exists on both the west and east sides of Alameda Street.

37. Page 4-43, Table 4.3-4. The overview of impacts to community and neighborhoods should be revised to reflect:

    a. The At-Grade Emphasis LRT can physically divide the Little Tokyo community because of the physical operation of LRT trains along surface streets that visually bisect these thoroughfares and because of the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    b. The Underground Emphasis LRT can physically divide the Little Tokyo community because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    c. The At-Grade Emphasis LRT can significant impair community mobility in Little Tokyo through the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    d. The Underground Emphasis LRT can significant impair community mobility in Little Tokyo because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.

38. Page 4-45, Section 4.3.3.4. While the EIS/EIR does not commit the project to initiate TBM activities at a particular location, it does confirm that construction impacts would be more significant in the Financial District and Little Tokyo. Please distinguish the extent of community and neighborhood impacts in Little Tokyo from dirt hauling and other operations if: a) TBM begins at 2nd/Central or near Bunker Hill.

11 cont'd

39. Page 4-311, Section 4.17.5. The Draft EIS/EIR does not reflect the language adopted by the Little Tokyo Community Council (LTCC) on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown below in underline.
    c. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders.
    d. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners.

40. Page 4-311, Section 4.17.5. Please add the following mitigation measure to the list of options suggested by the LTCC for inclusion in the Final EIS/EIR:

a. Provide free business support technical assistance to local businesses on strategies for business development that can minimize any adverse impacts of construction. This can include, but not be limited to, assistance with marketing, accounting, or finance.

41. Page 4-311, Section 4.17.5. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document.

Chapter 6 (Cost and Performance Considerations)

42. Please note that the capital costs of the Fully Underground alternative include all stations originally considered in the initial evaluations. Any efforts to reduce capital costs for this alternative should focus on opportunities for open cut stations, as well as eliminating any of the three stations to the west, including Flower Street between 4th and 5th, not on any changes to the fully underground system design at the proposed Little Tokyo station.

11 cont'd

43. LTCC concurs with the EIS/EIR's finding that the operating and maintenance costs for the Fully Underground alternative are lower than the TSM and At-Grade Emphasis alternatives.

44. Page 6-19, Table 6-15. The overview of the mobility benefits of each alternative clearly confirm that the Fully Underground alternative provides the most benefit in reducing congestion countywide.

45. Page 6-21, Table 6-16. The assessment of transit system user benefits for all alternatives confirms that the Fully Underground alternative provides the most "bang for the buck" and will be most competitive in Metro's pursuit of Federal Transit Administration New Starts funding.

46. Page 6-22, Section 6.6.1. The description of the evaluation methodology should acknowledge the importance of providing proportional benefits to local communities like Little Tokyo that are affected by construction to benefit the regional transit system.

Chapter 7 (Public Agency Outreach)

47. Page 7-7. In the list of stakeholders consulted, please add the Little Tokyo Community Council under Community Organizations, Neighborhood Groups, and Homeowner Associations.

48. Page 7-21. Please note that the LTCC's PCPC is the Planning and Cultural Preservation Committee.

BU4

Responses to Comments from Yamada Travel Bureau, Mikuni, Peggy T.

Response to Comment BU4-1

Thank you. Comment acknowledged. Please refer to Responses to Comments BU4-2 through BU4-11, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment BU4-2

Support for the Fully Underground LRT Alternative and the Little Tokyo Community Council proposed mitigation measures is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU4-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property, which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment BU4-4

Comment acknowledged. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, a range of durations, 2-4 months for the TBM insertion site and 24-48 months for the 2nd Street TBM tunnel, was assumed for tunneling activities at both insertion site options. These ranges are conservative estimates. Disproportionate impacts associated with each alternative were discussed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR.

The small size of the 2nd/Hope Street station site would require a substantial portion of construction staging activities to occur in the surrounding streets, necessitating longer downtown street closures and increased cut and cover activities. This would have the effect of reducing mobility downtown and could deter visitors from frequenting many downtown communities, including Little Tokyo. In addition, the 1st/Central Avenue station site in Little Tokyo would need to be used as the TBM receiving site if the tunnel boring machines are inserted at the 2nd/Hope Street station site.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and the 2nd/Hope Street station are no longer being considered. Instead the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. The TBM would be inserted

approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street and result in fewer acquisitions. Tunnel boring activities from this site would proceed farther down Flower Street to 4th Street, instead of ending at the proposed 2nd/Hope Street station. Spoils would be removed within the Mangrove property, and trucks would be routed to the east and/or north to reach the freeway, and would not pass through Little Tokyo. Section 4.18, Construction Impacts, of this Final EIS/EIR contains further detail regarding estimated construction durations, construction scenarios, and tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised based on the new TBM insertion site in this Final EIS/EIR. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR. Inserting the TBM at the Mangrove property would not result in new significant impacts or substantially increase the severity of impacts previously identified in the Draft EIS/EIR.

Worksite Traffic Control Plans will be developed in coordination with the Los Angeles Department of Transportation and presented to the community prior to construction activities. Metro will provide the community with updates regarding the construction schedule prior to and during construction.

Response to Comment BU4-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by the Federal Transit Administration (FTA). Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment BU4-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment BU4-7

The text of these mitigation measures has been documented in Section 4.17.4.2 of this Final EIS/EIR. Metro will implement all feasible mitigation measures as part of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU4-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment BU4-9

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU4-10

Metro also looks forward to continuing work with the community throughout the project process, including implementation of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU4-11

Comments acknowledged. These comments are a copy of the detailed comments submitted by the Little Tokyo Community Council (Comment Letter CN1). Please refer to Responses to Comments CN1-11 through CN1-57, below.

To: Ms. Dolores Roybal Saltarelli Oct. 12、2010
Project Manager
Metro
One Gateway Plaza,MS 99-22-2
Los Angeles, CA 90012

From: Hiroshi Yamauchi/Koraku Group Inc.
Board Member of LTBA,LTBID
314 E. 2nd St.
Los Angeles, CA 90012
Cel 310-890-1792、hiroyama1us@yahoo.co.jp

Dear Dolores,

Metro Regional Connector のLittle Tokyo での建設計画について手紙を書きます。
私どもLittle TokyoのBusiness OwnerのGroupは、ただいま有力な案の２nd St.を通る「Fully Underground Alternative」に反対します。 従って、「No Build」案を支持します。

はじめは、私どももこの「Fully Underground Alternative」は、我々Little Tokyoの関係者にとって全くImpactのない、いつも通りBusinessが継続できる、いい案だと思っていましたが、MeetingやHearingを重ねていくうちに、非常にImpactの大きい大変な計画だと知りました。
この案に賛成の方の中には、工事関係者やProperty Ownerの方達の様にご自身の利益につながる方もいらっしゃるでしょう。でもこの方達はこの計画が中止になったとしても、生活が奪われる訳ではありません。 私どもは、この4年間の工事中にBusinessが続けられなくなって生活自体が覚束なくなる可能性があります。一部の方達の利益の為に我々が犠牲になるのは、許す事のできない耐え難い屈辱です。 それでも、あるProperty Ownerの方は、「目先の利益より、犠牲のない皆さんの繁栄こそが将来の本当の利益につながるんです。」と、我々に賛同してくれている方もいます。

将来の環境問題については、我々も無関心ではありません。温暖化現象対策やCO2削減などはいますぐ手を打たなければなりません。これは一人一人の生活のなかで心掛けなければならないことです。それを目的とした公共工事も必要でしょう。しかしその為に人の生活が 犠牲になる様では、「本末転倒」と言うべきでしょう。

犠牲にならない様に「補償」はすると言っても、その「補償」の「保証」はありません。　その不安を払拭する前に、この工事の賛成は到底できません。　その為にも、他の案をもう一度研究し検討して頂きたい。

例えば、

1、　Red　Lineを共用する。（新たな地下鉄工事の資金で、改良する。一時的に不通になってもShuttle　Busで対応する。新たな工事と同じ効果が期待できる。）
2、　Moca　の裏の地下に駅を造ってTemple　St.の下を通す。
3、　３rd　St.か４th　St.の地下を通す。

いかがなものでしょうか、是非この提案に対してのお答えを頂きたいと思います。

Little Tokyo は我々日本人、日系人にとって非常に大事な心の拠りどころです。いや今や、全米の若者達の日本文化の聖地と言っても過言ではありません。　この歴史的にも重要な場所をどうか守ってください。　我々の中には、すでに不安で不安でたまらなく、夜も碌に眠れない人がでて居ます。この数字には表れない、ダメージをどうして補償してくれるのでしょうか。

私どもは決して、この地下鉄工事に反対している訳ではありません。「Fully Underground　Alternative」が2nd St.を通る案に反対をしているのです。この「Fully Underground　Alternative」を2nd St. ではなく、どうか他の通り、他の方法でもう一度検討をして頂きたい。

この我々の切実な想いをどうか汲み取って頂き、誰もが、幸福になる結果を願います。

お返事をお待ちしております。

Hiroshi Yamauchi

Koraku Group Inc.

October 17, 2010

To: Ms. Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza, MS99-22-2
Los Angeles, CA 90012

From: Hiroshi Yamauchi / Koraku Group Inc.
Board Member of LTBA, LTBID
314 E. 2nd St.
Los Angeles, CA 90012
Cell: 310-890-1792, Hiroyama1us@yahoo.co.jp

Dear Dolores:

I am writing to you to discuss about the construction plan of Metro Regional Connector in Little Tokyo area.
We, the Business Owner Group of Little Tokyo area, would like to express the objection against the plan of Fully Underground Alternative, which takes a route along the 2nd street. Instead, we will support the plan of No Build. 1

Initially, we had no objection against the plan of Fully Underground Alternative, because it seemed there would be no negative impact to our business in Little Tokyo area. Through a multiple number of meetings and hearings, however, we came to realize that this plan would pose a strong negative impact to our business and livings of people concerned.

Among those in favor of this plan, there are some people who will enjoy the benefits, such as those involved in the construction works, property owners, etc.
For those people, however, even if this plan was brought to halt, they won't be deprived of their lives. On the other hand, we are more seriously threatened because we may be forced to discontinue our business during four years of construction period.
We cannot live with such a humiliation that we are victimized for the sake of some people's benefits and interests. Yet, there is one property owner, who is supportive of our stance, saying " If you can stay in business without any sacrifice in Little Tokyo, it 2

will bring a true benefit in the future. So, we should focus on such a long-term vision, rather than a short-term benefits”

2 cont'd

Regarding the current environmental problems, we are not indifferent to the issue, and we understand that the immediate actions should be taken against the issues of global impacts, such as the global warming, and the reduction of CO2 emission.
Each one of us should bear it in mind and take appropriate behaviors at each individual level. In this context, it may require some public works, but if our livings are victimized by that action, it is utterly absurd just like putting the cart before the horse.

3

In regard to the financial compensation to ease our sufferings, the fact is that nothing is guaranteed whether it is realized in practice or not. Therefore, until all such anxiety is wiped out, we cannot support this construction plan.
Having said that, we would like to ask you to revisit other plans once again.

4

For example,

1. To share the Red Line (By allocating the budget of new subway construction to improve the Red Line. During the temporary period of service interruption, shuttle bus can be utilized instead. We expect this plan is as effective as the new construction of subway.)
2. To build a subway station in the underground behind Moca so as to take a subway route under Temple St.
3. To explore the new route in the underground of either 3rd St. or 4th St.

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These are conceivable alternative proposals we make, and we’d like to ask for your proactive consideration to them.

8

The Little Tokyo is the heart and soul of all the Japanese and Japanese American people. It’s not exaggeration to say that the Little Tokyo is even the holy place of Japanese culture for all the American young generation.
The area of Little Tokyo has a historical significance as well. So, we sincerely appeal for your generous understanding of the importance of protection and preservation of this area.
In our Group, some people are already mentally suffered from too much anxiety and claim that they cannot sleep well at night.
There already incurred such damages which cannot be explicitly expressed in figure.

9

How can such sufferings be relieved and compensated?

We are not opposing against the whole plan of subway construction. Our objection is focused only against the plan of Fully Underground Alternative which takes a route of 2nd st.

So, it is our earnest petition to ask you to revisit Fully Underground Alternative plan once again and to review other plans and other route, avoiding a route of 2nd St.

We sincerely hope that you will lent your ears to our desperate petition and come up with a plan which will sustain the well-being and happiness of everybody concerned.

9
cont'd

We all do look forward to hearing from you.

Best regards,

Hiroshi Yamauchi
Koraku Group. Inc.

BU5

Responses to Comments from Koraku Group, Inc., Yamauchi, Hiroshi

Response to Comment BU5-1

Comment acknowledged. Support for the No Build Alternative is noted.

Response to Comment BU5-2

As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. Construction activities in the Little Tokyo area would consist of cut and cover activities in the vicinity of the new underground station, the new portals, the junction beneath 1st and Alameda Streets, and a portion of Central Avenue between 1st and 2nd Streets. Refinements to the Locally Preferred Alternative would reduce the extent of cut and cover activities and associated street lane and sidewalk closures. Activities at these locations could be performed simultaneously to minimize the overall duration of the construction process. Tunnel boring machine activities would be staged at the Mangrove property for a period of two to four years, and would not cause impacts anywhere else in the Little
Tokyo community.

It is Metro's goal to help preserve the Little Tokyo community during construction, and Metro agrees that the long-term effects of the Regional Connector would be beneficial.

Response to Comment BU5-3

Metro is committed to minimizing impacts to the Little Tokyo community and also understands the importance of reducing greenhouse gas emissions. As identified in Section 4.17.4 of the Draft EIS/EIR and this Final EIS/EIR, Metro intends to minimize impacts to businesses in Little Tokyo during construction. Sections 4.14.3.4 and 4.14.3.5 of the Draft EIS/EIR and this Final EIS/EIR projected that the Regional Connector would ultimately have long-term beneficial impacts to businesses throughout the project, including in Little Tokyo.

Response to Comment BU5-4

All confirmed mitigation measures are guaranteed by the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and the Record of Decision. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative explicitly designates parties responsible for overseeing implementation of the confirmed mitigation measures.

Response to Comment BU5-5

The Metro Red and Purple Lines use a different rail transit mode than the Metro Blue, Gold, and future Expo Lines. The tracks and station platforms are not compatible due to differences in train floor height, train width, and method of electricity conveyance. In order to accommodate the Metro Blue, Gold, and future Expo Line trains, the Regional Connector must have a new alignment separate from the Metro Red/Purple Line tunnels.

Response to Comment BU5-6

A subway route beneath Temple Street would have difficulty connecting to the existing Metro Gold Line bridge over the US 101 Freeway due to the sharp curves that would be necessary. The Locally Preferred Alternative's 2nd/Hope Street station would provide service to the Museum of Contemporary Art on Bunker Hill, and the new underground station in Little Tokyo would provide service to MOCA's Little Tokyo location.

Response to Comment BU5-7

Routes along 3rd Street and 4th Street were considered in the Alternatives Analysis phase of the project, but were not pursued due to the need to perform higher-risk tunneling activities beneath high-rise buildings, preclusion of a station serving Bunker Hill, the need for greater acquisitions, and circuitous connections to the existing Metro Gold Line.

Response to Comment BU5-8

Metro has considered these alternative proposals and provided responses above.

Response to Comment BU5-9

Metro understands the importance of Little Tokyo to the Japanese American community, as shown in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. It is Metro's goal to minimize impacts to the Little Tokyo community, and Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to offer assistance and protection to the community throughout the construction process. Metro has refined the Locally Preferred Alternative since publication of the Draft EIS/EIR to eliminate cut and cover construction on 2nd Street in Little Tokyo, reduce property and business acquisitions, and reduce construction impacts. Metro has considered other routes in the Alternatives Analysis process, and these were documented in Appendix H, Final Alternatives Analysis Report, of the Draft EIS/EIR and this Final EIS/EIR. Metro will continue to work with the community throughout the project and foster open dialogue and communication.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Company Name: Cherry Land Company

Address: 612 E. Jackson Street

Telephone/E-Mail 213-620-0764 tsc.mam.wlu@att.net

Name: Wilson Lu

☐ Owner ☐ Employee ☑ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows:

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.*** 2

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Cherry Land Company

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU6

Responses to Comments from Cherry Land Company, Liu, Wilson

Response to Comment BU6-1

Metro's outreach to and involvement with the Little Tokyo community, including the business community, has been extensive. For a more detailed description of this outreach effort, please refer to Chapter 7, Public and Agency Outreach, of this Final EIS/EIR.

Metro held public meetings during the Draft EIS/EIR process, meetings with the Little Tokyo Working Group and individual stakeholders in the Little Tokyo neighborhood, hired an independent consultant for the Little Tokyo Community Council, and performed outreach activities to gather input that ultimately led to the creation of the Fully Underground LRT Alternative. The results of the Little Tokyo Business Improvement District's survey poll on the Regional Connector Transit Corridor project are provided in Comment Letter BU20, below. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, including those suggested by the Little Tokyo community to the extent feasible, in order to minimize impacts to businesses.

Response to Comment BU6-2

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These refinements would reduce construction impacts near the Japanese Village Plaza by eliminating the need for cut and cover activities on 2nd Street in Little Tokyo. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro will continue to meet with the community for the duration of the project.

Response to Comment BU6-3

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and

Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU6-4

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking
mitigation measures.

Response to Comment BU6-5

Comment acknowledged. Please refer to Responses to Comments BU6-1 through BU6-4, above, for detailed responses to concerns raised by the commenter about project-related construction impacts to the Little Tokyo community. In addition, construction and economic impacts associated with the project were analyzed in Sections 4.14, Economic and Fiscal Impacts, and 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Company Name: Ho - Nakumi - Taira Investment Company

Address: 200 S. San Pedro St., # 400B

Telephone/E-Mail 213-620-0764 tsc.mark.wlu@att.net

Name: Wilson Lu

☐ Owner ☐ Employee ☑ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Ho-Kurumi-Tsuru Investment Company

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU7

Responses to Comments from Ho-Narumi-Taira Investment Company, Liu, Wilson

Response to Comment BU7-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU7-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU7-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU7-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU7-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Company Name: Sho Tokyo Parking LLC

Address: 350 East 2nd Street

Telephone/E-Mail 213-620-0764 tsc.main.wlu@att.net

Name: Walter Lum

☒ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

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   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Wilson Liu
Sho Tokyo Bistro LLC

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU8

Responses to Comments from Sho Tokyo Parking LLC, Liu, Wilson

Response to Comment BU8-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU8-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU8-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU8-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU8-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Company Name: Tara Investment Company

Address: 200 S. San Pedro St. #400B

Telephone/E-Mail 213-620-0764 tic.mam.wlu@att.net

Name: Nelson Lau

☐ Owner ☐ Employee ☐ Manager ☑ Other: Property Owner

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Fire Investment Company

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU9

Responses to Comments from Taira Investment Company, Liu, Wilson

Response to Comment BU9-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU9-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU9-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU9-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU9-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Company Name: Taira Services Corporation

Address: 200 S. San Pedro St. #400B

Telephone/E-Mail 213-620-0764 tsc.main.wilw@att.net

Name: Wilson Lu

☐ Owner ☑ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

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   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Wilson Liu

Tsuru Services Corporation

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU10

Responses to Comments from Taira Services Corporation, Liu, Wilson

Response to Comment BU10-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU10-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU10-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU10-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU10-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: SEPT. 29, 2010

Company Name: RAFU BUSSAN, INC.

Address: 326 E. 2ND ST., L.A., CA 90012

Telephone/E-Mail (213) 614-1181

Name: MR. KIYOSHI KAWARATANI

☒ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

, PRESIDENT

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU11

Responses to Comments from Rafu Bussan, Inc., Kawaratani, Kiyoshi

Response to Comment BU11-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU11-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU11-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU11-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU11-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: October 10, 2010

Company Name: Little Tokyo Arts + Gifts

Address: 317 E. 1st Street, Los Angeles, CA 90012

Telephone/E-Mail (213) 620-1496 / ekt999@hotmail.com

Name: Elaine Taigoshi

☑ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we ~~are~~ cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

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   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

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3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

Little Tokyo Arts + Gifts

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU12

Responses to Comments from Little Tokyo Arts & Gifts, Taiyoshi, Elaine

Response to Comment BU12-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU12-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU12-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU12-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU12-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: 9/30/2010

Company Name: Joy Mart Restaurant

Address: 137 Japanese Village Plaza, LA, CA 90012

Telephone/E-Mail 213-680-9868 / totfood@gmail.com

Name: Sotaro Masuda

☐ Owner ☐ Employee ☒ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU13

Responses to Comments from Joy Mart Restaurant, Masuda, Sotaro

Response to Comment BU13-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU13-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU13-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU13-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU13-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: 10/3/2010

Company Name: Los Angeles Eye Care Optometry Group

Address: 250 E. 1st St, Ste 802, LA, CA 90012

Telephone/E-Mail 213-628-7419 / LAEyeCare@aol.com

Name: Dr. Gregory Kume

☒ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

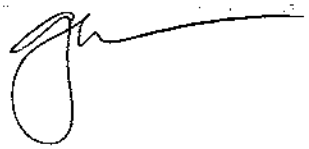
C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,



cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU14

Responses to Comments from Los Angeles Eye Care Optometry Group, Kame, Gregory

Response to Comment BU14-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU14-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU14-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU14-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU14-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: 9/30/2010

Company Name: TEISHOKUYA OF TOKYO

Address: 345 E. 2nd St, LA, CA 90012

Telephone/E-Mail 213-680-0394

Name: Etsuko Masuda

☒ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU15

Responses to Comments from Teishokuya of Tokyo, Masuda, Etsuko

Response to Comment BU15-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU15-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU15-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU15-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU15-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: 9/29/10

Company Name: FAVORITE SNACK · GIFT

Address: 340 E. AZUSA ST. A LA CA 90012

Telephone/E-Mail (213) 621-1919

Name: PARK, JONG HYUNG

☑ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows:

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.*** 2

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community.

5

Respectfully yours,

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

BU16

Responses to Comments from Favorite Snack, Park, Jong Hyung

Response to Comment BU16-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU16-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU16-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Response to Comment BU16-4

Comment acknowledged. Please refer to Response to Comment BU6-4, above.

Response to Comment BU16-5

Comment acknowledged. Please refer to Response to Comment BU6-5, above.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: Sept 28, 2010

Company Name: KEN Nakamura, D.D.S.

Address: 200 S. San Pedro St. Ste 401 L.A. CA 90012

Telephone/E-Mail (323)974-0105 KENNakamura422@Yahoo.Com

Name: KEN Nakamura

☑ Owner ☐ Employee ☐ Manager ☐ Other: _____

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative***, until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

BU17

Responses to Comments from Ken Nakamura, D.D.S., Nakamura, Ken

Response to Comment BU17-1

Comment acknowledged. Please refer to Response to Comment BU6-1, above.

Response to Comment BU17-2

Comment acknowledged. Please refer to Response to Comment BU6-2, above.

Response to Comment BU17-3

Comment acknowledged. Please refer to Response to Comment BU6-3, above.

Little Tokyo Business Association
And
Little Tokyo Business Improvement District

POSITION STATEMENT
ON THE
REGIONAL CONNECTOR TRANSIT CORRIDOR
DEIS/DEIR

September 28, 2010

Metro Staff:

On May 1, 2009, the ***Little Tokyo Business Association*** submitted to Dolores Roybal Saltarelli, Project Manager – Los Angeles County Metropolitan Transportation Authority, their support for the ***UNDERGROUND EMPHASIS LRT ALTERNATIVE, with a STATION LOCATION AT 2ND STREET, BETWEEN LOS ANGELES AND SAN PEDRO STREETS***, along with a list of concerns, which mitigating measures would be implemented and documented in the ***Final Environment Impact Statement and Final Environmental Impact Report.***

In light of the current efforts by the ***Little Tokyo Community Council,*** the ***Nikkei Center Developer***, the ***Property Owners*** and ***Businesses on the parcel bounded by 1st Street, Alameda Street, 2nd Street and Central Avenue***, and adjacent ***Property Owners, Businesses, Non-Profit Organizations, and Residences adjacent to the intersection of 1st and Alameda Streets***; *Metro Staff* is recommending that the ***Fully Underground LRT Alternative*** be designated the staff recommended ***LOCALLY PREFERRED ALTERNATIVE (LPA)*** in this DEIS/DEIR.

The ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** has never taken formal action on the ***Fully Underground LRT Alternative***. In light of the additional ***Fully Underground LRT Alternative*** and the release of the Draft EIS/EIR, the ***LTBA Board of Directors and LTBID Advisory Board*** needs to revisit the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final EIS/EIR***. 1

On September 22, 2010 the ***Board of Directors for the Little Tokyo Business Association*** and the ***Advisory Board for the Little Tokyo Business Improvement District*** held a joint session to discuss the current Regional Connector Transit Corridor DEIS/DEIR. At the recommendation of both Boards, the current position of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District,*** with respect to the Regional Connector Transit Corridor Project, is as follows:

1. ***LOCALLY PREFERRED ALTERNATIVE***: Metro Staff's current recommended ***LOCALLY PREFERRED ALTERNATIVE*** is premature and its recommendation did not adequately seek out the input from the business sector. Therefore, the ***Little Tokyo Business Association*** rescind its prior support for the ***UNDERGROUND EMPHASIS LRT ALTERNATIVE,*** pending a survey from the ***Little Tokyo Business Improvement District's*** 400 members, of their selection of the alternatives currently under consideration for the Regional Connector Transit Corridor project as the recommended ***LOCALLY PREFERRED ALTERNATIVE.***

2. ***CONSTRUCTION PHASE MITIGATIONS:*** Metro Staff has established the ***Little Tokyo Working Group***, as a forum that allows closer examination of the community concerns as it relates to the Regional Connector Project. Both Boards are ready, willing, and able to participate in the ***Little Tokyo Working Group*** to identify and address the business community concerns, with respect to the substantial construction phase impacts that will occur during the pre-construction and the actual construction phase of the Regional Connector Project. Among the key concerns, which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follow:

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo is one of the three remaining "Japan Towns" in the United States, the other two are in San Francisco and San Jose. Before World War II, Little Tokyo was the largest Japanese-American community. Little Tokyo once encompassed a larger area than today.

   Little Tokyo has existed since the early 1900's, and has included commercial and residential uses. During World War II and the Japanese internment, Little Tokyo was abolished and renamed Bronzeville. Bronzeville was comprised primarily of African-Americans and Hispanics. Upon the return of interred Japanese, Little Tokyo was revitalized as a Japanese-American community, though not on the pre-war scale. In 1970, Little Tokyo was designated a redevelopment area by the Community Redevelopment Agency of the City of Los Angeles. With the assistance of the CRA/LA, Little Tokyo became the entry point for Japanese corporations into Southern California. Japanese business influence led to further changes in the social, political, physical, and economic environment of Little Tokyo.

   Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussions needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the course of construction, every effort shall be made to minimize adverse impacts which, businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

2

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C. ***Replacement On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all of the build alternatives. Construction of the Regional Connector Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction would result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours , which will impede pedestrian flow.

Numerous Little Tokyo street level businesses relay on on-street parking for their patrons and the street-level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services.

All off-street parking spaces loss through eminent domain shall be replaced. All on-street and off-street parking spaces taken away during the course of construction shall be replaced.

4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economical impacts, which in turn will affect the future of the Little Tokyo Community. We the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** are ready, willing and able to discuss our concerns with the Metro Staff.

5

Respectfully yours,
Little Tokyo Business Association, Board of Directors
Little Tokyo Business Improvement District, Advisory Board

BU18

Responses to Comments from Little Tokyo Business Association and Little Tokyo Business Improvement District

Response to Comment BU18-1

Metro received the referenced letter and has incorporated mitigation measures suggested by the Little Tokyo community in Section 4.17.5 of the Draft EIS/EIR to the extent feasible. Metro created the Fully Underground LRT Alternative in response to community input, and the Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. In response to comments from the Little Tokyo Community Council, Little Tokyo Business Improvement District, and Little Tokyo Business Association, Metro has refined the Locally Preferred Alternative since publication of the Draft EIS/EIR to eliminate cut and cover construction on 2nd Street in Little Tokyo, reduce property and business acquisitions, and reduce construction impacts. Metro will continue to work closely with the Little Tokyo community groups throughout the project, and has met with the Little Tokyo Business Association and Little Tokyo Business Improvement District to present the proposed alignment refinements.

Metro held public meetings during the Draft EIS/EIR process, meetings with the Little Tokyo Working Group and individual stakeholders in the Little Tokyo neighborhood, hired an independent consultant for the Little Tokyo Community Council, and performed outreach activities to gather input that ultimately led to the creation of the Fully Underground LRT Alternative. The results of the Little Tokyo Business Improvement District's survey poll on the Regional Connector Transit Corridor project are provided in Comment Letter BU20, below. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, including those suggested by the Little Tokyo community to the extent feasible, in order to minimize impacts to businesses.

Response to Comment BU18-2

Metro welcomes the Little Tokyo Business Association and Little Tokyo Business Improvement District's participation in the Little Tokyo Working Group, and will continue to address community concerns in this forum throughout the duration of the project.

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Thank you for the additional community history provided in the comment. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will

coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These refinements would reduce construction impacts near the Japanese Village Plaza by eliminating the need for cut and cover activities on 2nd Street in Little Tokyo. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction.

Response to Comment BU18-3

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU18-4

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land at the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Response to Comment BU18-5

Comment acknowledged. Please refer to Responses to Comments BU18-1 through BU18-4, above, for detailed responses to concerns raised by the commenter about project-related construction impacts to the Little Tokyo community. Metro will continue to coordinate with the Little Tokyo Business Association and Little Tokyo Business Improvement District through the rest of the design phase and the construction phase of this project.

Little Tokyo Business Association
Little Tokyo Business Improvement District
200 South San Pedro Street, Suite 400B
Los Angeles, CA 90012
(213) 620-0764 (O) 213-617-8147 (F)
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October 4, 2010

Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: DEIS/DEIR – Regional Connector Transit System

Dear Ms. Roybal-Saltarelli:

In addition to our September 28, 2010 comments on the Regional Connector Transit Corridor Project , the ***Little Tokyo Business Association*** and ***Little Tokyo Business Improvement District*** are offering the following comments on the *DEIS* and *DEIR*.

Little Tokyo Business Interruption Consortium: The consortium of (1) ***Little Tokyo Business Association***, (2) ***Little Tokyo Business Improvement District***, (3) ***Japanese Chamber of Commerce of Southern California***, and (4) ***Little Tokyo Community Council*** be formed to work along with ***Metro Staff*** and other ***Governmental Agencies*** having jurisdiction, to develop policy, regulations, and procedures to resolve issues arising from adverse business interruption during the course of construction of the Regional Connector Project. The ***Little Tokyo Business Interruption Consortium*** shall be co-chaired by the President of the respective organizations listed. Any "***business interruption committee***" to be formed shall ***not be limited*** to the supervision of a single Little Tokyo organization nor granted exclusive powers of oversight. Little Tokyo has many organizations, which the listed four (4) above are considered the major organization representing a cross section of the business sector, non-profit organization sector, and the residential sector. To allow a single Little Tokyo organization to act as the sole and exclusive leadership would ***not be proper***. The ***Little Tokyo Business Interruption Consortium*** is the proper structure to work with ***Metro Staff*** in addressing serious construction impacts the Little Tokyo Community will be encountering. 1

Little Tokyo Construction Mitigation Program: We encourage the establishment of a ***Little Tokyo Construction Mitigation Program*** for the purpose of compensating constructing impact business interruption injuries. Should ***Metro*** or any other ***Governmental Agency*** establish a mitigation funding program for construction impact related business interruption injuries and other construction impacts that alters the business operations resulting in physical changes to business concerns, the ***Little Tokyo Business Interruption Consortium*** shall have active participation in the decision making process. 2

Respectfully yours,
Little Tokyo Business Association, Board of Directors
Little Tokyo Business Improvement District, Advisory Board

BU19

Responses to Comments from Little Tokyo Business Association and Little Tokyo Business Improvement District

Response to Comment BU19-1

Metro welcomes the opportunity to work with a Little Tokyo business consortium and all other affected stakeholders throughout the duration of the project. Metro will also work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU19-2

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains the confirmed mitigation measures intended to assist Little Tokyo businesses and minimize adverse impacts during the construction phase of the project. It is Metro's goal to minimize the potential for business interruption. Metro welcomes the opportunity to work with the Little Tokyo business community throughout the construction phase of the project.

Little Tokyo Business Association
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October 15, 2010

Los Angeles County Metropolitan Transportation Authority
Ms. Dolores Roybal-Saltarelli
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Subject: Regional Connector Transit Corridor Project – DEIS/DEIR

Dear Ms. Roybal-Saltarelli:

In addition to our September 28, 2010 and October 4, 2010 comments on the Regional Connector Transit Corridor Project, the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** are offering the following comments on the DEIS/DEIR. 1

Locally Preferred Alternative: NO-BUILD

Enclosed along with this letter, you will find the "Survey Poll" results, plus copies of the returned survey forms, conducted by the ***Little Tokyo Business Improvement District.*** This survey poll asked the stakeholders of the Little Tokyo Community to guide the ***Little Tokyo Business Improvement District*** in determining a locally preferred alternative currently under consideration. 2

One thousand two hundred twenty two (1,222) survey forms were returned by the stakeholders of the Little Tokyo Community.

With respect to the ***NO-BUILD*** alternative, one thousand eighty eight (1,088) responded, resulting in seventy-one percent (71%) ***"supporting"*** the ***NO-BUILD*** selection as the locally preferred alternative, as currently proposed in the DEIS/DEIR.

With respect to the ***FULLY UNDERGROUND*** alternative, seven hundred twenty four (724) responded, resulting in eight three percent (83%) ***"no-support*** " for the ***FULLY UNDERGROUND*** selection as the locally preferred alternative as currently proposed in the DEIS/DEIR. 3

Therefore, the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** is recommending the ***NO-BUILD*** alternative as the only acceptable option as the locally preferred alternative that addresses the economic, social, cultural and environmental impacts to the Little Tokyo community as currently proposed in the DEIS/DEIR.

Further, the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District,*** request a postponement of a locally preferred alternative selection by the MTA Board at its October 28, 2010 board meeting. 4

Construction Phase Mitigation Issues:

Under all the ***"BUILD ALTERNATIVES"*** currently under consideration, substantial pre-construction and construction impacts are anticipated that will seriously affect the conduct of business , economy, and social life in the Little Tokyo Community. In our September 28, 2010 comments, we addressed key concerns which has not been adequately addressed in the current DEIS/DEIS.

The "Survey Poll" asked the stakeholders of the Little Tokyo community, the following key concerns for their guidance.

Preservation of Japanese Business Influence and Culture:

Nine hundred forty (940) responded in the survey poll, resulting in ninety four percent (94%) ***"supporting"*** the preservation of the ***Japanese Business Influence and Culture*** in our community.

The current DEIS/DEIR does not properly address how the construction phase impacts and the operational phase of the Regional Connector Transit Corridor will preserve the Japanese business influence and culture. Metro Staff has not clearly addressed this issue in the current propose DEIS/DEIR.

5

Business Interruption Compensation Fund Program:

Nine hundred forty (940) responded in the survey poll, resulting in ninety four percent (94%) ***"supporting"*** a ***"Business Interruption Compensation Fund Program"*** for those businesses, property owners, and tenants of the Little Tokyo community that will be economic injured by substantial construction impacts during the construction of the Regional Connector Transit Corridor project.

The current DEIS/DEIR does not properly address the anticipated pre-construction and construction phase impacts upon the Little Tokyo business economy. Further, the current DEIS/DEIR does not clearly address the remedies that need to be implemented in the DEIS/DEIR to properly address these serious economic injuries caused by the construction of the Regional Connector Transit Corridor project. Metro Staff has not clearly addressed this issue in the current propose DEIS/DEIR.

6

Replacement of On-Street Parking and Off-street Parking Spaces:

Nine hundred forty four (944) responded in the survey poll, resulting in ninety four percent (94%) "***supporting"*** the replacement of on-street and off-street parking spaces permanently loss and caused by the construction of the Regional Connector Transit Corridor project.

The current DEIS/DEIR does not adequately address the replacement of on-street and off-street parking spaces loss permanently by the construction of the Regional Connector Transit Project. Numerous Little Tokyo street level businesses rely on on-street parking for their patrons and the street level pedestrian flow. With the on-street parking losses, the patrons to these street level businesses will be seriously affected, resulting in substantial economic losses. Metro Staff has not clearly addressed this issue in the current propose DEIS/DEIR.

7

The ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District,*** request a postponement of approving the current Draft Environmental Impact Statement and Draft Environmental Impact Report by the MTA Board at its October 28, 2010 board meeting.

8

Thank you for your consideration. We are ready, able and willing to work with Metro Staff to address our mutual concerns.

Respectfully yours,

Wilson Liu
LTBA, President
LTBID, Co-Chair

cc:
Eric Garcetti, Council Member – District 13, President
Jan Perry, Council Member – District 9, President Pro Tempore
Ed Reyes, Council Member – District 1
Paul Krekorian, Council Member – District 2
Dennis P. Zine, Council Member – District 3
Tom LaBonge, Council Member – District 4
Paul Koretz, Council Member – District 5
Tony Cardenas, Council Member – District 6
Richard Alacon, Council Member – District 7
Bernard Parks, Council Member – District 8
Herb J. Wesson, Jr., Council Member – District 10
Bill Rosendahl, Council Member – District 11
Greig Smith, Council Member – District 12
Jose Huizar, Council Member – District 14
Janice Hahn, Council Member – District 15

BU20

Little Business Improvement District
Regional Connector Transait Corridor Project
Survey Poll

	Date	Company Name	Personal Name	Address	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
1	10/08/10	Tokumitsu Insurance	Nobu Tokumitsu	248 E. 1st Street	1																1
2	10/08/10	Nirvana	Hiroshi Yano	314 E. 1st Street	1																1
3	10/08/10	Nirvana	Koichi Ichikawa	314 E. 1st Street	1																1
4	10/08/10	Nirvana	Yoshiko Ota	314 E. 1st Street	1																1
5	10/08/10	Nirvana	Rumiko Nomura	314 E. 1st Street	1																1
6	10/08/10	Nirvana	Hiromi Morishita	314 E. 1st Street	1																1
7	10/08/10	Nirvana	Tsutomu Morishita	314 E. 1st Street	1																1
8	10/08/10	Nirvana	Eiji Morishita	314 E. 1st Street	1																1
9	10/08/10	Nirvana	Hidemichi Morishita	314 E. 1st Street	1																1
10	10/08/10	Nirvana	Tomoko Morishita	314 E. 1st Street	1																1
11	10/09/10	Fugetsu-do	Brian Kito	315 E. 1st Street	1										1		1		1		1
12	10/07/10	Mitsuru Grill	Dora Hanamure	316 E. 1st Street	1			1		1		1	1		1		1		1		1
13	10/07/10	Mitsuru Grill	Mamoru Hanamura	316 E. 1st Street	1			1		1		1	1		1		1		1		1
14	10/10/10	Little Tokyo Arts & Gifts	Elaine Taiyoshi	317 E. 1st Street		1				1		1	1		1		1		1		1
15	10/04/10	Jungle 2nd	Koji Shiota	325 E. 1st Street		1		1		1		1	1		1		1		1		1
16	10/05/10	Jungle 2nd	Keiko Shiota	325 E. 1st Street		1		1		1		1	1		1		1		1		1
17	10/05/10	Jungle 2nd	Tstsu Shiota	325 E. 1st Street		1		1		1		1	1		1		1		1		1
18	10/06/10	Jungle 2nd	Polo Yazaki	325 E. 1st Street		1		1		1		1	1		1		1		1		1
19	10/07/10	Jungle 2nd	Kensaku Takagi	325 E. 1st Street		1		1		1		1	1		1		1		1		1
20	10/07/10	Jungle 2nd	Yuki Itoyama	325 E. 1st Street		1		1		1		1	1		1		1		1		1
21	10/09/10	Jungle 2nd	Yoichi Kakuma	325 E. 1st Street		1		1		1		1	1		1		1		1		1
22	10/09/10	Jungle 2nd	Hiroyuki Hamada	325 E. 1st Street		1		1		1		1	1		1		1		1		1
23	10/03/10	Daikokuya	Maiko Mori	327 E. 1st Street		1		1		1		1		1	1		1		1		1
24	10/03/10	Daikokuya	Chihiro Murakata	327 E. 1st Street		1		1		1		1		1		1		1		1	1
25	10/03/10	Daikokuya	Akira Yamada	327 E. 1st Street		1		1		1		1		1		1		1		1	1
26	10/03/10	Daikokuya	Takuma Inoue	327 E. 1st Street		1		1		1		1		1		1		1		1	1
27	10/03/10	Daikokuya	Atsuko Omote	327 E. 1st Street				1		1		1		1	1		1		1		1
28	10/04/10	Daikokuya	Michelle	327 E. 1st Street	1										1		1		1		1
29	10/05/10	Daikokuya	Mike Pedro	327 E. 1st Street		1		1		1		1		1	1		1		1		1
30	10/05/10	Daikokuya	Erin Manalo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
31	10/05/10	Daikokuya	Stan Shar	327 E. 1st Street		1		1		1		1		1	1		1		1		1
32	10/05/10	Daikokuya	Elliot Han	327 E. 1st Street		1		1		1		1		1		1		1		1	1
33	10/05/10	Daikokuya	Kaoru Kotama	327 E. 1st Street											1		1		1		1
34	10/05/10	Daikokuya	Satomi Sanuki	327 E. 1st Street											1		1		1		1
35	10/05/10	Daikokuya	Ai Kataoka	327 E. 1st Street											1		1		1		1
36	10/05/10	Daikokuya	Paul Netrayain	327 E. 1st Street		1		1		1		1		1		1		1		1	1
37	10/05/10	Daikokuya	Scooby Brat	327 E. 1st Street		1		1		1		1		1		1		1		1	1
38	10/05/10	Daikokuya	Momoko Tashiro	327 E. 1st Street											1		1		1		1
39	10/05/10	Daikokuya	Mami Koizumi	327 E. 1st Street											1		1		1		1
40	10/05/10	Daikokuya	Masaki Ikatabe	327 E. 1st Street											1		1		1		1
41	10/05/10	Daikokuya	Kent Chaisua	327 E. 1st Street		1		1		1		1		1		1		1		1	1
42	10/05/10	Daikokuya	Andrew Prahlan	327 E. 1st Street		1		1		1		1		1	1			1		1	1
43	10/05/10	Daikokuya	Eric Bushman	327 E. 1st Street		1		1		1		1		1		1		1		1	1
44	10/05/10	Daikokuya	Josh Ramirez	327 E. 1st Street		1		1		1		1		1		1		1		1	1
45	10/06/10	Daikokuya	Yuki Ito	327 E. 1st Street	1			1		1		1		1	1		1		1		1
46	10/06/10	Daikokuya	Sophie Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
47	10/06/10	Daikokuya	Sean	327 E. 1st Street		1		1		1		1		1	1		1		1		1
48	10/06/10	Daikokuya	Troy Morgan	327 E. 1st Street	1			1		1		1		1	1		1		1		1
49	10/06/10	Daikokuya	Yuta Zama	327 E. 1st Street		1		1		1		1		1	1		1		1		1
50	10/06/10	Daikokuya	Peta Oldring	327 E. 1st Street		1		1		1		1		1		1		1		1	1
51	10/06/10	Daikokuya	Zandy Ariss	327 E. 1st Street		1		1		1		1		1		1		1		1	1
52	10/06/10	Daikokuya	Gayle Takahashi	327 E. 1st Street		1									1		1		1		1
53	10/07/10	Daikokuya	Koichi Suzuki	327 E. 1st Street				1		1		1		1	1		1		1		1
54	10/07/10	Daikokuya	Elizabeth Saldana	327 E. 1st Street	1			1		1		1		1	1		1		1		1
55	10/07/10	Daikokuya	Kien Huy Pham	327 E. 1st Street		1		1		1	1		1		1		1		1		1
56	10/07/10	Daikokuya	Rene Padina	327 E. 1st Street		1		1		1		1		1	1		1		1		1
57	10/07/10	Daikokuya	Ka Hou Man	327 E. 1st Street		1		1		1		1		1	1		1		1		1
58	10/07/10	Daikokuya	Arabella Alvarez	327 E. 1st Street		1		1		1		1		1	1		1		1		1

Little Business Improvement District
Regional Connector Transait Corridor Project
Survey Poll

					Locally Preferred Alternative	Mitigation Issue	

F2-208

	Date	Company Name	Personal Name	Address	No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		Number of Survey Returned
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
59	10/07/10	Daikokuya	V. Flores	327 E. 1st Street		1		1		1		1		1	1		1		1		1
60	10/07/10	Daikokuya	Ralf Langer	327 E. 1st Street		1		1		1		1		1		1	1		1		1
61	10/07/10	Daikokuya	Anne Goodwin	327 E. 1st Street		1		1		1		1		1	1		1		1		1
62	10/07/10	Daikokuya	Helen Yang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
63	10/07/10	Daikokuya	Aanenne Salemo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
64	10/07/10	Daikokuya	Rose Hernandez	327 E. 1st Street		1		1		1		1		1	1		1		1		1
65	10/07/10	Daikokuya	Angela Parada	327 E. 1st Street		1		1		1		1		1	1		1		1		1
66	10/07/10	Daikokuya	Fujio Tsutsumi	327 E. 1st Street		1		1		1		1		1	1		1		1		1
67	10/07/10	Daikokuya	Nancy M. Yellan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
68	10/07/10	Daikokuya	David Aronow	327 E. 1st Street		1		1		1		1		1	1		1		1		1
69	10/07/10	Daikokuya	Nak	327 E. 1st Street		1		1		1		1		1	1		1		1		1
70	10/07/10	Daikokuya	Tuan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
71	10/07/10	Daikokuya	Betty Quan	327 E. 1st Street											1		1		1		1
72	10/07/10	Daikokuya	Paul	327 E. 1st Street		1		1		1		1		1	1		1		1		1
73	10/07/10	Daikokuya	Maura	327 E. 1st Street		1		1		1		1		1	1		1		1		1
74	10/07/10	Daikokuya	Adam Fiukel	327 E. 1st Street		1		1		1		1		1	1		1		1		1
75	10/07/10	Daikokuya	Zac Sager	327 E. 1st Street		1		1		1		1		1	1		1		1		1
76	10/07/10	Daikokuya	Annalise Moberg	327 E. 1st Street						1					1		1				1
77	10/07/10	Daikokuya	Mari Watanabe	327 E. 1st Street		1		1		1		1		1		1		1		1	1
78	10/07/10	Daikokuya	K. Nishikawa	327 E. 1st Street		1		1		1		1		1		1		1		1	1
79	10/07/10	Daikokuya	Brian Tseng	327 E. 1st Street	1		1		1		1		1		1		1				1
80	10/07/10	Daikokuya	Nick Wa	327 E. 1st Street	1		1		1		1		1		1		1				1
81	10/07/10	Daikokuya	Jason Lam	327 E. 1st Street			1								1		1		1		1
82	10/07/10	Daikokuya	Damdi Dandam	327 E. 1st Street	1		1		1		1		1		1		1		1		1
83	10/07/10	Daikokuya	Kay Konami	327 E. 1st Street	1		1		1		1		1		1		1		1		1
84	10/07/10	Daikokuya	Connie Choung	327 E. 1st Street				1		1					1		1		1		1
85	10/07/10	Daikokuya	Joel Mondragon	327 E. 1st Street		1		1		1		1		1	1		1		1		1
86	10/07/10	Daikokuya	Kenneth Y.	327 E. 1st Street	1		1		1		1		1		1		1		1		1
87	10/07/10	Daikokuya	Cherry Yu	327 E. 1st Street		1		1		1		1		1		1		1		1	1
88	10/07/10	Daikokuya	Janice Dollar	327 E. 1st Street		1		1		1		1		1		1		1		1	1
89	10/07/10	Daikokuya	Lily Zhang	327 E. 1st Street		1	1		1		1		1		1		1		1		1
90	10/07/10	Daikokuya	Yvette Zaldivar	327 E. 1st Street		1		1		1		1		1	1		1		1		1
91	10/07/10	Daikokuya	Philip Florendo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
92	10/07/10	Daikokuya	Mike Kamgiia	327 E. 1st Street		1		1		1		1		1		1		1		1	1
93	10/07/10	Daikokuya	John Martinez	327 E. 1st Street	1			1		1		1		1	1		1			1	1
94	10/07/10	Daikokuya	Kiem Ho	327 E. 1st Street		1		1	1		1		1		1		1		1		1
95	10/07/10	Daikokuya	Drew Webber	327 E. 1st Street		1		1	1		1		1		1		1		1		1
96	10/07/10	Daikokuya	Ramzi Shoukair	327 E. 1st Street		1			1		1		1		1		1			1	1
97	10/07/10	Daikokuya	Robert Lincoln	327 E. 1st Street		1		1	1		1		1		1		1		1		1
98	10/07/10	Daikokuya	Celene Canara	327 E. 1st Street											1		1			1	1
99	10/07/10	Daikokuya	Clarabelle Pong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
100	10/07/10	Daikokuya	Takuya Hoshio	327 E. 1st Street		1		1		1	1		1		1			1	1		1
101	10/07/10	Daikokuya	Adam Hoffman	327 E. 1st Street		1		1		1	1		1		1		1		1		1
102	10/07/10	Daikokuya	Saunran Palit	327 E. 1st Street		1		1		1	1		1		1				1		1
103	10/07/10	Daikokuya	Ridge Dunlap	327 E. 1st Street		1		1		1		1		1	1		1		1		1
104	10/07/10	Daikokuya	Nathan Villamor	327 E. 1st Street		1		1		1		1			1		1		1		1
105	10/07/10	Daikokuya	Erik Yang	327 E. 1st Street											1		1		1		1
106	10/07/10	Daikokuya	Helen J.	327 E. 1st Street	1		1		1		1		1		1		1		1		1
107	10/07/10	Daikokuya	Maureen Royue	327 E. 1st Street							1		1		1		1		1		1
108	10/07/10	Daikokuya	Jo Anne de Guzman	327 E. 1st Street		1	1		1		1		1		1		1		1		1
109	10/07/10	Daikokuya	Aram Yang	327 E. 1st Street	1			1		1		1		1	1		1		1		1
110	10/07/10	Daikokuya	Saran Parks	327 E. 1st Street			1				1				1		1		1		1
111	10/07/10	Daikokuya	Maggie K.	327 E. 1st Street											1				1		1
112	10/07/10	Daikokuya	Susie Hlainy	327 E. 1st Street	1		1		1		1		1		1		1		1		1
113	10/07/10	Daikokuya	Lee Mikyong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
114	10/07/10	Daikokuya	Jinah Kim	327 E. 1st Street		1		1	1			1	1		1		1			1	1
115	10/07/10	Daikokuya	Tess Oineda	327 E. 1st Street		1	1				1		1		1		1		1		1
116	10/07/10	Daikokuya	Christopher Basillo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
117	10/07/10	Daikokuya	Daniel Gee	327 E. 1st Street		1		1		1		1		1	1		1		1		1

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					Locally Preferred Alternative	Mitigation Issue

BU20

	Date	Company Name	Personal Name	Address	No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		Number of Survey Returned
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
118	10/07/10	Daikokuya	Spencer Inada	327 E. 1st Street	1			1		1		1		1	1			1		1	1
119	10/07/10	Daikokuya	Bob Do	327 E. 1st Street		1		1		1		1		1	1		1		1		1
120	10/07/10	Daikokuya	Miguel Iniquez	327 E. 1st Street											1		1		1		1
121	10/07/10	Daikokuya	Yuhei Nitta	327 E. 1st Street											1		1		1		1
122	10/07/10	Daikokuya	Takehiro Ariki	327 E. 1st Street											1		1		1		1
123	10/07/10	Daikokuya	Taka Yuki Nakazana	327 E. 1st Street											1		1		1		1
124	10/07/10	Daikokuya	Akiko Miyazaki	327 E. 1st Street											1		1		1		1
125	10/07/10	Daikokuya	Kevin Wu	327 E. 1st Street				1		1				1	1		1		1		1
126	10/07/10	Daikokuya	Breck Oyama	327 E. 1st Street	1		1		1		1		1		1		1		1		1
127	10/07/10	Daikokuya	Carlos Barillas	327 E. 1st Street		1		1		1		1		1	1		1		1		1
128	10/07/10	Daikokuya	Matt Smith	327 E. 1st Street		1		1		1		1		1	1		1		1		1
129	10/07/10	Daikokuya	Yumi Hirasawa	327 E. 1st Street											1		1		1		1
130	10/07/10	Daikokuya	Fionne Huang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
131	10/07/10	Daikokuya	Cresta Ramos	327 E. 1st Street		1		1		1		1		1	1		1		1		1
132	10/07/10	Daikokuya	Maki Matsumoto	327 E. 1st Street											1		1		1		1
133	10/07/10	Daikokuya	Chihiro Austin	327 E. 1st Street											1		1		1		1
134	10/07/10	Daikokuya	Sachi Ishioka	327 E. 1st Street											1		1		1		1
135	10/07/10	Daikokuya	Youhei Sekikawa	327 E. 1st Street											1		1		1		1
136	10/07/10	Daikokuya	Grace Pak	327 E. 1st Street		1		1		1		1		1	1		1		1		1
137	10/07/10	Daikokuya	Sung Park	327 E. 1st Street	1			1		1		1		1	1			1		1	1
138	10/07/10	Daikokuya	Joyce Hayashi	327 E. 1st Street			1				1				1		1		1		1
139	10/07/10	Daikokuya	Young Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
140	10/07/10	Daikokuya	Darryl Kaneyuki	327 E. 1st Street		1		1		1		1		1	1		1		1		1
141	10/07/10	Daikokuya	Lara	327 E. 1st Street		1		1		1			1		1		1			1	1
142	10/07/10	Daikokuya	Ruby Rargume	327 E. 1st Street		1		1		1		1		1	1		1		1		1
143	10/07/10	Daikokuya	Peter Bamforth	327 E. 1st Street		1		1		1		1		1	1		1		1		1
144	10/07/10	Daikokuya	Eun-Kee Maeng	327 E. 1st Street		1		1		1		1		1	1		1		1		1
145	10/07/10	Daikokuya	Kevin Clarke	327 E. 1st Street		1		1		1		1		1	1		1		1		1
146	10/07/10	Daikokuya	Marry Khan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
147	10/07/10	Daikokuya	Setsuko Kennotsu	327 E. 1st Street											1		1		1		1
148	10/07/10	Daikokuya	Seiji Sado	327 E. 1st Street											1		1		1		1
149	10/07/10	Daikokuya	Michelle Kishimoto	327 E. 1st Street	1								1		1		1		1		1
150	10/07/10	Daikokuya	Jay Lee	327 E. 1st Street	1		1		1		1		1		1		1		1		1
151	10/07/10	Daikokuya	Yoon-Mi Lee	327 E. 1st Street	1		1		1		1		1		1		1		1		1
152	10/07/10	Daikokuya	Liam Duong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
153	10/07/10	Daikokuya	Jun Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
154	10/07/10	Daikokuya	Jessy Hezawau	327 E. 1st Street		1		1		1		1		1	1		1		1		1
155	10/07/10	Daikokuya	Nickolas Lim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
156	10/07/10	Daikokuya	Anabel Garcia	327 E. 1st Street				1		1		1		1	1		1		1		1
157	10/07/10	Daikokuya	Charlie Inada	327 E. 1st Street	1			1		1		1		1	1			1		1	1
158	10/07/10	Daikokuya	Stephanie Mui	327 E. 1st Street		1		1		1		1		1	1		1		1		1
159	10/07/10	Daikokuya	Tony Phu	327 E. 1st Street		1		1		1		1		1		1	1		1		1
160	10/07/10	Daikokuya	Danny Chew	327 E. 1st Street		1		1		1		1		1		1	1		1		1
161	10/07/10	Daikokuya	Nick Huey	327 E. 1st Street		1		1		1		1		1		1	1		1		1
162	10/07/10	Daikokuya	Joanna Quan	327 E. 1st Street							1				1		1		1		1
163	10/07/10	Daikokuya	Maribelle B. Abergas	327 E. 1st Street		1		1		1		1		1	1		1		1		1
164	10/07/10	Daikokuya	Carmen Kishimoto	327 E. 1st Street	1										1		1		1		1
165	10/08/10	Daikokuya	Viet Ngo	327 E. 1st Street	1						1		1		1		1		1		1
166	10/08/10	Daikokuya	Eddie	327 E. 1st Street					1		1		1		1		1		1		1
167	10/08/10	Daikokuya	Matt Jones	327 E. 1st Street		1		1		1		1		1	1		1		1		1
168	10/08/10	Daikokuya	Mario Mazariegas	327 E. 1st Street				1		1		1		1	1		1		1		1
169	10/08/10	Daikokuya	Lauren E. Saki	327 E. 1st Street		1		1		1		1		1	1		1		1		1
170	10/08/10	Daikokuya	Jenny L.	327 E. 1st Street		1		1		1		1		1	1		1		1		1
171	10/08/10	Daikokuya	Kurt Mars	327 E. 1st Street		1		1		1		1		1	1		1		1		1
172	10/08/10	Daikokuya	Susan Huang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
173	10/08/10	Daikokuya	Calvin Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
174	10/08/10	Daikokuya	Casey Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
175	10/08/10	Daikokuya	Angie Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1

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	Date	Company Name	Personal Name	Address	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	

			1st Street																	
176	10/08/10	Daikokuya	Cora Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
177	10/08/10	Daikokuya	Angela Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
178	10/08/10	Daikokuya	Nancy Nelson	327 E. 1st Street		1		1		1		1		1	1		1		1		1
179	10/08/10	Daikokuya	Pamela Tang	327 E. 1st Street	1						1				1		1		1		1
180	10/08/10	Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
181	10/08/10	Daikokuya	Andrew Jan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
182	10/08/10	Daikokuya	Lee Martin	327 E. 1st Street		1		1		1		1		1	1		1		1		1
183	10/08/10	Daikokuya	Timmy Chui	327 E. 1st Street		1		1		1		1		1	1		1		1		1
184	10/08/10	Daikokuya	Jo Chu	327 E. 1st Street		1		1		1		1		1	1		1		1		1
185	10/08/10	Daikokuya	Mark House	327 E. 1st Street		1		1		1		1		1	1		1		1		1
186	10/08/10	Daikokuya	Alby Nguyen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
187	10/08/10	Daikokuya	Kimly Nguyen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
188	10/08/10	Daikokuya	Jordan Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
189	10/08/10	Daikokuya	Eriz	327 E. 1st Street	1			1		1		1		1	1		1		1		1
190	10/08/10	Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
191	10/08/10	Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
192	10/08/10	Daikokuya	Audrea Rayan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
193	10/08/10	Daikokuya	Clay Vasquez	327 E. 1st Street		1		1		1		1		1	1		1		1		1
194	10/08/10	Daikokuya	Claudia Barraza	327 E. 1st Street				1		1		1		1	1		1		1		1
195	10/08/10	Daikokuya	Cindy Nawilis	327 E. 1st Street	1								1		1		1		1		1
196	10/08/10	Daikokuya	Jim Stewart	327 E. 1st Street				1		1		1		1	1		1		1		1
197	10/08/10	Daikokuya	Scot Ferguson	327 E. 1st Street				1		1		1		1	1		1		1		1
198	10/08/10	Daikokuya	Matt Burstyn	327 E. 1st Street				1		1		1		1	1		1		1		1
199	10/08/10	Daikokuya	Mary E. Padnano	327 E. 1st Street				1		1		1		1	1		1		1		1
200	10/08/10	Daikokuya	Jennifer Sege	327 E. 1st Street				1		1		1		1	1		1		1		1
201	10/08/10	Daikokuya	Ayane Nakai	327 E. 1st Street		1		1		1		1		1	1		1		1		1
202	10/08/10	Daikokuya	Matt Marraccine	327 E. 1st Street		1		1		1		1		1	1		1		1		1
203	10/08/10	Daikokuya	Travis Tolar	327 E. 1st Street				1		1		1		1	1		1		1		1
204	10/08/10	Daikokuya	Kay	327 E. 1st Street	1			1		1		1		1	1		1		1		1
205	10/08/10	Daikokuya	Huang Ma	327 E. 1st Street				1		1		1		1	1		1		1		1
206	10/08/10	Daikokuya	Suk Ho	327 E. 1st Street				1		1		1		1	1		1		1		1
207	10/08/10	Daikokuya	Patricia Reynolds	327 E. 1st Street				1		1		1		1	1		1		1		1
208	10/08/10	Daikokuya	Mo	327 E. 1st Street				1		1		1		1	1		1		1		1
209	10/08/10	Daikokuya	AJ Kim	327 E. 1st Street				1		1		1		1	1		1		1		1
210	10/08/10	Daikokuya	Kumiko Tanaka	327 E. 1st Street		1	1		1		1		1		1		1		1		1
211	10/08/10	Daikokuya	Tamara Timinons	327 E. 1st Street					1		1		1		1		1		1		1
212	10/08/10	Daikokuya	Helen Seto	327 E. 1st Street				1		1		1		1	1		1		1		1
213	10/08/10	Daikokuya	Song Seto	327 E. 1st Street				1		1		1		1	1		1		1		1
214	10/08/10	Daikokuya	Dan Pham	327 E. 1st Street											1		1		1		1
215	10/08/10	Daikokuya	Jesus Ciscena	327 E. 1st Street		1		1		1		1		1	1		1		1		1
216	10/08/10	Daikokuya	S. Mir	327 E. 1st Street		1		1		1		1		1	1		1		1		1
217	10/08/10	Daikokuya	Lisa Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
218	10/08/10	Daikokuya	Mark Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
219	10/08/10	Daikokuya	Eric Pan	327 E. 1st Street		1		1		1		1		1	1		1		1		1
220	10/08/10	Daikokuya	Scott Eriksson	327 E. 1st Street		1		1		1		1		1	1		1		1		1
221	10/08/10	Daikokuya	Larry Orozco	327 E. 1st Street		1		1		1		1		1	1		1		1		1
222	10/08/10	Daikokuya	Cecilia Marta	327 E. 1st Street		1		1		1		1		1	1		1		1		1
223	10/08/10	Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
224	10/08/10	Daikokuya	John Mae	327 E. 1st Street		1		1		1		1		1	1		1		1		1
225	10/08/10	Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
226	10/08/10	Daikokuya	Kallyn Canalas	327 E. 1st Street		1		1		1					1						1
227	10/08/10	Daikokuya	Ernesto P.	327 E. 1st Street		1		1		1		1			1						1
228	10/08/10	Daikokuya	Ino Hong	327 E. 1st Street				1		1		1		1	1		1		1		1
229	10/08/10	Daikokuya	Gene Viado	327 E. 1st Street				1		1		1		1	1		1		1		1
230	10/08/10	Daikokuya	Tanya Zonza	327 E. 1st Street		1		1		1		1		1	1		1		1		1
231	10/08/10	Daikokuya	Nabcy Hernandez	327 E. 1st Street		1		1		1		1		1	1		1		1		1
232	10/08/10	Daikokuya	Nabncy Cecena	327 E. 1st Street		1		1		1		1		1	1		1		1		1
233	10/08/10	Daikokuya	Christy Kurarasamy	327 E. 1st Street		1		1		1		1		1	1		1		1		1

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	Date	Company Name	Personal Name	Address	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
234	10/08/10	Daikokuya	Znsung Na	327 E. 1st Street		1		1		1		1		1	1		1		1		1
235	10/08/10	Daikokuya	Naoki Shindo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
236	10/08/10	Daikokuya	Shusaku Nishikawa	327 E. 1st Street		1		1		1		1		1	1		1		1		1
237	10/08/10	Daikokuya	Mo Park	327 E. 1st Street	1		1		1		1		1		1			1		1	1
238	10/08/10	Daikokuya	Kevin Kajikawa	327 E. 1st Street	1		1		1		1		1		1			1		1	1

239	10/08/10	Daikokuya	Isah Higy	327 E. 1st Street		1		1		1		1		1	1		1			1	1
240	10/08/10	Daikokuya	Yi Ose	327 E. 1st Street		1		1		1		1		1	1		1		1		1
241	10/08/10	Daikokuya	Tao Liang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
242	10/08/10	Daikokuya	Micael Dong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
243	10/08/10	Daikokuya	Mao Si Yun	327 E. 1st Street		1		1		1		1		1	1		1		1		1
244	10/08/10	Daikokuya	Xiaomeng Wu	327 E. 1st Street		1		1		1		1		1	1		1		1		1
245	10/08/10	Daikokuya	Jesus Gomez	327 E. 1st Street		1		1		1		1			1		1		1		1
246	10/08/10	Daikokuya	Tim Roellig	327 E. 1st Street		1		1		1		1		1	1		1		1		1
247	10/08/10	Daikokuya	Rachel Lee	327 E. 1st Street		1		1		1		1		1			1		1		1
248	10/08/10	Daikokuya	Emily Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
249	10/08/10	Daikokuya	Danny No	327 E. 1st Street		1		1		1		1		1			1		1		1
250	10/08/10	Daikokuya	Dianna Villagnor	327 E. 1st Street				1		1		1		1	1		1		1		1
251	10/08/10	Daikokuya	Sean O'Shea	327 E. 1st Street	1			1		1		1		1	1		1		1		1
252	10/08/10	Daikokuya	Chris Espinosa	327 E. 1st Street		1		1		1	1		1		1		1		1		1
253	10/08/10	Daikokuya	Ha Young Park	327 E. 1st Street		1		1		1		1		1	1		1		1		1
254	10/08/10	Daikokuya	Andrew Kang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
255	10/08/10	Daikokuya	Glenn Kawaguchi	327 E. 1st Street		1		1		1		1		1	1		1		1		1
256	10/08/10	Daikokuya	Kristine Kawaguchi	327 E. 1st Street		1		1		1		1		1	1		1		1		1
257	10/08/10	Daikokuya	L. Dring	327 E. 1st Street											1		1		1		1
258	10/08/10	Daikokuya	J. Dring	327 E. 1st Street											1		1		1		1
259	10/08/10	Daikokuya	Mtna	327 E. 1st Street		1		1		1		1		1	1		1		1		1
260	10/08/10	Daikokuya	Kyenghyen Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
261	10/09/10	Daikokuya	Cataline Castaneda	327 E. 1st Street	1												1		1		1
262	10/09/10	Daikokuya	Jihyun Kim	327 E. 1st Street	1			1		1		1		1	1		1		1		1
263	10/09/10	Daikokuya	Henry Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
264	10/09/10	Daikokuya	Jennifer Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
265	10/09/10	Daikokuya	Nancy Tam	327 E. 1st Street		1		1		1		1		1	1		1		1		1
266	10/09/10	Daikokuya	Wanhez Chin	327 E. 1st Street	1			1		1		1		1	1		1		1		1
267	10/09/10	Daikokuya	Francisco Castaneda	327 E. 1st Street	1										1		1		1		1
268	10/09/10	Daikokuya	Dongjuhi	327 E. 1st Street		1		1		1		1		1	1		1		1		1
269	10/09/10	Daikokuya	Sungwhan Kim	327 E. 1st Street				1		1		1		1	1		1		1		1
270	10/09/10	Daikokuya	Jennifer Chin	327 E. 1st Street	1			1		1		1		1	1		1		1		1
271	10/09/10	Daikokuya	Priscilla Wong	327 E. 1st Street	1			1		1		1		1	1		1			1	1
272	10/09/10	Daikokuya	Steve Kuo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
273	10/09/10	Daikokuya	Hyojao Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
274	10/09/10	Daikokuya	Yeong Joo Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
275	10/09/10	Daikokuya	Jennifer Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
276	10/09/10	Daikokuya	Sharon	327 E. 1st Street		1		1		1		1		1	1		1		1		1
277	10/09/10	Daikokuya	Peter Santos	327 E. 1st Street		1		1		1		1		1	1		1		1		1
278	10/09/10	Daikokuya	Chris Coward	327 E. 1st Street		1		1		1		1		1	1		1		1		1
279	10/09/10	Daikokuya	Ian Wagner	327 E. 1st Street		1		1		1		1		1	1		1		1		1
280	10/09/10	Daikokuya	Brian Chen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
281	10/09/10	Daikokuya	JenniferYeh	327 E. 1st Street		1		1		1		1		1	1		1		1		1
282	10/09/10	Daikokuya	Judy Chang	327 E. 1st Street		1		1		1		1			1		1		1		1
283	10/09/10	Daikokuya	Jenny Taso	327 E. 1st Street		1		1		1		1		1	1		1		1		1
284	10/09/10	Daikokuya	Natalie Chen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
285	10/09/10	Daikokuya	Terry Ahn	327 E. 1st Street		1		1		1		1	1		1		1		1		1
286	10/09/10	Daikokuya	Fortune Chen	327 E. 1st Street		1		1		1		1		1		1	1		1		1
287	10/09/10	Daikokuya	Diana Ta	327 E. 1st Street		1		1		1		1		1	1		1		1		1
288	10/09/10	Daikokuya	Barbara Hirsch	327 E. 1st Street		1		1		1		1		1	1		1		1		1
289	10/09/10	Daikokuya	R. Hsu	327 E. 1st Street		1		1		1		1		1		1	1		1		1
290	10/09/10	Daikokuya	N. Hashimoto	327 E. 1st Street		1		1		1		1		1	1		1		1		1
291	10/09/10	Daikokuya	Iris Strom	327 E. 1st Street		1		1		1		1		1	1		1		1		1
292	10/09/10	Daikokuya	Todd Hirsch	327 E. 1st Street		1		1		1		1		1	1		1		1		1

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					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
293	10/09/10	Daikokuya	Norry Harn	327 E. 1st Street		1		1		1		1		1	1		1		1		1
294	10/09/10	Daikokuya	Shen-Shen Wu	327 E. 1st Street		1		1		1		1		1	1		1		1		1
295	10/09/10	Daikokuya	Neat Kohani	327 E. 1st Street		1		1		1		1			1		1		1		1
296	10/09/10	Daikokuya	Tina Leong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
297	10/09/10	Daikokuya	Crystal Lau	327 E. 1st Street		1		1		1		1		1	1		1		1		1
298	10/09/10	Daikokuya	Kiwi Chen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
299	10/09/10	Daikokuya	Jason Leong	327 E. 1st Street		1		1		1		1		1	1		1		1		1
300	10/09/10	Daikokuya	Chris Mendoza	327 E. 1st Street		1		1		1		1		1	1		1		1		1
301	10/09/10	Daikokuya	Jollieanne Julao	327 E. 1st Street		1		1		1		1		1	1		1		1		1
302	10/09/10	Daikokuya	Jonathan Lim	327 E. 1st Street		1		1		1		1		1	1			1	1		1
303	10/09/10	Daikokuya	Mike P.	327 E. 1st Street		1		1		1		1		1	1		1		1		1

304	10/09/10	Daikokuya	Tirawam Howard	327 E. 1st Street		1		1		1		1		1	1		1		1		1
305	10/09/10	Daikokuya	Thomas Yang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
306	10/09/10	Daikokuya	Terry Anderson	327 E. 1st Street		1		1		1		1		1	1		1		1		1
307	10/09/10	Daikokuya	Holly	327 E. 1st Street		1		1		1		1		1	1		1		1		1
308	10/09/10	Daikokuya	Lauren Matsushita	327 E. 1st Street	1		1			1		1		1	1		1		1		1
309	10/09/10	Daikokuya	Wilson Yuen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
310	10/09/10	Daikokuya	Linda Deril	327 E. 1st Street		1		1		1		1		1	1		1		1		1
311	10/10/10	Daikokuya	Yuri Barragan	327 E. 1st Street		1		1		1		1	1		1		1		1		1
312		Daikokuya	Jennifer Wu	327 E. 1st Street								1		1		1		1		1	1
313		Daikokuya	Rosa Po	327 E. 1st Street							1				1		1		1		1
314		Daikokuya	Jay Shay	327 E. 1st Street		1		1		1		1	1		1			1		1	1
315		Daikokuya	Peter Todorivic	327 E. 1st Street		1		1		1		1		1		1		1		1	1
316		Daikokuya	Coni Doe	327 E. 1st Street		1		1		1		1		1	1		1		1		1
317		Daikokuya	Jeffrey Doe	327 E. 1st Street		1		1		1		1		1	1		1		1		1
318		Daikokuya	Adrian Santos	327 E. 1st Street		1		1		1		1		1	1		1		1		1
319		Daikokuya	Kethan Tellis	327 E. 1st Street		1		1		1		1		1	1		1		1		1
320		Daikokuya	Jessica Gima	327 E. 1st Street	1			1		1	1		1		1			1		1	1
321		Daikokuya	Christpher Wan	327 E. 1st Street	1			1		1	1		1		1			1		1	1
322		Daikokuya	Christine Kae	327 E. 1st Street		1		1		1		1		1	1		1		1		1
323		Daikokuya	Sam Kae	327 E. 1st Street		1		1		1		1		1	1		1		1		1
324		Daikokuya	Yamaura Fransis	327 E. 1st Street		1		1		1		1		1	1		1		1		1
325		Daikokuya	Delfino Sato	327 E. 1st Street		1		1		1		1		1	1		1		1		1
326		Daikokuya	Juan Soto	327 E. 1st Street		1		1		1		1		1	1		1		1		1
327		Daikokuya	Guillermo Soto	327 E. 1st Street		1		1		1		1		1	1		1		1		1
328		Daikokuya	E. Bravo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
329		Daikokuya	David C.	327 E. 1st Street		1		1		1		1		1	1		1		1		1
330		Daikokuya	Stevie Soriano	327 E. 1st Street		1		1		1		1		1	1		1		1		1
331		Daikokuya	Jackson Lok	327 E. 1st Street		1		1		1		1		1	1		1		1		1
332		Daikokuya	Rose	327 E. 1st Street		1		1		1		1		1	1		1		1		1
333		Daikokuya	Sarah Reynolds	327 E. 1st Street		1		1		1		1		1	1		1		1		1
334		Daikokuya	Jennifer	327 E. 1st Street											1				1		1
335		Daikokuya	Jose Hernandez	327 E. 1st Street	1		1		1		1		1		1		1		1		1
336		Daikokuya	Robert Navaro	327 E. 1st Street		1		1		1		1		1	1		1		1		1
337		Daikokuya	Vince Chen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
338		Daikokuya	Mark Maeing	327 E. 1st Street		1		1		1		1		1	1		1		1		1
339		Daikokuya	Yuki Yamashita	327 E. 1st Street		1		1		1		1		1	1		1		1		1
340		Daikokuya	Brett Safarlu	327 E. 1st Street			1				1				1		1		1		1
341		Daikokuya	Jukie Kahon	327 E. 1st Street		1		1		1		1		1	1		1		1		1
342		Daikokuya	Noralie Liya	327 E. 1st Street		1		1		1		1		1	1		1		1		1
343		Daikokuya	Shin	327 E. 1st Street		1		1		1		1		1	1		1		1		1
344		Daikokuya	Shin	327 E. 1st Street		1		1		1		1		1	1		1		1		1
345		Daikokuya	Douglas Suyemoto	327 E. 1st Street		1		1		1		1			1		1		1		1
346		Daikokuya	Maria Lea Suyemoto	327 E. 1st Street		1		1		1		1		1	1		1		1		1
347		Daikokuya	Steve Shapiro	327 E. 1st Street	1			1		1		1		1	1		1		1		1
348		Daikokuya	Sovanny Much	327 E. 1st Street				1		1		1		1	1		1		1		1
349		Daikokuya	Jimmy Lu	327 E. 1st Street				1		1		1		1	1		1		1		1
350		Daikokuya	Jin Kim	327 E. 1st Street											1			1		1	1
351		Daikokuya	Jackie Taeda	327 E. 1st Street		1		1		1		1		1	1		1		1		1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
1st Street																					
352		Daikokuya	Eric Nakasako	327 E. 1st Street		1		1		1		1		1	1		1		1		1
353		Daikokuya	Allyson Thede	327 E. 1st Street		1		1		1		1		1	1		1		1		1
354		Daikokuya	Kristyn Ikeda	327 E. 1st Street		1		1		1		1		1	1		1		1		1
355		Daikokuya	Mike	327 E. 1st Street				1		1		1		1	1		1		1		1
356		Daikokuya	C.N. Lee	327 E. 1st Street				1		1		1		1	1		1		1		1
357		Daikokuya	Tom Lee	327 E. 1st Street		1		1		1		1		1	1		1		1		1
358		Daikokuya	Kiyoshi	327 E. 1st Street		1		1		1		1		1		1		1		1	1
359		Daikokuya	H.P.B.	327 E. 1st Street		1		1		1		1		1	1	1		1		1	1
360		Daikokuya	Tom Broersona	327 E. 1st Street		1		1		1		1		1		1		1		1	1
361		Daikokuya	Elvis Lara	327 E. 1st Street		1		1		1		1		1	1				1		1
362		Daikokuya	Mary	327 E. 1st Street				1		1		1		1	1		1		1		1
363		Daikokuya	Eric Kim	327 E. 1st Street				1		1		1		1	1		1		1		1
364		Daikokuya	Drew Komesa	327 E. 1st Street		1		1		1		1		1	1		1		1		1
365		Daikokuya	Amy Adams	327 E. 1st Street		1		1		1		1		1	1		1		1		1
366		Daikokuya	Jennifer Lopez	327 E. 1st Street		1		1		1		1		1	1		1		1		1
367		Daikokuya	Dennis Chou	327 E. 1st Street		1		1		1		1		1	1		1		1		1
368		Daikokuya	David Van Eyssen	327 E. 1st Street		1		1		1		1		1	1		1		1		1

369		Daikokuya	Soentanto Edrick	327 E. 1st Street		1		1		1		1		1	1		1		1		1
370		Daikokuya	Javier Lopez	327 E. 1st Street				1		1		1		1			1		1		1
371		Daikokuya	James P. Ness	327 E. 1st Street	1			1		1		1		1	1		1		1		1
372		Daikokuya	Chleo Wang	327 E. 1st Street				1		1		1		1	1		1		1		1
373		Daikokuya	Hin K. Liu	327 E. 1st Street		1		1		1		1		1	1		1		1		1
374		Daikokuya	Yae F. Chou	327 E. 1st Street		1		1		1		1		1	1		1		1		1
375		Daikokuya	Motoi Takahashi	327 E. 1st Street		1		1		1		1		1	1		1		1		1
376		Daikokuya	Leo Jen	327 E. 1st Street		1		1		1		1		1	1		1		1		1
377		Daikokuya	Choel Danny	327 E. 1st Street		1		1		1		1		1	1		1		1		1
378		Daikokuya	Jennifer Chang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
379		Daikokuya	Lity Frederick	327 E. 1st Street		1		1		1		1		1	1		1		1		1
380		Daikokuya	Lina Guo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
381		Daikokuya	Lisa Wang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
382		Daikokuya	Steve Hu	327 E. 1st Street		1		1		1		1		1	1		1		1		1
383		Daikokuya	Jonathan Kim	327 E. 1st Street		1		1		1		1		1	1		1		1		1
384		Daikokuya	Lenaida Soto	327 E. 1st Street		1		1		1		1		1	1		1		1		1
385		Daikokuya	Yoko Washington	327 E. 1st Street		1		1		1		1		1	1		1		1		1
386		Daikokuya	Crystal Belo	327 E. 1st Street		1		1		1		1		1	1		1		1		1
387		Daikokuya	Haydon Kho	327 E. 1st Street		1		1		1		1		1	1		1		1		1
388		Daikokuya	Chi Yao	327 E. 1st Street		1		1		1		1		1	1		1		1		1
389		Daikokuya		327 E. 1st Street		1		1		1		1		1	1		1		1		1
390		Daikokuya	Bernie Kang	327 E. 1st Street		1		1		1		1		1	1		1		1		1
391		Daikokuya	Petra Garcia	327 E. 1st Street		1		1		1		1		1	1		1		1		1
392		Daikokuya	Ernesto Garcia	327 E. 1st Street		1		1		1		1		1	1		1		1		1
393	10/01/10	Miyako Hotel	Mari Kimura	328 E. 1st Street	1			1		1	1					1	1		1		1
394	10/01/10	Miyako Hotel	Jose AlfredoSanchez Peveira	328 E. 1st Street		1		1		1	1		1		1			1	1		1
395	10/02/10	Miyako Hotel	Naomi N.	328 E. 1st Street		1					1				1		1		1		1
396	10/02/10	Miyako Hotel	Mac Waka	328 E. 1st Street							1				1		1		1		1
397	10/02/10	Miyako Hotel	Agan	328 E. 1st Street	1		1		1		1		1		1		1		1		1
398	10/02/10	Miyako Hotel	Min	328 E. 1st Street	1		1		1		1		1		1		1		1		1
399	10/02/10	Miyako Hotel	Sis	328 E. 1st Street	1		1		1		1		1		1		1		1		1
400	10/02/10	Miyako Hotel	John	328 E. 1st Street	1		1		1		1		1		1		1		1		1
401	10/05/10	Tamon	Kuroda Keiko	328 E. 1st Street											1		1		1		1
402	10/06/10	Tamon	Noriko Yamanaka	328 E. 1st Street											1		1		1		1
403	10/07/10	Tamon	Mitsuko Seki	328 E. 1st Street											1		1		1		1
404	10/07/10	Tamon	Samuel Lee	328 E. 1st Street											1		1		1		1
405	10/07/10	Tamon	Eduardo Hernandez	328 E. 1st Street											1		1		1		1
406	10/07/10	Tamon	Kosako Konoya	328 E. 1st Street											1		1		1		1
407	10/07/10	Tamon	Wakizo Toma	328 E. 1st Street											1		1		1		1
408	10/07/10	Tamon	Hisaharu Kawabe	328 E. 1st Street											1		1		1		1
409	10/07/10	Tamon	Victor Monarrez	328 E. 1st Street											1		1		1		1
410	10/07/10	Tamon	Katsuhiro Ichiyanagi	328 E. 1st Street											1		1		1		1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
411	10/07/10	Tamon	Shin Naganuma	328 E. 1st Street											1		1		1		1
412	10/07/10	Tamon	Jose Monarrez	328 E. 1st Street											1		1		1		1
413	10/07/10	Tamon	Ismeal Cabrera	328 E. 1st Street											1		1		1		1
414	10/08/10	Tamon	Yuka Hiruta	328 E. 1st Street	1										1		1		1		1
415	10/08/10	Tamon	Akiko Sugie	328 E. 1st Street	1										1		1		1		1
416	10/08/10	Tamon	Kayoko Shido	328 E. 1st Street											1		1		1		1
417	10/06/10	AOI Restaurant	Virtudes Medel	331 E. 1st Street															1		1
418	10/06/10	AOI Restaurant	Osamu Mishina	331 E. 1st Street															1		1
419	10/07/10	AOI Restaurant	Alberto Cruz	331 E. 1st Street															1		1
420	10/08/10	AOI Restaurant	Grace Naruyama	331 E. 1st Street															1		1
421	10/10/10	Mikado Hotel	Emile Peres/Suzanna Peres	331 1/2 E. 1st Street	1			1		1		1		1	1			1	1		1
422	10/06/10	Suehiro Café	Kenji Suzuki	337 E. 1st Street	1										1		1		1		1
423	10/06/10	Suehiro Café	Tom Sasaki	337 E. 1st Street	1										1		1		1		1
424	10/06/10	Suehiro Café	Eduardo Hernandez	337 E. 1st Street											1		1		1		1
425	10/06/10	Suehiro Café	Epifania Bautista	337 E. 1st Street											1		1		1		1
426	10/06/10	Suehiro Café	Edgar Hernandez	337 E. 1st Street											1		1		1		1
427	10/06/10	Suehiro Café	Arturo Felix	337 E. 1st Street											1		1		1		1
428	10/06/10	Suehiro Café	Edgar Rabanales	337 E. 1st Street											1		1		1		1
429	10/06/10	Suehiro Café	Ernesto Rosas Sanchez	337 E. 1st Street											1		1		1		1
430	10/06/10	Suehiro Café	Esteban Rosas Sanchez	337 E. 1st Street											1		1		1		1
431	10/06/10	Suehiro Café	Amalia Martinez	337 E. 1st Street	1										1		1		1		1
432	10/06/10	Suehiro Café	Angelina Cruz	337 E. 1st Street	1										1		1		1		1

433	10/06/10	Suehiro Café	Ayako Goto	337 E. 1st Street	1										1		1		1		1
434	10/06/10	Suehiro Café	Machiko Doi	337 E. 1st Street	1										1		1		1		1
435	10/07/10	Suehiro Café	Hanna Jung	337 E. 1st Street	1										1		1		1		1
436	10/07/10	Suehiro Café	Amy Kurakusa	337 E. 1st Street	1										1		1		1		1
437	10/07/10	Suehiro Café	Atsuko Mizuita	337 E. 1st Street	1										1		1		1		1
438	10/07/10	Suehiro Café	Aya Eguchi	337 E. 1st Street	1										1		1		1		1
439	10/07/10	Suehiro Café	Ayumi Omori	337 E. 1st Street	1										1		1		1		1
440	10/07/10	Suehiro Café	Kumi Satake	337 E. 1st Street	1										1		1		1		1
441	10/07/10	Suehiro Café	Takako Saito	337 E. 1st Street	1										1		1		1		1
442	10/07/10	Suehiro Café	Masaki Ikebe	337 E. 1st Street	1										1		1		1		1
443	10/07/10	Suehiro Café	Dwain Yamazaki	337 E. 1st Street	1										1		1		1		1
444	10/07/10	Suehiro Café	Keiko Deguchi	337 E. 1st Street	1										1		1		1		1
445	10/07/10	Suehiro Café	Fromencio Hernandez	337 E. 1st Street	1										1		1		1		1
446	10/07/10	Suehiro Café	Alberto Martinez	337 E. 1st Street	1										1		1		1		1
447	10/07/10	Suehiro Café	Yoriko Kakamura	337 E. 1st Street	1										1		1		1		1
448	10/07/10	Suehiro Café	Natsumi Tanaka	337 E. 1st Street	1										1		1		1		1
449	10/07/10	Suehiro Café	Shin Takashima	337 E. 1st Street	1										1		1		1		1
450	10/07/10	Suehiro Café	Lina Doi	337 E. 1st Street	1										1		1		1		1
451	10/07/10	Suehiro Café	Kazumi Sato	337 E. 1st Street	1										1		1		1		1
452	10/07/10	Suehiro Café	Keiko Takashima	337 E. 1st Street	1										1		1		1		1
453	10/07/10	Sperl Properties	Tony Sperl	339 1/2 E. 1st Street	1										1		1		1		1
454	10/04/10	Bunkado Inc	Irene Tsukada Simonian	340 E. 1st Street	1																1
455	10/05/10	Mr. Ramen	Junichi Mochimaru	345 E. 1st Street	1																1
456	10/05/10	Mr. Ramen	Tomoyan Sakuma	345 E. 1st Street	1																1
457	10/05/10	Mr. Ramen	Rimihiko Nakamura	345 E. 1st Street	1																1
458	10/05/10	Mr. Ramen	Sayuri Hashimoto	345 E. 1st Street	1																1
459	10/05/10	Mr. Ramen	Masumi Fujii	345 E. 1st Street	1																1
460	10/05/10	Mr. Ramen	Masahiro Hosoda	345 E. 1st Street	1																1
461	10/07/10	Mr. Ramen	Miwa Sato	345 E. 1st Street	1																1
462	10/07/10	Mr. Ramen		345 E. 1st Street	1																1
463	10/07/10	Mr. Ramen	Mihoko Sato	345 E. 1st Street	1																1
464	10/07/10	Mr. Ramen	Yousuke Uchida	345 E. 1st Street	1																1
465	10/07/10	Mr. Ramen	Nobuhiro Ishida	345 E. 1st Street	1																1
466	10/07/10	Mr. Ramen	Richard Wverth	345 E. 1st Street	1																1
467	10/07/10	Mr. Ramen	Kouichi Okabe	345 E. 1st Street	1																1
468	10/07/10	Mr. Ramen	Kazuki Yokta	345 E. 1st Street	1																1
469	10/07/10	Mr. Ramen	Tiautian Sum	345 E. 1st Street	1																1

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	Date	Company Name	Personal Name	Address	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			1st Street																		
470	10/07/10	Mr. Ramen	Makoto Fujioka	345 E. 1st Street	1																1
471	10/07/10	Mr. Ramen	Kasumi Yamaguchi	345 E. 1st Street	1																1
472	10/07/10	Mr. Ramen	Tomo Hisamoto	345 E. 1st Street	1																1
473	10/07/10	Mr. Ramen	Zhao Chang Y.	345 E. 1st Street	1																1
474	10/07/10	Mr. Ramen	Yuki Mitani	345 E. 1st Street	1																1
475	10/07/10	Mr. Ramen	Konji Yoshitomi	345 E. 1st Street	1																1
476	10/07/10	Mr. Ramen	Tanaka	345 E. 1st Street	1																1
477	10/07/10	Mr. Ramen	Takashi Yamaguchi	345 E. 1st Street	1																1
478	10/07/10	Mr. Ramen	Andrew Espueoa	345 E. 1st Street	1																1
479	10/07/10	Mr. Ramen	Shinobu Sakuma	345 E. 1st Street	1																1
480	10/07/10	Mr. Ramen	Mitzi Kabatosi Tanerdy	345 E. 1st Street	1																1
481	10/07/10	Mr. Ramen	Keiko Kuroda	345 E. 1st Street	1																1
482	10/07/10	Mr. Ramen	Yaki Kimura	345 E. 1st Street	1																1
483	10/07/10	Mr. Ramen	Taiyo Sugimoto	345 E. 1st Street	1																1
484	10/07/10	Mr. Ramen	Alice Zhang	345 E. 1st Street	1																1
485	10/07/10	Mr. Ramen	Miya Sato	345 E. 1st Street	1																1
486	10/07/10	Mr. Ramen	Yuichi Ikeda	345 E. 1st Street	1																1
487	10/07/10	Mr. Ramen	Masubobu Hirayama	345 E. 1st Street	1																1
488	10/07/10	Mr. Ramen	Takuya Nishimura	345 E. 1st Street	1																1
489	10/07/10	Mr. Ramen	Shohei Sakurai	345 E. 1st Street	1																1
490	10/07/10	Mr. Ramen	Takuro Miyagawa	345 E. 1st Street	1																1
491	10/07/10	Mr. Ramen	Thomas & Yuko Danforth	345 E. 1st Street	1																1
492	10/07/10	Mr. Ramen	Chong Han	345 E. 1st Street	1																1
493	10/07/10	Mr. Ramen	Ryo Sato	345 E. 1st Street	1																1
494	10/07/10	Mr. Ramen	Ishao Hashimoto	345 E. 1st Street	1																1
495	10/07/10	Mr. Ramen	Fusako Shida	345 E. 1st Street	1																1
496	10/07/10	Mr. Ramen	Yoshihiko Kuroda	345 E. 1st Street	1																1

497	10/07/10	Mr. Ramen	Hwang Park	345 E. 1st Street	1																1
498	10/07/10	Mr. Ramen	Fumihiko Nishita	345 E. 1st Street	1																1
499	10/07/10	Mr. Ramen	Henry Higashida	345 E. 1st Street	1																1
500	10/07/10	Mr. Ramen	Leiko Brown	345 E. 1st Street	1																1
501	10/07/10	Mr. Ramen	Tamayo Sato	345 E. 1st Street	1																1
502	10/07/10	Daimuru Ho	Ju C. Wang	345 E. 1st Street	1																1
503	10/01/10	California Acupuncture	Dr. Chen	360 E. 1st Street		1		1		1		1		1			1		1		1
504	10/06/10	Japanese America National Museum	Vicy Murakami-Tsuda	369 E. 1st Street									1		1		1		1		1
505	10/09/10	Tactical Depot	Miguel Perez	608 E. 1st Street	1										1		1		1		1
			2nd Street																		
506	09/29/10	Koraku	Steve Tateishi	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
507	10/01/10	Koraku	Dio Jenes Cruz	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
508	10/01/10	Koraku	Setsuo Matsumura	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
509	10/01/10	Koraku	Kyoko Kawabata	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
510	10/01/10	Koraku	Jimmi Cannales	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
511	10/01/10	Koraku	Jose Monarrez	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
512	10/01/10	Koraku	Villuiffo Reyes	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
513	10/01/10	Koraku	Keiko Saito	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
514	10/01/10	Koraku	Rumi Sugiyama	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
515	10/01/10	Koraku	Itaro Sugiyama	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
516	10/01/10	Koraku	Rufeal Santiago	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
517	10/01/10	Koraku	Diego Mateo M.	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
518	10/01/10	Koraku	Hitomi Iwanami	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
519	10/01/10	Koraku	Kyoko Kato	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
520	10/01/10	Koraku	Lazaro Hernandez	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
521	10/01/10	Koraku	Yuko Mukaibayaishi	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
522	10/01/10	Koraku	Kyoko Martin	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
523	10/06/10	Koraku	Kaoruku Kubo	314 E. 2nd Street	1																1
524	10/06/10	Koraku	Eric Mok	314 E. 2nd Street	1																1
525	10/06/10	Koraku		314 E. 2nd Street	1																1
526	10/06/10	Koraku	Kazue Blackwell	314 E. 2nd Street	1																1
527	10/06/10	Koraku	Yuki Inoue-Kim	314 E. 2nd Street	1																1

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					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			2nd Street																		
528	10/06/10	Koraku	Alicia Hart	314 E. 2nd Street	1																1
529	10/06/10	Koraku	Yukari Opalk	314 E. 2nd Street	1																1
530	10/06/10	Koraku	Julia Aya Coy	314 E. 2nd Street	1																1
531	10/06/10	Koraku	Masami Hoshino Coy	314 E. 2nd Street	1																1
532	10/06/10	Koraku	Kaoru Kantner	314 E. 2nd Street	1																1
533	10/06/10	Koraku	Chisato Mayclin	314 E. 2nd Street	1																1
534	10/06/10	Koraku	Angell Chen	314 E. 2nd Street	1		1			1	1			1							1
535	10/06/10	Koraku	Yuka Miznan	314 E. 2nd Street	1																1
536	10/06/10	Koraku		314 E. 2nd Street	1																1
537	10/06/10	Koraku	Joon Kim	314 E. 2nd Street	1																1
538	10/06/10	Koraku	Makiko Nakasone	314 E. 2nd Street	1																1
539	10/06/10	Koraku	Niroico Sawada	314 E. 2nd Street	1																1
540	10/07/10	Koraku	Hiroshi Yamauchi	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
541	10/07/10	Koraku	Kiga Park	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
542	10/07/10	Koraku	Rie Kudo	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
543	10/07/10	Koraku	Shuichiro Tsuru	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
544	10/07/10	Koraku	Atsuko Nakagawa	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
545	10/07/10	Koraku	Benjamin M.	314 E. 2nd Street	1		1			1		1	1		1		1		1		1
546	10/07/10	Koraku	Testsuya Yamada	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
547	10/07/10	Koraku	Taka Haru Hirano	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
548	10/07/10	Koraku	Teruyuki Sakurai	314 E. 2nd Street	1		1			1		1		1	1		1		1		1
549	10/07/10	Koraku	Yuji Hayashi	314 E. 2nd Street	1		1			1		1	1		1		1		1		1
550	10/07/10	Koraku	Tony Yokoi	314 E. 2nd Street	1																1
551	10/07/10	Koraku	Sadako Gee	314 E. 2nd Street	1																1
552	10/07/10	Koraku	Ken Kagawa	314 E. 2nd Street	1																1
553	10/07/10	Koraku	Reiko Tanooka	314 E. 2nd Street	1																1
554	10/07/10	Koraku	Nobuka Kawamoto	314 E. 2nd Street	1																1
555	10/07/10	Koraku	Noriko Shudo	314 E. 2nd Street	1																1
556	10/07/10	Koraku	Jhoo Yoon	314 E. 2nd Street	1																1
557	10/07/10	Koraku	Jody Uyeohi	314 E. 2nd Street	1																1
558	10/07/10	Koraku	Takio Sakaguchi	314 E. 2nd Street	1																1
559	10/08/10	Koraku	Toshiko Tazaki	314 E. 2nd Street	1																1
560	10/08/10	Koraku	Setsuko Ueda	314 E. 2nd Street	1																1

561	10/08/10	Koraku	Ai Ueda	314 E. 2nd Street	1															1
562	10/08/10	Koraku	Kazuo Ueda	314 E. 2nd Street	1															1
563	10/08/10	Koraku	Hiroko Fujita	314 E. 2nd Street	1															1
564	10/08/10	Koraku	Mai Ueda	314 E. 2nd Street	1															1
565	10/08/10	Koraku	Yui Ueda	314 E. 2nd Street	1															1
566	10/08/10	Koraku	Kentaro Ueda	314 E. 2nd Street	1															1
567	10/08/10	Koraku		314 E. 2nd Street	1															1
568	10/08/10	Koraku	Sachiko Kato	314 E. 2nd Street	1															1
569	10/08/10	Koraku	Richard Chiou	314 E. 2nd Street	1															1
570	10/08/10	Koraku	Saiko Nomura	314 E. 2nd Street	1															1
571	10/08/10	Koraku	Jeffrey Chertkow	314 E. 2nd Street	1															1
572	10/08/10	Koraku	Mark Morino	314 E. 2nd Street	1															1
573	10/08/10	Koraku	Kaori Chertkow	314 E. 2nd Street	1															1
574	10/08/10	Koraku	Chisato Fukumoto	314 E. 2nd Street	1															1
575	10/08/10	Koraku	Alice Fukumoto	314 E. 2nd Street	1															1
576	10/08/10	Koraku	Yoko Kuramoto	314 E. 2nd Street	1															1
577	10/08/10	Koraku	Angel F. Perez	314 E. 2nd Street	1															1
578	10/08/10	Koraku	Roy Kuramoto	314 E. 2nd Street	1															1
579	10/08/10	Koraku	Anne Yamauchi	314 E. 2nd Street	1		1			1		1		1	1		1		1	1
580	10/08/10	Koraku	Mihoko Yamauchi	314 E. 2nd Street	1		1			1		1		1	1		1		1	1
581	10/08/10	Koraku	Na Na Kamiya	314 E. 2nd Street	1															1
582	10/08/10	Koraku	Orlin Roldan	314 E. 2nd Street	1		1			1		1		1	1		1		1	1
583	10/08/10	Koraku		314 E. 2nd Street																1
584	10/08/10	Koraku		314 E. 2nd Street																1
585	10/05/10	Little Tokyo Dental Group	Scott Kanai	316 E. 2nd Street, #301	1			1		1		1	1		1		1		1	1
586	09/30/10	Elite Graphics	Mark Hirai	319 E. 2nd Street											1		1		1	1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			2nd Street																		
587	10/07/10	Elite Graphics	Yumiko Yashiro	319 E. 2nd Street	1										1		1		1		1
588	10/04/10	Special Collectors Jungle Corp.	Tetsu Shiota	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
589	10/04/10	Special Collectors Jungle Corp.	Koji Shiota	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
590	10/05/10	Special Collectors Jungle Corp.	Yoichi Kakuma	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
591	10/05/10	Special Collectors Jungle Corp.	Keiko Shiota	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
592	10/06/10	Special Collectors Jungle Corp.	Polo Yazaki	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
593	10/07/10	Special Collectors Jungle Corp.	Yuki Itoyama	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
594	10/07/10	Special Collectors Jungle Corp.	Kensaku Takagi	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
595	10/08/10	Special Collectors Jungle Corp.	Hiroyuki Hamada	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
596	10/09/10	Special Collectors Jungle Corp.	Yoichi Kakuma	319 E. 2nd Street, #103		1		1		1		1	1		1		1		1		1
597	10/06/10	J-Wave	Kyoko Samnders	319 E. 2nd Street, #112	1																1
598	10/06/10	J-Wave	Yosuke Hosaka	319 E. 2nd Street, #112	1																1
599	10/06/10	J-Wave	Tomoyuki Kubota	319 E. 2nd Street, #112	1																1
600	10/06/10	J-Wave	Hiroshi Ishida	319 E. 2nd Street, #112	1																1
601	10/06/10	J-Wave	Mami Morimitsu	319 E. 2nd Street, #112	1																1
602	10/07/10	J-Wave	Yuta Seki	319 E. 2nd Street, #112	1																1
603	10/08/10	J-Wave	Saikko Mune	319 E. 2nd Street, #112	1																1
604	10/08/10	J-Wave	Lauren Ishida	319 E. 2nd Street, #112	1																1
605	10/06/10	J-Wave	Arisa Miyasita	319 E. 2nd Street, #112	1																1
606	10/06/10	J-Wave	Massko Turusaki	319 E. 2nd Street, #112	1																1
607	10/08/10	Hair Salon Deja-Vu	Naoki Ishii	319 E. 2nd Street, #117	1			1		1		1		1	1		1		1		1
608	10/08/10	Hair Salon Deja-Vu	Michiko Ishii	319 E. 2nd Street, #117	1			1		1		1		1	1		1		1		1
609	09/29/10	Rafu Bussan, Inc.	Kiyoshi Kawaratani	326 E. 2nd Street									1		1		1		1		1
610		Record Access	Joseph Angeo	327 E. 2nd Street	1		1			1	1		1		1		1		1		1
611	10/10/10	Bunmeido of California	Edwin Takahashi	330 E. 2nd Street	1										1		1		1		1
612	10/06/10	Little Tokyo Cosmetic	Dian King	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
613	10/06/10	Little Tokyo Cosmetic	Yamada Ikae	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
614	10/06/10	Little Tokyo Cosmetic	Mayumi Sato	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
615	10/07/10	Little Tokyo Cosmetic	Etsuko Inoue	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
616	10/07/10	Little Tokyo Cosmetic	Hataoka Keiko	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
617	10/07/10	Little Tokyo Cosmetic	Morodomi	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
618	10/07/10	Little Tokyo Cosmetic	Rie Yamada	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
619	10/07/10	Little Tokyo Cosmetic	Masomi Yokoyama	341 E. 2nd Street	1			1		1		1		1	1		1		1		1
620	10/07/10	Little Tokyo Cosmetic		341 E. 2nd Street	1			1		1		1		1	1		1		1		1
621	10/01/10	Rz LTD: dba Popkiller Second	Ricky Takizawa	343 E. 2nd Street	1					1				1	1		1		1		1
622	10/06/10	Popkiller Second	Nozomi Yamaguchi	343 E. 2nd Street	1												1		1		1
623	10/06/10	Popkiller Second	Nagisa Hottori	343 E. 2nd Street	1												1		1		1
624	10/06/10	Popkiller Second	Max Browne	343 E. 2nd Street	1												1		1		1
625	10/06/10	Popkiller Second	Daiki Fukuoka	343 E. 2nd Street	1												1		1		1

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626	10/06/10	Popkiller Second	Yoshihito Araki	343 E. 2nd Street	1										1		1		1
627	10/06/10	Popkiller Second	Yuki Ueda	343 E. 2nd Street	1										1		1		1
628	10/06/10	Popkiller Second	Nobuo Vemura	343 E. 2nd Street	1														1
629	10/06/10	Popkiller Second	Ichisuke Yoshida	343 E. 2nd Street	1														1
630	10/06/10	Popkiller Second	Machi Ishikawa	343 E. 2nd Street	1												1		1
631	10/06/10	Popkiller Second	Yoshi Irie	343 E. 2nd Street											1		1		1
632	10/06/10	Popkiller Second	Kaori Koga	343 E. 2nd Street	1												1		1
633	10/08/10	Popkiller Second	Chris Balinas	343 E. 2nd Street	1														1
634	09/30/10	Teishokuya of Tokyo	Etsuko Masuda	345 E. 2nd Street		1		1		1		1		1	1		1		1
635	10/05/10	Teishokuya of Tokyo	Daibutsu Ikemizu	345 E. 2nd Street	1			1		1		1		1	1		1		1
636	10/05/10	Teishokuya of Tokyo	Hitomi Vezu	345 E. 2nd Street	1			1		1		1		1	1		1		1
637	10/05/10	Teishokuya of Tokyo	Chie Fuchikami	345 E. 2nd Street	1			1		1		1		1	1		1		1
638	10/05/10	Teishokuya of Tokyo		345 E. 2nd Street															1
639	10/06/10	Teishokuya of Tokyo	Juan Santiago	345 E. 2nd Street	1			1		1		1		1	1		1		1
640	10/06/10	Teishokuya of Tokyo	Omar Santiago	345 E. 2nd Street	1			1		1		1		1	1		1		1
641	10/06/10	Teishokuya of Tokyo	Yoko Masuda	345 E. 2nd Street	1			1		1		1		1	1		1		1
642	10/06/10	Teishokuya of Tokyo	Sumiko Santiago	345 E. 2nd Street	1			1		1		1		1	1		1		1
643	10/06/10	Teishokuya of Tokyo	Genaro Martinez	345 E. 2nd Street	1			1		1		1		1	1		1		1
644	10/06/10	Teishokuya of Tokyo	Jose Martinez	345 E. 2nd Street	1			1		1		1		1	1		1		1
645	10/06/10	Teishokuya of Tokyo	Yuya Okuda	345 E. 2nd Street	1			1		1		1		1	1		1		1

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					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			2nd Street																		
646	10/08/10	Teishokuya of Tokyo	Pedro Martinez Gutierrez	345 E. 2nd Street	1			1		1		1		1	1		1		1		1
647	10/08/10	Teishokuya of Tokyo	Yakao Isogai	345 E. 2nd Street	1			1		1		1		1	1		1		1		1
648	10/08/10	Teishokuya of Tokyo	Miko Nakanishi	345 E. 2nd Street	1			1		1		1		1	1		1		1		1
649	10/08/10	Teishokuya of Tokyo	Jose R. Menjivar Bonilla	345 E. 2nd Street	1			1		1		1		1	1		1		1		1
650	09/28/10	Hama Sushi	Tsutomu Iyana	347 E. 2nd Street		1		1		1		1		1		1		1		1	1
651	10/06/10	Hama Sushi	Yuki Tanabe	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
652	10/06/10	Hama Sushi	Miki Ida	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
653	10/06/10	Hama Sushi	Michael Wang	347 E. 2nd Street	1										1		1		1		1
654	10/06/10	Hama Sushi	Tetsuji Tahara	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
655	10/06/10	Hama Sushi	Masao Kotaki	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
656	10/06/10	Hama Sushi	Ei Hiroyoshi	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
657	10/06/10	Hama Sushi	Ko Fujiwara	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
658	10/06/10	Hama Sushi	Tanaka Setsuko	347 E. 2nd Street	1			1		1		1		1	1			1			1
659	10/06/10	Hama Sushi	Spencer Kassini	347 E. 2nd Street									1		1		1		1		1
660	10/06/10	Hama Sushi	Stanislas Debreu	347 E. 2nd Street	1			1		1		1			1		1		1		1
661	10/07/10	Hama Sushi	Tsutomu Iyama	347 E. 2nd Street											1						1
662	10/08/10	Hama Sushi	Masako Hamaguchi	347 E. 2nd Street	1			1		1		1		1	1		1		1		1
663	10/09/10	Hama Sushi	Ryuichi Nakamura	347 E. 2nd Street	1																1
664	10/09/10	Hama Sushi	Mitsuo Kato	347 E. 2nd Street	1																1
665	10/09/10	Hama Sushi	Ken Lin	347 E. 2nd Street	1																1
666	10/09/10	Hama Sushi	Hitoshi I. Chiba	347 E. 2nd Street	1																1
667	10/09/10	Hama Sushi	Yoko Akiyama	347 E. 2nd Street	1																1
668	10/09/10	Hama Sushi	Yukimasa Furukawa	347 E. 2nd Street	1																1
669	10/09/10	Hama Sushi	Ken Kageyama	347 E. 2nd Street	1																1
670	10/09/10	Hama Sushi	James K. Michiuyz	347 E. 2nd Street	1										1		1				1
671	10/09/10	Hama Sushi	Ricardo Zuniga	347 E. 2nd Street	1																1
672	10/09/10	Hama Sushi	Hiromi Morinaga	347 E. 2nd Street	1																1
673	10/09/10	Hama Sushi	Kenny Miyake	347 E. 2nd Street	1																1
674	10/09/10	Hama Sushi	Yasuko Aki Williams	347 E. 2nd Street	1																1
675	10/09/10	Hama Sushi	Kaori Shibata	347 E. 2nd Street	1																1
676	10/09/10	Hama Sushi	Joel A. Perez	347 E. 2nd Street	1																1
677	10/09/10	Hama Sushi	Kazuo Hashisume	347 E. 2nd Street	1			1		1		1		1		1	1		1		1
678	10/09/10	Hama Sushi	Ryuji Hirata	347 E. 2nd Street	1																1
679	10/09/10	Hama Sushi	Shozo Nozawa	347 E. 2nd Street	1																1
680	10/09/10	Hama Sushi	Norio Yamamoto	347 E. 2nd Street	1			1		1	1		1		1		1		1		1
681	10/09/10	Hama Sushi	Takeshi Kishida	347 E. 2nd Street	1					1		1	1		1		1		1		1
682	10/09/10	Hama Sushi	Yuki Kadota	347 E. 2nd Street	1										1		1		1		1
683	10/09/10	Hama Sushi	S. Ito	347 E. 2nd Street		1		1		1		1		1	1		1		1		1
684	10/09/10	Hama Sushi	Izayoi	347 E. 2nd Street							1				1		1		1		1
685	10/09/10	Hama Sushi	Izayoi	347 E. 2nd Street	1														1		1
686	10/09/10	Hama Sushi	K.N.	347 E. 2nd Street	1										1		1		1		1
687	10/10/10	Hama Sushi	K. Yasa	347 E. 2nd Street	1										1		1		1		1
688	10/07/10	Japanes Restaurant Komasa	Takashi Onishi	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
689	10/07/10	Japanes Restaurant Komasa	Shaoxin Jia	351 E. 2nd Street	1			1		1		1		1	1		1		1		1

690	10/07/10	Japanes Restaurant Komasa	Li Xiao Fei	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
691	10/07/10	Japanes Restaurant Komasa	Nagisa Fukuoka	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
692	10/07/10	Japanes Restaurant Komasa	Eichiro Nakamura	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
693	10/07/10	Japanes Restaurant Komasa	Setsuko Motoyama	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
694	10/07/10	Japanes Restaurant Komasa	Minoru Motoyama	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
695	10/07/10	Japanes Restaurant Komasa	Michael De	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
696	10/07/10	Japanes Restaurant Komasa	Chen Tzs Chan	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
697	10/07/10	Japanes Restaurant Komasa	Tsubasa Muratani	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
698	10/08/10	Japanes Restaurant Komasa	Alberto Santos	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
699	10/08/10	Japanes Restaurant Komasa	Naka Akiyama	351 E. 2nd Street	1			1		1		1		1	1		1		1		1
700	10/01/10	EBISU Japanese Restaurant	Kodai Onoue	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
701	10/01/10	EBISU Japanese Restaurant	Taiji Shibuya	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
702	10/02/10	EBISU Japanese Restaurant	Daichi Amano	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
703	10/02/10	EBISU Japanese Restaurant	Yoshihiro Tsorosaki	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
704	10/02/10	EBISU Japanese Restaurant	Yusaku Soga	356 E. 2nd Street		1		1		1		1		1		1		1		1	1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			2nd Street																		
705	10/02/10	EBISU Japanese Restaurant	Yumi Hirasawa	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
706	10/02/10	EBISU Japanese Restaurant	Hiroyuki Matsuoka	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
707	10/02/10	EBISU Japanese Restaurant	Yuri Nakamine	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
708	10/03/10	EBISU Japanese Restaurant	Tsubaga Kura	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
709	10/03/10	EBISU Japanese Restaurant	Nazario Ianacio	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
710	10/03/10	EBISU Japanese Restaurant	Jack Lim	356 E. 2nd Street		1	1	1	1			1		1	1	1	1		1		1
711	10/04/10	EBISU Japanese Restaurant	Juan Narato	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
712	10/04/10	EBISU Japanese Restaurant	Akinito Yanagida	356 E. 2nd Street		1		1		1		1		1		1		1		1	1
713	10/04/10	EBISU Japanese Restaurant	Yutaro Ebata	356 E. 2nd Street		1	1		1			1		1	1		1		1		1
714	10/04/10	EBISU Japanese Restaurant	Zhong Luc, Jr.	356 E. 2nd Street		1	1		1			1		1	1		1		1		1
715	10/06/10	EBISU Japanese Restaurant	Noriyuki Okamoto	356 E. 2nd Street		1		1		1		1		1	1		1		1		1
716	10/06/10	EBISU Japanese Restaurant	Sachie Mita	356 E. 2nd Street		1		1		1		1	1		1		1		1		1
717	10/06/10	EBISU Japanese Restaurant	Martin Aragon Sanchez	356 E. 2nd Street		1	1		1			1		1	1		1		1		1
718	10/07/10	EBISU Japanese Restaurant	Yuichi Watanabe	356 E. 2nd Street		1		1		1		1		1	1		1		1		1
719	10/08/10	Hold Up Art	Brian Lee	358 E. 2nd Street	1			1		1		1		1	1			1	1		1
720	10/06/10	Izakaya Haru Ulala	Tsutomu Morishita	368 E. 2nd Street	1																1
721	10/06/10	Izakaya Haru Ulala	Tomoko Morishita	368 E. 2nd Street	1																1
722	10/06/10	Izakaya Haru Ulala	Hidemichi Morishita	368 E. 2nd Street	1																1
723	10/06/10	Izakaya Haru Ulala	Sho Otsuka	368 E. 2nd Street	1																1
724	10/06/10	Izakaya Haru Ulala	Tim Sanae	368 E. 2nd Street	1																1
725	10/06/10	Izakaya Haru Ulala	Tokuyuki Wada	368 E. 2nd Street	1																1
726	10/06/10	Izakaya Haru Ulala	Eiji Morishita	368 E. 2nd Street	1																1
727	10/09/10	Izakaya Haru Ulala	Yamada Aiko	368 E. 2nd Street	1																1
728	10/09/10	Izakaya Haru Ulala	Shingo Suzuki	368 E. 2nd Street	1																1
729	10/09/10	Izakaya Haru Ulala	Miyoko Eiyama	368 E. 2nd Street		1												1			1
730	10/09/10	Izakaya Haru Ulala	Akira Tsuchiya	368 E. 2nd Street		1												1			1
731	10/09/10	Izakaya Haru Ulala	Katsuya Arai	368 E. 2nd Street	1			1		1		1		1	1		1		1		1
732	10/09/10	Izakaya Haru Ulala	Mari Sugio	368 E. 2nd Street	1			1		1		1		1	1		1		1		1
733	10/09/10	Izakaya Haru Ulala	Yuka Teranishi	368 E. 2nd Street	1																1
734	10/09/10	Izakaya Haru Ulala	Keiji Ogawa	368 E. 2nd Street	1																1
735	10/09/10	Izakaya Haru Ulala	Ito Shintaro	368 E. 2nd Street	1																1
736	10/09/10	Izakaya Haru Ulala	Sumiya Taiju	368 E. 2nd Street	1		1			1		1		1	1		1		1		1
737	10/05/10	Spitz	Bryce Rademan	371 E. 2nd Street		1		1		1	1		1		1		1		1		1
738	10/05/10	City Hair	Nakajima Toshihiro	372 E. 2nd Street			1						1		1		1		1		1
739	10/07/10	Buna Insurance Agency	Kiyomi Erskine	400 E. 2nd Street	1										1		1		1		1
740	10/06/10	Honda Plaza Dental Clinic	Akeno Ichikawa	400 E. 2nd Street, #207	1																1
741	10/06/10	Honda Plaza Dental Clinic	Kaga Akiko	400 E. 2nd Street, #207											1		1		1		1
742	10/06/10	Honda Plaza Dental Clinic	Kouichi Itoh	400 E. 2nd Street, #207											1		1		1		1
743	10/10/10	Honda Plaza Dental Clinic	Natalie			1		1		1		1		1	1		1		1		1
744	10/05/10	Raku Restaurant	Bangjia Hong	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
745	10/06/10	Raku Restaurant	Yasto Uzawa	424 E. 2nd Street	1										1		1		1		1
746	10/06/10	Raku Restaurant	Kadae Lim	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
747	10/06/10	Raku Restaurant	Yoshikaza Kondo	424 E. 2nd Street	1										1		1		1		1
748	10/07/10	Raku Restaurant	Shige Katagai	424 E. 2nd Street	1										1		1		1		1
749	10/07/10	Raku Restaurant	Darlene Dhillon	424 E. 2nd Street											1		1		1		1
750	10/07/10	Raku Restaurant	David Davis	424 E. 2nd Street	1		1		1		1		1		1		1		1		1
751	10/07/10	Raku Restaurant	Rachel Ho	424 E. 2nd Street	1		1		1		1		1		1		1		1		1
752	10/07/10	Raku Restaurant	Humberto Morales	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
753	10/07/10	Raku Restaurant	Takashi Narumi	424 E. 2nd Street	1			1		1		1		1	1		1		1		1

754	10/08/10	Raku Restaurant	Hiroko Kubo	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
755	10/08/10	Raku Restaurant	Aegripina De Los Altos	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
756	10/08/10	Raku Restaurant	Stephanie Man	424 E. 2nd Street	1										1						1
757	10/08/10	Raku Restaurant	Eiji Tsukida	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
758	10/08/10	Raku Restaurant	Hiroko Irisawa	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
759	10/08/10	Raku Restaurant	Masano Seo	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
760	10/08/10	Raku Restaurant	Satoshi Moro	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
761	10/08/10	Raku Restaurant	John Peterson	424 E. 2nd Street	1										1		1		1		1
762	10/08/10	Raku Restaurant	Mieko Sakamoto	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
763	10/08/10	Raku Restaurant	Randolph Kimmler	424 E. 2nd Street	1				1						1		1		1		1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
2nd Street																					
764	10/08/10	Raku Restaurant	Pancho Villa	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
765	10/08/10	Raku Restaurant	Thomas Copeland	424 E. 2nd Street	1										1				1		1
766	10/08/10	Raku Restaurant		424 E. 2nd Street	1			1		1		1		1	1		1		1		1
767	10/08/10	Raku Restaurant	Beatriz Mendoza	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
768	10/08/10	Raku Restaurant	Leoncio Santiago	424 E. 2nd Street	1																1
769	10/08/10	Raku Restaurant	Stephen Hong	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
770	10/08/10	Raku Restaurant	Il Soon Lim	424 E. 2nd Street	1			1		1		1		1	1		1		1		1
771	10/09/10	Raku Restaurant	J. Osaka	424 E. 2nd Street	1										1		1		1		1
772	10/09/10	Raku Restaurant	R. Osaka	424 E. 2nd Street	1										1		1		1		1
773	10/09/10	Raku Restaurant	Min Ji Lee	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
774	10/09/10	Raku Restaurant	John Han	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
775	10/09/10	Raku Restaurant	Jenny Jeong	424 E. 2nd Street	1			1		1		1		1		1	1		1		1
776	10/09/10	Raku Restaurant	Tadaaki Yamamoto	424 E. 2nd Street	1										1		1		1		1
777	10/09/10	Raku Restaurant	Hiromi Yamashita	424 E. 2nd Street	1										1		1		1		1
778	10/09/10	Raku Restaurant	Hiroko Seki	424 E. 2nd Street	1										1		1		1		1
779	10/09/10	Raku Restaurant	Michael	424 E. 2nd Street	1										1		1		1		1
780	10/09/10	Raku Restaurant	Koichi Arimitsu	424 E. 2nd Street	1										1		1		1		1
781	10/09/10	Raku Restaurant	Winnie	424 E. 2nd Street	1																1
782	10/09/10	Raku Restaurant	Kevin Kwan	424 E. 2nd Street	1																1
783	10/09/10	Raku Restaurant	John Dong	424 E. 2nd Street	1										1						1
784	10/09/10	Raku Restaurant	Ethan Haraday	424 E. 2nd Street											1		1		1		1
785	10/08/10	R-23		923 E. 2nd Street	1			1		1		1		1	1		1		1		1
786	10/08/10	R-23	Yumiko	923 E. 2nd Street	1			1		1		1		1	1		1		1		1
787	10/08/10	R-23	Tobita	923 E. 2nd Street	1			1		1		1		1	1		1		1		1
788	10/08/10	R-23	Taka	923 E. 2nd Street	1			1		1		1		1		1	1		1		1
789	10/08/10	R-23		923 E. 2nd Street																	1
3rd Street																					
790	10/06/10	Ai Beauty Salon	Yoko Kagaya	458 E. 3rd Street	1																1
791	10/06/10	Ai Beauty Salon	Yumi Homma	458 E. 3rd Street	1																1
792	10/06/10	Ai Beauty Salon	Akemi Wakasugi	458 E. 3rd Street	1																1
Azusa Street																					
793	09/20/10	Favorite Snack & Gift	Park Jing Hyung	340 E. Azusa Street, #A	1		1			1		1		1	1		1		1		1
794	10/05/10	U & U Graphics	Hiro Ueda	340 E. Azusa Street, #C	1			1		1		1		1	1		1		1		1
795	10/05/10	U & U Graphics	Yoshiko Ueda	340 E. Azusa Street, #C	1			1		1		1		1	1		1		1		1
796	10/06/10	U & U Graphics	Yukari Abe	340 E. Azusa Street, #C	1										1		1		1		1
Central Avenue																					
797	10/01/10	Yogurtland/Yushin Corporation	Joon Kim	130 S. Central Avenue	1										1		1		1		1
798	10/08/10	Sushi Ryo Izayoi	Junichi Shiode	132 S. Central Avenue		1		1		1		1		1	1		1		1		1
799	10/05/10	Kokekokko	Fukushima Ryoko	203 S. Central Avenue	1										1		1		1		1
800	10/05/10	Kokekokko	Hiroshi Yabila	203 S. Central Avenue	1										1		1		1		1
801	10/05/10	Kokekokko	Setsuko Tankuyu	203 S. Central Avenue	1										1		1		1		1
802	10/05/10	Kokekokko	Dennis Yu	203 S. Central Avenue	1		1		1		1		1		1		1		1		1
803	10/06/10	Kokekokko	Maya Kudamatsu	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
804	10/06/10	Kokekokko	Douglas Lee Deng Heng	203 S. Central Avenue	1																1
805	10/06/10	Kokekokko	Darren Ng	203 S. Central Avenue	1										1						1
806	10/06/10	Kokekokko	Mansa Kraikosd	203 S. Central Avenue	1																1
807	10/06/10	Kokekokko	Hideo Suzuki	203 S. Central Avenue	1																1
808	10/06/10	Kokekokko	Rumi Yokote	203 S. Central Avenue	1																1
809	10/06/10	Kokekokko	Toyoko Murakami	203 S. Central Avenue	1																1
810	10/06/10	Kokekokko	Fred Y. Murakami	203 S. Central Avenue	1																1
811	10/06/10	Kokekokko	Funatsu Nobuhiro	203 S. Central Avenue	1		1														1
812	10/06/10	Kokekokko	Ernest Francescht	203 S. Central Avenue	1																1
813	10/06/10	Kokekokko	Rie Ishii	203 S. Central Avenue	1																1

814	10/06/10	Kokekokko	Ezra Evangelista	203 S. Central Avenue	1															1
815	10/06/10	Kokekokko	Tiffanny Chuo	203 S. Central Avenue	1															1
816	10/06/10	Kokekokko	Makoto Takahashi	203 S. Central Avenue	1															1
817	10/06/10	Kokekokko	Yoshe Nakano	203 S. Central Avenue	1															1
818	10/06/10	Kokekokko	Sam Markkanen	203 S. Central Avenue	1															1
819	10/06/10	Kokekokko	Yaeko Mishima	203 S. Central Avenue	1			1		1		1		1	1		1		1	1

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					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Central Avenue																		
820	10/06/10	Kokekokko	Aya Koyano	203 S. Central Avenue	1										1		1		1		1
821	10/06/10	Kokekokko	Tsukasa Noel Okasaki	203 S. Central Avenue	1										1		1		1		1
822	10/06/10	Kokekokko	Hitoshi Tomonori	203 S. Central Avenue		1	1		1			1		1	1		1		1		1
823	10/06/10	Kokekokko	Taku Okuno	203 S. Central Avenue		1		1		1		1		1	1		1		1		1
824	10/06/10	Kokekokko	Shingo Umeda	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
825	10/06/10	Kokekokko	Masahiro Tsuzuki	203 S. Central Avenue	1										1		1		1		1
826	10/06/10	Kokekokko	Jimi Leung	203 S. Central Avenue	1																1
827	10/06/10	Kokekokko	Shinji Nagase	203 S. Central Avenue	1																1
828	10/06/10	Kokekokko	Erika Ichikawa	203 S. Central Avenue	1																1
829	10/06/10	Kokekokko	Judy Yabiku	203 S. Central Avenue	1																1
830	10/06/10	Kokekokko	Jason Yabiky	203 S. Central Avenue	1										1		1		1		1
831	10/06/10	Kokekokko	Kozue Sasaki	203 S. Central Avenue	1																1
832	10/06/10	Kokekokko	Kaori Nagatomo	203 S. Central Avenue	1																1
833	10/06/10	Kokekokko	John Rhee	203 S. Central Avenue	1										1		1		1		1
834	10/06/10	Kokekokko	Richard Yanagata	203 S. Central Avenue	1										1		1		1		1
835	10/06/10	Kokekokko	Jazmin Kim	203 S. Central Avenue	1										1		1		1		1
836	10/06/10	Kokekokko	Joyce Leong	203 S. Central Avenue	1										1		1		1		1
837	10/07/10	Kokekokko	Chung Yong Kim	203 S. Central Avenue	1		1		1		1		1		1		1		1		1
838	10/07/10	Kokekokko	Yoshichiko Shiki	203 S. Central Avenue	1										1		1		1		1
839	10/07/10	Kokekokko	Shintaro Seike	203 S. Central Avenue	1										1		1		1		1
840	10/07/10	Kokekokko	Kazunori Michimoto	203 S. Central Avenue	1		1		1		1		1		1		1		1		1
841	10/07/10	Kokekokko	Labonee Mohanta	203 S. Central Avenue											1		1		1		1
842	10/07/10	Kokekokko	Celine Shen	203 S. Central Avenue							1		1		1		1		1		1
843	10/07/10	Kokekokko	Richard Nivas	203 S. Central Avenue	1								1		1		1		1		1
844	10/07/10	Kokekokko	Mi Hwa Kang	203 S. Central Avenue	1		1		1		1		1		1		1		1		1
845	10/07/10	Kokekokko	Hiromi Monnaga	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
846	10/07/10	Kokekokko	Phillip M. Grant	203 S. Central Avenue	1																1
847	10/07/10	Kokekokko	Chistie V. Grant	203 S. Central Avenue	1																1
848	10/07/10	Kokekokko	Akira Kawana	203 S. Central Avenue	1																1
849	10/07/10	Kokekokko	Kana Kawana	203 S. Central Avenue	1																1
850	10/07/10	Kokekokko	James E. Stratton	203 S. Central Avenue	1																1
851	10/07/10	Kokekokko		203 S. Central Avenue	1			1		1		1		1	1		1		1		1
852	10/07/10	Kokekokko	Aisha Miwa	203 S. Central Avenue	1		1		1			1		1		1	1		1		1
853	10/07/10	Kokekokko	Gerhard Schultz	203 S. Central Avenue	1						1				1		1		1		1
854	10/07/10	Kokekokko	Seth Weiner	203 S. Central Avenue	1						1				1		1		1		1
855	10/07/10	Kokekokko	Chasmine Ramirez	203 S. Central Avenue		1		1		1		1		1	1		1		1		1
856	10/07/10	Kokekokko	Ralph Ramirez	203 S. Central Avenue		1		1		1		1		1	1		1		1		1
857	10/07/10	Kokekokko	Barbara Ramirez	203 S. Central Avenue		1		1		1		1		1	1		1		1		1
858	10/07/10	Kokekokko	Abe Sasson	203 S. Central Avenue	1																1
859	10/08/10	Kokekokko	Sehi Leu	203 S. Central Avenue							1		1		1		1		1		1
860	10/08/10	Kokekokko	Naomi Okazaki	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
861	10/08/10	Kokekokko	June Kageyama	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
862	10/08/10	Kokekokko	James Davis	203 S. Central Avenue	1																1
863	10/08/10	Kokekokko	Yasuhiro Morinaga	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
864	10/08/10	Kokekokko	Filiberto Castillo	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
865	10/08/10	Kokekokko	Mamoru Inoue	203 S. Central Avenue	1																1
866	10/08/10	Kokekokko	Karen Molleson	203 S. Central Avenue	1																1
867	10/08/10	Kokekokko	Lowell Hill	203 S. Central Avenue	1																1
868	10/08/10	Kokekokko	Eriko Saito	203 S. Central Avenue	1																1
869	10/08/10	Kokekokko	Tetsuo Kohama	203 S. Central Avenue	1																1
870	10/08/10	Kokekokko	Yoskay Yamukoto	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
871	10/08/10	Kokekokko	Emi Ueniki	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
872	10/08/10	Kokekokko	Adma Pilver	203 S. Central Avenue	1										1		1		1		1
873	10/08/10	Kokekokko	Ken Baldwin	203 S. Central Avenue	1										1		1		1		1
874	10/08/10	Kokekokko	Mona Balooch	203 S. Central Avenue	1										1		1		1		1
875	10/08/10	Kokekokko		203 S. Central Avenue	1																1
876	10/08/10	Kokekokko	William Vlyevc	203 S. Central Avenue	1																1
877	10/08/10	Kokekokko	Allen Liu	203 S. Central Avenue	1																1

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878	10/08/10	Kokekokko	Mina Kim	203 S. Central Avenue	1														1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Central Avenue																		
879	10/08/10	Kokekokko	Eric Kuo	203 S. Central Avenue	1																1
880	10/08/10	Kokekokko		203 S. Central Avenue	1																1
881	10/08/10	Kokekokko	Brant Mizgane	203 S. Central Avenue	1																1
882	10/08/10	Kokekokko	Eric Kuo	203 S. Central Avenue	1																1
883	10/08/10	Kokekokko	Jennifer Iam	203 S. Central Avenue	1		1		1		1		1		1		1		1		1
884	10/08/10	Kokekokko	Milky Marmet	203 S. Central Avenue	1																1
885	10/08/10	Kokekokko	Michael Choi	203 S. Central Avenue	1																1
886	10/08/10	Kokekokko	Satora Jo	203 S. Central Avenue	1																1
887	10/08/10	Kokekokko	Lydia Park	203 S. Central Avenue	1																1
888	10/08/10	Kokekokko	Han Zhang	203 S. Central Avenue	1																1
889	10/08/10	Kokekokko	Mikio Arai	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
890	10/08/10	Kokekokko	Junko Hayashi	203 S. Central Avenue	1																1
891	10/08/10	Kokekokko	Kenji Tajimi	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
892	10/09/10	Kokekokko	Nicholas Maeda	203 S. Central Avenue	1																1
893	10/09/10	Kokekokko	Connor Maeda	203 S. Central Avenue	1																1
894	10/09/10	Kokekokko	Emily Maeda	203 S. Central Avenue	1																1
895	10/09/10	Kokekokko	Misaki Maeda	203 S. Central Avenue	1																1
896	10/09/10	Kokekokko	Dennis Maeda	203 S. Central Avenue	1																1
897	10/09/10	Kokekokko	Takeshi Kishida	203 S. Central Avenue	1			1		1		1		1	1		1		1		1
898	10/10/10	Kokekokko	Aaron Michaelson	203 S. Central Avenue	1																1
899	10/08/10		Kazuko Ishii	222 S. Central Avenue	1										1		1		1		1
900	10/08/10		Kimiye Hayashida	222 S. Central Avenue	1										1		1		1		1
			Japanese Village Plaza																		
901	10/08/10	Las Galas	Gum Sick Shin	103 Japanese Village Plaza	1			1		1		1	1		1		1		1		1
902	10/05/10	Kools	Masato Miura	110 Japanese Village Plaza	1																1
903	10/04/10	Maneki Neko	Michael	111 Japanese Village Plaza	1		1		1		1		1		1		1		1		1
904	10/08/10	Sushi & Teri	Adam	116 Japanese Village Plaza	1		1		1		1		1		1		1		1		1
905	10/08/10	Mitsuru Grill	Angell Chen	117 Japanese Vilage Plaza	1			1				1		1	1		1		1		1
906	10/08/10	Mitsuru Grill	Yasuko Yaguchi	117 Japanese Vilage Plaza	1			1		1		1		1	1		1		1		1
907	10/08/10	Mitsuru Grill	Rumi Yamaguchi	117 Japanese Vilage Plaza	1			1		1		1		1	1		1		1		1
908	10/08/10	Mitsuru Grill	Ken Yamaguchi	117 Japanese Vilage Plaza	1			1		1		1		1	1		1		1		1
909	10/08/10	Mitsuru Grill	Kozue Ri	117 Japanese Vilage Plaza	1			1		1		1		1	1		1		1		1
910	10/04/10	Frying Fish	Qiang Nian Gu	120 Japanese Village Plaza	1																1
911	10/05/10	Frying Fish	Yoshiaki Hamaguchi	120 Japanese Village Plaza	1																1
912	10/05/10	Frying Fish	Masako Hamaguchi	120 Japanese Village Plaza	1																1
913	10/05/10	Frying Fish	Kawata, Kairu	120 Japanese Village Plaza	1																1
914	10/05/10	Frying Fish		120 Japanese Village Plaza	1																1
915	10/06/10	Frying Fish	Mariko Fuuisaki	120 Japanese Village Plaza	1																1
916	10/06/10	Frying Fish	Atsuko Fukushima	120 Japanese Village Plaza			1		1						1		1		1		1
917	10/07/10	Frying Fish	Kunihiro Nishiya	120 Japanese Village Plaza	1																1
918	10/07/10	Frying Fish	Yoshihiro Yamaguchi	120 Japanese Village Plaza	1																1
919	10/07/10	Frying Fish	Sachiko Miyazaki	120 Japanese Village Plaza	1																1
920	10/07/10	Frying Fish	Bert E. Inouye	120 Japanese Village Plaza	1																1
921	10/07/10	Frying Fish	Junko Komiyama	120 Japanese Village Plaza	1																1
922	10/07/10	Frying Fish	Akimi Miyake	120 Japanese Village Plaza	1																1
923	10/07/10	Frying Fish	Mack Miyazaki	120 Japanese Village Plaza	1																1
924	10/07/10	Frying Fish	Nozaki Nusery Inc.	120 Japanese Village Plaza	1																1
925	10/07/10	Frying Fish	Hisamori Iwashita	120 Japanese Village Plaza	1																1
926	10/07/10	Frying Fish	Mary Shiba	120 Japanese Village Plaza	1																1
927	10/07/10	Frying Fish	Yoshie Sato	120 Japanese Village Plaza	1																1
928	10/07/10	Frying Fish	Ryo Sato	120 Japanese Village Plaza	1																1
929	10/07/10	Frying Fish	Kazuhiko Nakanishi	120 Japanese Village Plaza	1																1
930	10/07/10	Frying Fish	Michiko Tamashiro	120 Japanese Village Plaza	1																1
931	10/07/10	Frying Fish	Kunia Shiba	120 Japanese Village Plaza	1																1
932	10/07/10	Frying Fish		120 Japanese Village Plaza	1																1
933	10/07/10	Frying Fish	Sadaoki Okuda	120 Japanese Village Plaza		1															1
934	10/07/10	Frying Fish	Takeshi Kawano	120 Japanese Village Plaza		1															1
935	10/07/10	Frying Fish	Hosaku Matsumura	120 Japanese Village Plaza		1															1
936	10/07/10	Frying Fish	Toshio Kojima	120 Japanese Village Plaza		1		1		1		1		1		1		1		1	1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
Japanese Village Plaza																					
937	10/07/10	Frying Fish	Hiroshi Yamaguchi	120 Japanese Village Plaza	1																1
938	10/07/10	Frying Fish	Shinta Azami	120 Japanese Village Plaza	1																1
939	10/08/10	Frying Fish	Alice C.	120 Japanese Village Plaza	1																1
940	10/08/10	Frying Fish	John Tong	120 Japanese Village Plaza	1																1
941	10/08/10	Frying Fish	Yoshinori Kawaguchi	120 Japanese Village Plaza	1																1
942	10/08/10	Frying Fish	Masahiko Ono	120 Japanese Village Plaza	1		1		1			1		1		1	1		1		1
943	10/08/10	Frying Fish	Carrie Tugna	120 Japanese Village Plaza									1		1		1		1		1
944	10/08/10	Frying Fish	Tan Nishida	120 Japanese Village Plaza	1			1		1		1	1								1
945	10/08/10	Frying Fish	Tadashi Akimoto	120 Japanese Village Plaza	1																1
946	10/08/10	Frying Fish	Mario Santiago	120 Japanese Village Plaza	1																1
947	10/08/10	Frying Fish	Jesus Salinas	120 Japanese Village Plaza	1																1
948	10/08/10	Frying Fish	Shoko Koshikawa		1																1
949	10/09/10	Frying Fish	Toyomi Yamada		1																1
950	10/10/10	Frying Fish		120 Japanese Village Plaza		1															1
951	10/10/10	Frying Fish	Ryota Maeda	120 Japanese Village Plaza	1																1
952	10/10/10	Frying Fish	Hiroshi Kobayashi	120 Japanese Village Plaza	1																1
953	10/01/10	Shabu Shabu House Restaurant	Masako Maruyama	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
954		Shabu Shabu House Restaurant	Yoshinobu Maruyama	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
955	10/07/10	Shabu Shabu House Restaurant	Yoko Matsukaya	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
956	10/07/10	Shabu Shabu House Restaurant	Wai Lin Yeung	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
957	10/07/10	Shabu Shabu House Restaurant	Winnie Tran	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
958	10/07/10	Shabu Shabu House Restaurant	Fidel Flores	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
959	10/07/10	Shabu Shabu House Restaurant	Gabril Flores	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
960	10/07/10	Shabu Shabu House Restaurant	Jennie Sham	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
961	10/08/10	Shabu Shabu House Restaurant	Susana Betancourt	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
962	10/08/10	Shabu Shabu House Restaurant	Kevin Floyd	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
963	10/08/10	Shabu Shabu House Restaurant	Pauline Reyes	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
964	10/08/10	Shabu Shabu House Restaurant	Alex Villanueva	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
965	10/08/10	Shabu Shabu House Restaurant	Teresa Villa	127 Japanese Village Plaza	1		1					1		1	1		1		1		1
966	10/08/10	Shabu Shabu House Restaurant	Patricia Walsh	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
967	10/08/10	Shabu Shabu House Restaurant	Julie	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
968	10/08/10	Shabu Shabu House Restaurant	Jose Gonzalez	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
969	10/08/10	Shabu Shabu House Restaurant	Veronika Ditross	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
970	10/08/10	Shabu Shabu House Restaurant	Garen Essakhanian	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
971	10/08/10	Shabu Shabu House Restaurant	Andrea Estrada	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
972	10/08/10	Shabu Shabu House Restaurant	Teresa Torrejon	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
973	10/08/10	Shabu Shabu House Restaurant	Isabel Ramirez	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
974	10/08/10	Shabu Shabu House Restaurant	Enid Santiago	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
975	10/08/10	Shabu Shabu House Restaurant	Abraham Anila	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
976	10/08/10	Shabu Shabu House Restaurant	Manuel Villa	127 Japanese Village Plaza	1		1		1			1		1	1		1		1		1
977	10/08/10	Shabu Shabu House Restaurant	James Garcia	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
978	10/08/10	Shabu Shabu House Restaurant	Alexandra Vazquez	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
979	10/08/10	Shabu Shabu House Restaurant	Hardy Carballo	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
980	10/08/10	Shabu Shabu House Restaurant	Lori White	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
981	10/08/10	Shabu Shabu House Restaurant	Christina Impastato	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
982	10/08/10	Shabu Shabu House Restaurant	Shane Klasnimi	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
983	10/08/10	Shabu Shabu House Restaurant	Rachel Frame	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
984	10/08/10	Shabu Shabu House Restaurant	Mark Speare	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
985	10/08/10	Shabu Shabu House Restaurant	Alexa Evans	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
986	10/08/10	Shabu Shabu House Restaurant	Kevin Loi	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
987	10/09/10	Shabu Shabu House Restaurant	Oscar Perez	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
988	10/09/10	Shabu Shabu House Restaurant		127 Japanese Village Plaza	1		1		1		1		1		1		1		1		1
989	10/09/10	Shabu Shabu House Restaurant		127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
990	10/09/10	Shabu Shabu House Restaurant	Cherry R. Sanchez	127 Japanese Village Plaza	1		1								1		1		1		1
991	10/09/10	Shabu Shabu House Restaurant	Horacio Chavez	127 Japanese Village Plaza	1		1								1		1		1		1
992	10/09/10	Shabu Shabu House Restaurant	De Guzman Heidi	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
993	10/09/10	Shabu Shabu House Restaurant	Garcia, Erick	127 Japanese Village Plaza	1		1								1		1		1		1
994	10/09/10	Shabu Shabu House Restaurant	Carlos Salinas	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
995	10/09/10	Shabu Shabu House Restaurant	Vivianan Saldana	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		1

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	Date	Company Name	Personal Name	Address	Locally Preferred Alternative					Mitigation Issue			Number of Survey Returned
					No-Build	TSM	At-Grade Alternative	Underground Alternative	Fully Underground Alternative	Preservation of Japanese Business Influence	Business Interruption Compensation	Replacement of On-Street and Off-Street Parking Spaces	

					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Japanese Village Plaza																		
996	10/09/10	Shabu Shabu House Restaurant	Ismeal Chaidez	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
997	10/09/10	Shabu Shabu House Restaurant	Mel Ortiga	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
998	10/09/10	Shabu Shabu House Restaurant	Emy Sayrongsa	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
999	10/09/10	Shabu Shabu House Restaurant	Chi Ho Cao	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1000	10/09/10	Shabu Shabu House Restaurant	Andrea Rabinowitz	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1001	10/09/10	Shabu Shabu House Restaurant	Ethan Roberts	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1002	10/09/10	Shabu Shabu House Restaurant	Jessica Kao	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1003	10/09/10	Shabu Shabu House Restaurant	Jessica K.	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1004	10/09/10	Shabu Shabu House Restaurant	Jake Strauch	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1005	10/09/10	Shabu Shabu House Restaurant	Joy Maruel	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1006	10/09/10	Shabu Shabu House Restaurant	Teresa Bunales	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1007	10/09/10	Shabu Shabu House Restaurant	G. Sabocon	127 Japanese Village Plaza	1			1		1		1		1	1			1		1	**1**
1008	10/09/10	Shabu Shabu House Restaurant	Jun Limbo	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1009	10/09/10	Shabu Shabu House Restaurant	Elizabeth Pascacio	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1010	10/09/10	Shabu Shabu House Restaurant	Joseph V. DeLeaon	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1011	10/09/10	Shabu Shabu House Restaurant	Meiliana	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1012	10/09/10	Shabu Shabu House Restaurant	Kathryn Quijano	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1013	10/09/10	Shabu Shabu House Restaurant	Matt Angeles	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1014	10/10/10	Shabu Shabu House Restaurant	Timothy Feanster	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1015	10/10/10	Shabu Shabu House Restaurant	Steve Salinas	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1016	10/10/10	Shabu Shabu House Restaurant	Linda Bill	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1017	10/10/10	Shabu Shabu House Restaurant	Marco Mo	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1018	10/10/10	Shabu Shabu House Restaurant	Kevin Nguyen	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1019	10/10/10	Shabu Shabu House Restaurant	Mike Zhang	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1020	10/10/10	Shabu Shabu House Restaurant	Wisan Vue	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1021	10/10/10	Shabu Shabu House Restaurant	Joe Angeles	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1022	10/10/10	Shabu Shabu House Restaurant	Samuel Nalbandian	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1023	10/10/10	Shabu Shabu House Restaurant	Feiviola Aguilar	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1024	10/10/10	Shabu Shabu House Restaurant	Edfan	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1025	10/10/10	Shabu Shabu House Restaurant	Jenifer Ramali	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1026	10/10/10	Shabu Shabu House Restaurant	Jonathan Harjo	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1027	10/10/10	Shabu Shabu House Restaurant	Nino Cruz	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1028	10/10/10	Shabu Shabu House Restaurant	Grace G.	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1029	10/10/10	Shabu Shabu House Restaurant	Jeremy McGinnis	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1030	10/10/10	Shabu Shabu House Restaurant	Jena Caneda	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1031	10/10/10	Shabu Shabu House Restaurant	Rene Cruz	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1032	10/10/10	Shabu Shabu House Restaurant	Richmond	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1033	10/10/10	Shabu Shabu House Restaurant	Tina Tuano	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1034	10/10/10	Shabu Shabu House Restaurant	Nimpoeno	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1035	10/10/10	Shabu Shabu House Restaurant	JD Sitton	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1036	10/10/10	Shabu Shabu House Restaurant	Alexander Wang	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1037	10/10/10	Shabu Shabu House Restaurant	Jesse Wu	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1038	10/10/10	Shabu Shabu House Restaurant	Jeff Berhaw	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1039	10/10/10	Shabu Shabu House Restaurant	Nguyen Bernard	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1040	10/10/10	Shabu Shabu House Restaurant	Kris Berhaw	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1041	10/10/10	Shabu Shabu House Restaurant	Christina Lin	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1042	10/10/10	Shabu Shabu House Restaurant	Thomas Lee	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1043	10/10/10	Shabu Shabu House Restaurant	Sophia Hu	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1044	10/10/10	Shabu Shabu House Restaurant	Joanne Liu	127 Japanese Village Plaza	1		1			1		1		1	1		1		1		**1**
1045	10/10/10	Shabu Shabu House Restaurant		127 Japanese Village Plaza																	**1**
1046	10/10/10	Shabu Shabu House Restaurant		127 Japanese Village Plaza																	**1**
1047	10/06/10	Blooming Art	Sachiko Hagikuchi	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1048	10/06/10	Blooming Art	Naoko Nikki Ikeda	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1049	10/07/10	Blooming Art	Maki Solomon	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1050	10/07/10	Blooming Art	Yukie Morinaga	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1051	10/07/10	Blooming Art	Chiyomi Hanamoto	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1052	10/07/10	Blooming Art	Andre Onsayan	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1053	10/07/10	Blooming Art	Elie Boutros	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1054	10/08/10	Blooming Art	Kazako Onabe	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Japanese Village Plaza																		
1055	10/08/10	Blooming Art	Yuta Mamaga	129 Japanese Village Plaza	1			1		1		1		1	1		1		1		**1**
1056	10/08/10	Tokyo Gift	Yuko	130 Japanese Village Plaza	1			1		1		1	1		1		1		1		**1**

1057	10/08/10	Tokyo Gift	Miriam	130 Japanese Village Plaza	1			1		1		1	1		1		1		1		1
1058	10/08/10	Tokyo Gift	Michelle	130 Japanese Village Plaza	1			1		1		1	1		1		1		1		1
1059	10/06/10	I Chiropractic	Tetsuya Iio	131 Japanese Village Plaza	1		1			1		1		1	1		1		1		1
1060	10/07/10	Little Tokyo Ice Cream & Yogurt	Yong C. Shin	133 Japaneses Village Plaza	1		1			1		1	1		1		1		1		1
1061	10/07/10	Korean Kitchen Hibachi BBQ	Bong M. Suh	135 Japanese Village Plaza	1			1		1		1	1		1		1		1		1
1062	09/30/10	Joy Mart Restaurant	Sotaro Masuda	137 Japanese Village Plaza		1		1		1		1		1	1		1		1		1
1063	10/04/10	Joy Mart Restaurant	Takashi	137 Japanese Village Plaza	1			1		1		1	1		1		1		1		1
1064	10/05/10	Joy Mart Restaurant	Yuki Miyasaka	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1065	10/05/10	Joy Mart Restaurant	Aya Mangram	137 Japnese Village Plaza	1										1		1		1		1
1066	10/05/10	Joy Mart Restaurant	Modesto Hernandez	137 Japnese Village Plaza	1					1		1		1	1		1		1		1
1067	10/05/10	Joy Mart Restaurant	Isauro Lopez	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1068	10/05/10	Joy Mart Restaurant	Nori Kitagawa	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1069	10/05/10	Joy Mart Restaurant	Aya Ueda	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1070	10/05/10	Joy Mart Restaurant	Zacarias Lopez	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1071	10/05/10	Joy Mart Restaurant	Shingo Makamura	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1072	10/05/10	Joy Mart Restaurant	Wang Xin	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1073	10/05/10	Joy Mart Restaurant	Yuya Nishino	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1074	10/05/10	Joy Mart Restaurant	Emi Iko	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1075	10/05/10	Joy Mart Restaurant	Atsuko Miyalce	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1076	10/05/10	Joy Mart Restaurant	Beymer Ryan	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1077	10/05/10	Joy Mart Restaurant	Max Hernandez	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1078	10/05/10	Joy Mart Restaurant	Susan Zabala	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1079	10/05/10	Joy Mart Restaurant	Kim Diaauh	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1080	10/05/10	Joy Mart Restaurant	Kay Hugihara	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1081	10/05/10	Joy Mart Restaurant	Yoko Iizuka	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1082	10/05/10	Joy Mart Restaurant	Amar Mario	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1083	10/05/10	Joy Mart Restaurant	Mai Suzuki	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1084	10/05/10	Joy Mart Restaurant	Yutz Izuneda	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1085	10/06/10	Joy Mart Restaurant	Hiroki Kikuchi	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1086	10/06/10	Joy Mart Restaurant	Kisuka Saori	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1087	10/06/10	Joy Mart Restaurant	Dashbold Dashka	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1088	10/06/10	Joy Mart Restaurant	Niwa Sakurako	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1089	10/06/10	Joy Mart Restaurant	Masaki Yamashita	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1090	10/06/10	Joy Mart Restaurant	Takashi Kunda	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1091	10/06/10	Joy Mart Restaurant	Uehara Yuki	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1092	10/06/10	Joy Mart Restaurant	Alberto Santiago	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1093	10/06/10	Joy Mart Restaurant	Taro Serigano	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1094	10/06/10	Joy Mart Restaurant	Aiko Suzuki	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1095	10/06/10	Joy Mart Restaurant	Kento Kondo	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1096	10/06/10	Joy Mart Restaurant	Anastasta Krylor	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1097	10/06/10	Joy Mart Restaurant	Hiroaki Matsumoto	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1098	10/06/10	Joy Mart Restaurant	Hitomi Kobayashi	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1099	10/06/10	Joy Mart Restaurant	Nasanboyan Myagmar	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1100	10/06/10	Joy Mart Restaurant	Abney D. John	137 Japnese Village Plaza	1			1		1		1		1	1		1		1		1
1101	10/01/10	Gifttime (Hob Nob)	An, Song Nam	141 Japanese Village Plaza		1		1		1		1		1		1		1		1	1
			Judge John Aiso Street																		
1102	10/08/10	Mark Kuwata Associates	Mark Kuwata	104 Judge John Aiso Street	1		1			1		1		1	1		1		1		1
			South Onizuka Street																		
1103	10/04/10	Sanwa Enterprises	Mitsue D.	114 Onizuka St.	1										1		1		1		1
1104	10/04/10	Sanwa Enterprises	Akira Fujimoto	114 Onizuka St.	1										1		1		1		1
1105	10/04/10	Sanwa Enterprises	Henry Sun	114 Onizuka St.	1										1		1		1		1
1106	10/05/10	Sanwa Enterprises	Keiko Asada	114 Onizuka St.											1		1		1		1
1107	10/08/10	Orochan Ramen	Erina Thomas	123 S. Onizuka St., #303	1			1		1		1		1	1		1		1		1
1108	10/08/10	Orochan Ramen	Ionuty Popesiu	123 S. Onizuka St., #303	1			1		1		1		1	1		1		1		1
1109	10/09/10	Orochan Ramen	Yuji Matsumaura	123 S. Onizuka St., #303	1			1		1		1		1	1		1		1		1
1110	10/09/10	Orochan Ramen	Justin Allen Coon	123 S. Onizuka St., #303	1												1		1		1
1111	10/06/10	Hair Craft	Miki Matsumoto	123 S. Onizuka St., #304	1																1

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					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Onizuka Street																		
1112	10/06/10	Hair Craft	Kazuyuki Takahashi	123 S. Onizuka St., #304	1								1								1
1113	10/06/10	Hair Craft	Saori Takahashi	123 S. Onizuka St., #304	1																1
1114	10/06/10	Hair Craft	Chiko Yamashiro	123 S. Onizuka St., #304	1																1
1115	10/06/10	Hair Craft	Natsuko Koshiba	123 S. Onizuka St., #304	1																1
1116	10/08/10	Hair Craft	Yuji Okamoto	123 S. Onizuka St., #304	1																1
1117	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Masaini Oki	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1118	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Yoshiaki Fufushima	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1

1119	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Ken Takeda	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1120	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Lin Zhang	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1121	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Ayako Suzuki	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1122	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Makiko Tanaka	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1123	10/05/10	Starlight Magnex Corp. - Kushi Shabu	Kenji Tanaka	123 S. Onizuka St., #305				1		1	1				1		1		1		1
1124	10/08/10	Starlight Magnex Corp. - Kushi Shabu	Yoshihiro Sugiyama	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1125	10/08/10	Starlight Magnex Corp. - Kushi Shabu	Shuichi Saito	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1126	10/09/10	Starlight Magnex Corp. - Kushi Shabu	Yoko Takeda	123 S. Onizuka St., #305				1		1	1		1		1		1		1		1
1127	10/09/10	Starlight Magnex Corp. - Kushi Shabu	Ken Takeda	123 S. Onizuka St., #305				1		1	1				1		1		1		1
1128	10/06/10	Mako Sushi	Mako Iida	123 S. Onizuka St., #307	1																1
1129	10/06/10	Mako Sushi	Mayumi Iida	123 S. Onizuka St., #307	1																1
1130	10/06/10	Senka Int'l Inc	Mitsuru Koyama	123 S. Onizuka St., #311	1												1		1		1
			San Pedro Street																		
1131	10/05/10	New Japan Travel Center	Yoshitaka Ena	106 S. San Pedro St.	1		1			1		1	1		1		1		1		1
1132	10/05/10	Izkaya Fuga	Stephine Alejandro	111 S. San Pedro St.	1		1			1		1		1	1		1		1		1
1133	10/06/10	Izkaya Fuga	Melvin Lopez	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1134	10/06/10	Izkaya Fuga	Hans Wirachman	111 S. San Pedro St.	1			1		1		1		1	1			1	1		1
1135	10/06/10	Izkaya Fuga	Humperdincic Calderon	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1136	10/06/10	Izkaya Fuga	Sinai M. Prado	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1137	10/06/10	Izkaya Fuga	Isreal Morales	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1138	10/06/10	Izkaya Fuga	Dante Duran	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1139	10/06/10	Izkaya Fuga	Asaka Horiba	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1140	10/06/10	Izkaya Fuga	Mamon Tokuda	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1141	10/07/10	Izkaya Fuga	Yuichi Ito	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1142	10/08/10	Izkaya Fuga	Javier Castro	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1143	10/08/10	Izkaya Fuga	Fernando Navarro	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1144	10/08/10	Izkaya Fuga	Angleo Garcia	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1145	10/08/10	Izkaya Fuga	Andrade Douglas	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1146	10/08/10	Izkaya Fuga	Noel Sebastian	111 S. San Pedro St.	1			1		1		1		1	1		1		1		1
1147	09/28/10	Infinity Janitorial Service	Victor Perez	200 S. San Pedro St., #400C	1			1				1		1	1		1		1		1
1148	09/28/10	Infinity Janitorial Service	Betsy Barrioz	200 S. San Pedro St., #400C	1			1				1		1	1		1		1		1
1149	09/28/10	Ken Nakamura, DDS		200 S. San Pedro St., #401	1		1			1		1		1	1		1		1		1
1150	10/06/10	Japanese Community Pioneer Center	Yasumasa Hirayama	244 S. San Pedro St.		1	1		1			1	1		1		1		1		1
1151	10/07/10	All Japan News	Masayo Nishimura	224 S. San Pedro St., #202	1		1		1			1	1		1		1		1		1
1152	10/07/10	All Japan News	Hiroshi Kawabara	244 S. San Pedro St., #202	1										1		1		1		1
1153	10/07/10	Asahi Gakuen	Junko Ito	244 S. San Pedro St., #308	1										1		1		1		1
1154	10/07/10	Asahi Gakuen	Takuya Ito	244 S. San Pedro St., #308	1										1		1		1		1
1155	10/07/10	Asahi Gakuen	Sueko Kawata	244 S. San Pedro St., #308	1										1		1		1		1
1156	10/07/10	Asahi Gakuen	G. Iwai	244 S. San Pedro St., #308	1										1		1		1		1
1157	10/07/10	Asahi Gakuen		244 S. San Pedro St., #308	1										1		1		1		1
1158	10/07/10	Asahi Gakuen	Mia Onh	244 S. San Pedro St., #308	1										1		1		1		1
1159	10/07/10	Asahi Gakuen	Yoichi Kitazawa	244 S. San Pedro St., #308	1										1		1		1		1
1160	10/07/10	Asahi Gakuen	Kyoko Suda	244 S. San Pedro St., #308	1										1		1		1		1
1161	10/07/10	Asahi Gakuen	Tomoko Hasagawa	244 S. San Pedro St., #308	1										1		1		1		1
1162	10/07/10	Asahi Gakuen	Koichi Ikeda	244 S. San Pedro St., #308	1										1		1		1		1
1163	10/07/10	Asahi Gakuen	Toshihiko Kato	244 S. San Pedro St., #308	1										1		1		1		1
1164	10/07/10	Asahi Gakuen	Hidehiko Ban	244 S. San Pedro St., #308	1										1		1		1		1
1165	10/07/10	Asahi Gakuen	Kaoruko Kawamoto	244 S. San Pedro St., #308	1										1		1		1		1
1166	10/07/10	Asahi Gakuen		244 S. San Pedro St., #308	1										1		1		1		1
1167	10/07/10	Asahi Gakuen	Kikuko Sanchez	244 S. San Pedro St., #308	1										1		1		1		1
1168	10/07/10	Asahi Gakuen	Mari Kawaguchi	244 S. San Pedro St., #308	1										1		1		1		1

Little Business Improvement District

Regional Connector Transait Corridor Project

Survey Poll

	Date	Company Name	Personal Name	Address	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
					No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
					Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
			Other																		
1169	09/30/10	Kajima Development Corporation	Shuichi Sasaka	301 Corporate Center Drive, Monterey Park, CA 91754									1		1		1		1		1
1170	10/05/10			8331 Beverly Dr., San Gabriel, CA 91775	1																1
1171	10/05/10		Yuko Kiyoto	2233 Parkside Ave., LA, CA 90031	1																1
1172	10/05/10	New Town Insurance	Katsuhido Arakaki	3360 Wilshire Bl., #708, LA, CA 90010	1			1		1		1		1	1		1		1		1
1173	10/05/10		Tomoo Kashiwagi	870 S. Gramoy Dr.																	1
1174	10/06/10		Kodo Tanaka	20920 Anza Ave., # 201, Torrance, CA 90503	1										1		1		1		1
1175	10/06/10	Timeless Language Center	Michihiro Nakashima	6360 Wynne Ave., Tarzanna, CA 91335	1										1		1		1		1
1176	10/06/10	Nishimoto Trading Co., LTD	Hitoshi Hashimoto	13409 Orden Drive, Santa Fe Springs, CA 90670	1		1			1		1	1		1		1		1		1
1177	10/06/10	Nishimoto Trading Co., LTD	Hirotake Ikejiri	13409 Orden Drive, Santa Fe Springs, CA 90670	1		1			1		1	1		1		1		1		1
1178	10/06/10	Nishimoto Trading Co., LTD	Teruyuki Tsuira	13409 Orden Drive, Santa Fe Springs, CA 90670	1		1			1		1	1		1		1		1		1
1179	10/06/10	Nishimoto Trading Co., LTD	Norio Yamamoto	13409 Orden Drive, Santa Fe Springs, CA 90670	1		1			1	1		1		1		1		1		1
1180	10/06/10	Edward Chan	Lee Wong	123 S. Figueroa St., Suite 622	1			1		1		1		1	1		1		1		1
1181	10/06/10		Hiromi Sakashita	10520 National Bl., #105, LA, CA 90034	1										1		1		1		1
1182			Fujie Wade		1										1		1		1		1
1183	10/06/10	The Bungalow	Ariza Watanabe	6701 Coldwater Canyon Ave., Noho, CA 91606	1										1		1		1		1

1184	10/06/10		Eri Moriyama	5455 Ventura Cyn Ave., Sherman Oaks, CA 91401	1										1		1		1		1
1185	10/06/10	ITE	Y.K. Tamalan	7101 E. Slauson Ave., LA, CA 90040	1										1		1		1		1
1186	10/07/10	Trading Eagle Co.	Shoichi Hamai	3937A Monterey Pass Road, Monterey Park, CA 91754	1										1		1		1		1
1187	10/07/10		Chikae Tashiro	4353 City Terrace Bl., LA, CA 90063	1																1
1188	10/07/10		Akiko Ishida	2742 Border Ave., Torrance, CA 90501	1																1
1189	10/07/10		Mitsuru Yasobu	411 E. 4th Street, LA, CA 90013	1																1
1190	10/07/10	Surf City Nissan	Izume J. Dor	17331 Beach Blvd., Huntington Beach, CA 92647	1										1		1		1		1
1191	10/07/10		Takao Katayama	1144 W. 148th St., Gardena, CA 90247	1			1		1		1		1		1	1		1		1
1192	10/07/10		Ethel Kamiyama		1										1		1		1		1
1193	10/07/10	Angeles National	Asako Takeuchi		1										1		1		1		1
1194	10/07/10		Carlos M. Regaert		1										1		1		1		1
1195	10/07/10		Mike Morita	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1196	10/07/10		Sachiko Morita	325 E. Boyle Ave., #422, LA, CA 90033	1										1		1		1		1
1197	10/07/10		Obi Kiyama	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1198	10/07/10		Fujio & Chiyoko Matsui	325 E. Boyle Ave., #425, LA, CA 90033	1										1		1		1		1
1199	10/07/10		Kayo Nagatani	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1200	10/07/10		June Yamakido	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1201	10/07/10		Sae Ellsworth	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1202	10/07/10		Kotoko Toji	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1203	10/07/10		Tadayuki Yokoro	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1204	10/07/10		Yoko O'Malley	325 E. Boyle Ave., #405, LA, CA 90033	1										1		1		1		1
1205	10/07/10		Yoshiko Okino	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1206	10/07/10		Toshio Enomoto	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1207	10/07/10		Rose Tanaka	325 E. Boyle Ave., LA, CA 90033	1										1		1		1		1
1208	10/07/10	Numbers Plumbing	Kirk Takahashi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1209		Taira Investment	Kirk Takahashi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1210		Kiwi Land Co.	Kirk Takahashi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1211		Kiwi Land Co.	Osumu Takahasi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1212		Numbers Plumbing	Osumu Takahasi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1213		Taira Investment	Osumu Takahasi	400 E. Riggin St., Monterey Park	1		1		1		1		1		1		1		1		1
1214	10/08/10	I-Com, LLC	Kiyoshi Morihara	1 Cigliano Aisle, Irvine, CA 92606	1										1		1		1		1
1215	10/08/10	Nagatoshi Produce USA, LLC	Kunimitsu Nagatoshi	340 N. Myers St., #B, LA, CA 90033	1										1		1		1		1
1216	10/08/10		Makoto Fukasawa	3215 Lacle Ave., LA, CA 90039	1										1		1		1		1
1217	10/08/10		Chiyoko Yamashiro	335 W. Duarte Rd., Ardadia, CA 91007	1				1						1		1		1		1
1218	10/09/10		Juko Tamura	3175 S. Hoover St., #516, LA, CA 90007	1				1						1		1		1		1
1219	10/09/10		Sumiko Kirk	601 N. Grand Ave., #265, LA, CA 90012	1										1		1		1		1
1220	10/09/10		Tsuyako Kunishige	655 N. Lafayette, LA, CA 90026	1				1						1		1		1		1
1221	10/10/10			8331 Beverly Sr., San Gabriel, CA 91775	1																1
1222	10/11/10	Commercial Waste Service Inc	Aron Petrosian	1128 Mines Ave., Montebello, CA					1						1		1		1		1

Little Business Improvement District

Regional Connector Transait Corridor Project

Survey Poll

Survey Poll Summary	Locally Preferred Alternative										Mitigation Issue						Number of Survey Returned
	No-Build		TSM		At-Grade Alternative		Underground Alternative		Fully Underground Alternative		Preservation of Japanese Business Influence		Business Interruption Compensation		Replacement of On-Street and Off-Street Parking Spaces		
	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	Support	No-Support	
Individual Survey Poll Responses to Each of the Alternative Under Consideration and Mitigation Issues	768	320	188	537	64	659	85	647	122	602	881	59	883	57	889	55	
Total Individual Survey Poll Responses to Each of the Alternative Under Consideration and Mitigation Issues	1,088		725		723		732		724		940		940		944		1,222
Individual - Percentage Tabulations for Each of the Alternative Under Consideration and Mitigation Issue	70.59%	29.41%	25.93%	74.07%	8.85%	91.15%	11.61%	88.39%	16.85%	83.15%	93.72%	6.28%	93.94%	6.06%	94.17%	5.83%	
Percentage to Total Survey Returned	89.03%		59.33%		59.17%		59.90%		59.25%		76.92%		76.92%		77.25%		

BU20

Responses to Comments from Little Tokyo Business Association and Little Tokyo Business Improvement District, Liu, Wilson

Response to Comment BU20-1

Thank you for your comment. Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Please refer to Responses to Comments BU20-2 through BU20-8, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment BU20-2

Comment acknowledged. The survey poll results have been included as part of Comment Letter BU20 in this Final EIS/EIR. Please see Responses to Comments BU20-3 through BU20-8, below, which address the results of the survey poll. Copies of the returned survey forms are available at Metro due to length, and are incorporated herein by reference.

Response to Comment BU20-3

Thank you for your comment. Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU20-4

Comment noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro has since refined the Locally Preferred Alternative to eliminate cut and cover construction on 2nd Street in Little Tokyo, reduce property and business acquisitions, and minimize construction impacts to businesses.

Response to Comment BU20-5

It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro plans to support the community and its businesses during construction using the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, and ensure that impacts to all businesses and cultural resources are minimized. A discussion of the potential impacts of the Locally Preferred Alternative framed by Little Tokyo's concerns as a minority community was provided in Section 4.17.3.5 of the Draft EIS/EIR and this Final EIS/EIR, and Metro believes this analysis is adequate pursuant to NEPA, CEQA, and federal Executive Order 12898. This Final EIS/EIR contains changes based on subsequent alignment refinements that would reduce construction impacts in Little Tokyo.

Response to Comment BU20-6

The survey responses regarding community desire to preserve Japanese business influence and culture are noted. It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by

the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU20-7

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Response to Comment BU20-8

Comment acknowledged. Under the NEPA/CEQA environmental review process, the lead agency decides whether or not to certify this Final EIS/EIR, not the Draft EIS/EIR. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Metro looks forward to continuing coordination with the Little Tokyo Business Association and Little Tokyo Business Improvement District during the remaining phases of the project.

Subject: FW: Regional Connector Comment
Date: Monday, October 4, 2010 3:12 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Darryl Garibay [mailto:dagaribay@sbcglobal.net]
Sent: Monday, October 04, 2010 11:49 AM
To: Regional Connector
Cc: Robert Volk; Douglas Kim Consultant
Subject: Regional Connector Comment

To whom it may concern:

Due to personal/medical ongoing medical issues that have been ongoing in my family of late, I can not make any type of detailed commentary about the Draft EIR. Being a business person in Little Tokyo I am aware of the position that the LTCC has taken and the letter that has been sent to the MTA from the board of the LTCC.

I do want to get on the record and receive acknowledgment back from the MTA the fact that my business, Advanced Parking Systems ("APS") will certainly be directly affected by the Regional Connector in the event that it does become a reality and if the fully underground alternative with a station under the "Volk property" is adopted. 1

In that case, I want to state for the record that I would like to speak with the appropriate individual(s) from the MTA in terms of direct compensation, relocation, etc.. for my business--again APS will not be indirectly affected but directly affected. Likely we will lose our entire business for a period of years due to construction.

Please respond and confirm receipt of the above email message.

Thank you,

Darryl Garibay, President
Advanced **P**arking **S**ystems
544 Mateo Street, Third Floor
Los Angeles, CA 90013
P: 213-628-9500
F: 213-628-9600

BU21

Responses to Comments from Advanced Parking Systems, Garibay, Darryl

Response to Comment BU21-1

Metro will confirm during final design which properties would need to be acquired for the project. Once this process is completed, Metro will contact property owners. As indicated in Section 4.2.1 of the Draft EIS/EIR and this Final EIS/EIR, compensation and relocation assistance will be provided to displaced businesses consistent with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

From: Bryant Ng [mailto:brywng@gmail.com]
Sent: Sunday, October 17, 2010 05:18 PM
To: Regional Connector
Cc: Kerman, Ann; Roybal, Dolores
Subject: Comments on Draft EIS/EIR - Bryant Ng & Kim Luu-Ng

Attached please find our comments for the official record regarding the Regional Connector Draft EIS/EIR in a Word file. I've also included the comments in the body of this email.

Thank you,
Bryant Ng
The Spice Table
114 S. Central Ave.
Los Angeles, CA 90012
818-593-9082

Following are our comments:

- Little Tokyo is one of the few unique neighborhoods in all of Los Angeles, and in the past 5-10 years has really transformed into a destination, not only for tourists, but for locals as well. The soul of Little Tokyo resides in its "mom-and-pop" shops who's fate will be determined by the decisions made by the Metro Board with respect to the Regional Connector Project.
- We support the At-grade alternative because it has the least impact on the Little Tokyo community and because of its lower cost.

1

- Do not take 114 S. Central Ave. (APN 5163018021).
  - If the fully-underground scenario is chosen, please choose the engineering alternative that does not destroy the group of restaurants on Central Ave., including 114 S. Central Ave., soon to be The Spice Table.
  - I am the owner of The Spice Table (serving cuisine influenced by Singapore and Vietnam) that is currently under construction and will open by December of 2010. Located at 114 S. Central Ave. (APN 5163018021). Although we are a "mom-and-pop" restaurant I have spent the majority of my professional culinary career working for well regarded Chefs in Los Angeles, New York, and San Francisco. Most recently I launched Pizzeria Mozza (www. mozza-la.com) as Chef-de-Cuisine, along with its owners Nancy Silverton and Mario Batali, into one of the country's most visible and commercially successful restaurants. During my time at Mozza it received numerous accolades and awards from national and regional publications/organizations including: Los Angeles Times, LA Weekly, New York Times, The Wall Street Journal, San Francisco Chronicle, Gourmet, The James Beard Foundation, Food and Wine, Bon Appétit, Los Angeles Magazine, Wine Spectator, Angelino, Travel and Leisure, Forbes, GQ, Zagat and Michelin. I hope that with my pedigree and with the concept we have for that specific location in Little Tokyo that we grow and add to the Little Tokyo community as well as to the overall landscape of dining in Los Angeles.
  - Our lease was signed prior to the fully underground scenario was introduced. Had we know I would have never have gone into a space that is potentially doomed.
  - This is not trivial, it is our livelihood. This particular location was chosen because of its historic feel (historic brick

2

building) and central location in Little Tokyo. For restaurants the location and "feel" of the place is crucial to the success of the restaurant. The location and natural "feel" cannot be replicated if the restaurant is simply moved. In addition it will take some time to recupe the initial costs for the start up of the restaurant. For most successful restaurants this takes a minimum of 4-5 years. If the fully-underground scenario is passed and the Engineers deem it necessary to destroy our restaurant we will not be able to recupe our costs and start again. Not to mention loss of credibility with those who have invested in us.
    - You will be taking away one of the most unique locations in Little Tokyo. The building at 114 S. Central has been around for over one century. We are spending time and money to restore its natural beauty to add to the already growing neighborhood. It's one of the few buildings of its kind left in Los Angeles.

2 cont'd

- The restaurants along Central Ave. are a main hub of activity in Little Tokyo.
    - Taking it away will negatively impact the Little Tokyo neighborhood.

3

- LTSC may be the political voice of Little Tokyo, but they do not represent all the voices in Little Tokyo and the business owners (even those who are currently unaware of the situation with the Regional Connector, despite efforts to inform them) will band together if the business are taken away or if there is no mitigation.
    - Unfortunately many of the business owners in the area have not voiced their opinion over the course of the Environmental Analysis period. This has been because they have not been adequately informed despite outreach efforts, or simply because they are not accustomed to voicing their opinion.
    - If the businesses are taken away and if there is no appropriate mitigation we and the community will exhaust all legal and political avenues.

4

- Mitigation during the construction phase.
    - Construction is extremely disruptive and will alter our businesses. And in many cases may result in the closure of many "mom-and-pop" shops, which are the soul of Little Tokyo.
    - We ask that there be more than just a mere consideration of mitigation for the businesses impacted by the Regional-connector.
    - Including – "business interruption payments" and well as other issues previously brought up by Little Tokyo members such as:
        - Compensate property owners and businesses that are Relocated.
        - Metro provides extensive marketing program tailored to meet needs of local businesses
        - Metro provides financial resources to community and businesses to provide further targeted marketing
        - Publicize Little Tokyo businesses on Metro buses, construction barriers
        - Provide temporary parking, central valet service
        - Work with LTBA to offset impacts from reduced revenue from Business Improvement District

5

Sincerely,

Bryant Ng and Kim Luu-Ng

Owners of The Spice Table

114 S. Central Ave.

Los Angeles, CA 90012

818-593-9082

Comments r...doc (35.0 KB)

BU22

Responses to Comments from The Spice Table, Ng, Bryant and Kim Luu

Response to Comment BU22-1

Thank you for your comment. Support for the At-Grade Emphasis LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU22-2

Metro analyzed the impacts of these acquisitions, and will minimize acquisitions to the extent feasible. Restaurant ownership and experience is noted. Acquisition of the property in question was analyzed as part of the Underground Emphasis LRT Alternative, which has been under consideration since the Alternatives Analysis phase (October 2007 through early 2009). As indicated in Section 4.2.1 of the Draft EIS/EIR and this Final EIS/EIR, compensation and relocation assistance will be provided to displaced businesses consistent with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The historical significance of the building was evaluated in the comprehensive building inventory at the end of Appendix X, Cultural Resources - Built Environment, of the Draft EIS/EIR and Appendix X, Cultural Resources - Built Environment (Updated), of this Final EIS/EIR. Metro understands the importance of local businesses, and will minimize impacts to businesses and acquisitions to the extent feasible.

Response to Comment BU22-3

Metro recognizes the importance of the restaurants along Central Avenue to the Little Tokyo community, and has refined the Locally Preferred Alternative to minimize acquisitions of these restaurants. Under the refined Locally Preferred Alternative, none of the restaurants fronting Central Avenue would be displaced with the exception of The Spice Table.

Response to Comment BU22-4

Metro has met with the Little Tokyo Business Association and the Little Tokyo Business Improvement District on multiple occasions to discuss the Regional Connector and the Fully Underground LRT Alternative, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR. Advertisements regarding scoping meetings and community updates were printed in local newspapers, including Japanese language publications. Outreach staff has maintained a consistent presence in the community and has gone door-to-door to speak with business owners. Mitigation measures were identified for the Locally Preferred Alternative to address the impacts related to displacement of businesses, and Metro has confirmed their implementation in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Displaced businesses will be compensated and offered relocation assistance per the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as discussed in Section 4.2.1 of the Draft EIS/EIR and this Final EIS/EIR. Metro will mitigate impacts to businesses to the extent feasible. Appropriate mitigation measures proposed in the Draft EIS/EIR (including all feasible mitigation measures proposed by the Little Tokyo Working Group in Section 4.17.5) are confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, and the Record of Decision.

Response to Comment BU22-5

Metro recognizes the construction impacts that the Regional Connector would have in Little Tokyo. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains the confirmed mitigation measures intended to assist Little Tokyo businesses and minimize adverse impacts. Metro believes that these mitigation measures will be comprehensive enough to protect and support businesses during the construction phase of the project. This will include a targeted marketing program developed in conjunction with the business community, including business advertising. Metro will also provide two acres of land on the Mangrove property for the purposes of providing supplemental parking services, such as valet parking services during construction. Metro will continue to work closely with the Little Tokyo Business Association/Little Tokyo Business Improvement District, and expects that the mitigation measures in this Final EIS/EIR will help offset the potential financial impacts of construction.

SUEHIRO CAFÉ, INC.
小東京スエヒロ
JAPANESE RESTAURANT
337 E. 1st Street, Los Angeles, CA 90012
Tel. (213) 626-9132

October 14, 2010

Ms. Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza
Los Angeles, CA 90012-2952

Dear Ms. Dolores Roybal Saltarelli,

I am writing to support a "No build" option concerning the Little Tokyo Regional Connector. 1

I am writing this letter to you on behalf of myself and other business owners that would suffer greatly if this construction were to go forward.

Little Tokyo has a long and important history and part of that history is the businesses that line Little Tokyo. Many of these stores are decades old, couple have past the century mark. Their survival is in part what Little Tokyo is all about. Through many hardships that Little Tokyo has seen, it's these stores that have helped shape and define Little Tokyo. The storefronts are what give life to Little Tokyo; it is what brings people into Little Tokyo. 2

Construction phase of this magnitude has shown that many businesses will not survive to reap the benefits of this new connector. What benefit will this connector serve to Little Tokyo when the life of Little Tokyo is destroyed in the construction?

Unfortunately for us, neither The Little Tokyo Community Council (LTCC) nor the Little Tokyo Working Group (LTWG) has ever approached the merchants (The "mom and pop" stores) and asked us how we felt about this construction; and perhaps you may have felt that the entire community was being represented. We just wanted you to know that LTCC and the LTWG represent only itself and the majority of the community has serious concerns about this project. 3

We are not against progress; however, given the choice between progress and destroying the life of Little Tokyo, there can be but one choice. We have an obligation to protect Little Tokyo, its history and our very own livelihoods and encourage you find other options to keep Little Tokyo safe from destruction.

Sincerely your,

Kenji Suzuki
President, Suehiro Café, Inc.

BU23

Responses to Comments from Suehiro Café, Inc., Suzuki, Kenji

Response to Comment BU23-1

Thank you for your comment. Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU23-2

Metro recognizes the significance of Little Tokyo and its businesses to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses and cultural resources, and will coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro believes that the Regional Connector will benefit the Little Tokyo community through greater accessibility, improved options for traveling to the community without a car, and the potential for improved economic development.

Response to Comment BU23-3

Metro has performed extensive outreach activities to involve Little Tokyo stakeholders in the project development process. Metro has met with the Little Tokyo Business Association and the Little Tokyo Business Improvement District on multiple occasions to discuss the Regional Connector and the Fully Underground LRT Alternative, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR. Advertisements regarding scoping meetings and community updates were printed in local newspapers, including Japanese language publications. Outreach staff has maintained a consistent presence in the community and has gone door-to-door to speak with business owners. Appropriate mitigation measures have been identified to address the impacts to businesses, and Metro has confirmed their implementation in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. It is Metro's goal to minimize impacts to businesses in Little Tokyo.

PROTEST of

JO-ANN AND ROGER GRACE

to the proposed taking of the

Wilcox Building

200-210 S. Spring Street

(APN 5149007006)

and the

Olender Building

212-218 S. Spring Street

(APN 5149007005)

Fact sheet and accompanying booklet

Interior of the Wilcox Building., home in 1896-24 of H. Jevne, premier grocery store on the West Coast. Stairway was copied in Jevne's new store at 6th and Broadway, opened 1906. Jevne's space is now home of the Metropolitan News Company.

1.) The recommendation of a taking of the Wilcox Building at Second and Spring Streets and the Olender Building next to it are based on <u>factually incorrect propositions</u>.

● The major tenant is not, as portrayed in the report[1], a restaurant; it is a newspaper company. The Metropolitan News Company's flagship newspaper is the Metropolitan News-Enterprise, which goes back to 1901. A taking of the buildings owned by Jo-Ann and Roger Grace would be ruinous to their wholly-owned business, the Metropolitan News Company, and thus imperil the continued existence of the Metropolitan News-Enterprise and the Metropolitan News Company's other seven California newspapers.

● While the report contends that there are 40 employees spread among the five businesses in the building, the Metropolitan News Company, alone, employs 47 persons, whose jobs would be put in jeopardy, affecting them and their families.[2] The other businesses employ at least 15 others—for a total of 62.

● This doom-and-gloom assessment—in contrast to what the report conveys of no meaningful potential adverse impact—is not theatrics. It is based on real facts...in particular, the utter impracticability of moving the operations. There is a seven-unit printing press for the newspapers in the basement of the Wilcox Building, and this has significant implications. 1

⇨It would cost a minimum of $300,000 to move the press. Once it were dismantled and reassembled, it is highly likely that its functionality would be severely impaired.

⇨There are few buildings at which a press could be installed due to stringent EPA requirements, exacting foundation requirements, extensive power requirements, and the need for access for newsprint delivery. It is unlikely that a location could be found near the Civic Center. The Metropolitan News Company would lose its competitive advantage of being close to the courthouse, where it processes legal notices.

⇨Most significantly, a move would in all probability spell a crippling of the company's ability to derive revenues from legal advertising, which is its primary source of income, and this would thus mean the death of the company and its newspapers. This involves legal complexities, and cannot be explained in a single sentence. The process of taking the press apart and putting it back together again could not possibly be accomplished over a weekend; an entire week would be closer to reality. Yet, the Metropolitan News-Enterprise and the Los Angeles Bulletin are five-day-a-week publications. Unless the Metropolitan News Company had a new press already installed at a new location—a million-dollar-plus proposition—being displaced from its quarters and relocating its equipment, including the press, would entail suspending publication of its newspapers for several days. If it did that, the newspapers would be vulnerable to a court challenge, by a competitor, to their continued entitlement to carry legal notices. This is because a newspaper, to be able to carry such notices, must have a court adjudication, which requires meeting certain criteria set forth in the Government Code. One criterion is

1. "Regional Connector Transit Corridor Displacement and Relocation Technical memorandum," Page 35.
2. Other businesses with space in the building which would impacted. to the detriment of the businesses and their employees and families are Southland Credit Union, The Blue Cube restaurant, City Employees Assn., and 2nd Street Cigars & Gallery.

being published at "regular intervals." (Government Code §6000). Cessation of publication for several days would mean that the adjudications of the Metropolitan News-Enterprise and the Los Angeles Bulletin, as well as other company newspapers, could be yanked, meaning financial wreckage of the company. To requalify for adjudications, the newspapers would, under §6000, have to published for one year —a year without meaningful revenue. Assuming they could endure for a revenue-dry year—which is *not* conceivable—the Metropolitan News-Enterprise, as a newly adjudicated newspaper, would lose its prized standing as a newspaper that has been eligible to carry legal notices since 1923. It would thus be stripped of its privilege under a statutory "grandfather clause" (Government Code §6006) which presently entitles it, as a pre-1923 newspaper, to be printed outside of the city in which it is published. This loss of grandfathered status would greatly diminish the newspaper's fair market value should its sale ever be contemplated.

2.) The recommendation is based on a report which fails to take into account the historical character of the Wilcox Building, opened in 1896.

- The very space occupied by the Metropolitan News Company (208-210 S. Spring Street) was originally the premises (from 1896-1924) of H. Jevne Company, the premier grocery store in the western United States. Patrons would come in by train from other western states and pick out six months' worth of goods, and the purchased items would be shipped by rail. The store advertised in newspapers in Arizona and elsewhere.

1 cont'd

- Previous historical occupants of the building have included the still-existing and prominent Southwestern University School of Law, the law firm Graves, O'Melveny & Shankland (now known as O'Melveny & Myers), a highly influential civic betterment group then known as the Merchant & Manufacturers Assn. (still in existence as the Employers Group), First National Bank of Los Angeles (its space now occupied by a new form of a bank, a credit union), and numerous luminaries in the legal profession including Joseph Scott, memorialized in a statue in front of the main courthouse, Isidor Dockweiler, who has a county beach named after him, and former District Attorney and later multi-term member of the U.S. House of Representatives James McLachlan.

3.) There is no actual need to buy and raze a history-filled 1896 structure to make room for a parking lot in light of existing vacant property and parking lots in close proximity.

- These locations (depicted in color photographs in the attached booklet) include:

  ⇨Vacant block between Second Street and First Streets, Boardway and Hill Streets (owned by the federal government and unused);
  ⇨Parking lot at 230 S. Spring Street stretching to Broadway;
  ⇨Parking lot at northeast corner of Spring and Third Streets;
  ⇨Parking lot at 252 S. Main Street;
  ⇨Parking Lot at 282 S. Hill St.;
  ⇨Parking lot at 214 S. Broadway:
  ⇨Parking lot at southeast corner of Third and Main Streets;
  ⇨Parking lot at southeast corner of Second and Los Angeles Streets;
  ⇨Parking lot at northwest corner of Second Street and Broadway;

⇨Vacant lot First Street, from Spring Street to Broadway (formerly the site of the state office building);
⇨Parking lot east side of Main Street between Second and Third Streets.

● There is a vague allusion in the report to the possibility of "optional station entrances locations" on our property. To demolish historic buildings on the mere chance that someone would later decide to put an escalator there to an underground depot defies reason. Access could be gained from the lawn of the new LAPD Building, the vacant lot at the northwest corner of Second and Broadway, from the bottom floor of the Los Angeles Times' multi-story parking lot to the south of the proposed depot, or from the southern portion of the Olender Building (212 S. Spring Street) through a minimal partial taking or leasehold.

● The MTA staff knows that 208-210 S. Spring Street is occupied by a newspaper publishing company, *not a restaurant*, contrary to what is stated in the report. Two meetings were held with the MTA staff—on March 23, 2010, and April 28, 2010. Jo-Ann W. Grace, represented herself and Roger M. Grace, as owners of the property, and additionally represented the Metropolitan News Company, of which she is president, with the company also being represented by Vahn C. Babigian, our general manager. The project manager subsequently advised Jo-Ann Grace by telephone that the needs and concerns that had been expressed were appreciated and would be accommodated. Yet, the report, dated March 19, 2010, and released on Sept. 3, includes as an alternative the taking of the Wilcox and Olender buildings, with no acknowledgement that a newspaper publishing company, and its printing press, are on the premises; that one of the newspapers was established in 1901; and that the buildings—which are not even lent the dignity of their names being reflected—have enormous historic value. (The names of the buildings were made known to the MTA at the meetings.) 1 cont'd

● The total area occupied by the newspaper is approximately 33,822 square feet (including basement, main floor and mezzanine). See photo in booklet.

4. The improvident inclusion of the Wilcox Building and the Olender Building in the report as structures to be demolished is causing and will cause irreparable injury to the owners.

● The report, as it affects the Grace-owned properties, is defective. It is a clear fact, not opinion, that the Metropolitan News Company is not a restaurant; it putsa out newspapers. The report does not take into cognizance the historic value of the buildings.

● Yet, based on patently erroneous assumptions of fact, the MTA, in its plan for a subway system, marks the properties as to-be condemned. Legally, this fact must be communicated to prospective tenants. No prospective tenant would enter into a 10-year lease, with obligations of making improvements, if advised that the government was planning to seize the property.

● The space at 218 S. Spring Street, previously occupied by a private company, is presently being used by the Metropolitan News Company while its space at 210 S. Spring Street is undergoing recarpeting and restoration. That will take just a few months. Once completed, the space at 218 S. Street will be, as a practical matter, unrentable in light of the plan—on

the Internet and in printed form, and which the Graces would be legally obliged to disclose—for a government demolition of the premises. The same applies to other unrented space in the two buildings.

- This is a time when newspapers across the nation are faring poorly. The parent company of this county's largest newspaper, the Los Angeles Times, is in bankruptcy. Likewise with the parent of the Daily News and its affiliated newspapers, including the Long Beach Press-Telegram, Pasadena Star-News, Whittier Daily News, Torrance Daily Breeze, and San Gabriel Valley Tribune. In this economy, the rental income periodically is necessary to redirect cash to maintaining the existence of the newspapers. This cannot occur if the rental income is dried up by virtue of the MTA rendering the spaces unrentable by publicly representing that they about to be seized and demolished.

- The refusal of MTA to remove the Grace-owned properties from the endangered list, notwithstanding actual knowledge that the placement there was by virtue of mistaken concepts, constitutes an unreasonable governmental action, and prompt rectification is imperative.

1 cont'd

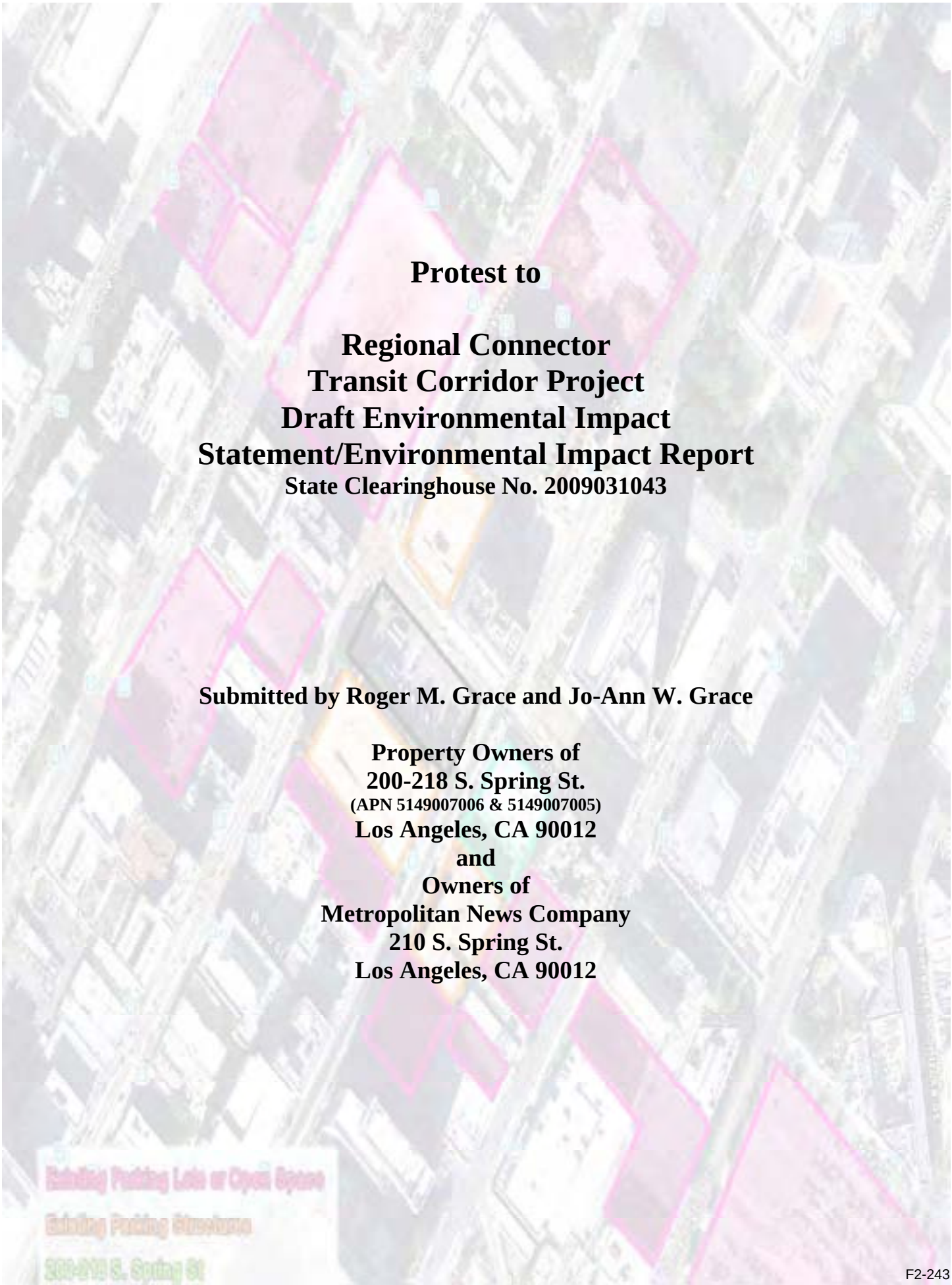
Protest to

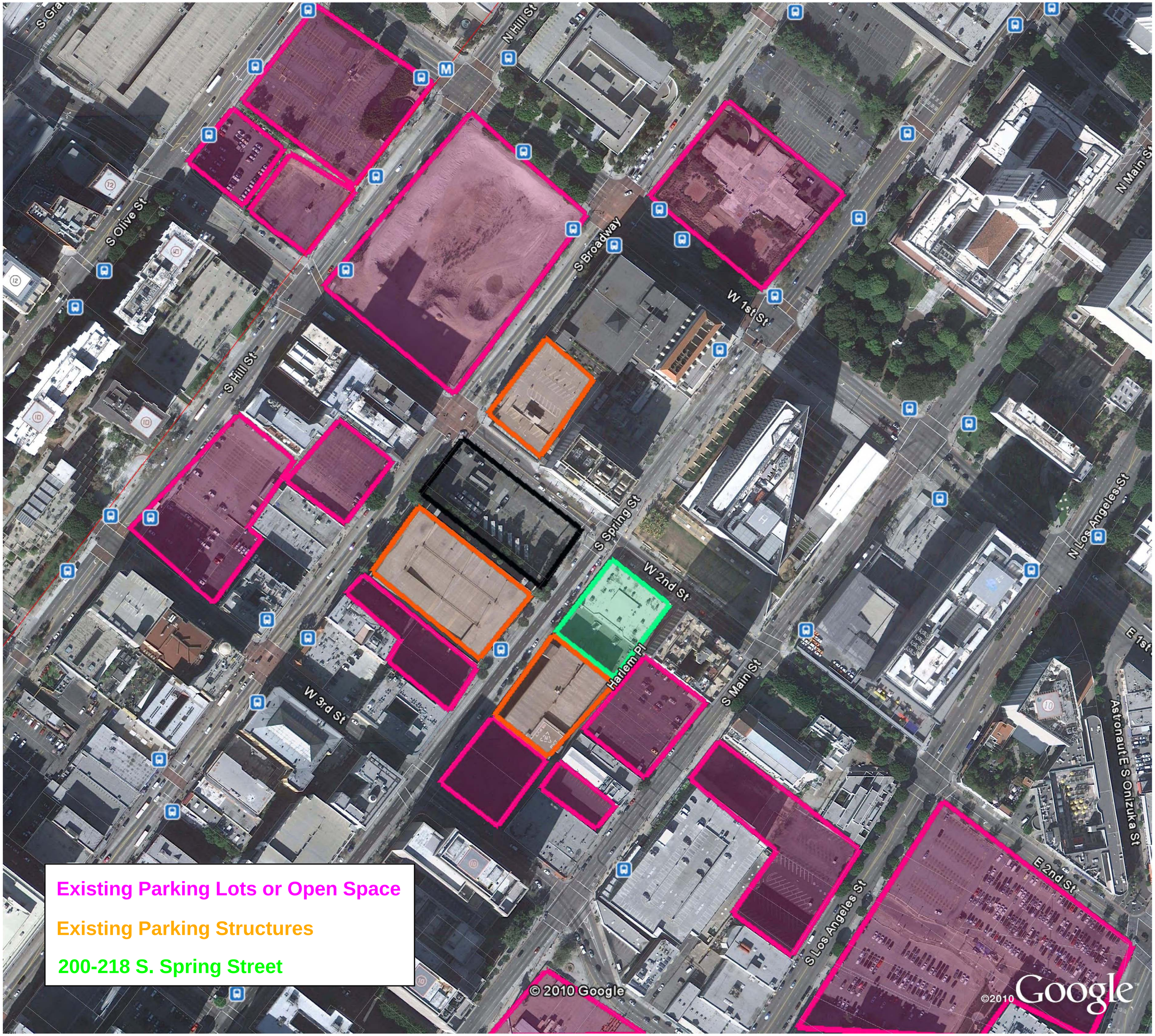
Regional Connector Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report

State Clearinghouse No. 2009031043

Submitted by Roger M. Grace and Jo-Ann W. Grace

Property Owners of
200-218 S. Spring St.
(APN 5149007006 & 5149007005)
Los Angeles, CA 90012
and
Owners of
Metropolitan News Company
210 S. Spring St.
Los Angeles, CA 90012




S Olive St
S Hill St
N Hill St
S Broadway
W 1st St
N Main St
S Spring St
W 2nd St
Harlem Pl
S Main St
W 3rd St
S Los Angeles St
E 2nd St
N Los Angeles St
Astronaut E S Onizuka St
Existing Parking Lots or Open Space
Existing Parking Structures
200-218 S. Spring Street
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Metropolitan News-Enterprise
Est. 1901

210 S. Spring Street, Los Angeles, CA 90013 | Telephone: (213) 628-4384 | FAX: 687-3886

ROGER M. GRACE
Editor/Co-Publisher

Sept. 13, 2010

Ms. Dolores Roybal Saltarelli
Project Manager, Metro
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Wilcox Building (APN 5149007006)
Olender Building (APN 5149007005)

Dear Ms. Saltarelli:

This is to protest the proposed taking of the historic Wilcox Building, at 200-210 South Spring Street, and the Olender Building, at 212-218 S. Spring Street, as part of a possible Second Street underground rapid transit project. My wife, Jo-Ann W. Grace, and I are owners of those properties.

It is my understanding that an underground rail system is contemplated, with a subterranean depot placed in the area boarded by Broadway on the west, Second Street on the east, Spring Street on the north, and the Times parking structure on the south. Under the plan, our land at the southeast corner of Second and Spring Streets would be confiscated and the historic structures upon that land would be razed in order to provide parking for construction vehicles and equipment. The ultimate disposition intended to be made of our land (at a commercially desirable location) is not revealed.

I bring to your attention that information concerning the 1896 Wilcox Building, as well as the Olender Building, as contained in the "Regional Connector Transit Corridor Displacement and Relocation Technical Memorandum," is wholly inaccurate. The gross misimpressions generated by the report flaw it, necessitating that it be withdrawn—including its removal from the Internet—and reissued only after being corrected. In the course of making, and considering, the corrections, the infeasibility of the present proposal to raze our buildings and use the space for temporary parking should become manifest.

The report sets forth at Page 35, with respect to the Wilcox Building:

"This parcel is occupied by a commercial structure that includes five businesses. The businesses located in this parcel include two restaurants, a cigar shop, a credit union, and the City Employees Club....[A taking] would result in no significant adverse impact related to job loss."

The businesses located in this parcel include *one* restaurant, a cigar shop, a credit union, and the City Employees Club. Not mentioned in the report is the primary occupant of the building, at 208-

210 S. Spring Street: the Metropolitan News Company (owned by my wife and myself), which publishes eight California newspapers, including its flagship publication, the *Metropolitan News-Enterprise*, founded in 1901.

The company has its printing press in the basement. It would cost in the hundreds of thousands of dollars to move the press and, after being dissembled and jostled, it is likely that its functionality would be diminished. Locations where it would be possible to secure approval for installation of the press would be severely limited, in light of EPA requirements. Propinquity of the operations to the Civic Center is essential not only for news-gathering purposes, but the processing of legal notices at the Mosk Courthouse. Viable alternative sites might not exist. The present proposal is life-threatening to the company, thus to its newspapers, and to the jobs of its employees. (The report mentions a total of 40 persons being employed by all businesses in the building. The Metropolitan News Company, alone, employs a number greater than 40.)

Too, a building would be demolished that is part of the history of Los Angeles County. In the very space occupied by the Metropolitan News Company, there was from 1896-1914, the premier grocery store on the west coast, owned by Hans Jevne, a civic leader. Persons came by train from the various western states to stock up on goods, which were sent to them by rail.

Among the original tenants were 13 lawyers, one of whom, Joseph Scott, is depicted in the form of a statue in front of the Mosk Courthouse, and another, Isidor Dockweiler, has a county beach named after him. Although the upper stories were removed in 1971 after an earthquake, the bottom floor, mezzanine, and basement remain. The credit union, in essence a bank, is in the very space occupied by the First National Bank of Los Angeles (which later became Security Pacific) from 1901 to Oct. 19, 1929.

Where cigars are now being sold, at 124 West Second Street, steam ship tickets were sold 114 years ago. The building was the home of the California Club, Southwestern University (now Southwestern Law School), and the law firm of Graves, O'Melveny & Shankland (now O'Melveny & Myers).

The Olender Building is likewise an historic Los Angeles structure (and is not vacant).

The MTA knows that 208-210 S. Spring Street is occupied by a newspaper publishing company, *not a restaurant*. Two meetings were held with the MTA staff—on March 23, 2010, and April 28, 2010. My wife, Jo-Ann Grace, represented herself and me, as owners of the property, and represented the Metropolitan News Company, of which she is president, with the company also being represented by Vahn C. Babigian, our general manager.

You subsequently advised my wife that our needs and concerns are appreciated and would be accommodated.

Yet, the report, dated March 19, 2010, and released on Sept. 3, includes as an alternative the confiscation of our buildings, with no acknowledgement that a newspaper publishing company, and its printing press, are on the premises; that one of the newspapers was established in 1901; and that

the buildings—which are not even lent the dignity of their names being reflected—have enormous historic value. (The names of the buildings were made known to the MTA at the meetings.)

Parking space is available for vehicles and equipment without raising muti-million dollar structures. There are parking lots close by. It might even be possible to lease space in them, rather than using powers of condemnation. There exist:

- A multi-level public parking lot on Spring Street, immediately to the south of our buildings (east side), with additional street-level parking south of there, to the end of the block, with some parking in a lot across the street (west side of Spring Street, extending to Broadway).
- Massive public lots behind our buildings (east of them, extending south of them), across from the LAPD parking on Main Street.
- A block-long parking lot south of the Kyoto Grand Hotel, on Second Street, bounded by Los Angeles Street on the West and San Pedro on the east.
- An empty, excavated lot between Second and First Streets, bounded on the east by Broadway and the west by Hill Street.

There is a vague allusion in the "Displacement and Relocation Technical Memorandum" to the *possibility* of "optional station entrances locations" on our property. To demolish historic buildings on the mere chance that someone would later decide to put an escalator there to an underground depot defies reason. Access could be gained from the lawn of the new LAPD Building, the vacant lot at the northwest corner of Second and Broadway, from the bottom floor of the Los Angeles Times' multi-story parking lot, or from our site through a minimal *partial* taking or leasehold.

It truly does not make sense to raze historic structures when land devoid of structures is located nearby—and, with respect to the vacant land at Second and Broadway, is as close to the site of the proposed depot (Second Street between Broadway and Spring Street) as we are.

With respect to a possible transit system that is above-ground, the closing of Second Street to traffic would preclude the delivery to our premises of newsprint. Delivery is made at the rear of our building from Harlem Place which, though officially a street, has the appearance of an alley. It's one-way, with entry on Third Street and exiting on Second. A truck carrying such loads could not back up for an entire block to Third Street. Without newsprint, a newspaper cannot be printed.

As a first step, I ask that the "Regional Connector Transit Corridor Displacement and Relocation Technical Memorandum" be withdrawn, and that it be redrafted, with attention lent to the matters discussed above. I would hope that in light of these considerations, an alternative location be chosen for an area on which to park vehicles and equipment.

Yours truly,

/s/

Roger M. Grace
RMG/mt

Open Space - NE Corner
2nd St. and Broadway.

©2010 Google™

Parking Lot - 230 S. Spring St.

©2010 Google

Parking Lot - Corner of 3rd St. and Spring St.

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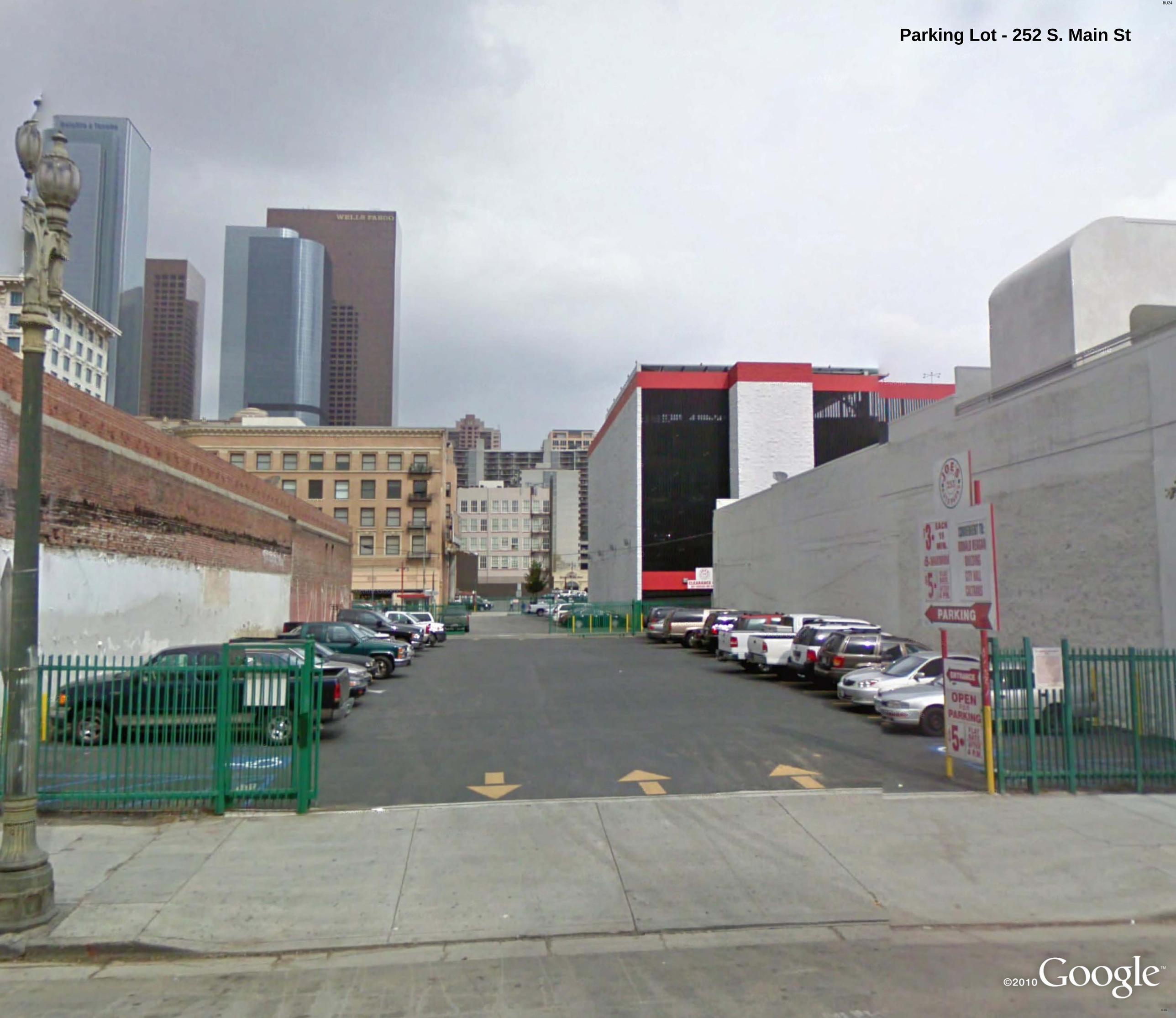
Parking Lot - 252 S. Main St



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Parking Lot - 282 S. Hill St.

Parking Lot - 214 S. Broadway
WELLS FARGO
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BU24

Parking Lot - SE Corner of 3rd St. and Main St.

F2-254

Parking Lot - SE Corner of 2nd St. and Los Angeles St.

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Parking Lot - NW Corner of 2nd St., and Broadway

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Open Space - Corner of 1st. St. and Spring St.

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Parking Lot - Eastside of Main St.
Between 2nd St. and 3rd St.

Parking Lots - Looking Directly West from 200-218 Spring St., Three Large Parking Lots or Open Space are Visible

Parking Lots - Looking Directly East from 200-218 Spring St., Four Large Parking Lots are Visible

Architectural Features within Wilcox Building. 200-218 S. Spring St.

Architectural Features within Wilcox Building.
200-218 S. Spring St.

Architectural Features within Wilcox Building.
200-218 S. Spring St.

BU24

Architectural Features within Wilcox Building.
200-218 S. Spring St.

F2-264

Architectural Features within Wilcox Building.
200-218 S. Spring St.

Architectural Features within Wilcox Building.
200-218 S. Spring St.

Architectural Features within Wilcox Building.
200-218 S. Spring St.

Architectural Features within Wilcox Building.
200-218 S. Spring St.

Metropolitan News Company
Pressroom

F2-269

218 S. Spring St.

BU24

214 S. Spring St.

F2-271

210 S. Spring St.

F2-272

206 S. Spring St.

200 S. Spring St.

BU24

130 W. 2nd St.

124 W. 2nd St.

2nd street
Cigars & Gallery
124
ART
CIGARS
OPEN
124
2nd street
Lounge & Gallery
OPEN ENROLLMENT
AUGUST

BU24

`120 W. 2nd St.

F2-27

NW Corner of 3rd St. and Main St.

Parking Structure - 220 S. Spring St.

Norwegian American

Hans Jevne

Grocer, Civic Leader

1849-1927

Reprinted from the Jan. 11, 2007, issue of the Metropolitan News-Enterprise

REMINISCING (Column)
By ROGER M. GRACE

Norwegian Immigrant Operates Premier L.A. Grocery Store

Supreme among grocery stores west of the Mississippi a century ago was H. Jevne's. It was located right here, where I'm now plunking out this column, at 210 S. Spring Street…the location since 1990 of Metropolitan News Company offices.

I have no idea what was being sold at this spot where my desk and PC are now. Caviar? Wines? Laundry soap? Cheeses? Perfumes? Mops? Candles?

Jevne had them all. Here's an ad which appeared 100 years ago today in the Los Angeles Times featuring smoked bloaters:

H. JEVNE CO.

Fancy Smoked Fish

An appetizing suggestion for Friday's luncheon—Jevne's fancy smoked bloaters. Sweet, tender, of fine flavor and smoked to perfection. Also tempting smoked halibut, in packages and strips; delicious smoked salmon and many other kinds of fancy smoked and salted fish.

Jevne's smoked fish are not the ordinary fish, smoked in the ordinary way. They are the choicest fish procurable, skillfully cured and smoked to retain and develop all their rich flavors.

Phone Your Fish Orders to Jevne's NOW.

SMOKE JEVNE'S FINE CIGARS

208-210 S. SPRING STREET—WILCOX BUILDING

Aside from Jevne ads appearing in the local dailies, they were to be found in out-of-state newspapers. Residents elsewhere were urged to send away for a free catalog and place their orders for shipping, or take the train to L.A. to stock up on merchandise.

"Buy Groceries in Los Angeles." That was the heading on a June 18, 1901 Jevne ad published in the Arizona Republic, which continues:

"Go to Jevne's for hundreds of dainty delicacies that no other grocery store in the Pacific southwest carries....Make a list before you leave on a trip to the coast."

A July 17, 1901 ad in the same newspaper advises:

"Free writing and waiting room at Jevne's in Los Angeles. Have your mail addressed in our care. Come to us for any information you wish. Use us in any way you can. We're always glad to make strangers welcome no matter if you wish to buy groceries, wines or cigars of us or not…."

I don't recall seeing any such an invitation in recent Ralphs, Vons or Albertson's ads.

"Buy enough [groceries] to last six months or a year," an Aug. 8, 1901 ad in the Arizona newspaper suggests.

A steadily growing number of H. Jevne products, such as Jevne Coffee, La Crescenta Olive Oil, and Pot o' Gold Oranges, were available in the early 1900s in grocery stores in Southern California, Arizona, and New Mexico.

The proprietor of H. Jevne Co. was Hans Jevne, born Feb. 28, 1849 in Hamar, Norway. On Oct. 18, 1866, he and his brother Carl came to Chicago to go to work for their older brother, who ran a Norwegian food market. Odd S. Lovoll, in his 1999 book, "The Promise Fulfilled: A Portrait of Norwegian-Americans Today," makes mention of that establishment:

"Norwegian food items were offered to the Norwegian community at immigrant retail stores, such as the one opened in 1865 by the young Christian H. Jevne. Jevne expanded to become a large wholesale and import concern, importing cheese, fish, canned

goods, and aquavit directly from Norway."

Operations expanded, and the store came to serve the populace at large. The first electric light in Chicago is said to have been installed there in 1880, and the store utilized two novel devices: an electric coffee bean roaster and an electric coffee mill.

Hans Jevne worked "first as salesman and afterward as manager in his brother's mammoth establishment, for seventeen years—with but ten days' vacation," according to "Illustrated history of Los Angeles County, California," published in 1889. In that capacity, the book notes, Jevne became a "master of the grocery trade in every detail."

Moving with his wife and 7-year old son to the West Coast in February 1882, for sake of his wife's health, and to Los Angeles the following November, Jevne opened a small shop on North Spring Street, soon shifting to a larger space nearby, and in 1896 relocating to the recently opened Wilcox Building at South Spring and Second Streets. The southern portion of the building where Jevne had his store, and where we now have our offices, was, prior to erection of the building, site of the Empire Livery Stable.

"A History of the Norwegians of Illinois," published in 1905, says that Jevne, as a Los Angeleno, "has grown up, so to speak, with the town, has prospered, and now owns one of the largest as well as the best equipped stores in the country."

There will be more about Jevne next week.

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Reprinted from the March 1, 2007, issue of the Metropolitan News-Enterprise

REMINISCING (Column)
By ROGER M. GRACE

Jevne: Retail Grocer, Wholesaler, Bank Director, Civic Leader

When Norwegian immigrant Hans Jevne first opened up shop in downtown Los Angeles in November 1882, in a small space now within the confines of City Hall, selling groceries to members of the public was his only pursuit. As his business expanded, as he became an "American success story"—to use a once hackneyed and now arcane phrase—his interests multiplied…though his primary and most visible role remained that of a retail grocer.

Jevne "was always on the main floor" of his store, "giving a kind smile and a glad hand of welcome to all who entered his door," Herman W. Frank writes in "Scrapbook of a Western Pioneer," published in 1934. But Frank (a founder of Harris & Frank clothiers) goes on to point to another side of Jevne, saying he was "the type of man with a civic spirit that helped build Los Angeles and the Los Angeles Chamber of Commerce."

Jevne was one of the organizers of the Chamber of Commerce in 1888, a time when the city was experiencing a drastic decrease in population…set then at about 50,000, down from 70,000 in 1880. Among of the group's early efforts was that of seeking to lure mid-west and southern farmers here by means of an exhibition dubbed "California on Wheels," located in a railway car. The car traveled through the farm regions over a two-year period, displaying agricultural products of this state.

As a civic leader, Jevne pushed for causes—such as adoption of a city charter and construction of a deep water harbor in San Pedro—but didn't care to involve himself in partisan politics.

His business interests were varied. The one that went hand-in-hand with the retail grocery operation was his wholesale venture which encompassed the manufacturing of his own brands of products, including Pot 'O' Gold oranges. He produced La Crescenta brand olive oil and was involved in quite a different sort of oil as a director of Western Union Oil Co. and Edmonds Midway Oil Co.

Many of his activities were conducted in the Wilcox Building, at Second and Spring streets. The building was opened in 1896, and Jevne had the space on the first floor at the south end of it (where, as I've noted, this newspaper now has its offices).

On the evening of July 20, 1896—one week before H. Jevne Company opened its new store there—the Merchants and Manufacturers Assn. dedicated its offices in the building and celebrated the formation of its organization, an amalgamation of two existing groups. Jevne had been active in the Merchants' Association, serving on the Executive Committee, and was to be a key player in the fused alliance. He continued to play a major role in the staging of the annual Fiesta de Los Angeles which brought money into the city and was a leader of the group's opposition to an occupational license tax.

On the fifth floor was the California Club, of which Jevne was a charter member, a place where business was transacted over brandy and cigars. The first-floor corner space came to be occupied in 1901 by First National Bank of Los Angeles, of which Jevne was a director.

(Among the other directors of the bank were real estate investor Henry Huntington, who owned much of the county's electric railway system; Walter J. Trask, a founder of the law firm that became Gibson, Dunn & Crutcher and who was to serve as Los

Angeles Bar Assn. president in 1910; C.H. Sessions whose 400-acre dairy ranch adopted the maiden name of his wife, Lynne Wood, with the land later becoming the City of Lynwood; and Jared S. Torrance who was to found the City of Torrance.)

"He was not only one of the city's most substantial business men," the 1932 book "California and Californians" says of Jevne, "but a citizen who took a keen and intelligent interest in the affairs of his community."

Harris Newmark—a leading merchant, a founder of Montebello, and an organizer of the Los Angeles Public Library—says in his 1916 book, "Sixty Years in Southern California," that "Jevne, since his advent here, has been identified with the most important steps in the evolution of the city."

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H. JEVNE.

One of the show features of Los Angeles, to which the resident proudly conducts his guest from the East, is the grocery store of H. Jevne in the Wilcox block on Spring street.

Until recently it could be said, without question, to be the most beautiful and the most perfectly equipped store of that description in the United States. It was so acknowledged by writers in grocery and other trade journals, and by newspaper correspondents who visited the city. Lately one or two others have been designed that may be compared with it, but which do not surpass it.

This store is a monument to the industry, sagacity, and good taste of the

man who built up the business which it harbors. Hans Jevne was born in the great northern peninsula of Europe which has sent to this country so many thousand progressive and successful men. He began the grocery business with his brother, C. Jevne, in Chicago, in 1866, and the splendid success which the great house of C. Jevne & Co. has enjoyed in the metropolis of the Middle West has been reproduced in a degree in the Los Angeles establishment, which bears a similar name but is independent of the other.

H. Jevne came to Los Angeles in 1882, several years before the great "Boom". The store was originally located at 138 North Spring, and in a short time it came to be the leading retail grocery business in Los Angeles and presently included number 136 as well. In 1896 Mr. Jevne moved into the Wilcox block, in the store room 45x160 feet, which was especially designed for his use. The furnishings, which are in polished hardwood, wrought iron and plate glass, were planned throughout by Mr. Jevne himself, and are perfect in their adaptation to the needs of the business, while they are at the same time striking and beautiful in appearance.

In the extent, variety and high grade of excellence of its stock, there are few stores in the United States to be compared with this, a fact which is an evidence not only of the progressiveness of the owner of the business, but also of the select character of the population of Los Angeles which demands goods of this character.

Mr. Jevne does a considerable amount of wholesale business, and has assisted to develop many California products and to push them in the Eastern market. A striking example of the latter is his pure olive oil "La Cresenta," which is making its way all over the country.

Mr. Jevne was for many years a director of the Chamber of Commerce and was one of its founders.

A history of the Chamber of Commerce of Los Angeles, CA: *from its foundation, September, 1888, to the year 1900, Kingsley-Barnes & Neuner, 1899*

BU24

Responses to Comments from Metropolitan News Enterprise, Grace, Roger M. and Jo-Ann W.

Response to Comment BU24-1

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

Subject: FW: Arts District chooses fully underground option
Date: Monday, October 11, 2010 3:33 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Tim Keating [mailto:VALTIM@PACBELL.NET]
Sent: Saturday, October 09, 2010 11:42 AM
To: Regional Connector
Subject: Arts District chooses fully underground option

I have been asked to represent LARABA and LaDADspace on this process.We think that the fully underground option provides the most efficient way to maxaimize the whole light rail system. 1

Another potential exists as we develop the station.We can build out a community art center above,with Theaters,Galleries and music venues,that could anchor a rennasance of the arts in downtown. 2
We are committed to the unlimited potential that this project can provide to advance the cultural life of Los Angeles.
Thank You,Tim Keating,LARABA,LaDADspace,HCNC

BU25

Responses to Comments from LARABA,LaDADspace, Keating, Tim

Response to Comment BU25-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU25-2

Comment acknowledged. Metro looks forward to helping the community explore potential transit oriented development (TOD) opportunities on this parcel and other parcels along the alignment. These separate possible future developments have potential to advance cultural life in Los Angeles.

Dear Metro,

I own the oldest business in Little Tokyo, which was started in 1903 by my Grandfather. My store's name is Fugetsu-do Confectionery at 315 E. First st. LA, Ca.90012.
My family has been thur 107 years of history in Little Tokyo. We have see the great depression, evacuation of Japanese American in 1941, and the worst that I saw, was the redevelopment in Little Tokyo in the 1980s.

This business community has struggled for the last 17 years, after the redevelopment. Our mom and pop friendly shops and the communities closeness was almost destroyed thru the use of emanate domain by the city. Your new proposal has construction down 2nd st. and removing an entire block in little Tokyo. This is not going to be a plus for the businesses here. The block in question has been owned by the Volk family for over 125 years. Mr., Bob Volk is currently the owner and has no wish to have his property taken, unless it is for the good of the community. I think the block is too big of a sacrifice for the connection. We will loss parking spaces, historic buildings, and an area of business mix that has served as a entry point for the local residence that reside just east and south of LT. 1

My major point is as follow.

1) Moving the connection down **Temple Street** is a much easier path. It is bound by mostly governmental buildings. Temple has an empty lot on Temple and on Alameda. The only problem seems to be a misplaced, but important, Japanese American veteran's monument. I think the monument should be moved to the corner of 1st and John Aiso st. It could sit <u>proudly</u> on top of the new underground parking lot and photos could be taken with the City Hall behind it. There it can get the respect it deserves. 2
2) Move the Go For Broke Monument. To First and Judge John Aiso st. (above the underground parking. 3
3) Reclaim property north of MOCA to locate the station. 4
4) Make a seamless connection going to union station only. People continuing on the gold line will have to cross the street to connect to the gold line east. 5
5) Take the line to union station above ground elevated over Alameda. 6
6) It does not make any sense to sacrifice any business and to disturb any others, when the alternative affects none on Temple Street. Let not forget who generates the tax dollars. <u>It is not the non profits</u>. 7
7) Our Community Council is run mostly by Non profits. I am the one that voted no to the alternative down 2nd street. I think that most businesses agree with my point of view. Many businesses will not be able to survive the construction period. Nor do I want to see Business and nonprofit fight over this. For both need each other to form Little Tokyo. 8
8) Please do not consider the route down 2nd st and reevaluate the temple street alternative. The Go For Broke monument should be in a better place anyway.It may not be popular with the vets in the beginning, but if metro can pay to relocate it, I think everyone would be happy in the end. Win! Win! Win! Can you ask for any thing more????????????? 9

Sincerely Yours.
Brian Kito

BU26

Responses to Comments from Fugetsu-do Confectionery, Kito, Brian

Response to Comment BU26-1

Metro has made refinements to the Locally Preferred Alternative in response to community input. The refinements would greatly reduce impacts to businesses. The refined alternative would not involve cut and cover construction on 2nd Street, and would minimize acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The majority of parking spaces and businesses on this block would not need to be acquired. Metro believes that the community will benefit from the Regional Connector once it is in place, and will minimize construction-related impacts to the extent feasible. It is Metro's goal to work with the community and assist businesses through the construction process. Impacts associated with off-street parking loss and property acquisition are analyzed in Section 4.2.3.5 of the Draft EIS/EIR, the Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. Potential impacts to historic structures were analyzed in Section 4.12.1.3.5 of the Draft EIS/EIR.

Response to Comment BU26-2

At the beginning of the Alternatives Analysis study, an initial set of 36 conceptual alternatives was developed, which included several alternatives with alignments along Temple Street. Based on input from stakeholders, agencies, and interested members of the public, the initial set of conceptual alternatives was narrowed to eight. An LRT alternative along Temple Street was one of the eight alternatives considered during the initial screening for the Regional Connector project in the Draft Initial Screening of Alternatives Report (April 2008). The eight alternatives were screened using the goals, objectives, and evaluation criteria established for the project. These eight alternatives were compared using a multi-criteria comparison method model. Overall, the Temple Street alternative did not achieve the Regional Connector project goals and objectives as well as the other alternatives studied during the initial screening. For example, the Temple Street alternative had a smaller population size within a quarter mile of all stations (including households within a quarter mile), a low opportunity for transit oriented design, less direct connections to key activity centers, and less community acceptance compared to the other alternatives studied during the initial screening. Therefore, the Temple Street alternative was not recommended for further analysis in the Draft EIS/EIR.

Response to Comment BU26-3

The Locally Preferred Alternative would not impact the Go For Broke Monument and, therefore, relocation of the monument would not be required. Relocation of the monument is outside the scope of this project.

Response to Comment BU26-4

Please refer to Response to Comment BU26-2, above. Based on the findings contained in the Final Alternatives Analysis Report, the Temple Street alternative was not recommended for further analysis in the Draft EIS/EIR. The property north of MOCA is not necessary for any of the stations under the Locally Preferred Alternative and, therefore, would not be acquired.

Response to Comment BU26-5

The commenter's alignment preference is noted. The Regional Connector Locally Preferred Alternative would include a seamless connection to Union Station via the north-south route (Montclair to Long Beach Transit Mall). Passengers at Regional Connector stations would be able to reach Union Station without transferring. An east-west route (I-605 to Santa Monica) would also be created using the new Regional Connector Transit Corridor tracks.

Response to Comment BU26-6

The commenter's design preference is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Fully Underground LRT Alternative has been designed to travel underground, beneath Alameda Street.

Response to Comment BU26-7

Metro has made refinements to the Locally Preferred Alternative to reduce impacts to businesses, and will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to ensure assistance is provided for affected businesses throughout the construction phase of the project. A worst-case scenario list of businesses that would be acquired was shown in Section 4.2.3.5 of the Draft EIS/EIR, and some of these businesses would no longer need to be acquired due to refinements made to the Locally Preferred Alternative as shown in Section 4.2.3.5 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. An alignment on Temple Street would affect the property containing the Go For Broke Monument, including an existing parking lot business. It is Metro's goal to minimize impacts to businesses and non-profit organizations alike.

Response to Comment BU26-8

Metro intends to work collaboratively with businesses and non-profits alike for the duration of the Regional Connector project. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses and cultural resources, and help them remain intact throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These alignment refinements have also eliminated the need for cut and cover construction on 2nd Street in Little Tokyo, resulting in greatly reduced impacts for 2nd Street businesses.

Response to Comment BU26-9

Please refer to Response to Comment BU26-2, above.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector Transit Corridor Project DEIS/DEIR**
Date: October 15, 2010 3:24:26 PM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, "'Ginny-Marie Brideau'" <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

From: Jim Smith [mailto:jsmith@acemalibu.com]
Sent: Friday, October 15, 2010 2:12 PM
To: Regional Connector
Cc: Bob Iannessa
Subject: Regional Connector Transit Corridor Project DEIS/DEIR

Japanese Village Plaza LLC is the owner of Japanese Village Plaza which will be drastically affected by the construction of this project. Our tenants and property will be severely impacted during this time and we wish to express support for the following:

1 – Fully underground system.
2 – Preservation of Japanese business influence and culture.
3 – Business interruption funds for tenants and property owners.
4 – Replacement of On-street and Off-street parking.

1

Thank you.

Jim Smith

BU27

Responses to Comments from Japanese Village Plaza, Smith, Jim

Response to Comment BU27-1

Support for a fully underground system is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These refinements would reduce construction impacts near the Japanese Village Plaza by eliminating the need for cut and cover activities on 2nd Street in Little Tokyo. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro will continue to meet with the community for the duration of the project.

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation

Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction mitigation measures.

RELATED

October 15, 2010

Ms. Dolores Roybal-Saltarelli
Project Manager
Los Angeles County Metropolitan
Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Mr. Raymond Sukys
Office of Planning and Program
Development
Federal Transit Administration
Region IX
201 Mission Street, Suite 1650
San Francisco, CA 94105

Mr. Ray Tellis
Federal Transit Administration
Region IX
Los Angeles Metropolitan Office
888 S. Figueroa St., Suite 1850
Los Angeles, CA 90017

Re: *Comments on Draft EIS/EIR for Regional Connector Transit Corridor Project*

Dear Ms. Roybal-Saltarelli, Mr. Sukys and Mr. Tellis:

This letter is submitted by The Related Companies, L.P. and Grand Avenue L.A., LLC (collectively Related) and The Broad Collection (Broad). Broad is the developer of a museum (Museum) that will house and display to the public the art collection of The Broad Art Foundation to be located on Parcel L at Grand Avenue and 2nd Street in Downtown Los Angeles. Related is the developer of the future Grand Avenue Project, which is a large-scale mixed use project to be constructed on Parcels L, M-2, Q, W-1 and W-2 along Grand Avenue at 1st and 2nd Streets in Downtown. The Grand Avenue Project and Broad will share in the use of certain facilities, such as a subterranean parking garage to be located under Parcels L. In light of our common interests, Broad and Related jointly submit this letter commenting on the Draft EIS/EIR (DEIS/EIR) prepared for the Regional Connector Transit Corridor Project (Connector Project) by the Federal Transit Administration (FTA) and the Los Angeles County Metropolitan Transit Authority (MTA).

1

RELATED . 333 South Grand Avenue, Suite No. 4050 . Los Angeles, CA 90071 . (213) 984-4110 . (213) 625-1918 FAX

We appreciate the opportunity to comment on the DEIS/EIR since we support the Connector Project. The Project will provide enhanced connectivity and transit service for Downtown and the region. As immediate neighbors to the proposed station at 2nd and Hope Street, we look forward to collaborating with the FTA and MTA towards maximizing connectivity in, around and through our development sites to ensure a first rate experience for transit riders accessing Grand Avenue and its many attractions. 1 cont'd

However, we also wish to ensure that the construction and operation of the Connector Project will occur harmoniously with our properties and take into consideration the sensitivity of the uses contained in our project sites. The Broad Collection is anticipated to house more than $500 million of world class contemporary art, including a multitude of artworks that are extremely sensitive to vibrations and can be easily damaged. The remainder of Parcels L and M, as well as Parcels Q and W, will be developed with residential units, a hotel and a variety of retail and restaurant uses. Keeping in mind the need to preserve the valuable artwork in The Broad Collection, as well as the quality of life of the properties' future residents and users, we submit the following comments and recommendations for the design, construction and operation of the Connector Project. 2

First and foremost, we strongly recommend that the Connector Project be built in the public right of way. We maintain that the simplest way to avoid many of the potential conflicts with the Museum and the Grand Avenue Project is to keep the Connector Project in and under the public right of way. The conceptual drawings provided in the DEIS/EIR indicate significant subsurface encroachment under Parcel L, which has potential impacts to the Museum and the rest of development project to be constructed on that site.

Second, even if the Connector Project is sited in the public right of way, the design, construction and operation of the Project must take into account a variety of issues to ensure that no significant impacts will occur to the Museum or the Grand Avenue Project. For example, with respect to subsurface issues: 3

1. **The Connector Project must be designed and constructed to ensure that any noise or vibration will not adversely affect the Museum or the Grand Avenue Project**. Depending on the distance of the Connector Project to our sites and the vibration damping properties of the bedrock, our projects may experience vibrations due to the tunnel excavation and operation of subway trains.

2. **The Connector Project must be designed and constructed to support the load of the proposed development and not cause any additional structural impacts to the Museum or the Grand Avenue Project**. First, since the proposed tunnel will be located near the heavily loaded foundations for the Museum and Grand Avenue Project, the tunnel excavation and finish design will need to ensure it does not remove or negatively impact any vertical or lateral support needed for the foundations of the Museum and/or Grand Avenue Project. Also, although water was not encountered within 80 feet of the existing ground surface, water may occur at the depth of the proposed tunnels. In the course of tunneling, water may be rapidly removed, increasing the stress on the overlying geologic materials. An increase in stress may impact the foundation system of the Museum and/or Grand Avenue Project. 4

3. **The Connector Project must be designed and constructed to address possible methane deflection toward the Museum or the Grand Avenue Project.** The source of natural-occurring methane in the vicinity of these sites is an oil reservoir and other geologic traps found hundreds to thousands of feet below the ground surface. The methane rises to the ground surface through the rock's primary porosity and through secondary fractures. Considering the size of the tunnel, its proximity and the assumption that it will be sealed from methane seepage, methane that otherwise rise to the ground surface outside the limits of our sites may instead be deflected towards our sites. An increase in methane volume may overload the passive venting system currently required by the Los Angeles Building Code. 5

4. **The Connector Project must be designed and constructed to avoid power outages or interruptions in the area due to relocation of any underground utilities required by the Connector Project.** 6

(These issues are discussed in more detail in the attached letter from Geotechnologies Inc. dated October 2010.) 7

In addition to these subsurface issues, the Connector Project should also address construction management and logistical issues. For example: 8

5. The logistics plan for the proposed station indicates a construction staging zone that extends up GTK to Grand Avenue. This staging area could impact the construction of Related's plaza over GTK Way as well as ingress and egress to and from our properties.

6. Our sites may be adversely affected by traffic congestion and access impacts attributable to construction equipment, activities and trucking associated with the Connector Project. Accordingly, we will request that a detailed construction timeline be provided to us as soon as possible so we can anticipate any disruption to our operations. 9

Finally, as we said earlier, we believe that integration of the proposed station at 2nd and Hope Street with the Museum and Grand Avenue Project can greatly enhance the experience of the user. Accordingly: 10

7. The aesthetic and functional design of the station should be compatible with the Museum and the Grand Avenue Project. In that regard, we would appreciate more information about the visibility of the station toward Upper Grand.

8. We are also interested in the accessible path of travel from the station to Upper Grand since the DEIS/EIR does not identify such a path. There has been discussion of constructing an elevator to transport passengers from the tunnel to the surface, and we have concerns with the potential safety and unpleasant experience of such an elevator. Further, when considering pedestrian access from the station to Upper Grand Avenue, the agencies should consider the likelihood of a public plaza existing over GTK (adjacent to the Museum). 11

9. More details about the reconfiguration of streets in the vicinity of the station and any potential impacts to ingress and egress to and from our properties should be provided. Drawings in the DEIS/EIR appear to indicate that the traffic islands and portions of the streets in the vicinity of the station will be reconfigured to support the construction of a new station. 12

In reviewing the DEIS/EIR, it does not appear that the above issues and potential impacts are analyzed in sufficient detail to determine whether a significant impact may occur or to fashion specific mitigation measures that will ensure that no significant impacts will occur. Instead, the DEIS/EIR appears to rely on *future* studies that may address these potential impacts. (Refer, for example, to Section 4.9 in the DEIS/EIR, pages 4-135-4-148, which addresses geological impacts.) As we understand, neither CEQA nor NEPA permits reliance on such future studies as a basis for lead agencies to conclude that a project will not cause significant environmental impacts or to avoid imposing all necessary mitigation measures before approving the proposed project. 13

Accordingly, we suggest that FTA and MTA adopt a mitigation measure and condition of approval that establishes the following process: 14

A. The appropriate studies will be conducted with respect to the specific issues identified in Items 1 through 10, above, prior to construction.

B. Upon completion of each study, copies will be made available to the appropriate stakeholders and holders of property interests (include Broad and Related) in the Bunker Hill area for their review and comment. The FTA and MTA shall work with the stakeholders to resolve concerns raised in their comments. 15

C. Eventual approval or disapproval of a study by the FTA and MTA shall be structured to allow for an administrative appeal to the governing bodies for the FTA and MTA. 16

D. Further, to ensure effective and timely communication, we request that the FTA and MTA adopt a condition of approval that requires meetings with the relevant stakeholders (including Broad and Related) on a quarterly basis to discuss the progress of the Connector Project and its design and construction. 17

By establishing a process now to address any concerns that may arise when the specifics of the design and engineering of the Connector Project are provided in the future, the Connector Project will be able to fulfill its mission of enhancing regional connectivity, while promoting the variety of cultural and social interests in the Downtown area. We look forward to working with you on this important project. 18

Very truly yours,

WILLIAM A. WITTE
Grand Avenue L.A., LLC

ELI BROAD
The Broad Collection

Geotechnologies, Inc.
Consulting Geotechnical Engineers
Celebrating 40 Years of Service
1971-2011

October 8, 2010
Revised October 15, 2010

File No. 19963

The Broad Art Foundation
10900 Wilshire Boulevard, 12th Floor
Los Angeles, California 90024

Attention: Deborah Kanter

Subject: Commentary Regarding The Proposed MTA Subway
Proposed Broad Foundation Museum
221 South Grand Avenue, Los Angeles, California

References: *Report by Geotechnologies, Inc.:*
Geotechnical Engineering Investigation, dated April 9, 2010, revised April 28, 2010;
Addendum I, dated August 25, 2010.

Communications with the City of Los Angeles, Department of Building and Safety:
Soils Report Approval Letter, dated April 30, 2010, LOG # 70524;
Soils Report Approval Letter, dated September 28, 2010, LOG # 71827.

Ladies and Gentlemen:

This letter has been prepared at the request of Rob Pinkerton, Project Manager for the Broad Collection. It is the understanding of this firm the Metropolitan Transit Authority (MTA) is proposing a subway tunnel that will pass beneath the Second Street tunnel and may even be located under a portion of the proposed Museum. The tunnel will likely be constructed several years after the completion of the Museum. The purpose of this letter is to identify the potential geotechnical concerns that may arise as a result of the construction and operation of the tunnel.

19

The proposed tunnel will be excavated through siltstone bedrock of the Fernando Formation. Groundwater was not encountered within a depth of 80 feet below the ground surface during the geotechnical investigation. The proposed museum is located within a City of Los Angeles Methane Buffer Zone. The proposed structure will be supported on a mix of conventional spread footings and belled, end-bearing caissons. The caissons will extend no deeper than the Second Street Tunnel.

Based on this firm's experience with MTA subway, they are typically two separately-excavated tunnels that are 20 feet in diameter and are placed in a side-by-side or stacked configuration. The tunnels are excavated using a tunnel boring machine. The boring procedure entails advancing the machine a given distance, then inserting a concrete shell to support the tunnel walls. Grouting or cement injection is done on as-needed basis to fill voids or seal the geologic materials behind the concrete shell. After the tunnel is structurally complete, an inner liner is placed that effectively seals the tunnel from water and gas seepage. 19 cont'd

This firm anticipates that there will be several geotechnical issues that will affect the proposed Museum that should be addressed by the MTA during the design phase of the tunnel. The issues are as follows:

- Since the proposed tunnel will be located near the heavily loaded foundations for the museum, the tunnel excavation procedure and finish design may remove vertical and lateral support of the proposed foundations.

- The source of natural-occurring methane in the site vicinity is from an oil reservoir and other geologic traps found hundreds to thousands of feet below the ground surface. The methane rises to the ground surface through the rock's primary porosity and through secondary fractures. Considering the size of the tunnel, it's proximity, and the assumption that it will be sealed from methane seepage, methane that would otherwise the rise to the ground surface outside of the site limits may instead be deflected towards the site. An increase in methane volume may overload the passive venting system currently required by the Los Angeles Building Code. 20

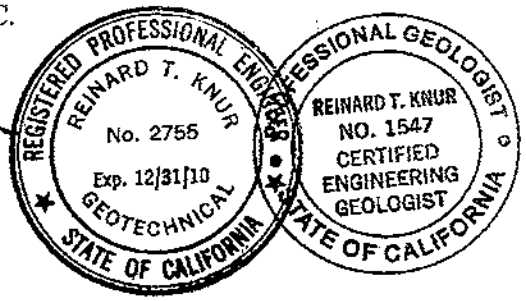
- Depending on the distance to the site and the vibration damping properties of the bedrock, the proposed Museum may experience vibrations due to the tunnel excavation and operation of subway trains. 21

- Although water was not encountered within 80 feet of the existing ground surface, water may occur within the depth of the proposed tunnels. In the course of tunneling, the water may be rapidly removed, increasing the stress of the overlying geologic materials. The increase in stress may impact the foundation system of the proposed Museum. 22

Since any one of these issues may affect the integrity or serviceability of the proposed Museum, these issues are should be addressed as early in the design of the proposed structure and the tunnel design as possible. 23

Should you have any questions, please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.



REINARD T. KNUR
G.E. 2755, C.E.G. 1547

RTK:aa

Distribution: (2) Addressee
(2) The Broad Collection, Attn: Robert Pinkerton

Email to: dkanter@broadfamilyoffice.com
Email to: robertbpinkerton@gmail.com

BU28

Responses to Comments from Related/Companies, L.P./Grand Avenue L.A., LLC/The Broad Collection, Witte, William A.; Broad, Eli

Response to Comment BU28-1

Thank you for your comment. Since this comment letter was submitted, Metro has held meetings with community groups, which included The Related Companies, L.P., Grand Avenue, LLC, and The Broad Collection, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Metro looks forward to collaborating with The Related Companies, L.P., Grand Avenue, LLC, and The Broad Collection through the rest of the design phase and the construction phase of this project.

Response to Comment BU28-2

Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to ensure that no vibration impacts during construction or operation occur at the museum or the residential hotel structure. Metro has performed a geotechnical and vibration study, and concluded that no impacts to the museum and residential hotel structure would occur after mitigation. The geotechnical and vibration study paid close attention to the future museum, residential, and hotel structures, based partly on information provided during meetings with Related and Broad engineers, in order to reach this determination. The results of this study are presented in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. The alignment would provide operational benefits including higher train speeds, more efficient operations, and better access to Upper Grand Avenue for passengers. This station location would allow for a visible and effective connection to the Broad Art Foundation Museum, currently under construction. Metro looks forward to continuing coordination with Related throughout the design and construction process. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which includes tunnels beneath the parcel in question.

Response to Comment BU28-3

Please refer to Response to Comment BU28-2, above.

Response to Comment BU28-4

The tunnel and stations will be designed and constructed to minimize the impact of the existing structures. A preliminary analysis of the impacts of the station excavation on the adjacent structures was performed. In the final design phase, additional analyses will be performed to confirm the prior analysis of stress from the museum/Grand Avenue project on the tunnel, to the extent information from those future developments is known. As part of the analysis, consideration will need to be made for the impact of groundwater changes due to construction. The tunnel excavations will be designed to minimize the impacts to groundwater levels. Final excavation methods will be confirmed with Related Companies and the Broad Foundation.

Response to Comment BU28-5

Previous explorations in the project area have not indicated the presence of methane. Additional sampling of soil gas will occur during the explorations as part of the final design phase. Since methane has not been detected, insignificant diversion of methane is anticipated due to the project construction and permanent structures. Both the tunnels and station facilities will be designed based on the requirement to minimize additional methane seepage to adjacent properties as a result of the Regional Connector construction. This effort will be coordinated with both Related Companies and the Broad Foundation.

Response to Comment BU28-6

Metro will work to minimize any utility service disruptions, and will notify the community in advance should any brief outages be necessary.

Response to Comment BU28-7

Comment acknowledged. Please refer to Responses to Comments BU28-19 through BU28-23, below.

Response to Comment BU28-8

As indicated in Section 4.3, Community and Neighborhood Impacts, of the Draft EIS/EIR and this Final EIS/EIR, mitigation to reduce community and neighborhood impacts during construction of the Locally Preferred Alternative involves the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. In addition, Metro and the construction contractor will coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events.

Response to Comment BU28-9

Comment acknowledged. As indicated in Response to Comment BU28-8 above, mitigation to reduce community and neighborhood impacts during construction of the Locally Preferred Alternative involves the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. In addition, Metro and the construction contractor will coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events.

In addition, Metro will provide Related and other affected property owners in-progress construction schedules of the Locally Preferred Alternative until a detailed construction schedule is finalized and available to provide. This would likely be after issuance of a Record of Decision by FTA.

Response to Comment BU28-10

Comment acknowledged. During the design process, Metro will coordinate with the Broad Foundation and the Related Companies regarding the design of the 2nd/Hope Street station in order to create a cohesive design of the station. New urban design drawings of the Locally Preferred Alternative are available on Metro's website and have been provided at recent urban design meetings held during the preparation of this Final EIS/EIR.

Response to Comment BU28-11

Comment acknowledged. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue and meet ADA compliance, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue. Concepts of the 2nd/Hope Street station will also assume the existence of a plaza space above General Thaddeus Kosciuszko Way, either built as part of the Broad Art Foundation Museum or the Locally Preferred Alternative, to allow for a compatible pedestrian connection to Upper Grand Avenue and to the Broad Art Foundation Museum.

Response to Comment BU28-12

Refined and updated plans and profiles are provided in Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings. Metro staff will continue meeting with the Broad Foundation staff to coordinate property ingress and egress and other design issues.

Response to Comment BU28-13

Adequate studies were performed to arrive at impact determinations in the Draft EIS/EIR. Such determinations are not reliant on future studies, but are based on the studies performed for the Draft EIS/EIR. In cases where specific data was not available, Metro assumed a worst-case scenario to ensure that the actual impacts would be equal to or less than what was studied in the Draft EIS/EIR. Future studies will confirm actual impact levels, but the severity of impacts will not exceed the assumptions studied in the Draft EIS/EIR. Metro will implement all mitigation measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as a condition of project approval.

Response to Comment BU28-14

Items 1 through 9 are addressed separately in the above responses to comments. No item 10 is shown.

Response to Comment BU28-15

During the environmental review process for this project, environmental documents have been made available to the public. The Draft EIS/EIR was circulated to affected local, state, and federal agencies; tribes; community groups; interested individuals; and other interested parties. The document was also made available at Metro's offices, public libraries, and in electronic format on Metro's website. A formal public comment period was initiated following publication of the Draft EIS/EIR, giving the public the opportunity to review and comment on the document.

During preparation of this Final EIS/EIR, Metro met with stakeholders through meetings, which included The Related Companies, L.P., Grand Avenue, LLC, and The Broad Collection, guiding them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation

Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8), which are presented in this Final EIS/EIR.

A Notice of Availability was also distributed notifying the public of the availability of this Final EIS/EIR. The document was also made available at Metro's offices, public libraries, and in electronic format on Metro's website.

Response to Comment BU28-16

Comment acknowledged. Metro and FTA are conducting the environmental analysis for the Regional Connector project in accordance with NEPA and CEQA requirements.

Response to Comment BU28-17

As indicated in Response to Comment BU28-15, Metro has met with stakeholders and community groups during preparation of this Final EIS/EIR. Metro will continue to meet with project stakeholders, including The Related Companies, L.P., Grand Avenue, LLC, and The Broad Collection, as needed to effectively communicate project progress and updates during the rest of the design phase and construction phase of the project.

Response to Comment BU28-18

Comment acknowledged. Metro looks forward to continued coordination with The Related Companies, L.P., Grand Avenue, LLC, and The Broad Collection regarding the Regional Connector project.

Response to Comment BU28-19

Please refer to Response to Comment BU28-4, above. Any potential change in support due to tunneling will continue to be confirmed as part of the final design phase, and coordinated with Related Companies and the Broad Foundation.

Response to Comment BU28-20

Previous explorations in the project area have not indicated the presence of methane. Additional sampling of soil gas will occur during the explorations as part of the final design phase. Since methane has not been detected, insignificant diversion of methane is anticipated due to the project construction and permanent structures. Both the tunnels and station facilities will be designed based on the requirement to minimize additional methane seepage to adjacent properties as a result of the Regional Connector construction. This effort will be coordinated with both Related Companies and the Broad Foundation.

Response to Comment BU28-21

The tunnel and stations will be designed and constructed to minimize potential impacts to existing structures for both construction and operation of trains. Refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR regarding vibration impacts associated with construction and operation of the Regional Connector project. During the continued development of the construction and engineering plans for the tunnels and stations, Metro will continue to work closely with the museum to ensure that vibration impacts are avoided or minimized to a less than significant level. Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) and Section

4.7.4.2 of this Final EIS/EIR, which would reduce vibration impacts associated with construction and operation to less than significant. Metro will further refine proposed construction activities based on ongoing monitoring and technical analysis, in order to reduce vibration.

Response to Comment BU28-22

Static groundwater was not encountered during the geotechnical investigation for the EIS/EIR phase. The rock is not considered to be water-bearing. However, seepage may be expected in Bunker Hill in fractures and joints. More detailed ground-water investigations will be performed to better characterize the groundwater by installing groundwater monitoring wells and multi-level piezometers. Please also refer to Response to Comment to BU28-4, above.

Response to Comment BU28-23

Please refer to Responses to Comments BU28-19 through BU28-22, above.

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Watermarke Properties
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Westin Bonaventure Hotel & Suites
Wilmington Trust, FSB
Wilshire Grand Hotel & Centre
Xpress Holdings, Inc.
Yellin Company

October 18, 2010

Metro Board of Directors
ATTN: Michele Jackson
One Gateway Plaza, Mail Stop 99-3-1
Los Angeles, CA 90012-2952

RE: Support for Regional Connector DEIS/R: Fully-Underground Alternative with Three Stations

Dear Board Members:

Established in 1924, Central City Association (CCA) is L.A.'s premier business advocacy association whose 450 members employ over 350,000 people in the Los Angeles region. CCA is leading the Downtown Los Angeles renaissance and is devoted to promoting a vibrant 24-hour, internationally renowned city center. Increasing mobility is paramount to continuing Downtown's draw as a destination to live, work, and play. On behalf of CCA, I offer this letter in strong support of the $1.3 billion fully-underground Regional Connector, with three stations, as described in the Draft Environmental Impact Statement/Report. 1

The renaissance has transformed Downtown from a 9-to-5 business center into a residential, cultural, and entertainment destination, drawing in 27,000 new residents, 93,500 new jobs, $180 million in tax revenues to the city and county, and $10.9 billion in business revenues. Located in the heart of Downtown, the Regional Connector will create a seamless transit experience and provide straightforward accessibility region-wide.

While CCA originally supported the inclusion of the 5th and Flower station in the Locally Preferred Alternative (LPA), we understand that it could lead to cost overruns, and that a proposal with cost overruns could jeopardize the entire Regional Connector project. We continue to support public transit access to the Financial District and request that Metro consider all reasonable measures to allow for the addition of a future station as the design phase progresses. Should Metro identify additional funding or cost-savings, we would strongly encourage the agency to consider reinstating the 5th and Flower station. 2

We would like to take this opportunity to commend Ann Kerman, Dolores Roybal-Saltarelli, and Metro's consultants whose professionalism and attention to the community has led to a project that we can all be proud of and get behind. 3

As a major Downtown stakeholder, CCA strongly supports the fully-underground alternative, including three stations, as the LPA and requests your support. 4

Thank you for your consideration.

Sincerely,

Carol E. Schatz
President & CEO
Central City Association of Los Angeles

cc: Mr. Arthur T. Leahy, Chief Executive Officer, Metro
Ms. Ann Kerman, Constituent Program Manager, Metro

BU29

Responses to Comments from Central City Association of Los Angeles, Schatz, Carol E.

Response to Comment BU29-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU29-2

Support for the Flower/5th/4th Street station is noted. Metro will continue to examine ways to reduce project costs. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment BU29-3

Thank you for your comment. Comment acknowledged.

Response to Comment BU29-4

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted.

October 20, 2010

Re: **Planning and Programming Committee Meeting**
Regional Connector Transit Corridor Project
Draft Environmental Impact Statement/Environmental Impact Report

Directors - LACMTA

Speaker – Glen Berryhill, Vice President, Thomas Properties Group

Thomas Properties Group ("TPG") is real property owner and property manager of the Financial District properties located at 515-555 South Flower Street, named as "City National Plaza and Towers" in the draft EIS/EIR, and 400 South Flower Street, known as the "J-2 Garage", collectively, the "Adjacent Properties". Both of these properties are immediately adjacent to the Regional Connector Transit Corridor Project ("Regional Connector"). 1

TPG wishes to register support for the Fully Below-Grade LRT Alternative.

However, the staff recommendation includes the elimination of the station proposed immediately north of 5TH Street due to lack of funding. TPG requests that this station continue to be included in the Final EIR and future studies so that the option to include this station is not completely eliminated at this time. A station in this location is beneficial in providing an important and needed connection at the center of the Financial District and adjacent to the Central Library. 2

TPG is supportive of the Fully Underground LRT Alternative but formally opposes the At-Grade Emphasis LRT Alternative with a station proposed immediately south of 5TH Street. 3

Thank you very much for your consideration.

Glen Berryhill

BU30

Responses to Comments from Thomas Properties Group Inc., Berryhill, Glen

Response to Comment BU30-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU30-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment BU30-3

Thank you for your comment. It is noted that the commenter supports for the Fully Underground LRT Alternative and opposes the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Comment for Metro Project**
Date: October 19, 2010 9:56:55 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

-----Original Message-----
From: Ishida [mailto:blishida@earthlink.net]
Sent: Monday, October 18, 2010 10:29 PM
To: Regional Connector
Subject: Comment for Metro Project

1. We want to ask you to consider any other routes besides 2nd Street, such as Temple, 3rd, 4th, 5th, 6th, etc.
As you are aware, 2nd Street is the narrowest and busiest street with so many small retail stores, restaurants and residential buildings.
We also want to ask you to get some technical advises again to research if it is really difficult to chose other routes.
A Metro staff explained at the meeting on 10/13/10, saying that it is not easy to make turn toward Union Station if the train is coming from the direction other than 2nd St.
Please clearfy why it has to be from 2nd St, not from 3rd, 4th or any other.
We cannot understand in that point.

2. Is there any possibility that you can use the existing line (Gold line) to connect to the other line?
It might cost more however, gives community less hassle.

3. We strongly suggest you to consider compensation for stores & restaurants which are located in Little Tokyo area during construction.
If we cannot keep daily sales, many business will not survive and many employees will lose their job.

1
2
3

10/18/10
Hiroshi Brian Ishida (Store owner)
J-WAVE Video

319 E. 2nd Street #112
Los Angeles, CA 90012
213-687-9920
blishida@earthlink.net

BU31

Responses to Comments from J-WAVE Video, Ishida, Hiroshi Brian

Response to Comment BU31-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which includes tunneling beneath 2nd Street. Metro considered alternatives on streets other than 2nd Street in the Alternatives Analysis process. This was documented in the Final Alternatives Analysis Report (Appendix H) of the Draft EIS/EIR and this Final EIS/EIR. Metro has refined the Locally Preferred Alternative, and cut and cover construction along 2nd Street would no longer be needed in Little Tokyo. No surface impacts on 2nd Street in Little Tokyo are anticipated. Alignments along other east-west streets involved higher-risk tunneling under high rise buildings, preclusion of a station serving Bunker Hill, greater property acquisitions, and curves too sharp to be accommodated by Metro's current fleet of light rail trains.

Response to Comment BU31-2

The existing Metro Gold Line operates at-grade in the vicinity of the 1st and Alameda intersection. Since the Regional Connector's new station in Little Tokyo would be underground, the at-grade tracks would have to be replaced by an underground junction and portals in order to make the connection to the existing Metro Gold Line. Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to minimize impacts to businesses.

Response to Comment BU31-3

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
515 South Figueroa, 9th Floor | Los Angeles, CA 90071-3309
Telephone: 213.622.5555 | Facsimile: 213.620.8816
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Patrick A. Perry
E-mail: pperry@allenmatkins.com
Direct Dial: 213.955.5504 File Number: 225957-00001/LA874990.01

Via Electronic and
First Class Mail

October 18, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Re: Regional Connector Transit Corridor Project

Dear Ms. Saltarelli:

This firm represents the Tribune Company, owner and publisher of the Los Angeles Times, which occupies the property located on the block surrounded by West Second Street, South Spring Street, West First Street, and South Broadway (the "Tribune Property"). The Tribune Company also owns the property located south of Second Street between Broadway and Spring Street, which is currently used as a surface parking lot. The Los Angeles Times has regularly supported the efforts of the Metropolitan Transportation Authority ("Metro") to develop new transit facilities throughout the Los Angeles Region. Upon careful review of the Draft Environmental Impact Report/Draft Environmental Impact Statement ("DEIR/DEIS") for the Regional Connector Transit Corridor Project (the "Project"), the Tribune Company nevertheless has a number of concerns regarding potential impacts that the construction and operation of the Project may have with respect to the ongoing operations of the Los Angeles Times. 1

The proposed alignment of each of the light rail transit alternatives studied in the DEIR/DEIS is located along Second Street between Hope Street and Alameda Street and will therefore be immediately adjacent to the Tribune Property between Broadway and Spring Street. Under the At-Grade Emphasis LRT Alternative, trains would travel at grade along this portion of Second Street, which would be dedicated as a transit-only roadway providing only emergency vehicle access and local access to adjacent properties. Under the Underground Emphasis LRT Alternative, trains would travel underground below Second Street, but a station would be located either between Broadway and Spring Street or between Main Street and Los Angeles Street. Under the Fully Underground LRT Alternative, trains would similarly travel underground below Second Street, but there is no option to locate a station between Main Street and Los Angeles Street, and the proposed station would be located between Broadway and Spring Street, immediately adjacent to the Tribune Property.

Each of the three light rail transit alternatives analyzed in the DEIR/DEIS would adversely impact operations at the Tribune Property to varying degrees; however, the fewest adverse impacts would result from the Underground Emphasis LRT Alternative, which locates the proposed station on Second Street between Main Street and Los Angeles Street. The Tribune Company accordingly urges Metro to adopt the Underground Emphasis LRT Alternative with the proposed station to be located between Main Street and Los Angeles Street, or to adopt the Fully Underground LRT Alternative with the proposed station to be relocated to an alternate location. 1 cont'd

The entrance into the main parking structure for the Tribune Property is located on Second Street. Two driveways into the surface parking lot located south of Second Street are also located on Second Street. A majority of the employees of the Los Angeles Times park in a parking facility south of Second Street and walk to the Tribune Property along Spring Street or Broadway. Construction of the Project will interfere with vehicular and pedestrian access to the Tribune Property under any of the Project Alternatives analyzed in the DEIR/DEIS. 2

Operation of the Project will also significantly interfere with pedestrian and vehicular access to the Tribune Property under the At-Grade Emphasis LRT Alternative, which proposes that Second Street be dedicated as a transit-only roadway with limited vehicular access. Vehicular restrictions along Second Street between Broadway and Spring Street will limit vehicular access to the parking structure and the surface parking lot that both have access from Second Street. Should this Alternative be implemented, it is imperative that full access be maintained to the Tribune Property during both construction and operation of the Project. Protection for pedestrians walking to and from the Tribune Property from south of Second Street along Broadway and Spring Street must also be maintained during both construction and operation of the Project should the At-Grade Emphasis LRT Alternative be implemented. 3

The impacts of the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative on the Tribune Property would be similar if a station were located on Second Street between Broadway and Spring Street. In addition to the adverse impacts on pedestrian and vehicular circulation associated with the construction of the At-Grade Emphasis LRT Alternative identified above, use of cut-and-cover techniques proposed in connection with the construction of the segment of the Project located between Broadway and Spring Street would completely disrupt all access to the Tribune Property and adjoining properties from Second Street during construction. Moreover, use of the sidewalks along Broadway and Spring Street both north and south of Second Street for construction staging will exacerbate adverse impacts on pedestrian safety and pedestrian access to the Tribune Property during construction. 4

In addition to adversely impacting access to the Tribune Property, development of the proposed station between Broadway and Spring Street will require the full take of the property located south of Second Street currently used by the Tribune Company for surface parking, as well as the full take of two adjoining properties located south of Second Street and east of Spring Street. 5

The Tribune Company derives parking and filming support revenues from its property located south of Spring Street and also maintains a 15,000 gallon underground fuel storage tank on the property to operate emergency backup generating equipment for the Tribune Property. Displacement of the fuel storage tank not only has the potential to disrupt operations, but few viable alternative locations exist for the relocation of the fuel storage tank. The DEIR/DEIS does not address the potential hazards associated with the risk of upset in connection with the displacement of the existing fuel storage tank or the potential cost or disruption to operations that would result from the displacement of the storage tank.

5 cont'd

In contrast to the difficulties associated with constructing a station between Broadway and Spring Street, development of a station along Second Street between Main Street and Los Angeles Street would involve only a partial take of a portion of the affected property and a permanent underground easement for another portion. Displacement of existing uses would be minimal, and there would be no disruption of access to adjoining properties. If the construction of the proposed station between Main Street and Los Angeles Street is not feasible for other reasons, there are alternative locations for the proposed station along Second Street between Olive Street and Hill Street and between Hill Street and Broadway that would have less impact on surrounding uses. The DEIR/DEIS should therefore analyze additional alternatives for the location of the proposed station that would be less disruptive to existing businesses.

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Thank you very much for the opportunity to provide these comments on the DEIR/DEIS. Please contact me if you have any questions or if I can provide further information with respect to this matter.

Very truly yours,

Patrick A. Perry

PAP

cc: Mr. Ray Tellis

BU32

Responses to Comments from Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Tribune Company, Perry, Patrick A.

Response to Comment BU32-1

Thank you for your comment. Support for the Underground Emphasis LRT Alternative, station option preference, and the Fully Underground LRT Alternative with station relocation is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative includes a station on 2nd Street between Broadway and Spring Street, and does not include a station on 2nd Street between Main and Los Angeles Streets. Metro evaluated all of the proposed alternatives in the Draft EIS/EIR and found that the 2nd/Broadway station location would not result in any more significant impacts than the other locations studied.

Response to Comment BU32-2

The entrances to the parking structure are on Broadway and Spring Street, but there are none on 2nd Street. The surface parking lot would be permanently acquired by Metro as part of the Locally Preferred Alternative, as shown in Table 4.2-5 of the Draft EIS/EIR and this Final EIS/EIR. Metro will work with the Tribune Company to ensure that adequate pedestrian and vehicular access to the Tribune property is maintained during operating hours throughout the construction phase of the project.

Response to Comment BU32-3

Comment acknowledged. Traffic impacts associated with the At-Grade Emphasis LRT Alternative were analyzed in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR. The Locally Preferred Alternative is grade-separated. Therefore, the concerns stated in this comment regarding the At-Grade Emphasis LRT Alternative are not an issue under the Locally Preferred Alternative.

Response to Comment BU32-4

Metro will work with the Tribune Company to ensure that adequate pedestrian and vehicular access to the Tribune property is maintained during operating hours throughout the construction phase of the project. This includes providing adequate sidewalk access. Construction staging areas will be designed to ensure pedestrian safety.

Response to Comment BU32-5

During the construction period of the 2nd/Broadway station, access to the Tribune property would be maintained at all times during operating hours. If existing access points would need to be closed for construction-related activities, temporary access locations would be provided until the existing access points are re-opened. Business compensation and assistance would be provided in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Metro is aware of the existing fuel tank. Metro will relocate the tank during construction to allow it to continue operating. No significant impacts are anticipated.

Response to Comment BU32-6

The Locally Preferred Alternative would have a station beneath 2nd Street between Broadway and Spring Street. Metro evaluated other potential station locations on 2nd Street but found that they would offer poor connections to the proposed downtown streetcar project on Broadway, or would require greater business displacements. As shown in Section 4.2.3 of the Draft EIS/EIR and Section 5.4.1.3 (and referenced in Section 5.5.1.3) of Appendix N, Displacement and Relocation Technical Memorandum, of the Draft EIS/EIR, and Section 4.2.3 of this Final EIS/EIR, there would be no significant impacts associated with the displacement of the existing parking lot at 201 South Spring Street and 200 and 208 South Broadway. Metro is working to minimize the potential for disruption of existing businesses.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Comments Metro Regional Connector**
Date: October 19, 2010 10:01:59 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: fhashimoto@mikawayausa.com [mailto:FHashimoto@mikawayausa.com]
Sent: Sunday, October 17, 2010 1:07 AM
To: Regional Connector
Subject: Comments Metro Regional Connector

Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: DEIS/DEIR – Regional Connector Transit System

As a person whose family has been doing business in Little Tokyo since 1910, a resident in Little Tokyo, and a member of many community organizations,

I would like to support the fully underground alternative but have serious concerns with respect to the substantial construction phase impacts that will occur during the pre-construction and the actual construction phase of the Regional Connector Project. Among the key concerns as addressed in the current DEIS/DEIR, but is not limited to, is as follow: 1

A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo is one of the three remaining "Japan Towns" in the United States, the other two are in San Francisco and San Jose. Before World War II, Little Tokyo 2

was the largest Japanese-American community. Little Tokyo once encompassed a larger area than today.

Little Tokyo has existed since the early 1900's, and has included commercial and residential uses. During World War II and the Japanese internment, Little Tokyo was abolished and renamed Bronzeville. Bronzeville was comprised primarily of African-Americans and Hispanics. Upon the return of interred Japanese, Little Tokyo was revitalized as a Japanese-American community, though not on the pre-war scale. In 1970, Little Tokyo was designated a redevelopment area by the Community Redevelopment Agency of the City of Los Angeles. With the assistance of the CRA/LA, Little Tokyo became the entry point for Japanese corporations into Southern California. Japanese business influence led to further changes in the social, political, physical, and economic environment of Little Tokyo as well as enriching the cultural identity that has made Little Tokyo a unique community and business

2 cont'd

center..

Little Tokyo has a large number of Japanese restaurants and other retail stores. Businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussions needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese identity influence and culture.***

B. Business Interruption: The current DEIS/DEIR has identified

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numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the course of construction, every effort shall be made to minimize adverse impacts which, businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project.

3 cont'd

C. ***Replacement On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all of the build alternatives. Construction of the Regional Connector Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction would result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours , which will impede pedestrian flow.

Numerous Little Tokyo street level businesses relay on on-street parking for their patrons and the street-level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street level businesses will seeking alternative

4

communities for similar products and services, resulting in serious economic hardship to the Little Tokyo businesses.

All off-street parking spaces loss through eminent domain shall be replaced. All on-street and off-street parking spaces taken away during the course of construction shall be replaced. Alternative or temporary parking during construction should be identified and

utilized.

4 cont'd

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economical impacts, as well as affect the quality of life for the many residents, and members of the many organizations, which in turn will affect the future of the entire Little Tokyo Community and surrounding communities. I implore

MTA to seriously study and act to address these mitigation issues.

5

Sincerely,

Frances Hashimoto
Mikawaya
800 E. Fourth Street
Los Angeles, CA 90013
Phone: (213)280 6662 Fax: (213) 625-0943
E mail: fhashimoto@mikawayausa.com

BU33

Responses to Comments from Mikawaya, Hashimoto, Frances

Response to Comment BU33-1

Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The pre-construction and construction concerns are addressed individually in Responses to Comments BU33-2 through BU33-5, below.

Response to Comment BU33-2

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These refinements would reduce construction impacts near the Japanese Village Plaza by eliminating the need for cut and cover activities on 2nd Street in Little Tokyo. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro will continue to meet with the community for the duration of the project.

Response to Comment BU33-3

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU33-4

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed

to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Response to Comment BU33-5

Comment acknowledged. Please refer to Responses to Comments BU33-1 through BU33-4, above, for detailed responses to concerns raised by the commenter about project-related construction impacts to the Little Tokyo community. In addition, construction and economic impacts associated with the project were analyzed in Sections 4.14, Economic and Fiscal Impacts, and 4.18, Construction Impacts, of the Draft EIS/EIR and Sections 4.14, Economic and Fiscal Impacts, and 4.18, Construction Impacts, for the Locally Preferred Alternative in this Final EIS/EIR.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Regional Connector Project in Los Angeles/Little Tokyo**
Date: October 19, 2010 9:57:31 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

-----Original Message-----
From: chickybalkin@yahoo.com [mailto:chickybalkin@yahoo.com]
Sent: Monday, October 18, 2010 9:05 PM
To: Regional Connector
Subject: Regional Connector Project in Los Angeles/Little Tokyo

Dolores Roybal Saltarelli, Project Manager
Metro
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Regional Connector Project in Los Angeles/Little Tokyo

Dear Dolores Saltarelli and Metro Board Committee:

Thank you for allowing us to share our comments on the Regional Connector Project.

After reviewing Draft EIR/EIRwe strongly oppose any project coming through the narrow streetso this small community. The Metro project that will be paving it's way along 2nd Street will destroy the charm of the community and also irrevocably impact hundreds' of taxpayers' livelihoods. Japanese citizens of multiple generations will be forced to endure untenable financial losses during an unpredictable 4-5 year project.

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Although the opposition might argue that this project will create jobs, a larger number of jobs in this community will be lost. The closed or barely surviving businesses will also yield losses of tax revenue, and the street closures will mean losses of parking revenues. How will customers patronize these businesses while this street is blocked with limited access? And how will these shopowners

be compensated for their losses during this extremely long time period? I only hope that they will be compensated substantially and in good faith. 1 cont'd

Therefore, we are in favor of 'No Build." Please do not allow this project to continue down this path. It will not only create economic hardships for individual business owners and the city, but also destroy an important culture in LA that many generations have preserved for the current generations and the future. 2

Respectfully,

Arlene Akemi Balkin
Levy Affiliated Holdings, LLC
201 Wilshire Blvd, Suite A28
Santa Monica, CA 90401
Tel: (310) 395-5200
email: arlene@levyaffiliated.com

BU34

Responses to Comments from Levy Affiliated Holdings, LLC, Balkin, Arlene Akemi

Response to Comment BU34-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. This alternative would not involve street-running tracks on 2nd Street. Construction durations for the Fully Underground LRT Alternative were shown in Table 4.18-2 of the Draft EIS/EIR and for the Locally Preferred Alternative in Table 4.18-1 of this Final EIS/EIR. The entire construction process would take four to five years, but the duration of construction in any one location in Little Tokyo would be less than four years. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR with the goal of supporting businesses throughout the construction phase. This will include targeted marketing efforts and other in-kind assistance. Metro will also provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction in order to preserve the accessibility of the neighborhood during construction. Metro will minimize street lane closures, and will maintain access to businesses throughout the construction process.

Response to Comment BU34-2

Thank you for your comment. Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Impacts associated with each alternative were described in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR.

Subject: Comment on subway project on 2nd Street
Date: Monday, October 18, 2010 8:28 AM
From: Yuji Okamoto <yujihaircraft@hotmail.com>
To: Regional Connector <RSC_RegionalConnector@metro.net>

This message is to Ms. Dolores Roybal Saltarelli-Project Manager,

My name is Yuji Okamoto, the ower of hair salon called Hair Craft located within the building of Weller Court on 2nd Street.

I heard about the project of subway construction going under the 2nd Street. First of all, I am not opposing towards the project itself. I would rather be happy about the new subway system created within our city. However, the 2nd Street has been newly developed within recent few years. As you may know, there are more tall modern buildings on 2nd Street than 1st, and more people tend to come to 2nd Street rather than the 1st now. There are only restaurants on 1st Street, but we have different type of stores on 2nd Street including grocery market - you know there is no other grocery market in that area. 1

If you try to construct the subway underneath of 2nd Street, it only bothers our business but also lots of customers. Besides, there are some public buildings along the street. I wonder if it is good idea to block those area for certain period. We have very limited parking spot within the Little Tokyo that if those parking will be eliminated or block even for short period, we are loosing business completely.

I would suggest you to investigate little more towards the 3rd or even 4th Street. There are so many storage buildings or open field along that area. That would be much ideal area for construction. 2

Please re-consider the line going underneath of 2nd Street.

Regards,

Yuji

BU35

Responses to Comments from Hair Craft Salon, Okamoto, Yuji

Response to Comment BU35-1

Project alternatives involving alignments on 2nd Street were first developed as part of the Alternatives Analysis process and presented to the Little Tokyo community in 2007. To date, no new buildings have been constructed on 2nd Street since the inception of these alternatives. Potential alignments on 1st Street were studied in the Alternatives Analysis process and eliminated from further consideration due to potential difficulties in making the connection to the Metro Gold Line at-grade and desire to avoid construction activities in the Little Tokyo Historic Core.

Metro recognizes the uniqueness of businesses in Little Tokyo and will continue to work with the community to minimize adverse impacts. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Temporary intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. No surface disruption or impacts to businesses on 2nd Street in Little Tokyo are anticipated as a result of the passage of the tunnel boring machine. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction mitigation measures.

Response to Comment BU35-2

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which includes tunneling beneath 2nd Street. Metro considered alternatives on streets other than 2nd Street in the Alternatives Analysis process. This was documented in the Final Alternatives Analysis Report (Appendix H) of the Draft EIS/EIR and this Final EIS/EIR. Metro has refined the Locally Preferred Alternative, and cut and cover construction along 2nd Street would no longer be needed in Little Tokyo. No surface impacts on 2nd Street in Little Tokyo are anticipated. Alignments along other east-west streets involved higher-risk tunneling under high rise buildings, preclusion of a station serving Bunker Hill, greater property acquisitions, and curves too sharp to be accommodated by Metro's current fleet of light rail trains.

Thomas Properties Group INC

City National Plaza
515 South Flower Street
Sixth Floor
Los Angeles, CA 90071

www.tpgre.com

213.613.1900
Fax 213.633.4760

October 15, 2010

VIA E-MAIL AND U.S. MAIL
Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
Email: roybald@metro.net

Mr. Ray Tellis
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017
Email: ray.tellis@dot.gov

Re: State Clearinghouse No. 2009031043
Los Angeles County Metropolitan Transportation Authority
Regional Connector Transit Corridor Project
Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Roybal Saltarelli and Mr. Tellis:

Thomas Properties Group ("TPG") is real property owner and property manager of the properties located at 515-555 South Flower Street, named as "City National Plaza and Towers" in the subject document, and 400 South Flower Street, known as the "J-2 Garage", collectively, the "Adjacent Properties". Both of these properties are immediately adjacent to the proposed locations of the Los Angeles County Metropolitan Transportation Authority ("LACMTA") Regional Connector Transit Corridor Project ("Regional Connector"). Pursuant to CEQA/NEPA, the following comments are submitted for consideration.

LACMTA has proposed three alternatives for the Regional Connector as follows:

- At-Grade Emphasis LRT Alternative;
- Underground Emphasis LRT Alternative; and
- Fully Underground LRT Alternative.

TPG understands that the Regional Connector will be constructed and that its path will follow Flower Street in immediate proximity to the Adjacent Properties. As developer, owner, and property manager of predominantly sustainable, transit-oriented developments, TPG is in overall support of mass transit, and of the Regional Connector project specifically. However, TPG has a significant economic interest in ensuring the minimization of the short-term construction impacts in the vicinity of the Adjacent Properties and on the tenants, employees, patrons, and visitors of the Adjacent Properties.

1

Specifically, TPG would like to register support for the Fully Underground LRT Alternative. It is our understanding that the LACMTA staff recommendation includes the elimination of the station proposed immediately north of 5th Street due to lack of funding. TPG would like to request that this station continue to be included in the Final EIR and future studies so that the option to include this station is not completely eliminated at this time. A station in this location would be beneficial to provide an important and needed connection at the center of the Financial District and adjacent to the Central Library.

1 cont'd

2

While TPG is supportive of the Fully Underground LRT Alternative; TPG formally opposes the At-Grade Emphasis LRT Alternative inclusive of the proposed below-grade station immediately south of 5th Street. The At-Grade Emphasis LRT Alternative requires a partial take of property for the proposed below-grade station and at-grade access to that station which would be located on the west side of Flower Street adjacent to and under City National Plaza and Towers. This alternative and the resulting take of property would disrupt the substantial enjoyment of, and have the potential to impact business operations at, the City National Plaza and Towers for the following reasons:

- Use of and access to the outdoor pedestrian plaza could be limited, restricted, or eliminated both during construction and operation of this alternative.
- Access to and operation of the subsurface garage which extends to the curb-line in this location could be disrupted both during construction and operation of this alternative.
- Infrastructure, e.g., utilities, providing service to and supporting City National Plaza and Towers could be disrupted both during construction and operation of this alternative.
- Lateral support of the 4-level subsurface structure could be jeopardized by construction of a station adjoining the City National Plaza and Towers property.

3

In light of the proximity and potential impacts to the Adjacent Properties, TPG requests the following:

- LACMTA should consider additional mitigation measures to address the significant traffic impacts identified in the Draft EIR (decreased LOS) that result from the changes to the number of traffic lanes in the immediate vicinity of the Adjacent Properties on Flower Street.

4

- While construction of the tunnel under Flower Street would be performed using cut-and-cover construction, access and circulation impacts could still result at City National Plaza and Towers and the J2 Garage. 5
- With the J2 Garage located across the street from the City National Plaza and Towers, many individuals employed at or visiting City National Plaza and Towers are required to cross both 5th Street and Flower Street; therefore, the safety and maintenance of a pedestrian connection between the Adjacent Properties is necessary at all times (as more generally indicated in the Draft EIR). 6
- TPG provides shuttle service to Union Station, Staples Center and other downtown destinations from the plaza on Flower Street. Furthermore, there is a heavy concentration of transportation lines with stops directly adjacent to the City National Plaza and Towers immediately south of 5th Street. These transportation lines are heavily utilized by employees, tenants, patrons, and visitors of City National Plaza and Towers. Therefore, in addition to mitigation measures in the Draft EIR addressing access to the bus lines, the shuttles should also be addressed. 7
- While City National Plaza and Towers has not been identified as a sensitive receptor in the noise and vibration analysis, due to the immediate proximity of construction to the Adjacent Properties, noise and vibration have the potential to substantially alter the existing ambient noise and vibration environment. General mitigation measures have been identified in the Draft EIR; however, no mitigation measure has been specifically identified to address the substantial change in ambient noise levels in the vicinity of the Adjacent Properties. 8
- Construction under Flower Street has the potential to significantly impact the lateral support of the subterranean garage at both City National Plaza and Towers and the J2 Garage. Specific mitigation measures related to this potential impact need to be addressed in consultation with TPG. 9
- The Draft EIR indicates that an easement is needed for construction staging at the plaza of City National Plaza and Towers. Due to the heavy volume of pedestrians and the number of transportation lines in this location, at no time should the plaza or adjacent sidewalk at City National Plaza and Towers be utilized for construction staging. 10

For all of these reasons, TPG respectfully requests that we be an active participant in planning for construction staging and logistics in those areas adjoining the Adjacent Properties. As owner and property manager of two properties whose operations, employees, tenants, patrons, and visitors will 11

be directly, and negatively, impacted by construction of any of the alternatives, and given the extreme reliance on the functionality of both 5th Street and Flower Streets, TPG has a vested interest in minimizing the short-term impacts of construction. As indicated above, TPG expects to be intimately involved during the planning phases to ensure that LACMTA provides all feasible mitigation measures to reduce construction impacts and effects in the vicinity of the Adjacent Properties. 11 cont'd

TPG looks forward to working with LACMTA for the long-term success of the Regional Connector project and the Fully Below-Grade LRT Alternative.

Sincerely,

Thomas S. Ricci
Executive Vice President

TSR/ct

BU36

Responses to Comments from Thomas Properties Group Inc., Ricci, Thomas S.

Response to Comment BU36-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU36-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment BU36-3

Support for the Fully Underground LRT Alternative is noted. The At-Grade Emphasis LRT Alternative is not the designated Locally Preferred Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, with the elimination of the Flower/5th/4th Street station. However, construction of a station at this location as a future, separate project would not be precluded by the design of the Locally Preferred Alternative.

Metro plans to minimize the area needed for construction of the Locally Preferred Alternative to the extent feasible. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, building protection measures such as underpinning or ground improvement combined with a geotechnical monitoring program would be used to monitor and protect structures identified for such measures. In addition, prior to construction utilities that would conflict with excavations would be relocated, modified, or protected in place.

Response to Comment BU36-4

Mitigation measures were incorporated in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR to reduce intersection impacts associated with each alternative to the maximum extent feasible. Mitigation identified for the Fully Underground LRT Alternative includes:

- Flower Street/4th Street – Restripe the southbound Flower Street approach to provide one shared left-turn/through lane and two through lanes. Then optimize the signal splits.
- Flower Street/5th Street – Restripe the southbound Flower Street approach to provide three through lanes and one exclusive right-turn lane. Then optimize the signal splits.
- Flower Street/6th Street – Restripe the eastbound 6th Street approach to provide three through lanes and two exclusive right-turn lanes. Then optimize the signal splits.

After implementation of mitigation for the Fully Underground LRT Alternative, one intersection would continue to be significantly impacted during the AM peak hour. In the PM peak hour, impacts to all three intersections would be reduced to less than significant.

The above-mentioned mitigation measures have been confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU36-5

As stated in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR, construction-related traffic and pedestrian access impacts would be significant and unavoidable. However, access to the City National Plaza would be maintained during operating hours throughout project construction. Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR identified mitigation measures to reduce traffic circulation and pedestrian access impacts associated with construction to the maximum extent feasible such as: preparation of site- and street-specific Worksite Traffic Control Plans in cooperation with the Los Angeles Department of Transportation; maintenance of access to adjacent businesses via existing or temporary driveways throughout the construction period; approval of sidewalk closures by the affected agency having jurisdiction and closure of only one side of the street at a time; and if crosswalks are temporarily closed, pedestrians would be directed to use one that is in close proximity to a closed one.

Response to Comment BU36-6

Comment acknowledged. Chapter 3, Transportation Impacts and Mitigation, Section 4.3, Community and Neighborhood Impacts, and Section 4.15, Safety and Security, of the Draft EIS/EIR identified mitigation measures to provide for the safety of pedestrians in the areas of construction activity and maintain adequate crosswalks during construction. For example, special facilities such as handrails, fences, and walkways would be provided for the safety of pedestrians in areas where construction activities would impact sidewalk areas. Please refer to Response to Comment BU36-5, above, for additional examples.

Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU36-7

Metro will ensure shuttle bus access to City National Plaza is maintained during construction. This mitigation measure has been added to the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU36-8

Some land use types are more sensitive to noise than others. For example, parks, churches, and residences are typically more noise-sensitive than industrial and commercial areas. The noise analysis contained in Section 4.7, Noise and Vibration, of the Draft EIS/EIR and this Final EIS/EIR used the FTA noise impact criteria classification of sensitive land uses:

- Category 1: Buildings or parks where low noise is an essential element of their purpose (e.g., amphitheaters and concert pavilions)
- Category 2: Buildings where people normally sleep, including residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance
- Category 3: Institutional land uses with primarily daytime uses that depend on low noise as an important part of operations (e.g., schools, libraries, churches, theaters, and places of study)

The City National Plaza and Towers is an office land use, which is not considered a sensitive land use.

As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, consistency with the goals of applicable local ordinances and implementation of Best Management Practices would ensure that noise and vibration levels associated with construction of the Fully Underground LRT Alternative (the Locally Preferred Alternative) would not result in a significant adverse noise impact. Given that the Locally Preferred Alternative would not result in an adverse noise impact during construction, mitigation is not required. The alignment would be constructed beneath Flower Street in the vicinity of the City National Plaza and Towers using cut and cover construction. Cut and cover construction would involve large bulldozers and drill rigs as the main sources of construction vibration. As indicated in Section 4.7, Noise and Vibration, vibration impacts (including ground-borne noise) associated with large bulldozers and drill rigs would be less than significant. Nonetheless, mitigation measures were included in the Supplemental EA/Recirculated Draft EIR Sections which would further reduce annoyance to sensitive land uses caused by ground-borne vibration. Since designation of a Locally Preferred Alternative, mitigation measures have been refined and confirmed for the Locally Preferred Alternative, which are listed in Section 4.7, Noise and Vibration, of this Final EIS/EIR, based on input received during the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections public review periods. Mitigation measures for the Locally Preferred Alternative have been carried forward and included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, of this Final EIS/EIR.

Response to Comment BU36-9

Metro will coordinate with Thomas Properties Group, Inc. (TPG) regarding specific construction concerns. As indicated in Response to Comment BU36-3, above, building protection measures such as underpinning or ground improvement combined with a geotechnical monitoring program would be used to monitor and protect structures identified for such measures. In addition, a geotechnical investigation will be performed during final design for the proposed at-grade and below-grade structures and improvements associated with the Locally Preferred Alternative. The investigation will provide additional site-specific data to facilitate final design

for maintaining the integrity of existing structures under static and seismic loading and operational demands. Refer to Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials, of this Final EIS/EIR for further information regarding geotechnical mitigation measures.

Response to Comment BU36-10

Metro will ensure that detours around construction staging areas can sufficiently accommodate the pedestrian flow and transportation lines in the vicinity. Pedestrian and vehicular access to surrounding parcels will be maintained during operating hours throughout the construction phase.

Response to Comment BU36-11

Comment acknowledged. Metro will coordinate with TPG regarding specific construction concerns. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included TPG, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8), which are presented in this Final EIS/EIR.

Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
[illegible]			
Organization	Organización	所属	단체
[illegible]			
Address	Dirección	住所	주소
[illegible]			
Telephone	Teléfono	電話	전화
[illegible]			
Email	Correo electrónico	電子メール	이메일
[illegible]			

Comment Comentario コメント 의견

SUPPORT OF THE FULL UNDERGROUND PROPOSED 1

COMMUNICATION OF THE CONSTRUCTION PROCESS WOULD BE

VERY HELPFUL TO ALL CONSTITUENTS TO SEE WHAT 2

PART OF IMPACT IT WILL HAVE TO ALL OF US.

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

[illegible] 2010年10月18日 [illegible] regionalconnector@metro.net [illegible] Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. [illegible] www.metro.net/regionalconnector [illegible]

의견은 반드시 2010년 10월 18일까지 접수되어야 공공 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

BU37

Responses to Comments from Rothenberg Sandy Architects, Takayama, George

Response to Comment BU37-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU37-2

Metro will continue its ongoing communication with the community about the construction process. A detailed description of the construction process is available in Section 4.18, Construction Impacts, of this Final EIS/EIR.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: comment**
Date: October 19, 2010 9:58:04 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: Maruyama Masako [mailto:masakousa@msn.com]
Sent: Monday, October 18, 2010 7:27 PM
To: Regional Connector
Subject: comment

To: Mr.Dolores Roybal Saltarelli
Project Manager
Metro

From: Yoshinobu Maruyama
Shabu-Shabu house Restaurant of owner
127 Japanese Village Plaza Mall
Los Angeles ,CA 90012
(213)680-3890

コメント

Dear Dolores,

Metro Regional Connector のLittle Tokyo　での建設計画で
２ND　Street　を通る「Fully underground Alternative」には
絶対反対です。

この話を聞いた時、すでに日系団体の話し合いもしたとの説明でしたが
実際に２ND　STREETで商売している私たちオーナーには
何の連絡も打診もなく、商売には全く影響のない人の意見が多く取り
入れられています。

今年に入りやっと色々な工事が終わりリトル東京に人の流れが
出てきこれからと言う時に、なぜ、店舗の多い２NDをわざわざ通る
必要があるのか、理解できません。

リトル東京の中心地である２ND　STで工事が行われる事は、お客さんに
大迷惑で、商売になりません。
お店を閉める所も出てくると思われます。

２NDだけは絶対に反対です。止めて下さい。お願い致します。

10-18-2010　　YOSHINOBU　MARUYAMA

To: Ms. Dolores Roybal Saltarelli
Metro Project Manager

From: Yoshinobu Maruyama, Owner
Shabu-Shabu House Restaurant
127 Japanese Village Plaza Mall
Los Angeles, CA 90012
(213) 680-3890

Dear Dolores,

With regard to the Little Tokyo construction plan for the Metro Regional Connector, I am absolutely opposed to the "Fully Underground Alternative" that passes under Second Street. When I heard about this, I was told that they had already spoken with Japanese-American groups, but in fact there had been no contact or discussion of any kind with us, the owners who actually do business on Second Street, and the opinions had been gathered mostly from people whose businesses would not be affected at all. 1

When this year began, various construction projects had finally finished, and the flow of people could be seen again in Little Tokyo, so I can't understand why at this time it is necessary to purposely go under Second Street, where there are many stores. Construction on Second Street, the heart of Little Tokyo, will be a great inconvenience for shoppers, making business difficult. I think some stores would close. It is specifically Second Street to which I am absolutely opposed. Please don't do this, I ask you. 2

October 18, 2010
Yoshinobu Maruyama

BU38

Responses to Comments from Shabu-Shabu House Restaurant, Maruyama, Yoshinobu

Response to Comment BU38-1

Opposition to the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro has performed extensive outreach activities to involve Little Tokyo stakeholders in the project development process. Metro has met with the Little Tokyo Business Association and the Little Tokyo Business Improvement District on multiple occasions to discuss the Regional Connector and the Fully Underground LRT Alternative, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR. Advertisements regarding scoping meetings and community updates were printed in local newspapers, including Japanese language publications. Outreach staff has maintained a consistent presence in the community and has gone door-to-door to speak with business owners. Appropriate mitigation measures have been identified to address the impacts to businesses, and Metro has confirmed their implementation in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment BU38-2

As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Short-term intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. No surface disruption or impacts to businesses on 2nd Street in Little Tokyo are anticipated as a result of the passage of the tunnel boring machine. Mitigation measures targeted at supporting businesses during the construction period are provided in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. It is Metro's goal to minimize impacts to businesses during construction.

Little Tokyo Business Improvement District
Survey of the Regional Connector Transit Corridor Project DEIS/DEIR

Date: 10/4/10

Company Name: Nishi Center

Address: 815 E. First St.

Telephone/E-Mail (213) 687-4585 nishi.center@yahoo.com

Name: Susan Mukai

☐ Owner ☐ Employee ☐ Manager ☑ Other: Director

	Support	No-Support	
1. Locally Preferred Alternative:			
No Build Alternative	☐	☐	1
Transportation System Management Alternative	☐	☐	
At-Grade Emphasis Alternative	☐	☐	
Underground Emphasis LRT Alternative	☑	☐	
Fully Underground LRT Alternative	☐	☐	
2. Preservation of Japanese Business Influence and Culture: Serious and real discussions needs to take place with Metro Staff and the Little Tokyo business community to preserve the Japanese business influence and culture.	☒	☐	2
3. Business Interruption: Additional funding shall be made available for those businesses, tenants, or property owners whose businesses endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property Owners, along with those governmental agencies, Having jurisdiction to make policy to resolve issues from adverse business interruption during the course of construction of the Regional Connector Project.	☒	☐	3
4. Replacement of On-Street and Off-Street Parking: All off-street parking spaces loss through eminent domain shall be replaced. All on-street and off-street parking spaces taken away during the course of construction shall be replaced.	☒	☐	4

Please return survey form before October, 10, 2010 to:
Little Tokyo Business Improvement District
200 S. San Pedro Street, Suite 400B, Los Angeles, CA 90012

BU39

Responses to Comments from Nishi Center, Mukai, Susan

Response to Comment BU39-1

Thank you for your comment. Support for the Underground Emphasis LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU39-2

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU39-3

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment BU39-4

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
Etsuko Masuda			
Organization	Organización	所属	단체
Teishokuya of Tokyo			
Address	Dirección	住所	주소
345 E. 2nd street, LA. CA 90012			
Telephone	Teléfono	電話	전화
213-680-0344			
Email	Correo electrónico	電子メール	이메일

Comment Comentario コメント 의견

I strongly oppose the plan. 1

2nd street is a really important place for Japanese community & business. Long term constructing to separate Little Tokyo is unallowable for all Japanese, Japanes American & Japanese community. All people now in this area is against the plan. 2

Metro should listen to the opinions of Japanese groups. otherwise, we will take robust actions. 3

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.netへ電子メールで送ることもできます。あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

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Metro

BU40

Responses to Comments from Teishokuya of Tokyo, Masuda, Etsuko

Response to Comment BU40-1

Comment acknowledged. It is noted that the commenter opposes the Regional Connector project.

Response to Comment BU40-2

Metro understands the importance of 2nd Street to Little Tokyo and will continue to work with the community to minimize adverse impacts. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Short-term intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. No surface disruption or impacts to businesses on 2nd Street in Little Tokyo are anticipated as a result of the passage of the tunnel boring machine. It is Metro's goal to minimize construction impacts to the Little Tokyo community and its businesses. Support for a non-2nd Street alignment is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment BU40-3

Comment acknowledged. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
Sotaro Masuda			
Organization	Organización	所属	단체
Joy Mart Restaurant			
Address	Dirección	住所	주소
137 Japanese Village Plaza, LA, CA 90012			
Telephone	Teléfono	電話	전화
213-680-9868			
Email	Correo electrónico	電子メール	이메일

Comment Comentario コメント 의견

この計画に強く反対します。
私たちリトル東京にとって 2nd street はとても大切です。
そこを分断して何年も工事することなど絶対に許せません。
ビジネスコミュニティーにとって大打撃です。
全ての日本人、日系人、日系コミュニティーの方が大変怒ってます。
もし、この計画が進めば、私たちは断固として戦います。

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.netへ電子メールで送ることもできます。
あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

의견은 반드시 2010년 10월 18일까지 접수되어야 공공 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

Sotaro Masuda
Joy Mart Restaurant
137 Japanese Village Plaza, LA, CA 90012
213-680-9868

I strongly opposed to this plan.
For those of us in Little Tokyo, 2nd Street is very important.
We absolutely cannot allow it to be blocked off and under construction for years.
That would be a big blow to the business community.
All Japanese, and Japanese-Americans, and the Japanese-American community, are terribly upset.
If this plan is pursued, we will fight against it with determination.

1

BU41

Responses to Comments from Joy Mart Restaurant, Masuda, Sotaro

Response to Comment BU41-1

Metro understands the importance of 2nd Street to Little Tokyo and will continue to work with the community to minimize adverse impacts. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Short-term intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. No surface disruption or impacts to businesses on 2nd Street in Little Tokyo are anticipated as a result of the passage of the tunnel boring machine. It is Metro's goal to minimize construction impacts to the Little Tokyo community and its businesses. Opposition to the 2nd Street alignment is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Responses to Community Groups and Non-Profit Organizations Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
CN1	Little Tokyo Community Council	Watanabe	Bill
CN2	Japanese American Citizens League - Pacific Southwest District	Ishii	Craig
CN3	Japanese American Citizens League - Pacific Southwest District	Mayeda	Kelly
CN4	Japanese American Citizens League - Pacific Southwest District	Fukushima	Kristin
CN5	Japanese American Citizens League - Pacific Southwest District	Potter	Meghan
CN6	Japanese American Cultural and Community Center	Aihara	Chris
CN7	Little Tokyo Service Center	Clark	Yasue
CN8	Little Tokyo Service Center	Watanabe	Bill
CN9	Asian Pacific Islander Small Business Program	Fong	Ronald M.
CN10	Savoy Homeowners Association		
CN11	Japanese American National Museum	Yano	Akemi Kikumura
CN12	Go For Broke National Education Center	Ozawa	Michael
CN13	East West Players	Dang	Tim
CN14	Los Angeles Conservancy	Chou	Flora
CN15	The Transit Coalition	Reed	Bart
CN16	Fixing Angelenos Stuck in Traffic	Norton	Hilary
CN17	Bus Riders Union	Martinez	Esperanza V.
CN18	Sierra Club	Clarke	Darrell
CN19	Higgins Building HOA	Agnew	Jonno

Comment Letter/ Speaker	Affiliation	Last Name	First Name
CN20	Little Tokyo Community Council	Watanabe	Bill
CN21	Zenshuji Temple	Rumme	Daigaku
CN22	Los Angeles Streetcar, Inc.	Allen	Dennis

CN1

Little Tokyo Community Council
100 North Central Avenue, Los Angeles, California 90012
213 625.0414 ext 5720
email: ltccjb@aol.com, http://ltcc.janet.org

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

The Little Tokyo Community Council (LTCC) appreciates the opportunity to comment on the Draft EIS/EIR for the proposed Regional Connector. The positive working relationship and open dialogue have helped the community actively participate in the process to date. We offer the following general comments, which are followed by specific comments on the EIS/EIR: 1

1. The LTCC strongly believes that the Fully Underground alternative is the only acceptable option as the Locally Preferred Alternative that addresses its concerns about the environmental, economic, social, and cultural impacts to the community. As such, it supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis in the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, noise, safety, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. Please note that our support for the Fully Underground alternative is contingent on satisfactory acceptance of LTCC's proposed mitigation measures identified on April 27, 2010. The other alternatives pose significant, disproportionate impacts on Little Tokyo that are unacceptable. 2

2. The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts. 3

3. In its letter to Metro dated April 27, 2010, the LTCC strongly urged Metro to initiate tunnel boring activities from 2nd/Flower/Hope to minimize construction impacts on the Little Tokyo community. If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. 4

4. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5. The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses: 6

    a. Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
    b. Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
    c. How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
    d. Redevelopment of the Office Depot block.

6. The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010: 7

    a. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders. 8
    b. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community, avoid adverse business interruptions, and ensure rapid resolution of unforeseen problems. This committee shall include local businesses and property owners. 9

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns. 10

Sincerely,

Bill Watanabe
Chair, Little Tokyo Community Council

Encl. Detailed comments on Draft EIS/EIR

Little Tokyo Community Council

Detailed Comments

Executive Summary

7. The LTCC supports the statement that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community" (Page ES-5). We concur that it "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, and social impact perspective. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo. 11
8. The EIS/EIR incorrectly characterizes the impacts of the At-Grade analysis by understating its environmental impacts on the Little Tokyo community. Specifically, the project would place disproportionate burdens on a minority community in the areas of: 12
    a. Transit Service Equity Deterioration
    b. Community and Neighborhood Impacts.
9. The EIS/EIR incorrectly concludes that there would not be any significant unavoidable environmental justice impacts for the At-Grade Emphasis alternative. The EIS/EIR should conclude that the impacts are significant for two reasons: 13
    a. The grade separation of a vehicle underpass and pedestrian overpass at Temple and Alameda to route traffic under the rail tracks would physically divide Little Tokyo along Alameda. This would significant affect the cultural integrity of the community by separating the many temples and residents east of Temple from the core of Little Tokyo. The pedestrian overpass would be a significant barrier to elderly residents who travel east-west across Alameda.
    b. The grade separation plan is comparable to the Underground Emphasis alternative, which was found to have significant "Community and Neighborhood" impacts. The EIS/EIR should be revised to be consistent with this finding for the At-Grade emphasis alternative.

Chapter 1 (Purpose and Need)

10. The Draft EIS/EIR fails to acknowledge the existence of Little Tokyo in Section 1.4.2 (Project Area Ethnicity). Given its status as one of only three Japantowns in the nation and the environmental justice concerns that are important to Metro, Little Tokyo should be mentioned in the Purpose and Need chapter. 14

Chapter 2 (Alternatives Considered)

11. Page 2-21, Section 2.3.4.4. The analysis of pedestrian circulation impacts at Temple and Alameda Street from the At-Grade Emphasis alternative fails to adequately describe likely impacts. The construction of a pedestrian overpass to "minimize delays (of rail service) at the intersection of Temple and Alameda" comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation. 15
12. Page 2-31, Section 2.3.6.4. The EIS/EIR understates the impact of the Underground Emphasis alternative on pedestrian circulation at Alameda Street by stating it will "require relatively small changes to surface traffic and pedestrian circulation patterns." The construction of a pedestrian overpass at 1st and Alameda comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation. 16
13. Page 2-34, Section 2.4.5. The EIS/EIR remains silent on whether tunneling would involve single boring followed by a reverse boring in the other direction, use of two TBMs concurrently, or use of a single, wider boring. It is assumed that the EIS/EIR assumes the boring approach that would result in a worst-case scenario for construction impacts. 17
14. Page 2-38, Figure 2-13. The EIS/EIR depicts the block between 1st, 2nd, Central, and Alameda as being the site for an open cut. However, Metro has indicated that the existing development on the east side of Central between 1st and 2nd may be spared from demolition during construction. Given the orientation of any subway alignment under the property, every effort should be made to avoid demolishing existing buildings that front on 1st Street, including the former Café Cuba restaurant, Weiland's Brewery, and other nearby buildings. 18

Chapter 3 (Transportation Impacts and Mitigation)

15. Page 3-4, Section 3.1.3. The EIS/EIR should clarify that the assessment of parking impacts also considers off-street parking spaces that would be affected by the construction or operation of the project. Chapter 4 in fact accounts for off-street parking. 19
16. Page 3-4, Section 3.1.4. The determination of significance for pedestrian circulation should be clarified to include detours that might lengthen bicycle commutes or pedestrian routes or travel time..." 20
17. Section 3.2.2.1, Table 3-9. Please confirm the existing LOS B and C at Alameda/1st Street in the morning and evening peaks, respectively. These don't correspond with empirical observations. 21

If these are correct, please note that this is due in large part to the closure of westbound lanes over the Los Angeles River. 21 cont'd

18. Page 3-8, Table 3-3. The overview of ridership on bus lines servicing the project area omits LADOT Commuter Express 438, DASH, and possibly other LADOT lines. If Table 3-3 is intended to exclusively identify Metro lines, it should be labeled as such. 22

19. Page 3-17, Section 3.2.3. As noted earlier, any assessment of existing parking conditions in the study area must include an inventory of any parking facilities that would be affected by the proposed construction or operation of the project. This includes off-street spaces on the block bounded by 1st, 2nd, Central, and Alameda. Chapter 4 in fact accounts for off-street parking. 23

20. Page 3-37, Section 3.3.3.2. As noted earlier, the operation of an At-Grade Emphasis LRT system would require construction of a pedestrian overpass at Temple and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant. 24

21. Section 3.3.3.2.2, Figure 3-7. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035. 25

22. Section 3.3.4.2.2, Figure 3-9. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035. 26

23. Section 3.3.4.2.2. Although this section concludes that the alternative would have a significant impact because of the seven intersections that would be impacted, the analysis needs to analyze and discuss the impact that the creation of the portal and the at-grade alignment to access the station at Alameda/1st. This is a huge impact on the area and should be discussed in terms of the operational impact this configuration has on the local street system. The actual impacted intersections in terms of LOS is minor in comparison to this potential impact. It must be evaluated in terms of operations, safety, access, etc., not just LOS. 27

24. Page 3-43, Section 3.3.4.2.3. In the analysis of the Underground Emphasis, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking. 28

25. Page 3-44, Section 3.3.4.2.4. The operation of an Underground Emphasis LRT system would require construction of a pedestrian overpass at 1st and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant. 29

26. Page 3-47, Section 3.3.5.1.1. The EIS/EIR should clarify whether construction of the Fully Underground alternative would require temporary closure of lanes on 2nd Street and Central for 30

relocation of utilities and cut-and-cover activities. The Draft does not indicate closure will be needed on these two streets. 30 cont'd

27. Page 3-48, Section 3.3.5.1.2. The EIS/EIR remains silent about where tunnel boring activities would be initiated, stating that "[r]outes and disposal sites will be confirmed during the preliminary engineering phase..." If Metro cannot confirm that tunnel boring will not be initiated from Little Tokyo, the EIS/EIR should assume a worst-case scenario of impacts for Little Tokyo so that the full extent of traffic impacts, including dirt hauling operations, during construction is understood. 31

28. Page 3-49, Section 3.3.5.1.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during construction. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. 32

29. Page 3-50, Section 3.3.5.2.2, Figure 3-11. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035. 33

30. Page 3-51, Section 3.3.5.2.2. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035. 34

31. Page 3-51, Section 3.3.5.2.2. It should be noted that there are only three impacted intersections from this alternative, none of them in Little Tokyo. From the LTCC's perspective, this alternative has no impacts on Little Tokyo. 35

32. Page 3-51, Section 3.3.5.2.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during operations. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking. 36

33. Section 3.4.1.3. The analysis of parking and mitigation measures is too qualitative and conceptual to accurately gauge project impacts. There needs to be a much more detailed description of at least the mitigation options that should be considered for this program. The EIS/EIR should be more quantitative in the parking analysis, with the locations and the type of users for the various types of parking provided, both for the interim during construction and for the permanent during operation of the system. It is impossible to evaluate the parking program that does not discuss any of these items 37

Chapter 4 (Environmental Analysis, Consequences, and Mitigation)

34. Page 4-23, Section 4.2.3.4.3. LTCC agrees that the removal of off-street parking spaces from the Underground Emphasis alternative could be an "adverse effect with respect to environmental justice" if impacts are not fully mitigated. 38

35. Page 4-30, Section 4.2.4.4. While the issue of loading spaces at JANM is discussed in Chapter 3, the issue should be cited again in the displacement discussion, with appropriate mitigation included in this section. 39

36. Page 4-42, Section 4.3.2.4.6. The EIS/EIR should note that the Little Tokyo community exists on both the west and east sides of Alameda Street. 40

37. Page 4-43, Table 4.3-4. The overview of impacts to community and neighborhoods should be revised to reflect:

    a. The At-Grade Emphasis LRT can physically divide the Little Tokyo community because of the physical operation of LRT trains along surface streets that visually bisect these thoroughfares and because of the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling. 41
    b. The Underground Emphasis LRT can physically divide the Little Tokyo community because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling. 42
    c. The At-Grade Emphasis LRT can significant impair community mobility in Little Tokyo through the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling. 43
    d. The Underground Emphasis LRT can significant impair community mobility in Little Tokyo because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling. 44

38. Page 4-45, Section 4.3.3.4. While the EIS/EIR does not commit the project to initiate TBM activities at a particular location, it does confirm that construction impacts would be more significant in the Financial District and Little Tokyo. Please distinguish the extent of community and neighborhood impacts in Little Tokyo from dirt hauling and other operations if: a) TBM begins at 2nd/Central or near Bunker Hill. 45

39. Page 4-311, Section 4.17.5. The Draft EIS/EIR does not reflect the language adopted by the Little Tokyo Community Council (LTCC) on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown below in <u>underline</u>. 46

    c. Expand the safety net for Little Tokyo businesses that will be affected during construction. <u>This must include</u> having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, <u>as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders</u>. 47
    d. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities <u>and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners</u>. 48

40. Page 4-311, Section 4.17.5. Please add the following mitigation measure to the list of options suggested by the LTCC for inclusion in the Final EIS/EIR:
    a. Provide free business support technical assistance to local businesses on strategies for business development that can minimize any adverse impacts of construction. This can include, but not be limited to, assistance with marketing, accounting, or finance. 49

41. Page 4-311, Section 4.17.5. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 50

Chapter 6 (Cost and Performance Considerations)

42. Please note that the capital costs of the Fully Underground alternative include all stations originally considered in the initial evaluations. Any efforts to reduce capital costs for this alternative should focus on opportunities for open cut stations, as well as eliminating any of the three stations to the west, including Flower Street between 4th and 5th, not on any changes to the fully underground system design at the proposed Little Tokyo station. 51

43. LTCC concurs with the EIS/EIR's finding that the operating and maintenance costs for the Fully Underground alternative are lower than the TSM and At-Grade Emphasis alternatives. 52

44. Page 6-19, Table 6-15. The overview of the mobility benefits of each alternative clearly confirm that the Fully Underground alternative provides the most benefit in reducing congestion countywide. 53

45. Page 6-21, Table 6-16. The assessment of transit system user benefits for all alternatives confirms that the Fully Underground alternative provides the most "bang for the buck" and will be most competitive in Metro's pursuit of Federal Transit Administration New Starts funding. 54

46. Page 6-22, Section 6.6.1. The description of the evaluation methodology should acknowledge the importance of providing proportional benefits to local communities like Little Tokyo that are affected by construction to benefit the regional transit system. 55

Chapter 7 (Public Agency Outreach)

47. Page 7-7. In the list of stakeholders consulted, please add the Little Tokyo Community Council under Community Organizations, Neighborhood Groups, and Homeowner Associations. 56

48. Page 7-21. Please note that the LTCC's PCPC is the Planning and Cultural Preservation Committee. 57

CN1

Responses to Comments from Little Tokyo Community Council, Watanabe, Bill

Response to Comment CN1-1

Comment acknowledged. Please refer to Responses to Comments CN1-2 through CN1-57, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN1-2

Support for the Fully Underground LRT Alternative and the Little Tokyo Community Council proposed mitigation measures is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine (TBM) operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting TBM operations at 2nd and Central as indicated in Section 4.17.3.5 of this Final EIS/EIR. TBM operations would instead begin at the Mangrove property, which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN1-4

Comment acknowledged. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, a range of durations, 2-4 months for the TBM insertion site and 24-48 months for the 2nd Street TBM tunnel, was assumed for tunneling activities at both insertion site options. These ranges are conservative estimates. Disproportionate impacts associated with each alternative were discussed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR.

The small size of the 2nd/Hope Street station site would require a substantial portion of construction staging activities to occur in the surrounding streets, necessitating longer downtown street closures and increased cut and cover activities. This would have the effect of reducing mobility downtown and could deter visitors from frequenting many downtown communities, including Little Tokyo. In addition, the 1st/Central Avenue station site in Little Tokyo would need to be used as the TBM receiving site if the TBMs are inserted at the 2nd/Hope Street station site.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and the 2nd/Hope Street station are no longer being considered. Instead the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. The TBM would be inserted

approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street and result in fewer acquisitions. Tunnel boring activities from this site would proceed farther down Flower Street to 4th Street, instead of ending at the proposed 2nd/Hope Street station. Spoils would be removed within the Mangrove property, and trucks would be routed to the east and/or north to reach the freeway, and would not pass through Little Tokyo. Section 4.18, Construction Impacts, of this Final EIS/EIR contains further detail regarding estimated construction durations, construction scenarios, and tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised based on the new TBM insertion site in this Final EIS/EIR. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR. Inserting the TBM at the Mangrove property would not result in new significant impacts or substantially increase the severity of impacts previously identified in the Draft EIS/EIR.

Worksite Traffic Control Plans will be developed in coordination with the Los Angeles Department of Transportation and presented to the community prior to construction activities. Metro will provide the community with updates regarding the construction schedule prior to and during construction.

Response to Comment CN1-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN1-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the other businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN1-7

Comment acknowledged. The refinements identified in this comment and adopted by the Little Tokyo Community Council on May 25, 2010 have been included in the list of potential candidate mitigation measures developed by the Little Tokyo Working Group for the Fully Underground LRT Alternative in Section 4.17.5 of the Draft EIS/EIR as shown in the bullet points below. Metro evaluated these for incorporation into the list of final mitigation measures in Section 4.17.4.3 of this Final EIS/EIR.

- Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include~~by~~ having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing~~.~~, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details shall be established jointly between Metro and Little Tokyo stakeholders.

- Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities~~.~~ and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community, avoid adverse business interruptions, and ensure rapid resolution of unforeseen problems. This committee shall include local businesses and property owners.

Response to Comment CN1-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN1-9

This refinement, which was adopted by the Little Tokyo Community Council on May 25, 2010, to the list of potential candidate mitigation measures developed by the Little Tokyo Working Group for the Fully Underground LRT Alternative has been included in Section 4.17.4.2 of this Final EIS/EIR. Please refer to Response to Comment CN1-7, above. The final mitigation measures are shown in Section 4.17.4.3 of this Final EIS/EIR.

In addition, Metro will create a Regional Connector Community Leadership Council, consisting of local business and property owners, to streamline Metro's communication with all communities affected by the project and respond to their concerns during construction of the Locally Preferred Alternative.

Response to Comment CN1-10

Comment acknowledged. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included

the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

Response to Comment CN1-11

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-12

The At-Grade Emphasis LRT Alternative would improve transit service in Little Tokyo by increasing the number of destinations reachable with a one-seat ride from the existing Little Tokyo/Arts District Station. The disproportionate adverse community and neighborhood impacts that the At-Grade Emphasis LRT Alternative would cause in Little Tokyo were documented in Section 4.17.3.3 of the Draft EIS/EIR and this Final EIS/EIR. This alternative is not being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-13

None of the proposed alternatives would have significant adverse community or neighborhood impacts remaining after mitigation, as documented in Table 4.3-4 of the Draft EIS/EIR and this Final EIS/EIR. However, both the At-Grade Emphasis LRT Alternative's and Underground Emphasis LRT Alternative's Alameda Street underpass and pedestrian bridge would result in disproportionate adverse environmental justice impacts, as reported in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR. The proposed pedestrian bridges would be compliant with the Americans with Disabilities Act, and would have elevator access for elderly persons who are unable to use the escalators or stairs. Neither the At-Grade Emphasis LRT Alternative nor the Underground Emphasis LRT Alternative are being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-14

Section 1.4.2 of the Draft EIS/EIR and this Final EIS/EIR identified populations of Asian, African-American, White, and Hispanic populations in the project area based on census demographic data. The importance of Little Tokyo as one of the three Japantowns in the nation was appropriately discussed in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment CN1-15

The design of the pedestrian bridge would have incorporated elevators to provide access to senior citizens and disabled persons. The underpass on Alameda Street would reduce vehicular traffic at the intersection, which would be beneficial to all pedestrians. A pedestrian bridge in Little Tokyo is included only in the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to

designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which does not include an underpass or pedestrian bridge in Little Tokyo.

Response to Comment CN1-16

Please refer to Response to Comment CN1-15, above.

Response to Comment CN1-17

Comment acknowledged. Section 2.4.5 of the Draft EIS/EIR and this Final EIS/EIR described typical underground construction using TBM. All TBM options were discussed in the Draft EIS/EIR because all options were a possible construction method depending on the alternative. The Draft EIS/EIR analyzed the most conservative TBM scenario for each environmental resource area. Based on further study, it was determined that one larger TBM would not be used during construction. The tunnels could be constructed using one TBM inserted and then transported back to the original insertion site and re-inserted; or two TBMs would be used, with the second machine inserted slightly later than the first TBM and both are pulled from the site, with no need for re-inserting.

Response to Comment CN1-18

Metro has made refinements to the Locally Preferred Alternative in response to community input. The refinements would greatly reduce impacts to businesses. The refined alternative would not involve cut and cover construction on 2nd Street, and would minimize acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The majority of parking spaces and businesses, including the Office Depot, on this block would not need to be acquired. However, Señor Fish, Weiland Brewery and the former Café Cuba (The Spice Table) would still need to be displaced.

Response to Comment CN1-19

Comment acknowledged. Off-street parking impacts were analyzed in Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR. The following reference has been added to Section 3.1.3 of this Final EIS/EIR:

Evaluation of potential parking impacts included consideration of:

- The availability of parking within one-half mile walking distance; and
- The availability of loading zones in relation to the location of commercial enterprises.

Refer to Section 4.2, Displacement and Relocation, for analysis of off-street parking impacts.

Response to Comment CN1-20

Comment acknowledged. Travel time is already taken into account under the threshold. If bicycle commutes or pedestrian routes are lengthened, the time to travel along those commutes or routes would also lengthen. Section 3.1.4 of this Final EIS/EIR has been modified as follows:

- Detours that might lengthen bicycle commutes or pedestrian routes (which would increase travel time); and

Response to Comment CN1-21

The level of service data in Section 3.2.2.1 of the Draft EIS/EIR is correct, per the on-site traffic counts performed by Metro. These counts are supplemented with traffic data from before the bridge closure in order to accurately gauge the potential impacts of the Regional Connector.

Response to Comment CN1-22

Comment acknowledged. The title of Table 3-3 has been modified to read:

Table 3-3. Average Daily Ridership on Metro Bus Lines Serving the Project Area (2009).

Response to Comment CN1-23

Comment acknowledged. Off-street parking impacts were analyzed in Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR. The following reference has been added to Section 3.2.3 of this Final EIS/EIR:

Along the majority of the proposed build alternative alignments, parking regulations permit on-street parking in one or both directions during the AM and PM peak hours. Refer to Section 4.2, Displacement and Relocation, for analysis of off-street parking impacts.

Response to Comment CN1-24

The pedestrian bridge would lengthen crossings of Alameda Street, but this would be offset by eliminating the need to wait for a walk signal. Pedestrian safety would also be improved because the bridge would reduce the existing potential for conflicts between automobiles and pedestrians. The bridge would include elevators and escalators for elderly residents, and would be fully compliant with the Americans with Disabilities Act. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which does not include an underpass or pedestrian bridge in Little Tokyo.

Response to Comment CN1-25

Figure 3-7 of the Draft EIS/EIR and this Final EIS/EIR shows that level of service at 1st and Alameda would decline under the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-26

Level of service at 1st and Alameda would improve under the Underground Emphasis LRT Alternative due to the new underpass. The new underpass at 1st and Alameda is part of the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-27

The analysis in Section 3.3.4.2.2 of the Draft EIS/EIR and this Final EIS/EIR assumes the presence of the portal and at-grade tracks at 1st and Alameda. Traffic circulation impacts related to the construction of the portal were discussed in Section 3.3.4.1.2 of the Draft EIS/EIR and this Final EIS/EIR. These impacts pertain to the Underground Emphasis LRT Alternative. The Metro

Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-28

Comment acknowledged. Off-street parking impacts were analyzed in Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR. The following reference has been added to Section 3.3.4.2.3 of this Final EIS/EIR:

The parking impacts identified under this alternative would be adverse only in the Little Tokyo community portion of the alignment, but even there ~~they~~ impacts would be less than significant after implementation of proposed mitigation. Refer to Section 4.2, Displacement and Relocation, for analysis of off-street parking impacts.

Response to Comment CN1-29

The pedestrian bridge would lengthen crossings of Alameda Street, but this would be offset by eliminating the need to wait for a walk signal. Pedestrian safety would also be improved because the bridge would reduce the existing potential for conflicts between automobiles and pedestrians. The bridge would include elevators and escalators for elderly residents, and would be fully compliant with the Americans with Disabilities Act. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which does not include an underpass or pedestrian bridge in Little Tokyo.

Response to Comment CN1-30

Temporary lane closures would be needed on 2nd Street and a portion of Central Avenue between 1st and 2nd Streets for relocation of utilities and cut and cover activities for proposed stations. Refinement of the Locally Preferred Alternative would reduce the amount of cut and cover construction needed on 2nd Street. The Draft EIS/EIR indicated this in Section 4.18.2.2.

Response to Comment CN1-31

Comment acknowledged. At the time the Draft EIS/EIR was circulated for public review, both TBM insertion sites were being considered. Both TBM insertion sites were analyzed in the Draft EIS/EIR where appropriate. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and 2nd/Hope Street station are no longer being considered. Instead, the vacant property to the northeast of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. Please refer to Response to Comment CN1-4, above. Please refer to Section 4.18, Construction Impacts, of this Final EIS/EIR for further detail regarding tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised in this Final EIS/EIR based on the new TBM insertion site. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR.

Response to Comment CN1-32

Comment acknowledged. Off-street parking impacts were analyzed in Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR. The following reference has been added to Section 3.3.5.1.3 of this Final EIS/EIR:

Potential impacts to available parking during construction of the ~~Fully Underground LRT~~ LPA would result in an adverse impact only in the Little Tokyo community portion of the alignment~~.~~; however, even within Little Tokyo ~~but even there~~ the potential impact would be less than significant after implementation of ~~proposed~~ the final mitigation measures in Section 3.4.2 and Chapter 8. Refer to Section 4.2, Displacement and Relocation, for analysis of off-street parking impacts.

Response to Comment CN1-33

Level of service at 1st and Alameda would improve under the Locally Preferred Alternative due to the at-grade light rail tracks being removed from service. Trains would no longer pass through the intersection, thereby freeing up cycle time for auto traffic.

Response to Comment CN1-34

Level of service at 1st and Alameda would improve under the Locally Preferred Alternative due to the at-grade light rail tracks being removed from service. Trains would no longer pass through the intersection, thereby freeing up cycle time for auto traffic.

Response to Comment CN1-35

Comment acknowledged. The following note has been incorporated in the fourth paragraph of Section 3.3.5.2.2 of this Final EIS/EIR.

Only one intersection during the AM peak hour and only three intersections during the PM peak hour would experience a significant adverse impact from the ~~Fully Underground LRT Alternative~~ LPA. It should be noted, none of the adversely impacted intersections are located in Little Tokyo.

Response to Comment CN1-36

Comment acknowledged. Off-street parking impacts were analyzed in Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR. The following reference has been added to Section 3.3.5.2.3 of this Final EIS/EIR:

The on-street parking impacts identified under ~~this alternative~~ the LPA would not be adverse. Only 13 on-street parking spaces would be displaced, in an area with multiple off-street garages. Also, the parking spaces would be replaced by access points to a new underground light rail station, and the improved transit access would offset the effects of the lost parking. Therefore, the on-street parking impacts would not be adverse and would be less than significant. Refer to Section 4.2, Displacement and Relocation, for analysis of off-street parking impacts.

Response to Comment CN1-37

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR identifies specific replacement parking sites and mitigation measures to

offset parking impacts during construction. This includes two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Preliminary drafts of the Mitigation Monitoring and Reporting Program were submitted to the Little Tokyo Working Group for review. Some demand for parking in the long term would be offset by the introduction of improved light rail service into the community.

Response to Comment CN1-38

Comment acknowledged.

Response to Comment CN1-39

Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR, discusses transportation circulation impacts. Impacts to the loading spaces at the Japanese American National Museum were considered in the analysis presented in Section 3.3.5.1.3 of the Draft EIS/EIR and this Final EIS/EIR. Impacts to the museum itself are non-transportation impacts, and were appropriately discussed in Section 4.2.4.4 of the Draft EIS/EIR.

Response to Comment CN1-40

Comment acknowledged. The third paragraph of Section 4.3.2.4.6 of this Final EIS/EIR has been modified to read:

Little Tokyo, which exists to the east and west of Alameda Street, contains a variety of important cultural venues and resources including the Japanese American National Museum, the Jodo Shu Betsuin Temple, the Los Angeles Hompa Hongwanji Temple, and the Japanese-American Cultural and Community Center.

Response to Comment CN1-41

As indicated in Section 4.3, Community and Neighborhood Impacts, and Appendix O, Community and Neighborhood Impacts Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the At-Grade Emphasis LRT Alternative would not physically divide an established community. Automobiles, pedestrians, and bicycles would still be able to cross the alignment at roadway intersections to access the communities to the north and south. At the intersection of Temple and Alameda Streets in the Little Tokyo community, the addition of an automobile underpass would facilitate movement of traffic on Alameda Street by allowing it to travel below the intersection without stopping and, thus, enhancing community mobility. A pedestrian bridge would also be located where the tracks would cross Alameda Street, which would allow pedestrians and bicyclists to cross the street. The Underground Emphasis LRT Alternative would not create a barrier that would impede vehicle, bicycle, or pedestrian access. Vehicle, bicycle, and pedestrian access at the intersection of 1st and Alameda Streets would be maintained as indicated above. Therefore, this alternative would not physically divide a community and impacts would be less than significant. Nonetheless, the At-Grade Emphasis LRT Alternative is not the designated Locally Preferred Alternative and will not be studied further. The Fully Underground LRT Alternative has been designated as the Locally Preferred Alternative.

Response to Comment CN1-42

As with the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would not physically divide an established community. As part of the Underground Emphasis LRT Alternative, the Alameda Street underpass would be constructed at 1st Street in the Little Tokyo community, which would carry car and truck through traffic along Alameda Street beneath 1st Street and the rail junction. In addition, an optional overhead pedestrian bridge structure would maintain pedestrian and bicyclist access to the north and south sides of Alameda Street and enhance mobility. The Underground Emphasis LRT Alternative would not create a barrier that would impede vehicle, bicycle, or pedestrian access. Vehicle, bicycle, and pedestrian access at the intersection of 1st and Alameda Streets would be maintained as indicated above. Therefore, this alternative would not physically divide a community and impacts would be less than significant. Nonetheless, the Underground Emphasis LRT Alternative is not the designated Locally Preferred Alternative and will not be studied further. The Fully Underground LRT Alternative has been designated as the Locally Preferred Alternative.

Response to Comment CN1-43

Please refer to Response to Comment CN1-41, above. Under the At-Grade Emphasis LRT Alternative, the automobile underpass under Alameda Street and the pedestrian bridge located where the tracks would cross Alameda Street would enhance community mobility. Therefore, this alternative would not impair community mobility or create a physical barrier to cross Alameda Street and impacts would be less than significant. Nonetheless, the At-Grade Emphasis LRT Alternative is not the designated Locally Preferred Alternative and will not be studied further. The Fully Underground LRT Alternative has been designated as the Locally Preferred Alternative.

Response to Comment CN1-44

Please refer to Response to Comment CN1-42, above. As part of the Underground Emphasis LRT Alternative, the Alameda Street underpass constructed at 1st Street and the pedestrian bridge located where the tracks would cross Alameda Street would enhance community mobility. Therefore, this alternative would not impair community mobility or create a physical barrier to cross Alameda Street and impacts would be less than significant. Nonetheless, the Underground Emphasis LRT Alternative is not the designated Locally Preferred Alternative and will not be studied further. The Fully Underground LRT Alternative has been designated as the Locally Preferred Alternative.

Response to Comment CN1-45

The duration and intensity of construction impacts related to TBM operations were shown in Table 4.18-2 of the Draft EIS/EIR and for the Locally Preferred Alternative in Table 4.18-1 of this Final EIS/EIR. The Locally Preferred Alternative has been modified since publication of the Draft EIS/EIR to relocate the potential TBM insertion site to the Mangrove property in order to reduce impacts. Please refer to Response to Comment CN1-4, above.

Response to Comment CN1-46

Please refer to Response to Comment CN1-7, above.

Response to Comment CN1-47

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN1-48

Please refer to Response to Comment CN1-9, above.

Response to Comment CN1-49

The following mitigation measure has been added to Section 4.17.4.3 of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8):

Metro shall provide services to support affected Little Tokyo businesses and organizations during construction such as targeted advertising and marketing campaigns, Metro-sponsored coupons, incentives for construction worker patronage, and Metro-sponsored community events. Metro shall provide free technical support assistance (i.e., website development) to local businesses on strategies for business development that can minimize any adverse impacts of construction. This can include, but not be limited to, assistance with accounting or advertising. Metro shall work with the RCCLC including businesses, tenants, property owners, and government agencies with jurisdiction to make policy to resolve issues arising from adverse business issues during all phases of construction. The committee shall work to develop an implementation plan for these services and determine their content. The committee shall also be kept apprised of construction progress and upcoming transit, parking, or access changes. Metro shall provide maps showing existing and planned access during all phases of construction. Metro shall also provide directional signage to temporary parking facilities. These activities shall be conducted in a manner consistent with the similar program developed for the Crenshaw Transit Corridor Project.

Response to Comment CN1-50

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN1-51

Partially open-roof stations are being considered as an urban design measure where possible. Metro has refined the Locally Preferred Alternative alignment in Little Tokyo primarily to reduce impacts, but this refinement may also have the benefit of reducing project capital costs.

Response to Comment CN1-52

Comment acknowledged.

Response to Comment CN1-53

Comment acknowledged. Table 6-15 of the Draft EIS/EIR showed that the Fully Underground LRT Alternative performs the best compared to the No Build, TSM, and other build alternatives for both new transit trips and project transit trips.

Response to Comment CN1-54

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN1-55

Comment acknowledged. As indicated in Chapter 6, Cost and Performance Considerations, of the Draft EIS/EIR and this Final EIS/EIR, the value of unique and diverse communities in the project area and the support of community preservation, which includes balancing the benefits and impacts while preserving communities in the area, such as Little Tokyo, the Arts District, Bunker Hill, Civic Center, and the Historic Core, are already included as goals and objectives for evaluating potential alternatives for the Regional Connector Transit Corridor project.

Response to Comment CN1-56

Comment acknowledged. The Little Tokyo Community Council has been added to the List of Key Stakeholder Groups and Organizations table in Chapter 7, Public and Agency Outreach, of this Final EIS/EIR.

Community Organizations, Neighborhood Groups, and Homeowner Associations:

Downtown Los Angeles Neighborhood Council	Higgins Homeowners Association
Historic Cultural Neighborhood Council	Savoy Homeowners Association
Little Tokyo Community Council	

Response to Comment CN1-57

Comment acknowledged. Chapter 7, Public and Agency Outreach, of this Final EIS/EIR has been modified to clarify that the Little Tokyo Community Council's PCPC is the Planning and Cultural Preservation Committee.

- Little Tokyo Community Council: ~~Parking,~~ Planning, and Cultural Preservation Committee

Subject: FW: Public Comment on Metro Regional Connector, 10-6-2010
Date: Friday, October 8, 2010 12:24 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Craig Ishii [mailto:cishii@jaclpsw.org]
Sent: Wednesday, October 06, 2010 6:26 PM
To: Regional Connector
Subject: Public Comment on Metro Regional Connector, 10-6-2010

Name: Craig Ishii

Organization: Japanese American Citizens League - Pacific Southwest District

Address: 244 S. San Pedro St. Suite 406, Los Angeles 90012

Telephone: 213-626-4471

Email: cishii@jaclpsw.org

Comment:

I speak on behalf of the Japanese American Citizens League - Pacific Southwest District. Our organization, as a fellow Little Tokyo community-based nonprofit organization supports the Fully-Underground Regional Connector option as the **ONLY** acceptable alternative for the Metro Regional Connector. We appreciate the continuous dialogue that MTA has engaged in with Little Tokyo nonprofits, residents and small businesses. 1

The JACL Pacific Southwest District is a member of the Little Tokyo Community Council (LTCC). As an active participant with the LTCC Preservation and Planning Committee as well as the LTCC Transit Committee, we would also like to reiterate the 6 major comments on the Draft EIR/EIS provided by the LTCC: 2

1) The LTCC strongly supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative…as a staff recommended Preferred Alternative based on the technical analysis…and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo.

2) The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts. 3

3) If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. 4

4) While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5) The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses:

- Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,

- Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,

- How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,

- Redevelopment of the Office Depot block 6

6) The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown in underline. 7

- Expand the safety net for Little Tokyo businesses that will be affected during construction. This can include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders. 8

- Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners. 9

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Craig Ishii

Regional Director

Japanese American Citizens League - Pacific Southwest District

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JACL PSW September/October News Bytes

JACL to Honor Three Community Leaders at 14th Annual Awards Dinner <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=123&Itemid=57>

Major Updates on the Metro Regional Connector <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=113&Itemid=2>

<http://www.jaclpsw.org/index.php?option=com_content&view=article&id=64&Itemid=27> <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=64&Itemid=27> Project Community H <http://www.jaclpsw.org/index.php?option=com_content&view=frontpage&Itemid=1> osts Culmination with Generous Support from AT&T

Visit www.jaclpsw.org <http://www.jaclpsw.org/> for more information on upcoming programs in the JACL Pacific Southwest District!

Visit www.jacl.org <http://www.jacl.org/> for news and updates about National JACL.

CN2

Responses to Comments from Japanese American Citizens League - Pacific Southwest District, Ishii, Craig

Response to Comment CN2-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN2-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. Please refer to Responses to Comments CN2-3 through CN2-9, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN2-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN2-4

Please refer to Response to Comment CN1-4, above.

Response to Comment CN2-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN2-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN2-7

Please refer to Response to Comment CN1-7, above.

Response to Comment CN2-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN2-9

As indicated in Section 4.3, Community and Neighborhood Impacts, of the Draft EIS/EIR and this Final EIS/EIR, mitigation to reduce community and neighborhood impacts during construction of the Locally Preferred Alternative involves the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours.

In addition, Metro will create a Regional Connector Community Leadership Council, consisting of local business and property owners, to streamline Metro's communication with all communities affected by the project and respond to their concerns during construction of the Locally Preferred Alternative.

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October 10, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

I speak as a Board member of the Japanese American Citizens League, Pacific Southwest District. Our organization, as a fellow Little Tokyo community-based nonprofit organization supports the Fully-Underground Regional Connector option as the **ONLY** acceptable alternative for the Metro Regional Connector. We appreciate the continuous dialogue that MTA has engaged in with Little Tokyo nonprofits, residents and small businesses. The positive working relationship and open dialogue have helped the community actively participate in the process to date. 1

The JACL Pacific Southwest District is a member of the Little Tokyo Community Council (LTCC). As an active participant with the LTCC Preservation and Planning Committee as well as the LTCC Transit Committee, we would also like to reiterate the 6 major comments on the Draft EIR/EIS provided by the LTCC: 2

1) The LTCC strongly supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo.

2) The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts. 3

3) If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could 4

affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities.

4 cont'd

4) While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document.

5

5) The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses:
- Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
- Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
- How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
- Redevelopment of the Office Depot block

6

6) The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown in underline.

7

- Expand the safety net for Little Tokyo businesses that will be affected during construction. This can include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders.

8

- Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners.

9

In conclusion, I would like to thank Metro again for their willingness to open the planning process to the community, and strongly hope that such a positive working relationship will continue in the future. Little Tokyo is an important place of history and community for Japanese Americans and everyone else, and ensuring the preservation of Little Tokyo is essential. The Fully Underground alternative is the **only build option** that allows for this, and therefore I urge the MTA Board to select this as the Locally Preferred Alternative.

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns.

10

Sincerely,

CN3

Responses to Comments from Japanese American Citizens League - Pacific Southwest District, Mayeda, Kelly

Response to Comment CN3-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN3-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. Please refer to Responses to Comments CN3-3 through CN3-10, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN3-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN3-4

Please refer to Response to Comment CN1-4, above.

Response to Comment CN3-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN3-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN3-7

Please refer to Response to Comment CN1-7, above.

Response to Comment CN3-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN3-9

Please refer to Response to Comment CN2-9, above.

Response to Comment CN3-10

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

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October 18, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

I speak as the Public Policy Coordinator of the Japanese American Citizens League, Pacific Southwest District. Our organization, as a Little Tokyo community-based organization, supports the Fully-Underground Regional Connector option as the ONLY acceptable alternative for the Metro Regional Connector. We appreciate the continuous dialogue that MTA has engaged in with Little Tokyo nonprofits, residents and small businesses. The positive working relationship and open dialogue have helped the community actively participate in the process to date. 1

The JACL Pacific Southwest District is a member of the Little Tokyo Community Council (LTCC). As an active participant with the LTCC Preservation and Planning Committee as well as the LTCC Transit Committee, we would also like to reiterate the 6 major comments on the Draft EIR/EIS provided by the LTCC:

1) The LTCC strongly supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative…as a staff recommended Preferred Alternative based on the technical analysis…and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. From the Little Tokyo community perspective, it is the <u>only</u> alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo. 2

2) The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts. 3

3) If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. [kristin's note: to reiterate and be resolute: we absolutely do not want tunnel boring to begin in Little Tokyo, as we believe it will severely disrupt community and economic life] 4

4) While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5) The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses:
- Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
- Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
- How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
- Redevelopment of the Office Depot block

6

6) The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown in underline.

7

- Expand the safety net for Little Tokyo businesses that will be affected during construction. This can include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders.

8

- Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners.

9

In conclusion, I would like to thank Metro again for their willingness to open the planning process to the community, and strongly hope that such a positive working relationship will continue in the future. Little Tokyo is an important place of history and community for Japanese Americans and everyone else, and ensuring the preservation of Little Tokyo is essential. The Fully Underground alternative is the only build option that allows for this, and therefore I urge the MTA Board to select this as the Locally Preferred Alternative. This is, however, an acceptable alternative only by securing proper mitigations. Our biggest concern right now, to reiterate, is proper business mitigations, as well as minimizing impact to Little Tokyo. We also want to be sure that the Little Tokyo community remains an integral part of future conversations on this project, and that our comments and input are given the proper attention.

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns.

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Sincerely,

Kristin Fukushima
Public Policy Coordinator
Japanese American Citizens League, Pacific Southwest District

CN4

Responses to Comments from Japanese American Citizens League - Pacific Southwest District, Fukushima, Kristin

Response to Comment CN4-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN4-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. Please refer to Responses to Comments CN4-3 through CN4-10, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN4-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN4-4

Please refer to Response to Comment CN1-4, above.

Response to Comment CN4-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN4-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN4-7

Please refer to Response to Comment CN1-7, above.

Response to Comment CN4-8

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Response to Comment CN4-9

Please refer to Response to Comment CN2-9, above.

Response to Comment CN4-10

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

CN5

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October 10, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

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1) The LTCC strongly supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo. 2

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3) If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could 4

affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. 4 cont'd

4) While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5) The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses:
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- Redevelopment of the Office Depot block 6

6) The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown in underline. 7
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- Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners. 9

In conclusion, I would like to thank Metro again for their willingness to open the planning process to the community, and strongly hope that such a positive working relationship will continue in the future. Little Tokyo is an important place of history and community for Japanese Americans and everyone else, and ensuring the preservation of Little Tokyo is essential. The Fully Underground alternative is the **only build option** that allows for this, and therefore I urge the MTA Board to select this as the Locally Preferred Alternative. 10

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns.

Sincerely,

Meghan Otter

CN5

Responses to Comments from Japanese American Citizens League - Pacific Southwest District, Potter, Meghan

Response to Comment CN5-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN5-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. Please refer to Responses to Comments CN5-3 through CN5-10, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN5-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN5-4

Please refer to Response to Comment CN1-4, above.

Response to Comment CN5-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN5-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN5-7

Please refer to Response to Comment CN1-7, above.

Response to Comment CN5-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN5-9

Refer to Response to Comment CN2-9, above.

Response to Comment CN5-10

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

日米文化会館
JACCC

October 6, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

The Japanese American Cultural & Community Center is an active participant in the Little Tokyo Community Council, and have hosted many of the community meetings regarding the proposed Regional Connector. We take this opportunity to submit our letter of concurrence with the position stated by Little Tokyo Community Council (LTCC) in their letter of October 1, 2010. 1

LTCC comments addressed the following:

1. The LTCC strongly believes that the Fully Underground alternative is the only acceptable option as the Locally Preferred Alternative that addresses its concerns about the environmental, economic, social, and cultural impacts to the community. As such, it supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community." Please note that our support for the Fully Underground alternative is contingent on satisfactory acceptance of LTCC's proposed mitigation measures identified on April 27, 2010. The other alternatives pose significant, disproportionate impacts on Little Tokyo that are unacceptable. 2

2. The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. 3

3. In its letter to Metro dated April 27, 2010, the LTCC strongly urged Metro to initiate tunnel boring activities from 2nd/Flower/Hope to minimize construction impacts on the Little Tokyo community. This information is critical to determining whether the community will endure disproportionate impacts during construction activities. 4

4. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document. 5

5. The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses: 6

    a. Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
    b. Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
    c. How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
    d. Redevelopment of the Office Depot block.

6. The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010: 7

    a. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders. 8
    b. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. 9

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns. 10

Sincerely,

Chris Aihara
Executive Director
Japanese American Cultural & Community Center

CN6

Responses to Comments from Japanese American Cultural and Community Center, Aihara, Chris

Response to Comment CN6-1

Comment acknowledged.

Response to Comment CN6-2

Support for the Fully Underground LRT Alternative and the Little Tokyo Community Council proposed mitigation measures is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN6-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN6-4

Please refer to Response to Comment CN1-4, above.

Response to Comment CN6-5

The mitigation measure recommendations were segregated in the Draft EIS/EIR because they are a distinct part of the environmental justice outreach process. Like all other appropriate mitigation measures in the Draft EIS/EIR, feasible measures from the Little Tokyo Working Group recommendations have been incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8). The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, contains final mitigation measures for the Locally Preferred Alternative; the Mitigation Monitoring and Reporting Program will be approved by the Metro Board of Directors upon certification of this Final EIS/EIR. These mitigation measures will also be included in a Record of Decision subsequently issued by FTA. Metro will formally commit to implement all mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative upon certification of this Final EIS/EIR and issuance of the Record of Decision by FTA.

Response to Comment CN6-6

Metro intends to undertake all of the listed activities. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR and Record of Decision to be issued by FTA are the formalized commitments to implement mitigation measures. Metro will involve the community throughout the project process. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

Response to Comment CN6-7

Please refer to Response to Comment CN1-7, above.

Response to Comment CN6-8

This mitigation measure has been recorded in Section 4.17.4.2 of this Final EIS/EIR as one of the mitigation measures suggested by the Little Tokyo community. Metro has identified measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR that will provide support for the Little Tokyo businesses. This could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures.

Response to Comment CN6-9

Please refer to Response to Comment CN2-9, above.

Response to Comment CN6-10

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

Yasue Clark
Community Organizer
Little Tokyo Service Center
231 E. Third Street
G106
Los Angeles, CA 90013

October 15, 2010

Dolores Roybal Saltarelli,
Project Manager
Metro
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

Dear Ms.Saltarelli;

Although the residents were supportive of the fully underground option, they were very concerned with the issues in the attached letters. We will continue to push Metro to address these concerns.

Comments included letter attached based on discussion with elderly residents of five Little Tokyo buildings including: Casa Heiwa, San Pedro Firm Building, Little Tokyo Towers. Miyako Gardens and Teramachi.

1

Please consider their opinions.

If you have any questions, please don't hesitate to contact me at yclark@ltsc.org or (213) 473-1649.

Sincerely,

Yasue Clark

CN7

Responses to Comments from Little Tokyo Service Center, Clark, Yasue

Response to Comment CN7-1

The referenced letters have been included as separate comment letters, Comment Letters PC78, PC80 through PC83, PC85 through PC87, and PC89 through PC97, in this Final EIS/EIR. Please refer to specific responses to the above-mentioned comment letters included in this volume of the Final EIS/EIR.

Little Tokyo Service Center
a Community Development Corporation

Helping People, Building Community

CN8

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County MTA
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Metro Regional Connector EIS/EIR

The Little Tokyo Service Center (LTSC) is a comprehensive multi-purpose social service agency serving thousands of clients annually in Little Tokyo for the past 30 years.

The LTSC Board of Directors, at the Board meeting on Tuesday, October 12, 2010, voted unanimously to support the FULLY UNDERGROUND OPTION of the Metro Connector Project, with the provisions that there would be: a) ongoing communication with and participation by the Little Tokyo community in the development of the Connector, b) mitigation and business compensation measures for businesses negatively impacted by the Connector construction, and c) boring of the underground tunnel along Second Street be done from west to east. 1 2 3

LTSC is appreciative of the work done thus far by the Metro staff in assisting the community to be informed and engaged, and hopes to continue in a constructive dialogue as we move ahead. 4

Sincerely,

Bill Watanabe
Executive Director

231 East Third Street, Suite G106 • Los Angeles, California 90013 • 213.473.3030 • fax 213.473.3031 • WWW.LTSC.ORG

CN8

Responses to Comments from Little Tokyo Service Center, Watanabe, Bill

Response to Comment CN8-1

Thank you for your comment. Support for the Fully Underground LRT Alternative and stated provisions are noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project.

Response to Comment CN8-2

Metro will continue the ongoing communication with the Little Tokyo community throughout the project. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains confirmed mitigation measures targeted at minimizing adverse impacts and assisting businesses through the construction process.

Response to Comment CN8-3

Please refer to Response to Comment CN1-4, above.

Response to Comment CN8-4

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project.

Asian Pacific Islander
SMALL BUSINESS PROGRAM

www.apisbp.org

October 15, 2010

Ms. Dolores Roybal Saltarelli
Metro
One Gateway Plaza
Los Angeles, CA 90012-2952

RE: Comments on Draft EIS/EIR for Metro Regional Connector

Dear Ms. Roybal Saltarelli:

The Asian Pacific Islander Small Business Program is a non-profit collaborative whose mission is to assist entrepreneurs in low-income immigrant Asian Pacific Islander communities. Our offices are located in Little Tokyo and as a result we are very interested in Metro's plans for the Regional Connector Transit Corridor. As an elected Little Tokyo representative of the Historic Cultural Neighborhood Council, and as an appointed member of the Community Redevelopment Agency of the City of Los Angeles' Little Tokyo Community Advisory Committee, I have closely followed the planning for this important project. I wish to reiterate the comments submitted by the Little Tokyo Community Council (LTCC): I strongly believe that the Fully Underground LRT Alternative is the only acceptable option as the Locally Preferred Alternative. 1

As an advocate of entrepreneurs and small businesses I want to emphasize to Metro the need to provide compensation to businesses that are negatively impacted by the project. Metro must work with Little Tokyo organizations such as the Japanese Chamber of Commerce of Southern California, the Little Tokyo Business Association and the Little Tokyo Business Improvement District to ensure that the concerns of Little Tokyo businesses met. The provision of financial compensation and targeted marketing efforts are essential to providing a safety net for Little Tokyo businesses. In particular, Metro should provide free technical assistance to small businesses to help minimize the adverse impacts of the project. This could include, but not be limited to, assistance with marketing, accounting, finance and access to Metro or other public sources of small business support. 2

My final comment concerns the use of Tunnel Boring Machines. We strongly recommend that the insertion point for TBM be at the west end of 2nd Street, furthest from Little Tokyo. 3

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns. 4

Sincerely,

Ronald M. Fong
Director

Administered by
Little Tokyo Service Center CDC
231 E. Third Street
Los Angeles, CA 90013
Phone: 213.473.1605
Fax: 213.473.1601

A Collaborative of
Chinatown Service Center
Koreatown Youth & Community Center
Little Tokyo Service Center CDC
Search to Involve Pilipino Americans
Thai Community Development Center

CN9

Responses to Comments from Asian Pacific Islander Small Business Program, Fong, Ronald M.

Response to Comment CN9-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Please refer to Responses to Comments CN9-2 through CN9-4, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment CN9-2

Metro intends to work with the Little Tokyo community to support businesses throughout the construction phase of the project. It is Metro's goal to minimize the Regional Connector's adverse impacts to businesses. Targeted marketing efforts and other technical assistance are included as confirmed mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro believes that, once completed, the Regional Connector will be beneficial for the Little Tokyo business community.

Response to Comment CN9-3

Please refer to Response to Comment CN1-4, above.

Response to Comment CN9-4

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

CN10

SAVOY

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Dolores,

Enclosed is a copy of the letter and signed petitions that were sent to the board last November. We understand that not all signature pages were received and we would like this included in the Draft EIR. 1

Sincerely,

The Board of Directors

Board of Directors
Savoy Homeowners Association

xc: Ginny-Marie Brideau, The Robert Group

Savoy Community Association
c/o Management Office
100 S. Alameda Street
Los Angeles, CA 90012
Phone (213) 617-9300 fax (213) 617-8001
savoyhoa.com

CN10

SAVOY

November 10, 2009

MTA Board of Director-Chair
Attn: Ara Najarian
One Gate Plaza
Los Angeles, CA 90012

Dear Ara Najarian,

Re: Los Angeles Regional Connector Project

Attached please find a copy of the letter signed by over 200 Savoy residents opposing the MTA Regional Connector Project in its present form.

This letter reflects signatures collected through September and accurately speaks to our concerns regarding the proposed underground alignment at First and Alameda Streets in Los Angeles.

1 cont'd

We ask for your support and efforts in finding another alternative that will not adversely affect our community.

Thank you for attention to this matter. Please let us know if we can be of any future assistance in opposing this project.

Sincerely,

Lynne Collmann
For the Board of Directors
Savoy Community Association

Enclosures

Savoy Community Association.
100 South Alameda Street, Los Angeles, CA 90012
(213) 617-9300 (213) 617-8001 fax
www.myhoa.com/savoy

CN10

SAVOY

Attention:

Antonio R. Villaraigosa, Mayor, City of Los Angeles
Gloria Molina, Los Angeles County Supervisor, 1st District
Michael D. Antonovich, Los Angeles County Supervisor, 5th District
Don Knabe, Los Angeles County Supervisor, 4th District
Zaev Yaroslavsky, Los Angeles County Supervisor, 3rd District
Mark Ridley-Thomas, Los Angeles County Supervisor, 2nd District
MTA Board of Directors

We, the residents of Savoy in Little Tokyo, represented by the Savoy Homeowners' Association, hereby oppose the MTA Regional Connector underground alignment crossing 1st and Alameda St. As a community of 500+ property owners and residents in 303 units facing this intersection, we stand to lose much because of this project: depressed property values during construction, permanent loss of businesses, increased traffic, and increased air and noise pollution from construction and trains, respectively. The extreme designs for the surfacing of the train and the intersection threaten our property and quality of life. We have already sustained three years of road closures and construction for the Gold Line Extension. We applaud the conventional and unobtrusive design of the Gold line route and welcome the addition of a new Metro station to our neighborhood.

The proposed underground alignment for the Regional Connector, on the other hand, would surround the building in yet another round of heavy construction and place trains running on TWO sides of our building, forcing residents to use a bridge just to cross the street. Our residents facing Alameda will see their views of LA street life forever altered by the presence of a hole going into the ground and trains surfacing every 1.30 minutes. Finally, the Regional Connector will create an artificial boundary effectively isolating us from the historic and significant LA community we are so proud to be a part of.

1 cont'd

We understand the need for the Regional Connector, but we simply cannot accept this development in its present form; the impact on our community is too severe. We implore you and the MTA to find another way.

Sincerely,

The Residents of the Savoy

	Signature	Name	Unit #
1.		Pei Yun Chiang	355
2.		Kenneth Tan	355361
3.		Eileen Tan	365
4.		Eveline Lee	234
5.		Lauren Frank	347
		SIDNEY WANG	#408

CN10

SAVOY

Attention:

Antonio R. Villaraigosa, Mayor, City of Los Angeles
Gloria Molina, Los Angeles County Supervisor, 1st District
Michael D. Antonovich, Los Angeles County Supervisor, 5th District
Don Knabe, Los Angeles County Supervisor, 4th District
Zaev Yaroslavsky, Los Angeles County Supervisor, 3rd District
Mark Ridley-Thomas, Los Angeles County Supervisor, 2nd District
MTA Board of Directors

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The proposed underground alignment for the Regional Connector, on the other hand, would surround the building in yet another round of heavy construction and place trains running on TWO sides of our building, forcing residents to use a bridge just to cross the street. Our residents facing Alameda will see their views of LA street life forever altered by the presence of a hole going into the ground and trains surfacing every 1.30 minutes. Finally, the Regional Connector will create an artificial boundary effectively isolating us from the historic and significant LA community we are so proud to be a part of.

We understand the need for the Regional Connector, but we simply cannot accept this development in its present form; the impact on our community is too severe. We implore you and the MTA to find another way.

Sincerely,

The Residents of the Savoy

	Signature	Name	Unit #
1.		SUSAN LIN	430
2.		SEAN USHEROFF	471
3.		Heera Choi	446
4.		Young S. Yoon	446
5.		Yvette Kim	359

CN10

SAVOY

	Signature	Name	Unit #
6.		Amanda Gregory	126
7.		Krista Evans	126
8.		Grace Shim	427
9.		JIN SHIM	427.
10.		Eric Nicsinger	152
11.		Jimmy Lee	265
12.		Jack Yuan	267
13.		Paula Williams	308
14.		THERESA CONG	271
15.		Joseph C Ferraro	368
16.		Joshua Norton	365
17.		GRACE PAE LIU	473
18.		Sang Rim Son	212
19.		Nam H. Lee	212
20.		SCANEH LEE	212
21.		Robert Cordova	246
22.		DAN DEANG	104

SAVOY

	Signature	Name	Unit #
23.		Sal Magturo	475
24.		Kyoungsuk Jo	370
25.		Pei Yun Chiang	355
26.		Francis Federis	351
27.		John J. Kim	469
28.		Sara Feldman-Grosse	457
29.		Jon-than Lin	322.
30.		Barbara Bauza	425
31.		Joy Pae	115
32.		Sabrina Villalba	329
33.		Christine Crain	164
34.		Shirley J. Keyser	303
35.		Jasna Lujan	371
36.		Dean Kim	250
37.		Robby Garcia	371
38.		Shaun Sano	409
39.		Yun Lim	434

SAVOY

	Signature	Name	Unit #
40.		James Beltran	166
41.		Peter Choi	377
42.		Mimi Hong	320
43.		Pei Chen Hsieh	260
44.		Jennifer Shim	378
45.		PAUL YEH	203
46.		Myung Hee Byun	468
47.		Eric Yang	202
48.		Judy Chang	402
49.		MARIA MUKAKAWA	360
50.		Sung Hee Yu	121
51.		Mihyun Kim	336
52.		DOMINO CHEUNG	242
53.		ANDY FOSTER	261
54.		DANIEL NAKAMURA	420
55.		KYOKO NAKAMURA	279
56.			

SAVOY

	Signature	Name	Unit #
57.		Maggie Xu	452
58.		GISELLE FEDERIS	351
59.		NORMA a mendini	172
60.		CHRISTOPHER TAN	368
61.		In hee Choi	406
62.		Channon Mizuno	130
63.		Miki Yokoyama	466
64.		Evan Fujii	206
65.		Jane H	204
66.		Richard Cho	204
67.		Lamy Lu	204
68.			
69.			
70.			
71.			
72.			
73.			

CN10

SAVOY

Signature	Name	Unit #
	LINDA C. BLAKEMAN	302
	JAMES R. BLAKEMAN	302
	NELWINA TOMI	155
	Sam Roe	352
	Hyun Min Park	435
	ANDREW LIU	473
	Karen Lee	348
	Dong S Kim	348
	B. [illegible]	136
	J. [illegible]	433
	Sylvia Lee	265
	ANDREA DILLON	446
	Elise Okita	114
	JACK TSAI	452
	Drew Patrick	462
	Johnnie Raines	318
	Robert Y Storm	213

CN10

SAVOY

Signature	Name	Unit #
	MARCIA J. STROM	213
		#443
	H. Villalba	#329
	Chun-Shen Chiang	#228
	MARCUS DRISCOLL	#472
	ANDREW LIN	#430
	LINDA VAKHRAMEEVA	419
	JAIME C ALTAMIRANO, JR	168
	TIFFANY DEANG	104
	Julieta Deang	104
	Euree Kim	238
	Michael Maguire	475
	Paul Vaughan	369
	Jonathan Nahm	466
	Michael Chang	207
	Eve Chang	207

CN10

SAVOY

Signature	Name	Unit #
	Paul de Guzman	205
	Allan Wang	418
	Christina Sain	305
	Michael Ford	#318
	TERESA GREGORY	#126
	Jame	
	John Keil	*220
	MINON PATE	115
	BRANDON PATE	115
	DANIEL DELBOY	115
	Guillermo Mejia	442
	Michelle Kim	405
		474
	MI YOUNG CHON	316
	SUNG YEON CHO	316
	ERIN CHO	316
	Yang H Kim	304

CN10

SAVOY

Signature	Name	Unit #
	Heera Choi	#252
	REGINA LEE	109
	Vanna Tran	311
	Bernard Miranda	311
	Alongkorn Amornvongpaibun	266
	SEENA SAMIMI	464
	MONA SAMIMI	469
	Dong-Hun Kim	357
	Erika Koyama	315
	Kenneth Hsu	315
	Elaine Kim	443
	Alan W Fan	260
	Jannie Oh	251
	Peggy Kim	251
	Hsing-Ting Yu	328
	JORDAN SU	208

CN10

SAVOY

Signature	Name	Unit #
	JUNEON SON	264
	Tom Kim	421
	Fritzie Alapas	166
	Kekoa Horaguchian	474
	Hori's Horaguchian	474
	Deana K. Chuang	280
	Guadalupe Ortiz	459
	Christina Manh	167
	Claudia Kessler	409
	DAVID TAN	247
	Young Lee	150
	Diana Choi	232
	Eugene Kim	231
	SUSAN TAE	376
	Karen Kim	367
	JIXIAN. JIN	367
	Joo Won Lee	417

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SAVOY

Signature	Name	Unit #
	Ryan Smith	327
	Allen Hsu	328
	Amy Chang	331
	John Hwang	323
	Jane Kim	380
	Terrence Nolan	303
	Candy Jeon	304
	WILLIAM ELEY	307
	CANDICE PERKINS	307
	Wook Kim	338
	Hyon Cheong	338
	CEC—JMG	324
	Hy	324
	Eunice Park	317
	RYAN BUENDIA	314
	Lynn, Suh	#239
	Colton Kim	#239

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SAVOY

Signature	Name	Unit #
	Seung S Hong	378
	Daniel Gusher	379
	Nathalie Tran	379
	Yun Sun	375
	T. Agan	375
	Ji Lung	383
	Park	363
Etsuko Masuda	ETSUKO MASUDA	354
Sotaro Masuda	sotaro MASUDA	354
Shintaro Masuda	shintaro MASUDA	354
Kentaro Masuda	KENTARO MASUDA	354
	Melissa Soo Hoo	349
	Jai H. Jang	342
	Jee eun chun	342
	Deborah Brutchey	343
	Yong Lee	340
	Boo. Lee	340

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SAVOY

Signature	Name	Unit #
	Romeo Salumbides	160
	CMALI, FERMOL	161
	Kim Gyeong Sag	159
	CANDY CHUNG	170
	Stephanie Tagudar	173
	David Miyadaki	173
	Nam Kim	146
	JENNIFER AYTONA	146
	Lee Yunmi	152
	Hye Jin. Jeo	152.
	Seolcgoung Kwon	149
	Go H Sun	140
	Nancy Kwak	101
	George Ahn	102
	KWAC. AO-Soo	102
	Mary Ahn	102
	Peter Han	236

CN10

SAVOY

Signature	Name	Unit #
	Loreclena Cabrera	406
	Lori A. Norrick	414
	NICK LEE	403
	ASHA LEE	403
	C. T. (CIM #401	
	Todd Cesko	465
	Alma Cesko	465
	Gina Seo	
	Won Lee	454
	Randy Lee	454
	MEG HWANG	448
	Scott	245
1.	Todd Cesko	465
2.	Alma Cesko	465
	AIMEE SHIMAMOTO	143
	Jennifer Hoi	322

CN10

SAVOY

Signature	Name	Unit #
	Mayela Solorio	105
	Sea C. Lee	109
	Jung H. Lee	109
	KyungHoKim	111
	SOON UM	112
	KEN HAMANO	118
	Kyung Min Son	122
	Sungho Kim	122
	Anna Yoon	123
	Brian Kim	124
	Sandra L. Christenson	134
	Beth Minato	134
	Ron Kim	436
	HIROKO Mimose	436
	MAGI Kurita	436
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CN10

Savoy MTA Petition SAVOY Paul (1)

Signature	Name	Unit #
	Bree Carlson	208
	Sun M Lee	217
	Young Kim	217
	JEEAH JUNG	221
	John Dokken	226
	Gregory Park	227
	Soo Heo	229
	Yoo, Alex	230
	Eric Kim	224
	Tanja Olano	268
	KYUNG G. HAN	254
	Peter Tang	258
	Jai Shim	257
	Yoo-min Park	255
	esther Baek	250
	Teresastone	248

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12
20
48

CN10

OPPOSITION LETTER

Attention: Antonio R. Villaraigosa, Mayor, City of Los Angeles
Michael D. Antonovich, Los Angele County Supervisor, 5th District
Don Knabe, Los Angeles County Supervisor, 4th District
Zaev Yaroslavsky, Los Angeles County Supervisor, 3rd District
Mark Ridley-Thomas, Los Angeles County Supervisor, 2nd District
Gloria Molina, Los Angeles County Supervisor, 1st District

We, the patrons, businesses and community members of Little Tokyo, hereby list our signatures below to oppose Metro Regional Connector's underground, or light rail project, which will run through our beloved community. The Metro Regional Connector is only a thoroughfare along 2nd Street and emerges onto 1st and Alameda. It offers no stops along the way. This will threaten long time established businesses, forcing closures and loss of jobs, due to 3-5 years of construction; as well as visitors and tourists seeking accessibility elsewhere. Many Japanese senior citizens who reside in Little Tokyo will not be able to cross the street safely. The Metro line will delineate resident's from their current lifestyle, which will segregate them from everyday shopping, community centers and temples/churches of worship. 2nd Street is very narrow and should not be allowed for Metro's proposed commuter transportation.

We ask that you and your constituents reconsider this project and find other routes that will not destroy our community.

We hereby oppose this project as presented below:

Print Name	Signature	Date	Phone No.
ANDREW LIN	A Lin	9/10/09	310-[illegible]-4206

CN10

Responses to Comments from the Savoy Homeowners Association

Response to Comment CN10-1

This letter and the signature pages are included herein as part of this Final EIS/EIR. This Final EIS/EIR also includes refinements to the Locally Preferred Alternative presented in the Draft EIS/EIR that reduce construction impacts both in Little Tokyo and other parts of the project area (see Chapter 2). The Locally Preferred Alternative involves reconstruction of a portion of the Metro Gold Line underground, including the tracks at the 1st and Alameda intersection. All trains would run underground or in an open-cut portal in the vicinity of the Savoy complex. This would reduce train activity on the surface in front of the building. The rail infrastructure and trains would be less visibly noticeable than the current at-grade Metro Gold Line. No pedestrian bridges in Little Tokyo are proposed as part of the Locally Preferred Alternative. Metro will continue to work with the community throughout project construction. Metro believes that the mitigation measures presented in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR would minimize project impacts to the extent feasible, including business loss, traffic congestion, air pollution, and noise. It should also be noted that light rail trains are powered by electricity, and do not generate air pollution in the vicinity of the vehicles.

Japanese American National Museum

October 15, 2010

Ms. Dolores Roybal-Saltarelli
Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Ms. Roybal-Saltarelli:

The Japanese American National Museum is appreciative for the opportunity to provide its position on Metro's proposed Regional Connector and, more specifically, on the Draft Environmental Impact Study and Environmental Impact Report (Draft EIS/EIR) for the Regional Connector Transit Corridor Study which was first released on September 3, 2010.

Given the magnitude of the proposed project and the direct impact on the Japanese American National Museum's facilities (located at the corner of Alameda and First Street) and operations, the Board of Trustees wants to convey the following to Metro:

1) Of the proposed build options listed in the Draft EIS/EIR, the Japanese American National Museum believes the Fully Underground Alternative is the best choice in terms of long-term economic, social, environmental, and public benefit to the local and greater community. By constructing the Regional Connector entirely underground, Metro would mitigate potential problems of great concern to the National Museum, such as safety, noise and traffic. The commitment to construct a Little Tokyo station is of primary importance. Given the potential disruption to Little Tokyo during a construction period that could span four years or more, it would be unjust if the community does not receive a commensurate benefit when the project is completed. The National Museum deems the Little Tokyo station as an essential part of the proposed project.

2) The two other build options, the At-Grade Emphasis and the Underground Emphasis, are both problematical for the National Museum. Because the light rail lines would run at-grade, traffic will continuously be disrupted, creating hazards for pedestrians trying to visit our facilities and producing an unhealthy environment filled with noise pollution. One scenario has as

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2

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many as 24 trains an hour running adjacent to the Museum's Pavilion and the Museum's tenant, Chado Tea Room. The two other build proposals would require the excavation of Alameda Street, adjacent to the Museum's Pavilion and Chado Tea Room. Such a development would inhibit access to the Museum's underground garage, loading dock, and bus loading zones on First Street and Alameda, jeopardizing thousands of student visits as well as normal operations for the institution.

3 cont'd

3) The National Museum, while expressing its preference for the Fully Underground Alternative, has grave concerns on how the project and its lengthy construction period will affect the stability of the institution. There are three major areas in which the National Museum will be severely impacted by the construction of the Regional Connector:

   a. access to the Museum;
   b. facilities/operations; and
   c. business revenue.

   Mitigation for each area is essential to ensure that the Museum may continue day-to-day operations without suffering an increased burden on its finances and human resources and to compensate for any lost revenue due to construction circumstances that prevent the Museum from doing business with visitors and event rental clients. The National Museum is concerned about its members and visitors not being able to visit its facilities. The perception alone that access is difficult is enough to decrease the institution's attendance. For facilities, increased wear-and-tear on its HVAC (Heating, Ventilation & Air Conditioning) equipment, specifically in regard to air filtration systems, ventilation shafts and rooftop condenser coils due to dust and debris from construction are enormous expenses. Also of major concern is the likelihood of utility service disruptions, including electrical power, natural gas, plumbing and telecom. The construction will likely inhibit the Museum's ability to host visitors and event rental clients, of which the Museum depends for operating revenue. Construction noise and lack of accessibility will greatly reduce the appeal and logistical ability for the Museum to rent event space for meetings, lectures, seminars and receptions. Renting location space for events and media productions constitute an important stream of earned income for the Museum. Noise and accessibility challenges will certainly make the location undesirable and the Museum would lose that revenue source.

4

4) The Japanese American National Museum seeks assurances from Metro that it will be responsive to these concerns and will engage in direct discussions throughout the process and duration of construction. Given

5

the length of the project, direct communication with Metro leadership and staff will be crucial to facilitating resolution of any challenges. The National Museum is gratified by the amount of cooperation shown by Metro since the proposed Regional Connector project was made public and believes that continued cooperation with the willingness to seek new, innovative solutions will be the key to making the project successful for all involved.

5 cont'd

The Japanese American National Museum looks forward to working with Metro to find ways to handle the challenges that lie ahead.

Thank you for your consideration.

Sincerely,

Akemi Kikumura Yano
President & CEO

Gordon Yamate
Chairman of the Board of Trustees

CN11

Responses to Comments from Japanese American National Museum, Yano, Akemi Kikumura

Response to Comment CN11-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN11-2

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. This alternative includes a new underground station on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street.

Response to Comment CN11-3

Comment noted. Metro will ensure that access to the museum, including bus loading areas, is maintained during construction. The Locally Preferred Alternative would not involve at-grade train operations at 1st and Alameda Streets like the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative would have.

Response to Comment CN11-4

Preference for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro will provide replacement parking during construction on the Mangrove property to offset displaced parking spaces and help maintain access to the museum and other destinations nearby. Pedestrian and automobile access to the museum will be maintained during operating hours throughout the construction phase of the project, and Metro will ensure that visitors remain able to access the museum. Mitigation measures to assist businesses and organizations, including the Japanese American National Museum, are included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro will work to minimize any utility service disruptions, and will notify the community in advance should any brief outages be necessary. Metro will repair any inadvertent damage to private property that occurs as a result of construction, including heating, ventilation, and air conditioning (HVAC) systems. Metro will work to establish construction schedules around important community events at the museum so as to accommodate the museum's need to utilize its outdoor spaces. Barriers will be placed around construction staging areas to minimize the visual and noise impacts of construction activities.

Response to Comment CN11-5

Metro intends to engage in direct discussions with the museum throughout the construction phase and will be responsive to the museum's concerns. Metro agrees that direct communication will be crucial to resolving challenges. Metro looks forward to the continued involvement of the museum.

Go For Broke
NATIONAL EDUCATION CENTER

October 15, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Via email: regionalconnector@metro.net

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

Go For Broke National Education Center (GFBNEC) is a 501(c)(3) established by second-generation Japanese American or Nisei veterans of World War II. Our founders and supporters were soldiers of the 100th Infantry Battalion, 442nd Regimental Combat Team and Military Intelligence Service, the heroic units recently designated by Congress to collectively receive its highest civilian honor, the Congressional Gold Medal. Our programs include:

- Hanashi Oral Histories, an archive of more than 1,000 interviews that we've conducted with Nisei or second-generation Japanese American veterans that is the largest of its kind in the nation, and
- an educational curriculum for history and social studies classes that we support with teacher training nationwide and that is offered to students in California, Hawaii, Maryland, Washington, D.C. and Virginia.

In addition, we serve as a resource center for academics, journalists, historians, documentary and film producers, journalists, writers and others. Our symbol is the **Go For Broke Monument**, a lasting reminder of the U.S. Constitution's guarantees of civil liberties to Americans of all races and ethnic backgrounds that stands in Little Tokyo off of Temple Street at Alameda near MOCA's Geffen Contemporary Museum.

GFBNEC has raised millions of dollars, including funding from Congress and the State of California, for the development and planning of a new Go For Broke National Education Center to be built adjacent to the Go For Broke Monument.

On behalf of the veterans, our GFBNEC Board of Directors and our Board of Governors, we join fellow members of the Little Tokyo Community Council (LTCC) in urging the Metropolitan Transit Authority to adopt the Fully Underground Alternative as the only acceptable build option, with the caveat that critical mitigation measures be part of the plan. This option is the Locally Preferred Alternative. It addresses more of our

1

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Established in 1989 as the 100th/442nd/MIS WWII Memorial Foundation

Go For Broke
NATIONAL EDUCATION CENTER

concerns about environmental, economic, social and cultural impacts on our existing Go For Broke Monument, our future National Education Center and the Little Tokyo community than any of the other alternatives examined by the DEIS/EIR, with the exceptions of the no-build alternatives. We also support Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative...as a staff recommended Preferred Alternative based on the technical analysis...and input received from the community."

1 cont'd

The veterans and GFBNEC agree, as stated in the Draft EIS/EIR, that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." The Draft EIS/EIR also shows this option to be the best performing alternative from a ridership, travel time savings, environmental, noise, safety, cost-effectiveness and social impact perspective. Over time, we believe the fully Underground Alternative will also be the most prudent choice fiscally. In contrast, other alternatives, with the exceptions of the no-build alternatives, pose significant, disproportionate impacts on our Go For Broke Monument, our National Education Center, the Little Tokyo community and, ultimately, the City of Los Angeles.

We also agree with our fellow LTCC members that our support for the Fully Underground Alternative is contingent on satisfactory acceptance of LTCC's proposed mitigation measures identified on April 27, 2010. The other alternatives, with the exceptions of the no-build alternatives, pose significant disproportionate impacts on our Go For Broke Monument, our National Education Center and Little Tokyo that are unacceptable. Little Tokyo is one of three remaining Japan Towns in America and is a vibrant part of the Downtown Los Angeles renaissance.

2

We also agree with LTCC that the Draft EIS/EIR is incorrect in its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts.

3

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Go For Broke
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The At-Grade Emphasis is especially objectionable to GFBNEC. Running at street level on Temple Street to Alameda, tracks and right-of-way would take up most of the parking lot area north of the Geffen at the corner of Temple and Alameda Streets. The inward curve of the two sets of tracks would be very close to the Go For Broke Monument and would significantly encroach into our GFBNEC building site. In addition, if the LA City Department of Transportation requires more right-of-way for safety reasons as we've been told that it may do, the At-Grade Emphasis would take away most of our building site. This street-level option would have detrimental effects on GFBNEC's plans and on work now underway. Frequent trains would make it impossible to hold veterans' celebrations at the Go For Broke Monument or to use the long-awaited Art Park for special events. It would also make it unlikely that buses filled with school children or 80 and 90-year-old veterans would be able to enter or exit from our new Go For Broke National Education Center on Temple Street. 4

GFBNEC further agrees with LTCC that it is critical for Metro to establish a broader safety net for Little Tokyo businesses and institutions, and that boring must begin at the vacant parcel on 2nd Street between Flower and Hope Streets to minimize impacts of construction on daily life in our Little Tokyo community and on access to our community. 5

And we agree that it is important for Metro to formalize a process for the Little Tokyo Community to have a continuing voice regarding these issues throughout design, engineering and construction of the Regional Connector. 6

On behalf of the veterans, GFBNEC Board of Directors and GFBNEC Board of Governors, thank you for your consideration. We look forward to continuing to work with Metro to move forward with this project and develop effective mitigation measures that will address our own and our community's concerns. 7

Sincerely,

Michael Ozawa
Chairman of the Board
GFBNEC

CC:
Bill Watanabe, Chair, Little Tokyo Community Council and Board of Directors

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CN12

Responses to Comments from Go For Broke National Education Center, Ozawa, Michael

Response to Comment CN12-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Appropriate candidate mitigation measures identified in the Draft EIS/EIR for the Fully Underground LRT Alternative have been refined and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment CN12-2

Comment acknowledged.

Response to Comment CN12-3

The impacts of the proposed pedestrian bridge and roadway underpass in Little Tokyo were discussed in Sections 4.17.3.3.2 and 4.17.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR, respectively. The potential impacts of beginning tunnel boring machine operations at 2nd and Central were described in Section 4.18.3.4 of the Draft EIS/EIR. Impacts were adequately analyzed in the Draft EIS/EIR. Disproportionate impacts on the Little Tokyo community were analyzed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The refined Locally Preferred Alternative would not involve construction of any pedestrian bridges or roadway underpasses in Little Tokyo, and would not involve starting tunnel boring machine operations at 2nd and Central. Tunnel boring machine operations would instead begin at the Mangrove property as indicated in Section 4.18, Construction Impacts, of this Final EIS/EIR which is farther from the center of Little Tokyo and would involve fewer impacts.

Response to Comment CN12-4

Metro recognized the proximity of the proposed At-Grade Emphasis LRT Alternative alignment to the Go For Broke Monument in Section 4.1.4.3 of the Draft EIS/EIR and this Final EIS/EIR. The alternative's potential traffic access impacts to the Go For Broke Monument were identified in Section 4.17.3.3.1 of the Draft EIS/EIR and this Final EIS/EIR. This alternative is not being pursued for further study. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative alignment would not use any part of the lot containing the Go For Broke Monument, and would run along the opposite side of Alameda Street in an underground configuration.

Response to Comment CN12-5

Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR with the goal of minimizing impacts to businesses and institutions affected by the project. As part of the refinements made to the Locally Preferred Alternative in response to public comments on the Draft EIS/EIR, Metro is no longer considering inserting tunnel boring machines from the

2nd/Central Avenue station or the 2nd/Hope Street station sites. Instead, the tunnel boring machine would be inserted from the Mangrove property, which is farther from the center of Little Tokyo. This refinement would reduce impacts to the Little Tokyo community and its businesses. Metro will have at least one project office in the Little Tokyo community, and staff will be available via a 24-hour hotline to ensure the minimization of impacts during construction.

Response to Comment CN12-6

Comment acknowledged. Metro will create a Regional Connector Community Leadership Council a committee, consisting of local business and property owners, to streamline Metro's communication with all communities affected by the project and respond to their concerns during construction of the Locally Preferred Alternative.

Response to Comment CN12-7

Thank you for your comment. Metro has met and will continue to meet with the Little Tokyo community groups regarding the Regional Connector Transit Corridor project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Little Tokyo community, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Input from the community was incorporated into the refinement of the Locally Preferred Alternative and the mitigation measures presented in this Final EIS/EIR.

EAST WEST PLAYERS

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Tim Dang
PRODUCING ARTISTIC DIRECTOR

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Dolores Wong
John Woo

ARTISTIC DIRECTORS EMERITI
Mako (d.)
Nobu McCarthy (d.)

October 18, 2010

Via Email & U.S. Mail
RegionalConnector@Metro.net

Ms. Dolores Roybal-Saltarelli
Los Angeles County
Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: **Comments of East West Players on Draft EIS/EIR for Regional Connector**

Dear Ms. Roybal-Saltarelli:

On behalf of East West Players ("EWP"), I am submitting comments on the Draft EIS/EIR for the proposed Regional Connector.

By way of introduction, EWP is the nation's largest producing organization of Asian American artistic work and the longest-running professional theater of color in the country. EWP performs in a 240-seat theater in a restored, historic building once known as the Union Church of Los Angeles, now the Union Center for the Arts. The Union Center, which also houses EWP's administrative offices, is located at 120 John John Aiso Street near the corner of First and San Pedro Streets in the heart of the historic Little Tokyo District in downtown Los Angeles. The Union Center's parking lot is shared with the Go for Broke Monument, the Geffen Contemporary at MOCA and the Japanese American National Museum.

EWP is a member of the Little Tokyo Community Council ("LTCC") and has participated in the prior discussions that Metro has had with Little Tokyo community stakeholders concerning the proposed Regional Connector. EWP fully supports LTCC's position on this issue and joins in LTCC's comments dated October 1, 2010 on the Draft EIS/EIR. Specifically, EWP strongly urges Metro to adopt the Fully Underground LRT Alternative for the proposed Regional Connector as it is the only

1

option that adequately addresses the environmental, economic, social and cultural impacts to the community.

The balance of this letter addresses a few comments specific to EWP and the potential impact the proposed Regional Connector may have on EWP.

1 cont'd

Through its main stage productions, Actors Conservatory, David Henry Hwang Writers Institute and other programs, EWP is a cultural and economic engine for Little Tokyo and the surrounding downtown area. Surveys confirm that over 70% of our patrons visit local restaurants and shops before and/or after attending EWP performances.

Because most of our patrons arrive at the theater via private cars, EWP's main concerns about the proposed Regional Connector is that automobile traffic in the downtown area not be unduly hindered during the construction phase, that access to the Union Center be maintained at all times and that parking in Little Tokyo be preserved as much as reasonably practicable. EWP understands that LTCC has advocated for Metro to implement construction/traffic mitigation measures in addition to those already contemplated in the Draft EIS/EIR, and we join those recommendations.

2

Moreover, upon the completion of the proposed Regional Connector utilizing the Fully Underground Alternative, EWP's patrons will be able to reach the theater using various light rail lines, thus potentially reducing traffic. Many of EWP's patrons reside in Los Angeles' West Side (West LA, Culver City, Beverly Hills, Santa Monica, etc.), South Bay (Gardena, Torrance) and San Gabriel Valley (Pasadena, Monterey Park, Alhambra). The proposed Regional Connector will fulfill the goal stated in the Executive Summary of connecting the spokes of Metro's expanding rail lines and providing a "one seat ride," via the Blue, Gold and Expo lines, from home to the theater for many of EWP's patrons.

3

Given the importance of EWP to Little Tokyo's cultural and economic life, and the impact that the proposed Regional Connector can have on EWP, we believe it would be appropriate to include a specific reference to EWP in the final EIS/EIR as follows and as reflected in the attached pages:

--In Chapter 4, "Environmental Analysis, Consequences and Mitigation," Section 4.3.2.4.6 Little Tokyo, the following (or similar) sentence should be inserted immediately before the final sentence of the third paragraph: --

4

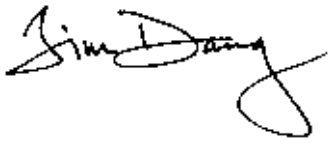
East West Players, the largest and oldest Asian American theater organization in the country, is located across from the Geffen Contemporary and the Go For Broke Monument. 4 cont'd

--In Appendix O, "Community and Neighborhood Impacts," Section 4.9.6 Little Tokyo, on page 21 before the last sentence of the third paragraph, insert the following (or similar) sentence: 5

East West Players, the nation's largest and oldest producing organization of Asian American artistic works, is housed in the historic Union Church Building (now the Union Center for the Arts) located across from the Geffen Contemporary and the Go For Broke Monument.

In conclusion, East West Players thanks Metro for this opportunity to comment on the draft EIS/EIR and reiterates its support for the staff recommended Preferred Alternative of the Fully Underground LRT Alternative for the proposed Regional Connector. Please do not hesitate to contact me if you require any further information. 6

Sincerely,



Tim Dang
Producing Artistic Director

cc: EWP Board of Directors

Core/Center City area and contains a large homeless population and many single-occupant hotel residential properties.

4.3.2.4.6 Little Tokyo

Little Tokyo is a unique cultural community in downtown Los Angeles because it has the largest Japanese-American community in the continental United States (City of Los Angeles Planning Department 2003). Little Tokyo is one of only three remaining Japantowns in the United States (in addition to San Francisco and San Jose). Little Tokyo has a range of mixed uses including retail, hotel, office, and commercial spaces.

The area also contains a substantial portion of the central downtown's residential units and has several new residential developments. The rehabilitation of existing spaces into residential uses is also occurring in Little Tokyo. Important developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo/Arts District Station on the Metro Gold Line. Due to the proximity to Metro's transit lines, this development could potentially contain a high-density combination of offices and housing.

Little Tokyo contains a variety of important cultural venues and resources including the JANM, the Jodo Shu Betsuin Temple, the Los Angeles Hompa Hongwanji Temple, and the Japanese-American Cultural and Community Center. The Geffen Contemporary at the MOCA is located behind JANM. The Go For Broke Monument, located North of The Geffen Contemporary at MOCA at Temple and Alameda Streets is a monument dedicated to the Japanese-American veterans of World War II. Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to residents of the area.

INSERT

The Little Tokyo Historic District was listed on the National Register of Historic Places in 1986. The district spans from the north side of 1st Street from Judge John Aiso Street to Central Avenue and the east side of Judge John Aiso Street from 1st Street to midblock between 1st and Temple Streets. Buildings in the Historic District include commercial buildings on the north side of 1st Street, the Union Church on San Pedro Street, and the former Nishi Hongwanji Temple (the first Buddhist Temple built in Los Angeles) located at 1st and Central Streets.

4.3.2.4.7 Arts District

The Arts District is technically outside central downtown and considered a part of the Central City North Community Plan area; however, it is discussed in this section because it is adjacent to Little Tokyo and could be affected by the project. The Arts District consists mostly of old warehouses that have been converted to artists' lofts and studios (City of Los Angeles Planning Department 2003b). The largest concentration of artists is within the area between 1st, Palmetto, and Alameda Streets, and the Los Angeles River. This area is also sometimes referred to as the Artist-in-Residence District (City of Los Angeles Planning Department 2003b).

4.3.3 Environmental Impacts/Environmental Consequences

The following sections summarize the evaluation of potential community and neighborhood impacts for each alternative. Table 4.3-4 summarizes the results of the analysis.

(City of Los Angeles Planning Department 2003a). To the east, a variety of offices, hotels, shops and government buildings exist along Los Angeles, Spring, and Main Streets. Many buildings here have been renovated and converted to residential uses with ground floor retail, restaurants, and art galleries. Most of the historic financial buildings of the 1920s are found on Spring Street. Several historic theatres are located in this area; however, some are being used for retail purposes or are currently vacant.

The southern end of the Historic Core/City Center is adjacent to the Fashion District and contains historic buildings now used to manufacture clothing. The Metro Red Line travels beneath this district with a station on Hill Street between 4th and 5th Streets (City of Los Angeles Planning Department 2003a). The Skid Row community is located adjacent to the Historic Core/Center City area and contains a large homeless population and many single occupancy hotel residential properties.

4.9.6 Little Tokyo

Little Tokyo is a unique cultural community in downtown Los Angeles with the largest Japanese-American community in the continental United States (City of Los Angeles Planning Department 2003). Los Angeles' Little Tokyo is one of only three remaining Japantowns in the US (in addition to San Francisco and San Jose). Located between 1st, 3rd, San Pedro, and Alameda Streets, Little Tokyo has a range of mixed uses including retail, hotel, office, and commercial spaces.

The area also contains a substantial portion of the central downtown's residential units and has several new residential developments. The rehabilitation of existing spaces into residential uses is also occurring in Little Tokyo. Important developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo/Arts District Station on the Metro Gold Line. This development could potentially contain a high-density combination of offices and housing, utilizing its proximity to transit.

Little Tokyo contains a variety of important cultural venues and resources including the Japanese American National Museum (JANM), the Jodo Shu Betsuin Temple, the former Nishi Hongwanji Temple, and the Japanese American Cultural and Community Center. The Geffen Contemporary at the Museum of Contemporary Art (MOCA) is located behind JANM. North of The Geffen Contemporary at MOCA, at Temple and Alameda Streets, is the Go For Broke Monument, a monument dedicated to the Japanese American veterans of World War II who fought for the United States even as their families were classified as "enemy aliens" and were forced into internment camps (Experience L.A. 2009). Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to the area.

INSERT

The Little Tokyo Historic District was listed on the National Register of Historic Places in 1986. The district spans the north side of 1st Street from Judge John Aiso Street to Central Avenue, and the east side of Judge John Aiso Street from 1st Street to midblock between 1st

CN13

Responses to Comments from East West Players, Dang, Tim

Response to Comment CN13-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Please refer to Responses to Comments CN13-2 through CN13-6, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment CN13-2

As indicated in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, during construction of the Locally Preferred Alternative significant traffic impacts would occur due to temporary lane closures and installation of decking above proposed stations. Mitigation has been incorporated to reduce traffic impacts associated with construction of the Locally Preferred Alternative to the maximum extent feasible. Nonetheless, traffic impacts associated with construction of the Locally Preferred Alternative would be significant and unavoidable. However, access to Union Station would be maintained.

On-street and off-street parking impacts were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.2, Displacement and Relocation, of the Draft EIS/EIR and this Final EIS/EIR, respectively. Appropriate candidate mitigation measures to reduce parking impacts associated with the Locally Preferred Alternative were identified in the Draft EIS/EIR and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Examples of parking mitigation include development of a parking mitigation and circulation plan by the contractor in coordination with Metro and the City of Los Angeles; possible sequencing of construction activities so that multiple blocks of on-street parking are not temporarily removed at one time; and any unmet demand for parking spaces eliminated from the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street shall be replaced with spaces within one block of the land uses that rely on those spaces, or through a combination of strategies identified in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative.

Response to Comment CN13-3

Comment acknowledged. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN13-4

Comment acknowledged. The following sentence has been added to Section 4.3.2.4.6 of this Final EIS/EIR:

The Go For Broke Monument, located ~~North~~ north of The Geffen Contemporary at MOCA at Temple and Alameda Streets is a monument dedicated to the Japanese-American veterans of World War II. East West Players, the largest and oldest Asian American theater organization in the country, is located across from The Geffen Contemporary and the Go For Broke Monument,

in the Union Church Building (now the Union Center for the Arts). Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to residents of the area.

Response to Comment CN13-5

Comment acknowledged. The following sentence has been added to Section 4.3.2.4.6 of this Final EIS/EIR instead of Appendix O, Community and Neighborhood Impacts Technical Memorandum:

East West Players, the largest and oldest Asian American theater organization in the country, is located across from The Geffen Contemporary and the Go For Broke Monument, in the Union Church Building (now the Union Center for the Arts). Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to residents of the area.

Response to Comment CN13-6

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

LOS ANGELES CONSERVANCY

October 18, 2010

Submitted by email

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
Email: roybald@metro.net

Re: Regional Connector Transit Corridor Project Draft EIR

Dear Ms. Saltarelli:

On behalf of the Los Angeles Conservancy, thank you for the opportunity to comment on Metro's Regional Connector Transit Corridor Project Draft EIR (DEIR). The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with over 6,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural heritage of Los Angeles County. We commend Metro for its thorough survey of historic resources within the Area of Potential Effect, and believe the Regional Connector is an important project for the continued vitality of downtown. We submit the following comments to ensure that adverse impacts to historic and cultural resources are minimized as Metro selects its locally preferred alternative and as the project advances through completion. 1

I. At-Grade Emphasis LRT Alternative

In the analysis of the three build alternatives, At-Grade Emphasis, Underground Emphasis, and Fully Underground, the DEIR identifies a direct adverse impact on a historic resource with the At-Grade Emphasis alternative. As proposed, the train tracks for this alternative would "punch" through the south wall of the National Register-eligible 2nd Street Tunnel before continuing east through the tunnel toward Hill Street.

Completed in 1924, the 2nd Street Tunnel was the fourth in a sequence of significant tunnels built by the City of Los Angeles to ease traffic congestion in the early 20th century. With the demolition of the Broadway and Hill tunnels, and the subsequent alteration of 3rd Street Tunnel in the 1960s, 2nd Street is the only remaining tunnel in this group that retains its original appearance. With a brick-arch construction method and a rusticated, Classical Revival-style portal at the eastern (Hill Street) end, the most notable feature of the tunnel is its sleek, white-tiled line interior that is instantaneously recognizable in countless films and automobile commercials. 2

While the majority of the 2nd Street Tunnel would remain, we concur with the DEIR finding that punching through the tunnel's tile-lined wall would constitute an adverse effect under the federal Section 106 regulations as well as under the California Environmental Quality Act (CEQA). Although the HABS/HAER documentation is a fairly common mitigation measure adopted under Section 106 review, CEQA sets the bar higher by requiring the lead agency to evaluate and adopt all feasible alternatives and mitigation measures that avoid or reduce impacts on historic resources. As feasible alternatives exist that avoid impacts to the 2nd Street Tunnel in the form of the Underground Emphasis and Fully Underground alternatives, the Conservancy urges Metro not to adopt the At-Grade Emphasis as the locally preferred alternative. 2 cont'd

II. Underground Emphasis and Fully Underground LRT Alternatives

Under all options for the Underground Emphasis and Fully Underground alternatives, the block bounded by 1st Street, Alameda, 2nd Street, and Central Avenue would be taken and all buildings demolished, including the California Register-eligible building at 416 East 1st Street. Located at the southwest corner of 1st Street and Alameda, the one-story building dates from the early twentieth century but is best known and culturally significant as the location of the Atomic Café. Owners Minoru and Ito Matoba first opened their curiously-named restaurant at another location in Little Tokyo one year after the bombing of Nagaski and Hiroshima, and moved it to 416 East 1st Street in 1965. At this location, the Atomic Café was popular with intellectuals as a late night hang-out, and under the direction of the Matobas' daughter, Nancy, became a destination for the emerging punk rock music scene in the 1970s and 1980s. The building today houses Señor Fish, which continues the decades-long tradition as a gathering place for an eclectic crowd of artists, musicians, and intellectuals. 3

a. DEIR fails to evaluate alternatives that substantially lessen adverse impacts

As mentioned above, it is well established under CEQA that documentation does not meaningfully reduce the impacts of demolition of historic resources. As recognized by the court in *League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, "A large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers." Therefore, the demolition of the Atomic Café/Señor Fish building would constitute a significant adverse impact under CEQA, and the lead agency is required to evaluate and adopt all feasible alternatives and mitigation measures that avoid or reduce impacts on historic resources.

The DEIR erroneously concludes that documentation was sufficient mitigation under CEQA and fails to evaluate any potentially feasible preservation alternatives to demolition. To ensure adequacy of the environmental documents, the Final EIR must evaluate the feasibility of relocating the train egress/ingress portal in the Underground Emphasis and the underground station in the Fully Underground alterative to avoid demolition of the Atomic Café/Señor Fish building. Since the building is located on the corner of the block, we believe that this could be accommodated.

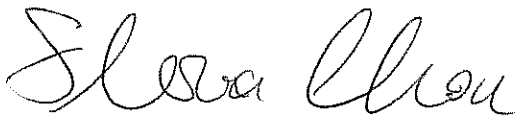
III. Effectiveness of Proposed Mitigation Measures to Avoid Potential Construction Impacts 4

Several historic resources along the route of all build alternatives have been identified as vulnerable to differential settlement and/or damage from ground-borne vibration during construction. In particular, the proximity of the routes to St. Vibiana Cathedral, which dates to 1876, and the 1910 Higgins Building should be studied. Previous Metro projects have resulted in damage to historic resources from such construction effects and it is unclear whether similar pre- and post-construction surveys, geotechnical and vibration investigation and monitoring, building protection measures, and contractor requirements near historic resources were employed. We request additional information concerning lessons learned from prior Metro projects such as the Red and Gold Lines, and examples of comparable projects in which the proposed mitigation measures have been utilized successfully. 4 cont'd

We also urge Metro to include an additional mitigation measure committing to repair substantial damage attributable to the construction of the Regional Connection as determined through the proposed monitoring. Such repairs should conform to the Secretary of the Interior's Standards and should be overseen by a qualified architectural historian or preservation architect in consultation with the City of Los Angeles Office of Historic Resources. 5

Thank you for the opportunity to comment on the Regional Connector Transit Corridor Project Draft EIR. Please feel free to contact me at (213) 430-4211 or fchou@laconservancy.org should you have any questions.

Sincerely,



Flora Chou
Preservation Advocate

CN14

Responses to Comments from Los Angeles Conservancy, Chou, Flora

Response to Comment CN14-1

Thank you for your comment. Please refer to Responses to Comments CN14-2 through CN14-5, below, for detailed responses to concerns raised by the commenter regarding historic and cultural resources.

Response to Comment CN14-2

Comment acknowledged. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The alignment of the Fully Underground LRT Alternative does not travel through the 2nd Street Tunnel as with the At-Grade Emphasis LRT Alternative.

Response to Comment CN14-3

Metro appreciates the comments from the Los Angeles Conservancy and the Office of Historic Resources regarding the development of mitigation measures for the impacts to the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building. Although the facts of the case for the Office of Historic Preservation and the League for Protection of Oakland's Architectural and Historic Resources v City of Oakland differ in that Metro is already developing an EIR for this project. The Draft EIS/EIR did include alternatives that avoided impacts to the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building. However, the Locally Preferred Alternative identified in this Final EIS/EIR would require acquisition of the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building property. The S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building has been significantly altered from its original condition and does not meet the criteria for architectural historic significance. However, this location played an important role in California history as the commenter points out. Metro agrees that mitigation is required for the change to the property. Metro also agrees that additional mitigation measures are warranted to mitigate for the impacts to this historic resource and that the proposed additional mitigation, while not required to reach the CEQA determination in the Draft EIS/EIR, would reinforce that determination. Metro has developed additional mitigation measures to enhance reduction of the impacts to a less than significant level and to be responsive to these comments. These include Metro offering the building for a period of one year following certification of this Final EIS/EIR for the price of one dollar to any party willing to move the building off of the 1st/Central Avenue station site at their own expense. Should no parties come forward, Metro would incorporate materials from the building into the project facilities. Metro would also offer to provide an exhibit commemorating the Atomic Cafe at the Japanese American National Museum or other suitable location, including exploring incorporating such an exhibit into the proposed 1st/Central Avenue station; and developing an individual Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) submission. Section 4.12, Historic Resources, of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) have been updated accordingly with the new mitigation measures. Please also refer to Response to Comment AL3-101.

Response to Comment CN14-4

Metro utilizes industry standards that are particular to California in identifying mitigation measures for potential ground-borne vibration and settlement near historic and non-historic resources during construction. These measures were identified in Section 4.7, Noise and Vibration, and Section 4.12, Historic Resources, of the Draft EIS/EIR and have been refined and confirmed in this Final EIS/EIR. These measures have been utilized on the Metro Red Line North Hollywood extension and the Metro Gold Line Eastside Extension where Metro completed two miles of tunnel with almost zero settlement near historic and culturally significant structures such as the Boyle Hotel at 1st and Boyle Streets which was built in 1889. In addition, structures at 2130 East 1st Street, Hollenbeck Masonic Lodge, 2415 East 1st Street and 2001-2009 were among some of the historic structures along the alignment where a tunnel boring machine, specifically an earth pressure balance (EPB) machine, was used successfully to limit ground settlement.

Response to Comment CN14-5

Metro has included this measure in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro will further stipulate that whatever repairs that are done to damaged historic properties are implemented in a manner consistent with the Secretary of the Interior's Standards for Rehabilitation. Metro has consulted with the California State Historic Preservation Officer and other consulting parties concerning this measure and its inclusion in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative and the Memorandum of Agreement (MOA) for the project.

Southern California's Leading Transit Advocacy Group

P.O. Box 567 * San Fernando, CA 91341-0567
Voice: 818.362.7997 * Fax: 818.364.2508
www.transitcoalition.org

The Transit Coalition (a project of SEE) is a nonprofit public charity exempt from federal income tax under Section 501[c](3) of the Internal Revenue Code

18 October 2010

Dolores Roybal Saltarelli, Project Manager
Metro
One Gateway Plaza, MS 99-22-02
Los Angeles, CA 90012-2932

RE: Metro Regional Connector DEIR/DEIS Comments

Dear Ms. Roybal Saltarelli:

The Transit Coalition strongly supports the Metro Downtown Regional Connector. Our comments describe the DEIR/DEIS items we support and the items that need to be changed. Also, the project needs to ensure bike access through station entrances, as directed by the Metro Board resolution. 1, 2

We believe that it is vital to keep the 5th/Flower Station. 7th/Metro is already crowded during peak hours; with the addition of traffic from the Expo, Foothill and Eastside lines, this key station will be severely overcrowded. The station on Flower, with portals at 5th and/or 4th, serves the densest concentration of high-rise buildings in the Western U.S. Many of these commuters would switch to transit if it is close to their destination, but not if they have to walk several blocks up to Bunker Hill. This would reduce congestion and improve air quality. 5th is actually three blocks away from 7th due to Wilshire, the same as between Pershing Square and Civic Center. 3

We support an underground alternative with inclusion of all four stations. 4

Sincerely,

Bart Reed

Bart Reed
Executive Director

CN15

Responses to Comments from The Transit Coalition, Reed, Bart

Response to Comment CN15-1

Thank you for your comment. Support for the project is noted. Please refer to Responses to Comments CN15-2 through CN15-4, below, for detailed responses to concerns raised by the commenter.

Response to Comment CN15-2

Station entrances proposed under the refined Locally Preferred Alternative would accommodate bicycle access in accordance with Metro polices.

Response to Comment CN15-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment CN15-4

Thank you for your comment. Support for an underground alternative with four stations is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

October 18, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
Via E-mail: roybald@metro.net

Mr. Ray Tellis
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017
Via E-mail: ray.tellis@dot.gov

Re: State Clearinghouse No. 2009031043
Los Angeles County Metropolitan Transportation Authority
Regional Connector Transit Corridor Project
Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Roybal Saltarelli and Mr. Tellis:

FAST is a non-profit organization dedicated to designing and supporting the implementation of short-term strategies to reduce traffic congestion in Los Angeles by optimizing current transit infrastructure and expanding use of public transit in order to improve our mobility and quality of life.

Pursuant to CEQA/NEPA, we submit the following comments with regard to the Regional Connector Transit Corridor Project:

Metro has proposed three alternatives for the Regional Connector as follows:

- At-Grade Emphasis LRT Alternative;
- Underground Emphasis LRT Alternative; and
- Fully Underground LRT Alternative.

FAST supports the Fully Below-Grade LRT Alternative. We strongly believe that this alignment will best serve employers, employees, students, residents and visitors around the region to and from the downtown area. The project will improve existing at-grade intersections and the flow of traffic downtown, while making public transit more accessible and useful for existing and future users.

1

515 South Flower Street • Sixth Floor • Los Angeles, CA 90071 • 213.233.2542 • Fax 213.613.1903
www.FASTLA.org

Metro has successfully engaged the entire community of stakeholders for the Regional Connector. While there would be some temporary disruption of surface street traffic during the construction phase for stations, the long-term impact of the Fully Below-Grade LRT Alternative would best serve the maximum number of people, providing circulation through downtown in the least intrusive way possible. This option is the safest for a highly pedestrian-used area. 2

We understand that Metro staff currently recommends eliminating the station proposed at 5th and Flower Streets due to potential cost overruns for the Fully Underground LRT Alternative. While FAST supports the 5th and Flower Street Station as important service to a residential, financial, tourist and cultural area currently underserved by transit, we would not want continued inclusion of this potential station to jeopardize Metro's application for federal New Starts program funding for the entire Regional Connector project. 3

However, FAST believes that a station in this area, in the heart of the Financial District and adjacent to the Central Library, is an important way to completely connect the different areas of Downtown Los Angeles. FAST therefore requests that the 5th and Flower Street station continues to be included in the Final EIR and future studies to ensure that this station is not completely eliminated at this time.

FAST congratulates Metro staff members Ann Kerman and Dolores Roybal-Saltarelli, with whom we have worked closely during the development and outreach process for this important project. The outreach efforts of this team and of The Robert Group have been exemplary. 4

We look forward to our continued work with Metro for the long-term success of the Regional Connector project and the Fully Below-Grade LRT Alternative. Please feel free to contact me with regard to any additional support FAST can provide. 5

Sincerely,

Hilary Norton

Hilary Norton
Executive Director
FAST – Fixing Angelenos Stuck in Traffic

cc: Anne Kerman
Metro Board of Directors
FAST Board of Directors

CN16

Responses to Comments from Fixing Angelenos Stuck in Traffic, Norton, Hilary

Response to Comment CN16-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment CN16-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted.

Response to Comment CN16-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment CN16-4

Thank you for your comment.

Response to Comment CN16-5

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. Metro looks forward to continued coordination with Fixing Angelenos Stuck in Traffic (FAST) regarding the Regional Connector project.

BUS RIDERS UNION 버스 승객 조합 Sindicato De Pasajeros
The Wiltern Center • 3780 Wilshire Blvd. Suite 1200 • Los Angeles, CA 90010 • (213) 387-2800 • fax: (213) 387-3500 • info@busridersunion.org • www.busridersunion.org

October 18, 2010

Dolores Roybal Saltarelli
Metro
1 Gateway Plaza
Mail Stop 99-22-5
Los Angeles, CA 90012

Dear Ms. Roybal:

On behalf of over 2,000 dues-paying members, we are writing to express our opposition to the construction of the Downtown Regional Connector. We see this as yet another misguided project whose exorbitant costs far outweigh its transit benefits. Bus riders simply cannot see this project – which duplicates existing rail connections -- as the slightest bit beneficial when it is proposed as part of a Long Range Transportation Plan that reduces bus service and raises fares over the next three decades. We would support a revamped and expanded TSM alternative that would invest not only in shuttle bus service serving downtown, but would also increase Rapid and Local service, keep fares low and fund bus-only lanes county-wide. If this option is not seriously considered, then we support the No-Build alternative. 1

Here are our core objections to the project: 2

- **The Regional Connector duplicates existing rail service at the same time that bus service will see significant reductions in bus service.** Metro has cited duplication of service as one of the major justifications for the reduction of bus service, claiming it cannot afford to maintain this perceived inefficiency in the bus system. Yet the Regional Connector will not create any new connections – it will simply duplicate service with the only benefit being the reduction of travel time by 7 to 12 minutes, and with an enormous construction price tag.
- **The Regional Connector has a minimal transit benefits relative to cost**: As the Draft Environmental Impact Report (DEIR) states, shortening travel time between various downtown Metro Rail stations would yield between 12,300 and 17,400 transit trips per day. Given the high capital cost of the project, it means each new transit daily trip generated by the introduction of this line will cost $11 or $12 per day[1] compared to $1.40 per new rider if the same funds were invested in bus expansion following the strategies of the Bus Riders Union's Civil Rights consent decree.[2] 3
- **Spending $1.25 billion on the Regional Connector is an enormous missed opportunity to improve the bus system:** Leaving aside operations expenses for the Regional Connector, the total annualized capital cost of the project – ranging from $52 million for the At-Grade Emphasis alternative to $72 million for the Underground Alternative – would generate enormous benefits if invested instead in bus capital and service expansion following the strategies employed during the 4

BRU's civil rights consent decree with MTA. *Investing these annualized costs using consent decree strategies could increase system ridership between 100,000 and 140,000 new transit trips per day each year for the next 25 years.*[3] This beats the Regional Connector by more than 800% in new riders generated per year. Considering that the Regional Connector will not begin operation until 2019 whereas bus expansion strategies could be implemented as early as FY2013, investing these funds in "Consent Decree strategy" bus expansion would outperform the Regional Connector by 1100% in terms of ridership over the period of FY2013 to FY2035. 4 cont'd

- **The burden of rail construction, including cost overruns, has been born by bus riders.** As you know all too well, the Civil Rights Consent Decree was born largely out of Metro's practice of raiding the bus system budget in order to cover capital expenses of Rail project – especially all-too-frequent construction cost overruns. As it is, the project's construction budget depends heavily on not-yet-secure funding from the Federal Transit Administration New Starts program. Even after that, there is a $173 million hole in the construction budget of the staff-recommended Underground Alternative. Moreover, with all the complications endemic to Subway construction, we have no reason to believe the DEIR's 10% built-in cost overruns will be sufficient. Given the agency's track record of disrespect for bus riders – both very recent, in the form of service cuts and fare increases, and going back to the early 1990's – we have every reason to believe bus riders will end up paying the price as Metro siphons bus-eligible funds to fill these holes and in turn raises fares and cuts service. Proponents of the 30/10 Initiative argue that this acceleration will save money, but the federal government will not provide money for cost overruns in the form of a loan or a grant. 5

- **The Regional Connector, as a priority project within the 2009 Long Range Transportation and the 30/10 Initiative, will exacerbate the existing operations crisis and require fare increases and service cuts.** For many years, Metro has claimed that fare reductions and service cuts are necessary to close a structural operations deficit in the bus system budget. Some Metro staff member and Board members have blamed this operations deficit on bus expansion required by the BRU's civil rights consent decree with MTA. Yet the agency's current rail expansion plan – of which the Regional Connector is an important component -- will only exacerbate the operations crisis. First because the agency is building what it does not have the money to operate. The major *new* source of Metro Rail operations funds – Measure R 5% rail operations – will not generate enough in 2035 to cover the West Side Subway operations costs plus all of the other rail projects outlined in the 2009 Long Range Transportation Plan.[4] The agency plans to deal with this by 1) raising fares repeatedly; and 2) siphoning off additional money from the bus system budget, which means service cuts. *The result is that LA County's very low income, overwhelmingly Black, Latino and Asian bus riders will bear the burden of this project in its impact on their bus service and by paying higher fares.* If the 30/10 Initiative is implemented as an acceleration plan, this will accelerate this operations crisis into a 10-year rather than 30-year timetable. 6

For all these reasons, we urge the Board of Directors to adopt the "No-Build Alternative" and cease pursuing this project. 7

Best regards,

Esperanza V. Martinez
Lead Organizer, Bus Riders Union

Barbara Lott-Holland
Co-chair, Bus Riders Union

[1] Using annualized costs of $52-$72 million over 40 years, and ridership numbers from: Regional Connector DEIR, Table ES-1. Page ES-15.
[2] Using Consent Decree Strategies, ($1.40/boarding: Marginal capital and operations, minus operating revenue per new passenger). BRU and Ryan Synder. The Bus Riders Union Transit Model. 2009.
[3] Ibid. and MTA Ridership Statistics, http://www.metro.net/news/pages/ridership-statistics/ (10/14/2010)
[4] Based on 2009 Long Range Transportation Plan projections of Measure R revenue over time, the Measure R 5% Rail Operations fund will be $105 million in 2035. The projected annual operating cost of the Subway in 2035 is $67- $150 million, $31 million of which will be covered through reductions of bus service solely on the Wilshire Corridor.

CN17

Responses to Comments from Bus Riders Union, Martinez, Esperanza V.

Response to Comment CN17-1

The Regional Connector's primary purpose is to close a two-mile gap in the Metro light rail network and eliminate transfers from many transit trips. Many existing transit riders would benefit from shorter trip times to, from, and through downtown Los Angeles as a result of the Regional Connector. The Federal Transit Administration New Starts Cost-Effectiveness Index for the proposed project, as of the publication of the Draft EIS/EIR, was $13.68 (a "medium-high" rating), which indicates that the anticipated transportation benefits of the project would be great enough to justify the projected cost. Refer to Chapter 6, Cost and Performance Consideration and Summary Comparison of Alternative, of this Final EIS/EIR for updated information regarding the Locally Preferred Alternative. Connections with intersecting bus lines would be made at the new stations and, as noted in Section 4.17.3.5 of the Draft EIS/EIR and this Final EIS/EIR, the Regional Connector project does not involve any cuts in bus service or fare increases. Metro notes the Bus Riders Union's support for the TSM Alternative, and secondary support for the No Build Alternative. Additional shuttle bus service and bus-only lanes would fail to address the two-mile gap in the light rail system in a way that reduces transfers and improves trip times, and would not provide adequate capacity in the downtown area for the volume of transit passengers anticipated in the coming decades.

Response to Comment CN17-2

Although the Regional Connector would be located near the heavy rail Metro Red and Purple Lines, the primary purpose of the project is to eliminate transfers on the light rail system. New connections between the Metro Gold, Blue, and Expo Lines would be created. Trips from Pasadena to Long Beach, or East Los Angeles to Culver City (once the Expo Line opens) currently require two transfers. By linking these unconnected light rail lines in the Metro system, the Regional Connector would eliminate these transfers and allow a one-seat ride. Travel time savings would range from 7 minutes to 20 minutes or more, depending on the time of day. This constitutes a cost-effective enhancement of transit service, rather than a duplication.

Response to Comment CN17-3

The Regional Connector would shorten travel times between Metro Rail stations system-wide, and would place three new stations in downtown Los Angeles. In addition to the 17,000+ new daily transit trips generated by the Regional Connector, many existing transit trips would be improved with fewer transfers and faster travel times. Approximately 90,000 passengers per day would use the Regional Connector in the year 2035. As mentioned in Response to Comment CN17-1, the Federal Transit Administration cost-effectiveness rating for the project, as of the publication of the Draft EIS/EIR, was $13.68, which indicates substantial transit benefits relative to cost. In addition to the ridership benefits, the Regional Connector could also assist community revitalization and economic development. Refer to Chapter 6, Cost and Performance Consideration and Summary Comparison of Alternative, of this Final EIS/EIR for updated information regarding the Locally Preferred Alternative.

Metro designated the Fully Underground LRT Alternative as the Locally Preferred Alternative in part because it would address the need to reduce transfers system-wide and provide additional transit capacity in the downtown area. Many of the major streets in the downtown area already

carry their maximum practicable volume of buses. Further increases in transit capacity in the downtown area require the use of other modes, such as underground light rail. Buses have and will continue to play an important role in the regional transit system. However, buses cannot meet every transit need and purpose.

Response to Comment CN17-4

The Regional Connector would provide benefits to transit patrons who transfer to the rail system because fewer transfers on the rail system would be needed. Modeling indicates that some bus riders would begin using the rail system in lieu of bus trips once the Regional Connector is built because of the increased reliability and speed. In addition to creating new trips, the Regional Connector would improve trip times and reduce transfers on existing trips. Approximately 90,000 riders per day would use the Regional Connector 16 years after it is projected to open (year 2035), and this figure is expected to grow further in subsequent years. Metro would create new connections with the bus system at the new Regional Connector stations, which would benefit transit riders across Los Angeles County. Implementation of the Regional Connector would not involve reductions in bus service, as noted in Section 4.17.3.5 of the Draft EIS/EIR and this Final EIS/EIR, and would not preclude separate bus system improvements from being made.

Response to Comment CN17-5

As shown in Table 6-6 of the Draft EIS/EIR, bus operating funds would not be used to construct the Regional Connector. Table 6-8 of the Draft EIS/EIR showed that the costs of operating the Metro bus system would be the same for both the No Build Alternative and the build alternatives, demonstrating that the Regional Connector would not result in any cuts to the operating budget for the bus system. As mentioned in Responses to Comments CN17-1 and CN17-3, above, the Regional Connector's favorable FTA Cost-Effectiveness Index makes it competitive for New Starts funding. Metro is currently working to reduce the costs of constructing the Regional Connector. Metro has recently completed tunneling for the Eastside Extension Phase 1 within budget and on schedule, and believes that the contingency included in the Regional Connector's financial plan would be sufficient to cover any unforeseen expenses regardless of the outcome of America Fast Forward (formerly the 30/10 initiative). No fare increases are proposed to cover the Regional Connector's financing. Refer to Chapter 6, Cost and Performance Consideration and Summary Comparison of Alternative, of this Final EIS/EIR.

Response to Comment CN17-6

As discussed in Response to Comment CN17-5, above, Tables 6-6 and 6-8 of the Draft EIS/EIR showed that bus operating funds would not be used to construct or operate the Regional Connector, and bus operations funding would remain unaffected by the project. The Regional Connector project would not involve any bus fare increases or service reductions. Refer to Chapter 6, Cost and Performance Consideration and Summary Comparison of Alternative, of this Final EIS/EIR.

Response to Comment CN17-7

Support for the No Build Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

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October 18, 2010

Ms. Dolores Roybal Saltarelli, Transportation Planning Manager
Metro
1 Gateway Plaza, Los Angeles, CA 90012
Via email regionalconnector@metro.net

Sierra Club comments on the Regional Connector Draft EIS/EIR

We've long sought this vital light rail connection across the downtown Los Angeles gap between the Blue-Expo and Gold Lines. It will provide one-seat convenience for riders to more destinations within downtown and for trips from one side to the other. 1

We support the **Fully-Underground LRT Alternative**, and seek creative funding opportunities to **not eliminate the 5th and Flower station**, such as Propostion A and C for non-subway expenditures, or Los Angeles CRA funding. 2

Darrell Clarke
Angeles Chapter Conservation chair and Transportation co-chair
darrell@dclarke.org

CN18

Responses to Comments from Sierra Club, Clarke, Darrell

Response to Comment CN18-1

Thank you for your comment.

Response to Comment CN18-2

Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro is actively seeking ways to reduce the costs of the project, and is considering all available funding sources. Proposition A and C funds are largely unusable for the fully underground Regional Connector due to the voter-approved Metropolitan Transportation Authority Reform and Accountability Act of 1998. The City of Los Angeles would provide a portion of the local funding for the Regional Connector.

CN19

Oct. 18, 2010

FAX COVER
PAGE 1 of 21

COMMENT ON DRAFT EIS/EIR
FOR REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

TO: **METRO PLANNING GROUP**
Dolores Roybal-Saltarelli

Via fax to:
Ginny-Marie Brideau
Project Manager
The Robert Group
323 669 9800

FROM: **HIGGINS BUILDING HOA**
108 W. 2nd Street, Los Angeles CA 90012

If questions or problems with transmission
please contact Joan Springhetti 213 621 7895

CN19

October 16, 2010

TO: Metro
FROM: Higgins Building HOA
RE: Comment on Draft EIS/EIR
for Regional Connector Transit Corridor Project

The Higgins Building Homeowners Association represents the owners of the 135 residences and seven commercial units in the 10-story Higgins Building located at 2nd and Main, which is in the path of the proposed rail project.

As we have previously stated, the at-grade and partially underground alternatives are not acceptable to our community: they would divide it, compromise quality of life and put its safety at risk. In the past, we have offered support in principle for the fully underground alternative. However, newly revealed details of that plan in the Draft EIS/EIR also make it unacceptable. We register our protest in the strongest terms. 1

Specifically, as proposed, it would do great harm to the economic and general well being of the businesses and those who make their homes near the 2nd and Broadway proposed station. We ask that this plan be taken off the table and reworked until this and other matters identified here are resolved.

TAKING OF PROPERTY AT 2nd and SPRING

We strenuously object to the taking of the commercial properties on the southeast corner of 2nd and Spring, identified in the report as 206 and 212 S. Spring Street. This quarter-block is the home of the Metropolitan News-Enterprise, Southland Credit Union, 2nd Street Cigars, Blue Cube café and City Employees Club Store. All are part of the fabric of the community and serve its needs.

Why, in the many public meetings on this project, was the prospect of taking these properties never raised? The implication in drawings and public statements has always been that the only parcel to be taken for this portion of the project was the parking lot across 2nd Street from the LA Times. 2

The current proposal would take these additional properties for the most mundane of reasons – to create an empty lot! This underscores lack of community sensitivity and shows a land-grab mentality that in the past has created negative public opinion surrounding so many transportation projects.

Higgins Building 108 West 2nd Street Los Angeles CA 90012

Regarding the property at 206 S. Spring Street, the Draft EIS/EIR states:

> "The entire parcel would be taken and utilized for staging materials and equipment for the Underground Emphasis LRT Alternative (for the entire alignment, not just the adjacent station options). Optional station entrance locations are also located on this site, though not all of the optional station entrances would be constructed."

--The destruction of activated buildings for the purpose of creating a construction staging and parking site shows complete lack of understanding of what a hard-won resource an established business is in downtown LA at any time, but in particular during this period of great economic distress in our city, state and nation.

--There are alternatives for staging and parking areas. Surely given the number of empty lots in the vicinity—especially obvious is the full city block at 2nd and Broadway, 1st and Hill–it is not necessary to level occupied buildings.

-- The proposed station has always been described as being at 2nd and Broadway – not 2nd and Spring. If an entrance is needed in addition to the one on the block directly across from the LA Times, it can be placed on the wide-open lot on the other side of Broadway. That would be in keeping with the station's particular appeal to the Bring Back Broadway effort and proposed streetcar alignment. And it would not tear down established businesses. 2 cont'd

-- Taking of the property on the southeast corner of 2nd and Spring will put at risk the survival of the businesses on the site, in particular the Metropolitan News-Enterprise, which serves a wide legal community and has location-specific business needs and difficult-to-relocate printing presses. Note: The Draft EIR/EIR errs in not including the newspaper in the list of businesses operating in the Wilcox Building.

-- The report states that demolition of the buildings would "displace approximately 40 employees" but it assumes those jobs would not be lost, only moved. That assessment does not take into account the particular combination of location, space and affordability that allows small businesses such as the Blue Cube to stay in business. It apparently does not take into account at all the 47 employees of the Metropolitan News-Enterprise.

-- The property has a historic pedigree. The larger of the two buildings, the Wilcox, was built in 1896 and was originally home to the California Club. While its upper floors no longer remain, elements of its elegant origins are still visible and add to the character of the neighborhood.

– Taking of the properties will isolate and further stress businesses in the Higgins Building during a four-year-or-more construction process. There is a huge difference between being on a street with other businesses and being on one with a long-term construction site. Commercial businesses located in the Higgins that rely on high-volume foot and vehicle traffic that would be highly impacted include The Edison nightclub, Lilya's China Bistro, the Charcoal Grill, Pitfire Pizza and Groundwork Coffee, not to mention the multiple live-work businesses operating from residential lofts.

– Turning the land immediately adjacent to the Higgins Building into a staging site for materials and equipment will create unacceptable high-volume noise and traffic disturbance to residents--not for a limited period, but for years. There is absolutely no buffer between these lots and where people live, work and sleep. It is estimated in the report that at least 15-20 trucks a day will be coming and going from the site. 2 cont'd

-- Taking these commercial properties would create a vacuum in the community before and after construction: no one wants to sign leases on a doomed property; after construction, protracted uncertainty and debate about the fate of the site would precede any decision and ultimate new construction.

TRAFFIC DISRUPTION

The cut-and-cover proposal for the 2nd and Broadway station is shown extending significantly beyond the site of the proposed station. Drawings exhibited at public hearings showed the station contained between Broadway and Spring streets; the plans in the Draft EIS/EIR now show it crossing both of those streets and extending an additional half block in each direction. Disruption to surface street traffic would be widespread. 3

-- We find no proposal for mitigating traffic disruption in this plan: it should not and must not go forward without one. 4

-- We urge Metro planners to reduce the footprint of the cut-and-cover construction. It is vital that disruption of access by residents and by customers, clients and workers with business in buildings on 2nd Street be kept to an absolute minimum. 5

– What access will there be to 2nd Street between Spring and Main during construction? The front door of the Higgins Building, which is the primary entrance and exit for 135 residences, is on the block. So is drop off and pick up for customers and vendors of the Edison, Charcoal Grill and Pitfire Pizza. Prolonged closure of this street or limited access will have dramatic and potentially crippling impact. 6

MITIGATION OF CONSTRUCTION ACTIVITY

Having just recently endured construction of the LAPD Headquarters and its parking facility, residents and businesses in the Higgins are very aware of the impact of major construction projects. Among the issues we know will arise: Vibration to the building, diminished air quality, dust and dirt, noise and smell of heavy equipment operation, ear-piercing beeping every time a vehicle backs up, lack of parking spaces and work being conducted during the day and at night (when we are trying to sleep!). 7

We ask that Metro conduct a separate meeting with residents/business owners in the Higgins Building to address point-by-point mitigation beyond the boilerplate language in the Draft EIS/EIR. We would anticipate a good faith effort on the part of Metro to develop mitigation on these and related issues, and then monitor implementation of that agreement.

PARK AT LAPD HEADQUARTERS

The community park adjacent to the new LAPD headquarters is not listed among park resources. We ask that it be included in the EIS/EIR and that efforts be made to ensure that access is not limited and that maintenance is not impaired during construction. 8

MEMORANDUM OF AGREEMENT

We ask that a Memorandum of Agreement (MM-BE-5) be added to proposed mitigations for the Higgins Building to resolve any adverse effects as a result of the project. We are especially concerned about the potential impact of vibration or settlement during construction and operation of a completed line.

In addition to the age of the building and its physical closeness to the project, the basement of the Higgins houses the Edison, a 14,000-square-foot nightclub. At a depth of two-stories underground, a portion of the club extends under the 2nd Street sidewalk, beyond the primary boundaries of the building. 9

We hope the assumption in the Draft EIR/EIS is correct, that with mitigation there will be minimal disturbance to the building and its occupants—in the club and elsewhere—but we are seeking additional assurance.

CN19

The importance of a memorandum (MM-BE-5) to the building is directly referenced in the report, including in this paragraph from Appendix X, p.186:

> CEQA Impact Analysis for Historical Resources
>
> The potential for construction-related vibration could cause a substantial adverse change that would impair the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library 2nd Street Tunnel, Mirror Building, Cathedral of Saint Vibiana, the Cathedral of Saint Vibiana Rectory, or the Higgins Building. The implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce the potential impacts to a less than significant level.

9 cont'd

Memoranda are being developed for nearby historic properties and it is entirely appropriate that one be developed for the 100-year-old Higgins Building.

HISTORIC DESIGNATION

We believe the Draft EIS/EIR errs in not including the Higgins Building among those eligible for listing in the National Register. We ask that this assessment be reexamined and, upon confirmation of the building's eligibility, that the report and all associated listings be corrected.

The consulting firm hired by Metro makes a number of incorrect assumptions and errors of omission and commission. Among them is misidentifying the building's architect as A.L. Hurley. The architect is A.L. Haley.

The consultant, SWCA of Pasadena, states that the building is not eligible because it is "not associated with any broad patterns of events nor is its architecture or engineering" and because "alterations to the building have reduced integrity of its original design." In describing the condition of the Higgins Building, Metro's consultant dismissively describes the façade as being of "painted concrete" rather than like "rubbed sandstone." The entire building is made of concrete, including the façade, and that is integral to its historic significance and relevant engineering.

10

The Higgins is of monolithic concrete construction and was the first high-rise in Southern California built of steel reinforced concrete. City code had to be changed to allow concrete construction to a height of 10 stories. The Higgins' architect and engineer, A.L. Haley and A.C. Martin, were both innovators and pioneers in the use of concrete. (There is evidence of only one other concrete high-rise from that era on the West Coast, a 10-story hotel in San Francisco.)

CN19

The Higgins Building played a vital role in the history of oil development in Southern California, which in the 1920s was the world's 4th largest producer of oil. The Higgins was home for 38 years to major player General Petroleum (founded in the Higgins), Standard Oil (until 1924 when it built its own headquarters), Union Oil's National Exploration Company, Puente Oil and others as well as attorneys and agents associated with the industry.

Among its credits, General Petroleum—a precursor of Mobil Oil--discovered the largest oil field ever in Southern California. The Wilmington field has been in continuous operation since 1932, when General Petroleum drilled the first of what would become more than 6,000 wells in a reservoir that stretches from San Pedro to offshore Seal Beach. (In the late 1890s, derricks even bloomed near the site of the Higgins, in a shallow oil field north of 2nd and west of Broadway.)

10 cont'd

While there have been alterations to the building during its long history, many are part of its important historical narrative. It has lost some—far from all--of its original detail. What has not been compromised is the amazing design and construction that have kept it standing when so many others around it have had to be rebuilt or been lost altogether.

We urge Metro to reevaluate. The Higgins Building should indeed be considered eligible for listing in the National Register. Give the benefit of any doubt that might exist to a building that deserves the highest level of protection possible, not the least required.

On behalf of the Higgins Building Homeowners Association,

Jonno Agnew
HOA President

Cheryl McDonald
HOA Secretary

Coleman Engellenner
HOA Vice-President

Martin Berg
HOA Member At Large

Diarmuid McCoy
HOA Treasurer

Eleven
Additional pages
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I support the Higgins Building HOA comment letter to Metro in response to the Draft EIS/EIR for the Regional Connector Transit Corridor Project

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HIGGINS BUILDING

I support the Higgins Building HOA comment letter to Metro in response to the Draft EIS/EIR for the Regional Connector Transit Corridor Project

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CN19

I support the Higgins Building HOA comment letter to Metro in response to the Draft EIS/EIR for the Regional Connector Transit Corridor Project

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SUE HENDERSON	#411 310/650-0936
Eileen Scahill	#1003
Elizabeth Lee	108 W. 2nd. St #712
Nelson Lee	108 W. 2nd. St #712
	2230 Meadowview Terrace LA CA 90039
	2230 Meadow Valley Terrace
	108 W 2nd Street #702 LA, CA 90012 2135370423

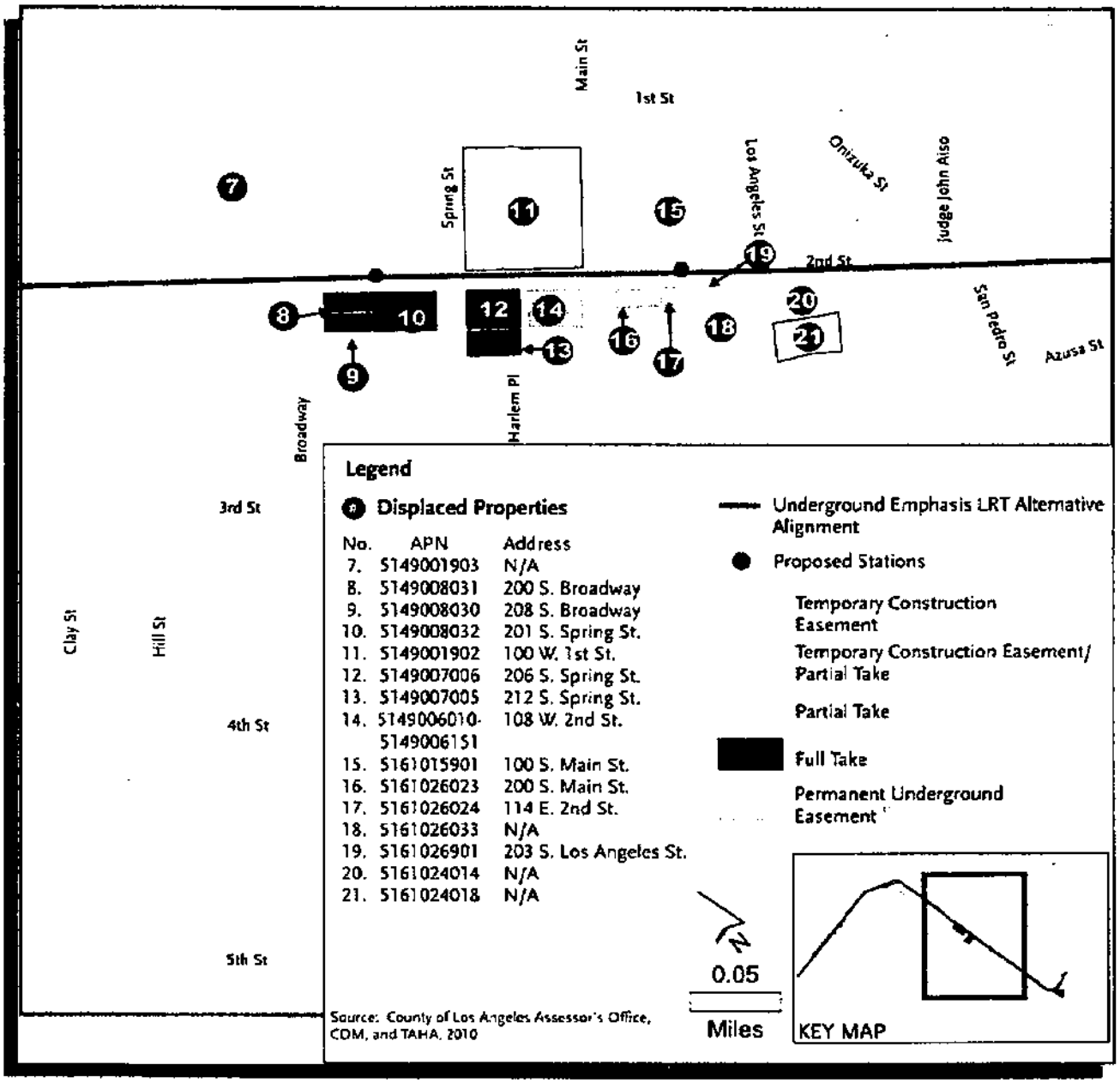

Figure 4.2-3. Underground Emphasis LRT Alternative Potential Displacements – 2nd Street

Table 4.2-4. Parcels Potentially Affected by Displacement – Underground Emphasis LRT Alternative (continued)

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
4.2-2	4	5151014033	Parcel Bounded by 3rd/Hope/Flower Streets & General Kosciuszko Way	Partial Take	Vacant	Construction Staging
4.2-2	5	5151027256	Parcel Bounded by 3rd/Hope/Flower Streets	Partial Take	Tennis Courts and Pool for Residential Bldg	Station Entrance and Bridge
4.2-2	6	5151004911 thru 5151004913	Parcel Bounded by 2nd Street, Hope Street, Grand Avenue, and Genl. Kosciuszko Way	Permanent Underground Easement	Parking Lot	Tunneling
4.2-3	7	5149001903	Parcel Bounded by 1st/2nd/Hill Streets, Broadway	Temporary Construction Easement & Partial Take	Empty Lot	Construction Staging/ Station Entrance
4.2-3	8	5149008031	200 S. Broadway	Full Take	Parking Lot	Potential Station
4.2-3	9	5149008030	208 S. Broadway	Full Take	Parking Lot	Potential Station
4.2-3	10	5149008032	201 S. Spring Street	Full Take	Parking Lot	Potential Station
4.2-3	11	5149001902	100 W. 1st Street	Temporary Construction Easement	New LAPD HQ	Construction Staging
4.2-3	12	5149007006	206 S. Spring Street	Full Take	Commercial Buildings	Construction Staging
4.2-3	13	5149007005	212 S. Spring Street	Full Take	Commercial Buildings	Construction Staging
4.2-3	14	5149006010-028; 031-054; 056-059; 061-095; 097; 099-108; 110; 112-149, 151	108 W. 2nd Street, Units 102-108; 201-212; 215; 301-315; 401-408; 410-415; 501-515; 601-615; 701-704; 706; 708-715; 801-802; 804; 806-815; 901-915; 1001-10015	Permanent Underground Easement	Higgins Bldg; Mixed-Use Commercial and Condos	Tunneling
4.2-3	15	5161015901	100 S. Main Street	Temporary Construction Easement & Partial Take	Caltrans HQ	Station Entrance

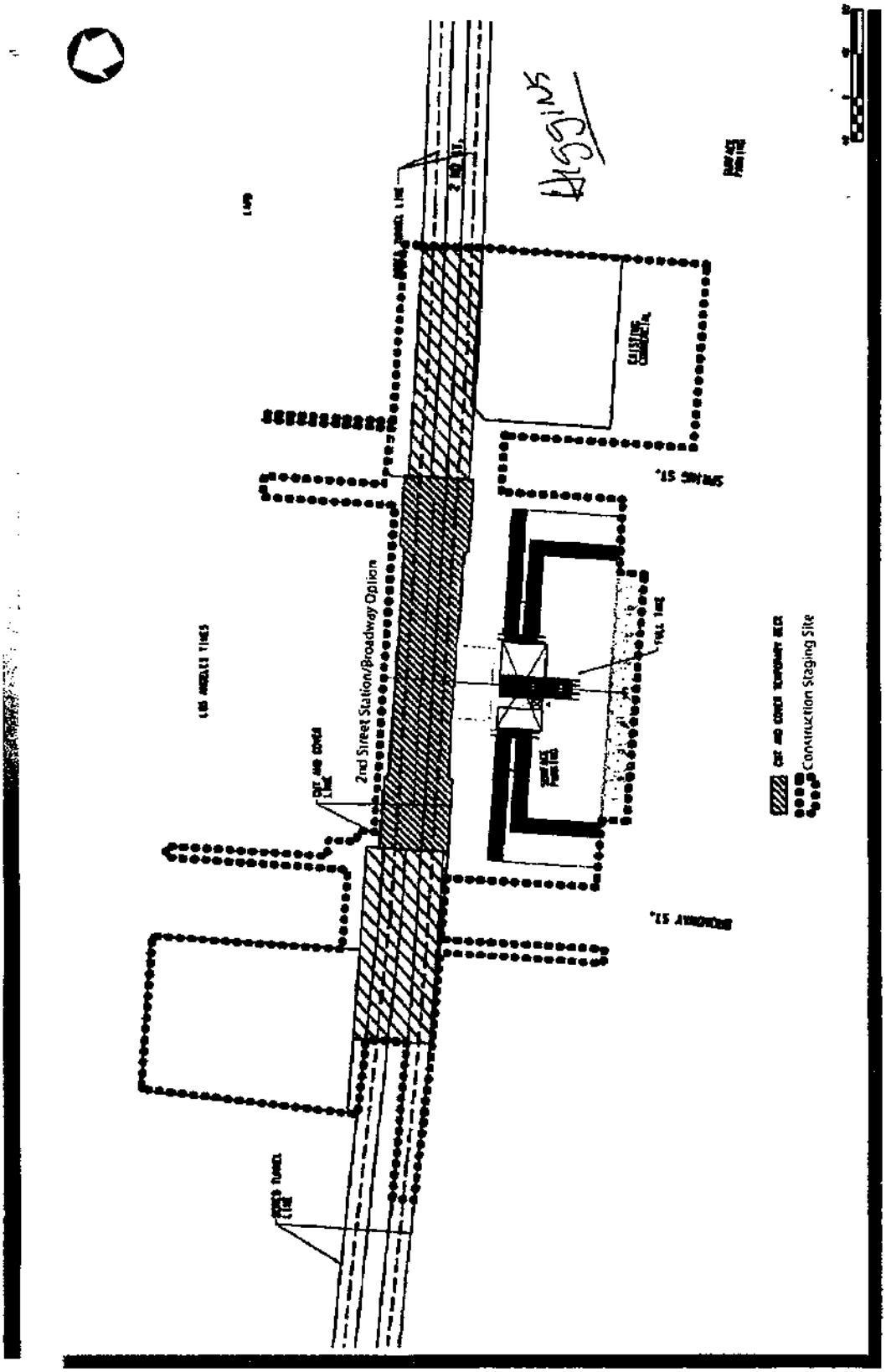

Figure 2-19. 2nd/Broadway Station (Underground Emphasis LRT Alternative – Broadway Station Option and Fully Underground LRT Alternative)

CN19

Responses to Comments from Higgins Building HOA, Agnew, Jonno

Response to Comment CN19-1

Comment acknowledged. Impacts associated with the Locally Preferred Alternative (Fully Underground LRT Alternative) were analyzed and mitigation was incorporated to reduce impacts to the maximum extent feasible in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR. Please refer to Responses to Comments CN19-2 through CN19-10, below, for detailed responses to concerns raised by the commenter about the Fully Underground LRT Alternative.

Response to Comment CN19-2

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

Response to Comment CN19-3

The alignment maps for the project, such as the one shown in Figure 2-10 of the Draft EIS/EIR, show station locations, but not the extent of cut and cover activities. The extent of cut and cover activities was shown in Figure 2-13 of the Draft EIS/EIR, and specifically for the 2nd/Broadway station in Figure 2-19 of the Draft EIS/EIR and this Final EIS/EIR. Disruption to surface street traffic would be mostly confined to periods at the beginning and end of construction activities, when the temporary decking is not in place. This was described in further detail in Section 4.18.2.5.1 of the Draft EIS/EIR and this Final EIS/EIR. Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to offset construction-related traffic impacts. It is Metro's goal to minimize traffic disruption during the construction process.

Response to Comment CN19-4

Mitigation measures for construction-related traffic disruption are provided in Section 3.4.1.2 of the Draft EIS/EIR and in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment CN19-5

Metro has refined the Locally Preferred Alternative since publication of the Draft EIS/EIR to reduce the amount of cut and cover construction needed on 2nd Street. Metro would maintain access to adjacent residences and businesses throughout the construction phase of the project.

Response to Comment CN19-6

Access to buildings along 2nd Street between Spring and Main Streets would be maintained throughout the construction phase of the project. No cut and cover construction would occur in front of the Higgins Building, including The Edison, Charcoal Grill, and Pitfire Pizza. Street closures for the cut and cover construction occurring west of the Higgins Building would be

consistent with the description provided in Section 4.18.2.5.1 of the Draft EIS/EIR and this Final EIS/EIR. It is Metro's goal to minimize street closures during the construction process.

Response to Comment CN19-7

During preparation of this Final EIS/EIR, Metro met with the Higgins Building Home Owners Association (HOA) to discuss the refined Locally Preferred Alternative.

Response to Comment CN19-8

The landscaped area at the new LAPD headquarters is not owned or operated by the municipal parks and recreation department, does not serve a primarily recreational function, and does not qualify as a park under CEQA or Section 4(f) of the United States Department of Transportation Act of 1966.

Response to Comment CN19-9

A Memorandum of Agreement will be prepared in coordination with the State Historic Preservation Officer for properties listed on the National Register of Historic Places or eligible for listing. The Higgins Building was determined to be ineligible for listing on the National Register of Historic Places per analysis in the building inventory at the end of Appendix X (Cultural Resources - Built Environment) of the Draft EIS/EIR and Appendix X (Cultural Resources - Built Environment(Updated)) of this Final EIS/EIR; therefore, appropriate mitigation measures for the Higgins Building are included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in lieu of the Memorandum of Agreement. Metro is aware of the configuration of the Higgins Building's basement, and appreciates the confirmation from the homeowners association. Metro believes that the impact conclusions in the Draft EIS/EIR are correct. The Memorandum of Agreement is necessary for other historic buildings in the area that are listed on the National Register of Historic Places or eligible for listing. The analysis in Section 4.12.1 of the Draft EIS/EIR relied on Appendix X, Cultural Resources – Built Environment, to arrive at refined conclusions concerning the necessity of candidate mitigation measures. Metro is committed to implementing the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in a manner similar to the requirements of the Memorandum of Agreement.

Response to Comment CN19-10

Metro reviewed the background research and other information on the Higgins Building, including the application for California Landmark Status. As indicated in the historic property inventory form, the building is eligible for the California Register due to its association with Job Harriman and Clarence Darrow. Background research did not indicate that the building is eligible for the National Register under Criterion B for its association with these individuals. Although the building had tenants who were noted for their involvement with the development of the oil industry in California, background research did not indicate that the Higgins Building is the location of significant events relating to those activities, therefore the building is not eligible for the California Register under Criterion 1 or the National Register under Criterion A. Due to the loss of its integrity of design, workmanship and materials from alterations, the building was recommended as not eligible for the California Register under Criterion 3 or the National Register of Historic Places under Criterion C. The State Historic Preservation Officer

reviewed the inventory form and concurred with Metro's determination on June 1, 2010. No additional information has been presented to indicate that the building is eligible for the National Register.

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

The Little Tokyo Community Council (LTCC) appreciates the opportunity to comment on the Draft EIS/EIR for the proposed Regional Connector. The positive working relationship and open dialogue have helped the community actively participate in the process to date. We offer the following general comments, which are followed by specific comments on the EIS/EIR:

1. The LTCC strongly believes that the Fully Underground alternative is the only acceptable option as the Locally Preferred Alternative that addresses its concerns about the environmental, economic, social, and cultural impacts to the community. As such, it supports Metro's finding that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative…as a staff recommended Preferred Alternative based on the technical analysis…and input received from the community." We concur that the Fully Underground Alternative "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis in the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, noise, safety, cost-effectiveness, and social impact perspective. It is also nearly the cheapest alternative to operate and maintain over time. Please note that our support for the Fully Underground alternative is contingent on satisfactory acceptance of LTCC's proposed mitigation measures identified on April 27, 2010. The other alternatives pose significant, disproportionate impacts on Little Tokyo that are unacceptable. 1

2. The EIS/EIR should correct its assessment of the impacts of the At-Grade Emphasis and Underground Emphasis alternatives. The draft understates the environmental impacts on the Little Tokyo community of the grade separations required along Alameda Street that would physically bisect the Little Tokyo community, potential impacts if tunnel boring were to be initiated from 2nd/Central, and the aesthetic impacts associated with at-grade LRT operations through our community. As such, these two alternatives would place disproportionate burdens on a minority community in the areas of Transit Service Equity Deterioration and Community and Neighborhood Impacts.

3. In its letter to Metro dated April 27, 2010, the LTCC strongly urged Metro to initiate tunnel boring activities from 2nd/Flower/Hope to minimize construction impacts on the Little Tokyo community. If Metro cannot commit to initiate TBM activities at 2nd/Flower/Hope until Preliminary Engineering is complete, the EIS/EIR should more clearly distinguish the extent and duration of construction impacts that could affect Little Tokyo if boring begins at 2nd/Central. This information is critical to determining whether the community will endure disproportionate impacts during construction activities.

4. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document.

5. The LTCC calls for Metro to formalize an agreement with the Little Tokyo community that provides us with a substantial role in decision-making during the Preliminary Engineering, Final Design, and construction phases that addresses:

    a. Little Tokyo's formal involvement in the development and approval of mitigation measures for the Little Tokyo community,
    b. Little Tokyo's formal involvement in the monitoring of mitigation measures through the Mitigation Monitoring Plan,
    c. How to provide a sufficient safety net for Little Tokyo businesses that will be affected during construction,
    d. Redevelopment of the Office Depot block.

1 cont'd

6. The Draft EIS/EIR does not reflect the language adopted by the LTCC on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010:

    a. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders.
    b. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community, avoid adverse business interruptions, and ensure rapid resolution of unforeseen problems. This committee shall include local businesses and property owners.

Thank you for your consideration. We look forward to continuing to work with Metro to address appropriate mitigation measures that will address our community's concerns. 1 cont'd

Sincerely,

Bill Watanabe
Chair, Little Tokyo Community Council

Encl. Detailed comments on Draft EIS/EIR

Little Tokyo Community Council

Detailed Comments

Executive Summary

7. The LTCC supports the statement that "the Draft EIS/EIR does designate the Fully Underground LRT Alternative…as a staff recommended Preferred Alternative based on the technical analysis…and input received from the community" (Page ES-5). We concur that it "was developed to best address community concerns simultaneous with cost, operational, and design concerns." Further, the analysis the EIS/EIR shows it is clearly the best performing alternative from a ridership, travel time savings, environmental, and social impact perspective. From the Little Tokyo community perspective, it is the only alternative that adequately addresses our concerns about environmental, economic, social, and cultural impacts to the community. The other alternatives pose significant disproportionate impacts on Little Tokyo.
8. The EIS/EIR incorrectly characterizes the impacts of the At-Grade analysis by understating its environmental impacts on the Little Tokyo community. Specifically, the project would place disproportionate burdens on a minority community in the areas of:
    a. Transit Service Equity Deterioration
    b. Community and Neighborhood Impacts.
9. The EIS/EIR incorrectly concludes that there would not be any significant unavoidable environmental justice impacts for the At-Grade Emphasis alternative. The EIS/EIR should conclude that the impacts are significant for two reasons:
    a. The grade separation of a vehicle underpass and pedestrian overpass at Temple and Alameda to route traffic under the rail tracks would physically divide Little Tokyo along Alameda. This would significant affect the cultural integrity of the community by separating the many temples and residents east of Temple from the core of Little Tokyo. The pedestrian overpass would be a significant barrier to elderly residents who travel east-west across Alameda.
    b. The grade separation plan is comparable to the Underground Emphasis alternative, which was found to have significant "Community and Neighborhood" impacts. The EIS/EIR should be revised to be consistent with this finding for the At-Grade emphasis alternative.

1 cont'd

Chapter 1 (Purpose and Need)

10. The Draft EIS/EIR fails to acknowledge the existence of Little Tokyo in Section 1.4.2 (Project Area Ethnicity). Given its status as one of only three Japantowns in the nation and the environmental justice concerns that are important to Metro, Little Tokyo should be mentioned in the Purpose and Need chapter.

Chapter 2 (Alternatives Considered)

11. Page 2-21, Section 2.3.4.4. The analysis of pedestrian circulation impacts at Temple and Alameda Street from the At-Grade Emphasis alternative fails to adequately describe likely impacts. The construction of a pedestrian overpass to "minimize delays (of rail service) at the intersection of Temple and Alameda" comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation.
12. Page 2-31, Section 2.3.6.4. The EIS/EIR understates the impact of the Underground Emphasis alternative on pedestrian circulation at Alameda Street by stating it will "require relatively small changes to surface traffic and pedestrian circulation patterns." The construction of a pedestrian overpass at 1st and Alameda comes at the expense of increasing travel time for pedestrians that must navigate the overpass to cross Alameda. Given the significant concentrations of elderly residents and merchants in the area, this will pose a significant impact on pedestrian circulation, particularly from temples and residences east of Alameda to the heart of Little Tokyo that lies west of Alameda. This represents a disproportionate impact on local residents and pedestrian circulation to accommodate reduced travel time for the regional Metro Rail system. The EIS/EIR should be revised to accurately portray the impact of pedestrian circulation.
13. Page 2-34, Section 2.4.5. The EIS/EIR remains silent on whether tunneling would involve single boring followed by a reverse boring in the other direction, use of two TBMs concurrently, or use of a single, wider boring. It is assumed that the EIS/EIR assumes the boring approach that would result in a worst-case scenario for construction impacts.
14. Page 2-38, Figure 2-13. The EIS/EIR depicts the block between 1st, 2nd, Central, and Alameda as being the site for an open cut. However, Metro has indicated that the existing development on the east side of Central between 1st and 2nd may be spared from demolition during construction. Given the orientation of any subway alignment under the property, every effort should be made to avoid demolishing existing buildings that front on 1st Street, including the former Café Cuba restaurant, Weiland's Brewery, and other nearby buildings.

1 cont'd

Chapter 3 (Transportation Impacts and Mitigation)

15. Page 3-4, Section 3.1.3. The EIS/EIR should clarify that the assessment of parking impacts also considers off-street parking spaces that would be affected by the construction or operation of the project. Chapter 4 in fact accounts for off-street parking.

16. Page 3-4, Section 3.1.4. The determination of significance for pedestrian circulation should be clarified to include detours that might lengthen bicycle commutes or pedestrian routes or travel time…"

17. Section 3.2.2.1, Table 3-9. Please confirm the existing LOS B and C at Alameda/1st Street in the morning and evening peaks, respectively. These don't correspond with empirical observations.

If these are correct, please note that this is due in large part to the closure of westbound lanes over the Los Angeles River.

18. Page 3-8, Table 3-3. The overview of ridership on bus lines servicing the project area omits LADOT Commuter Express 438, DASH, and possibly other LADOT lines. If Table 3-3 is intended to exclusively identify Metro lines, it should be labeled as such.

19. Page 3-17, Section 3.2.3. As noted earlier, any assessment of existing parking conditions in the study area must include an inventory of any parking facilities that would be affected by the proposed construction or operation of the project. This includes off-street spaces on the block bounded by 1st, 2nd, Central, and Alameda. Chapter 4 in fact accounts for off-street parking.

20. Page 3-37, Section 3.3.3.2. As noted earlier, the operation of an At-Grade Emphasis LRT system would require construction of a pedestrian overpass at Temple and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant.

21. Section 3.3.3.2.2, Figure 3-7. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

22. Section 3.3.4.2.2, Figure 3-9. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

1 cont'd

23. Section 3.3.4.2.2. Although this section concludes that the alternative would have a significant impact because of the seven intersections that would be impacted, the analysis needs to analyze and discuss the impact that the creation of the portal and the at-grade alignment to access the station at Alameda/1st. This is a huge impact on the area and should be discussed in terms of the operational impact this configuration has on the local street system. The actual impacted intersections in terms of LOS is minor in comparison to this potential impact. It must be evaluated in terms of operations, safety, access, etc., not just LOS.

24. Page 3-43, Section 3.3.4.2.3. In the analysis of the Underground Emphasis, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking.

25. Page 3-44, Section 3.3.4.2.4. The operation of an Underground Emphasis LRT system would require construction of a pedestrian overpass at 1st and Alameda that would impact the length and travel time for pedestrian travel. Given the high concentration of elderly residents in Little Tokyo, this impact on travel times would be even greater. This impact should be considered significant.

26. Page 3-47, Section 3.3.5.1.1. The EIS/EIR should clarify whether construction of the Fully Underground alternative would require temporary closure of lanes on 2nd Street and Central for

relocation of utilities and cut-and-cover activities. The Draft does not indicate closure will be needed on these two streets.

27. Page 3-48, Section 3.3.5.1.2. The EIS/EIR remains silent about where tunnel boring activities would be initiated, stating that "[r]outes and disposal sites will be confirmed during the preliminary engineering phase…" If Metro cannot confirm that tunnel boring will not be initiated from Little Tokyo, the EIS/EIR should assume a worst-case scenario of impacts for Little Tokyo so that the full extent of traffic impacts, including dirt hauling operations, during construction is understood.

28. Page 3-49, Section 3.3.5.1.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during construction. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed.

29. Page 3-50, Section 3.3.5.2.2, Figure 3-11. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

30. Page 3-51, Section 3.3.5.2.2. Please explain how the intersection of Alameda/1st Street improves over existing conditions in the year 2035. This "beneficial change in LOS" is counterintuitive given the extent of growth projected in the study area through 2035.

31. Page 3-51, Section 3.3.5.2.2. It should be noted that there are only three impacted intersections from this alternative, none of them in Little Tokyo. From the LTCC's perspective, this alternative has no impacts on Little Tokyo.

32. Page 3-51, Section 3.3.5.2.3. In the analysis of the Fully Underground alternative, the EIS/EIR fails to account for the demolition of off-street parking spaces on the block bounded by 1st, 2nd, Central, and Alameda during operations. Removal of these spaces will likely have an impact on existing and proposed parking in Little Tokyo and should be analyzed. Chapter 4 in fact accounts for off-street parking.

33. Section 3.4.1.3. The analysis of parking and mitigation measures is too qualitative and conceptual to accurately gauge project impacts. There needs to be a much more detailed description of at least the mitigation options that should be considered for this program. The EIS/EIR should be more quantitative in the parking analysis, with the locations and the type of users for the various types of parking provided, both for the interim during construction and for the permanent during operation of the system. It is impossible to evaluate the parking program that does not discuss any of these items

1 cont'd

Chapter 4 (Environmental Analysis, Consequences, and Mitigation)

34. Page 4-23, Section 4.2.3.4.3. LTCC agrees that the removal of off-street parking spaces from the Underground Emphasis alternative could be an "adverse effect with respect to environmental justice" if impacts are not fully mitigated.

35. Page 4-30, Section 4.2.4.4. While the issue of loading spaces at JANM is discussed in Chapter 3, the issue should be cited again in the displacement discussion, with appropriate mitigation included in this section.

36. Page 4-42, Section 4.3.2.4.6. The EIS/EIR should note that the Little Tokyo community exists on both the west and east sides of Alameda Street.

37. Page 4-43, Table 4.3-4. The overview of impacts to community and neighborhoods should be revised to reflect:

    a. The At-Grade Emphasis LRT can physically divide the Little Tokyo community because of the physical operation of LRT trains along surface streets that visually bisect these thoroughfares and because of the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    b. The Underground Emphasis LRT can physically divide the Little Tokyo community because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    c. The At-Grade Emphasis LRT can significant impair community mobility in Little Tokyo through the physical grade separation at Temple and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.
    d. The Underground Emphasis LRT can significant impair community mobility in Little Tokyo because of the physical grade separation at 1st and Alameda that will create physical barriers to cross Alameda Street by walking or bicycling.

1 cont'd

38. Page 4-45, Section 4.3.3.4. While the EIS/EIR does not commit the project to initiate TBM activities at a particular location, it does confirm that construction impacts would be more significant in the Financial District and Little Tokyo. Please distinguish the extent of community and neighborhood impacts in Little Tokyo from dirt hauling and other operations if: a) TBM begins at 2nd/Central or near Bunker Hill.

39. Page 4-311, Section 4.17.5. The Draft EIS/EIR does not reflect the language adopted by the Little Tokyo Community Council (LTCC) on May 25, 2010 that included refinements to its comments on the pending environmental analysis. These changes stem from additional comments from the Little Tokyo community in late April and amend comments that were transmitted to Metro in our letter dated April 27, 2010. The approved changes are shown below in underline.
    c. Expand the safety net for Little Tokyo businesses that will be affected during construction. This must include having Metro provide additional financial and other resources to the community and/or businesses to provide more targeted marketing, as well as financial compensation to local businesses for any loss in gross sales. The process for establishing eligibility, quantifying financial assistance or compensation, and related details would be established jointly between Metro and Little Tokyo stakeholders.
    d. Metro shall work with the Little Tokyo community businesses to ensure no adverse impacts to business operations prior to relocation of or protection of in-place utilities and during construction activities. The LTCC and Metro shall consider establishing a Business Interruption Committee that will streamline Metro's communication with the community and avoid adverse business interruptions. This committee shall include local businesses and property owners.

40. Page 4-311, Section 4.17.5. Please add the following mitigation measure to the list of options suggested by the LTCC for inclusion in the Final EIS/EIR:
    a. Provide free business support technical assistance to local businesses on strategies for business development that can minimize any adverse impacts of construction. This can include, but not be limited to, assistance with marketing, accounting, or finance.

41. Page 4-311, Section 4.17.5. While many mitigation measures are identified throughout the document, the recommendations from the LTCC are segregated as a package of candidate measures to be considered by Metro and FTA. Please confirm the process for approving mitigation measure recommendations and whether this differs from mitigation measures cited elsewhere in the document.

Chapter 6 (Cost and Performance Considerations)

42. Please note that the capital costs of the Fully Underground alternative include all stations originally considered in the initial evaluations. Any efforts to reduce capital costs for this alternative should focus on opportunities for open cut stations, as well as eliminating any of the three stations to the west, including Flower Street between 4th and 5th, not on any changes to the fully underground system design at the proposed Little Tokyo station.

43. LTCC concurs with the EIS/EIR's finding that the operating and maintenance costs for the Fully Underground alternative are lower than the TSM and At-Grade Emphasis alternatives.

44. Page 6-19, Table 6-15. The overview of the mobility benefits of each alternative clearly confirm that the Fully Underground alternative provides the most benefit in reducing congestion countywide.

45. Page 6-21, Table 6-16. The assessment of transit system user benefits for all alternatives confirms that the Fully Underground alternative provides the most "bang for the buck" and will be most competitive in Metro's pursuit of Federal Transit Administration New Starts funding.

46. Page 6-22, Section 6.6.1. The description of the evaluation methodology should acknowledge the importance of providing proportional benefits to local communities like Little Tokyo that are affected by construction to benefit the regional transit system.

Chapter 7 (Public Agency Outreach)

47. Page 7-7. In the list of stakeholders consulted, please add the Little Tokyo Community Council under Community Organizations, Neighborhood Groups, and Homeowner Associations.

48. Page 7-21. Please note that the LTCC's PCPC is the Planning and Cultural Preservation Committee.

1 cont'd

CN20

Responses to Comments from Little Tokyo Community Council, Watanabe, Bill

Response to Comment CN20-1

This comment letter is an unsigned, duplicate copy of Comment Letter CN1. Please refer to the responses to Comment Letter CN1, above.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name Nombre 名前 이름	
DAIGAKU KUMME	
Organization Organización 所属 단체	
ZENSHUJI TEMPLE	
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Telephone Teléfono 電話 전화	
213-617-0100	
Email Correo electrónico 電子メール 이메일	
daigaku@sotozen.us	

Comment Comentario コメント 의견

We are expecting to meet with representative from MRCT's to discuss how the Regional Connector will affect Zenshuji but prefer to contact me to set up talk a meeting.

Thanks

D. Kumme

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.netへ電子メールで送ることもできます。
あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

의견은 반드시 2010년 10월 18일까지 접수되어야 공공 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

CN21

Responses to Comments from Zenshuji Temple, Rumme, Daigaku

Response to Comment CN21-1

Metro has contacted the temple to initiate a meeting.

goLAstreetcar.org
213.618.9781 | info@lastreetcar.org
550 South Hope Street, Suite 2300 , Los Angeles, CA 90071

October 15, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County MTA
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
e-mail: roybald@metro.net

Mr. Ray Tellis
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017
e-mail: ray.tellis@dot.gov

RE: Public Comments on the Regional Connector EIR

Dear Los Angeles County MTA and the Federal Transit Administration:

Thank you for providing the opportunity to respond to the Draft Regional Connector EIR. Los Angeles Streetcar, Inc., is a 501(c)(3) public-private partnership dedicated to building a modern streetcar system in Downtown Los Angeles. We have been coordinating and planning with LACMA to ensure the forthcoming streetcar project fully integrates with the Regional Connector and existing transit infrastructure.

We are writing to strongly support the **Fully Underground LRT Alternative**. Developing multi-mobility opportunities and transit connectivity in the center of downtown Los Angeles will help the region attract and retain businesses, visitors, and transit riders. The Regional Connector will play a vital role in reducing travel times and transaction costs, and by finally connecting the region's rail lines together, will greatly increase worker mobility. All of this is a benefit to Downtown as a whole and the streetcar.

By including a fully underground portal between **Broadway and Spring St.**, the Regional Connector will significantly improve connections to downtown's most populous communities and neighborhoods. Constructing underground portals will ensure that the streetcar system can easily and effortlessly integrate with the regional connector, and will provide a seamless transfer point between the LRT and streetcar.

Again, we are in full support of the **Fully Underground LRT Alternative** and the underground **Broadway/Spring St.** portals.

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Sincerely,

Dennis Allen
Executive Director
Los Angeles Streetcar, Inc.

CN22

Responses to Comments from Los Angeles Streetcar, Inc., Allen, Dennis

Response to Comment CN22-1

Thank you for your comment. Support for the Fully Underground LRT Alternative and pedestrian entrances to the 2nd/Broadway station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Regional Connector Transit Corridor
Final Environmental Impact Statement/
Final Environmental Impact Report

VOLUME F-3

RESPONSES TO COMMENTS ON THE DRAFT EIS/EIR (continued)

State Clearinghouse Number: 2009031043

RESPONSES TO COMMENTS ON THE DRAFT EIS/EIR

Introduction

The Regional Connector Transit Corridor Project Draft EIS/EIR was made available to identified stakeholders, agencies, and the general public for review and comment for a 45-day review period from September 3, 2010 through October 18, 2010. During the public review period, Metro held two public hearings to receive oral and written testimony on the Draft EIS/EIR from the general public.

Volumes F-2 and F-3 of this Final EIS/EIR contain copies of all written comments and public hearing transcripts, and provide written responses to all comments received on the Draft EIS/EIR. A total of 195 comment letters were received during the public review period, including written materials submitted at the two public hearings. Comments were also submitted in the form of oral testimony at those hearings. A total of 44 public testimonies were recorded at the public hearings. Overall, a total of 1,030 individual comments were received on the Regional Connector Transit Corridor Project Draft EIS/EIR.

The format for the responses to comments presents each comment letter/hearing transcript, bracketed into separate comments, followed by corresponding responses to each individual comment of that comment letter/hearing transcript. The comment letters/hearing transcripts and responses are organized and grouped into the following categories based on the affiliation of the commenter as follows:

Letter/Speaker ID Prefix	Description
AF	Federal Agency
AL	Local Agency
AR	Regional Agency
AS	State Agency
BU	Businesses and Business Groups
CN	Community Groups and Non-Profit Organizations
PC	Public Comment
PHA	The first public hearing held on September 28, 2010
PHB	The second public hearing held on October 4, 2010

To assist the reader's review and use of the responses to comments, two indices that provide the commenter name, affiliation, and comment letter/speaker identification designator (e.g., PC1) for each comment letter are provided below. The first index lists all the comment letters by comment letter/speaker identification designator and the second lists all of the comment letters alphabetically by commenter's last name.

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AF2	U.S. Environmental Protection Agency - Region IX	Dunning	Connell	F2-5	F2-10
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AL5	County of Los Angeles - Department of Public Works	Farber	Gail	F2-94	F2-98
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AL7	City of Los Angeles, BSL	Batikian	Silva	F2-102	F2-103
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Comment Letter/ Speaker	Affiliation	Last Name	First Name	Comment Page	Response Page
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Adelman	Charles	PHA5		F3-366	F3-426
Agnew	Jonno	CN19	Higgins Building HOA	F2-453	F2-474
Agnew	Jonno	PC99	Higgins Lofts	F3-241	F3-243
Aihara	Chris	CN6	Japanese American Cultural and Community Center	F2-389	F2-391
Aima	Matthew	PC44		F3-108	F3-110
Aldava	Lawrence	PC27		F3-65	F3-66
Allen	Dennis	CN22	Los Angeles Streetcar, Inc.	F2-489	F2-490
Alossi	Rich	PC18		F3-42	F3-43
Alpern	Ken	PC114	The Transit Coalition	F3-305	F3-306
Altamirano	Jaime	PC98		F3-238	F3-240
Avitabile	Travis	PC35		F3-82	F3-83
Axelrod	Steve	PC34		F3-80	F3-81
Axelrod	Rise B.	PC55		F3-133	F3-134
Axelrod	Steven	PC56		F3-135	F3-136
Baisez	Christine	PC31		F3-74	F3-75
Baisez	Christine	PHB20		F3-489	F3-511
Balkin	Arlene Akemi	BU34	Levy Affiliated Holdings, LLC	F2-323	F2-325
Barnes	Jason	PC61		F3-145	F3-147

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Batikian	Silva	AL7	City of Los Angeles, BSL	F2-102	F2-103
Berg	Martin	PHB8		F3-473	F3-498
Berk	Fred	PC60		F3-143	F3-144
Berman	Patti	PHA13	Downtown Los Angeles Neighborhood Council	F3-386	F3-437
Berryhill	Glen	BU30	Thomas Properties Group Inc.	F2-307	F2-308
Bilski	Jonathan	PC11		F3-28	F3-29
Blackburn	Gregor	AF1	U.S. Department of Homeland Security - FEMA	F2-2	F2-4
Bobigian	Vahn	PHB3	Metropolitan News Enterprise	F3-466	F3-493
Briones	William	PHA8	Los Angeles Hompa Hongwanji Temple	F3-372	F3-429
Broide	Barbara	PC112	Westwood South of Santa Monica Blvd. HOA	F3-299	F3-300
Brown	J. Russell	PC113	Downtown Los Angeles Neighborhood Council	F3-301	F3-304
Brown	Russ	PHA11	Historic Downtown Business Improvement District of the L.A. City Chapter	F3-380	F3-434
Brown	Russell	PHB17	Historic Downtown Theater	F3-485	F3-508
Byun	Myunghee	PC117		F3-311	F3-312
Centeno	Adriana	PC58		F3-139	F3-140
Chaiken	Stacie	PC100		F3-244	F3-258
Chang	San Ok	PC90		F3-222	F3-223
Chavira	Tracey	PHB16	Central City Association	F3-484	F3-507
Chen	Jay	PC47		F3-115	F3-117
Cheung	Domino	PC64		F3-152	F3-153
Chou	Flora	CN14	Los Angeles Conservancy	F2-436	F2-439

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Clark	Yasue	CN7	Little Tokyo Service Center	F2-393	F2-394
Clarke	Darrell	CN18	Sierra Club	F2-451	F2-452
Covarrubias	Joel	PC3		F3-12	F3-13
Covarrubias	Joel	PC26		F3-62	F3-63
Covarrubias	Joel	PHA12		F3-382	F3-435
Dang	Tim	CN13	East West Players	F2-429	F2-434
Davidson	Christopher	PC77		F3-194	F3-195
Donato	Carol	PC22		F3-52	F3-54
Dunning	Connell	AF2	U.S. Environmental Protection Agency - Region IX	F2-5	F2-10
Duong	Toan	AL4	County of Los Angeles - Department of Public Works	F2-17	F2-19
Egdal	David	PC19		F3-44	F3-45
Farber	Gail	AL5	County of Los Angeles - Department of Public Works	F2-94	F2-98
Federis	Frank	PC24		F3-58	F3-59
Fishel	Alan	PC111		F3-293	F3-298
Fishel	Alan	PHA1		F3-354	F3-422
Fong	Ronald M.	CN9	Asian Pacific Islander Small Business Program	F3-354	F3-422
Frevele	Dave	PC72		F3-178	F3-180
Frevele	Dave	PHA14	Electric Railway Historical Association	F3-388	F3-438
Fujita	James	PC1		F3-7	F3-8
Fukushima	Kristin	CN4	Japanese American Citizens League - Pacific Southwest District	F2-381	F2-383
Fung	Hank	PC103		F3-266	F3-268

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Furlong	Aaron	PC10		F3-26	F3-27
Garcia	Dan	PC42		F3-103	F3-104
Garibay	Darryl	BU21	Advanced Parking Systems	F2-230	F2-231
Garza	Bobby	PC101		F3-260	F3-262
Garza	Don	PHB18		F3-486	F3-509
Gonzalez	Rachel	PC14		F3-34	F3-35
Gove	John	PC43		F3-105	F3-107
Grace	Roger M.	BU1	Metropolitan News Enterprise	F2-134	F2-138
Grace	Roger M. and Jo-Ann W.	BU24	Metropolitan News Enterprise	F2-238	F2-283
Grace	Roger	PHB2		F3-466	F3-492
Grace	Jo-Ann	PHB4		F3-467	F3-494
Grewal	AnnMarie	PC41		F3-101	F3-102
Gross	Spencer	PC51		F3-124	F3-125
Handa	Toshio "Terry"	BU2	Japanese Chamber of Commerce of Southern California	F2-139	F2-140
Handa	Toshio "Terry"	PC115	Japanese American Cultural and Community Center	F3-307	F3-308
Hanks	Keith	AL8	Metro Gold Line Foothill Extension Construction Authority	F2-104	F2-105
Hashimoto	Frances	BU33	Mikawaya	F2-317	F2-321
Havens	Alan D.	PC70		F3-166	F3-173
Havens	Alan	PHA6		F3-368	F3-427
Havens	Alan	PHB7		F3-472	F3-497
Helfand	Morley	PC9		F3-24	F3-25

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Herrasti	Jose	PC12		F3-30	F3-31
Hirase	Kikue	PC81		F3-203	F3-204
Ho	Jean	PC25		F3-60	F3-61
Hogge	Richard	PC29		F3-69	F3-70
Hom	Japhet	PC57		F3-137	F3-138
Howard	Les	PC28		F3-67	F3-68
Howard	Les	PHA24	Gold Line Washington Alignment Advocacy Group	F3-414	F3-448
Hur	Jenny	PC79		F3-199	F3-200
Hymel	Chad	PC23		F3-56	F3-57
Iki	Nobuko	PC86		F3-214	F3-215
Ishida	Hiroshi Brian	BU31	J-WAVE Video	F2-309	F2-311
Ishii	Craig	CN2	Japanese American Citizens League - Pacific Southwest District	F2-372	F2-375
Johnston	Mark R.	PC37	NARP-TRAC-PRS	F3-86	F3-92
Kahn	Aaron	PC62		F3-148	F3-149
Kaji	Jon	PHA17	Nikkei Center, LLC Project	F3-396	F3-441
Kame	Gregory	BU14	Los Angeles Eye Care Optometry Group	F2-187	F2-189
Kassimir	Spencer V.	PC7		F3-20	F3-21
Kassimir	Spencer V.	PC20		F3-46	F3-48
Kawaratani	Kiyoshi	BU11	Rafu Bussan, Inc.	F2-178	F2-180
Kawaratani	Yukio	PC30		F3-71	F3-72
Kawaratani	Yukio	PC76		F3-187	F3-191

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Kawaratani	Yukio	PHA10		F3-475	F3-501
Kay	Greg	PHA4		F3-364	F3-425
Keating	Tim	BU25	LARABA,LaDADspace	F2-284	F2-285
Kerr	John	PHA23		F3-412	F3-447
Kim	Kun Ja	PC82		F3-205	F3-206
Kim	Suk Hee	PC93		F3-228	F3-229
Kito	Brian	BU26	Fugetsu-do Confectionery	F2-286	F2-287
Kito	Brian	PHA22	Fugetsu-Do Confectionery	F3-410	F3-446
Koh	Mija	PC85		F3-212	F3-213
Koh	Sang Soo	PC91		F3-224	F3-225
Kosinski	Ronald	AS2	State of California - Department of Transportation, District 7	F2-126	F2-127
Lee	Nelson	PC33		F3-78	F3-79
Levey	Sam	PC110		F3-289	F3-291
Lim	Teressa	PC39		F3-97	F3-98
Lin	Susan	PC75		F3-185	F3-186
Liu	Huasha	AR2	Southern California Association of Governments	F2-113	F2-120
Liu	Wilson	BU6	Cherry Land Company	F2-162	F2-164
Liu	Wilson	BU7	Ho-Narumi-Taira Investment Company	F2-166	F2-168
Liu	Wilson	BU8	Sho Tokyo Parking LLC	F2-169	F2-171
Liu	Wilson	BU9	Taira Investment Company	F2-172	F2-174
Liu	Wilson	BU10	Taira Services Corporation	F2-175	F2-177

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Liu	Wilson	BU20	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-205	F2-228
Liu	Wilson	PHA3	Little Tokyo Business Association and Little Tokyo Business Improvement District	F3-360	F3-424
Liu	Wilson	PHB14	Little Tokyo Business Association and Little Tokyo Business Improvement District	F3-480	F3-505
Lo	Derrick	PC63		F3-150	F3-151
Lu	Grace	PC65		F3-154	F3-155
Luu-Ng	Kim	PHA18	The Spice Table	F3-400	F3-442
MacMillan	Ian	AR1	South Coast Air Quality Management District	F2-107	F2-110
Magdaleno	George	PC16		F3-38	F3-39
Mandel	John	PC17		F3-40	F3-41
Marks	Wally	PC68		F3-160	F3-161
Martinez	Esperanza V.	CN17	Bus Riders Union	F2-446	F2-449
Maruyama	Yoshinobu	BU38	Shabu-Shabu House Restaurant	F2-338	F2-341
Maruyama	Yoshi	PHB19	Shabu Shabu House Restaurant	F3-488	F3-510
Mason	Matt	PC6		F3-18	F3-19
Masuda	Sotaro	BU13	Joy Mart Restaurant	F2-184	F2-186
Masuda	Etsuko	BU15	Teishokuya of Tokyo	F2-190	F2-192
Masuda	Etsuko	BU40	Teishokuya of Tokyo	F2-344	F2-345
Masuda	Sotaro	BU41	Joy Mart Restaurant	F2-346	F2-348
Mayeda	Kelly	CN3	Japanese American Citizens League - Pacific Southwest District	F2-377	F2-379
Mendiores	Rupert	PC45		F3-111	F3-112

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Metcalfe	Michael	PC84	Metcalf Associates	F3-209	F3-211
Mikuni	Peggy T.	BU4	Yamato Travel Bureau	F2-143	F2-152
Miyoshi	Ellen	PHB11		F3-476	F3-502
Mochizuki	John	PC80		F3-201	F3-202
Mochizuki	Noriko	PC87		F3-216	F3-217
Montijo	Jorge	PC32		F3-76	F3-77
Montijo	Jorge	PC105		F3-274	F3-276
Moore	David G.	PC54		F3-131	F3-132
Moore et. al.	Gary Lee	AL3	City of Los Angeles, DCP, BOE, BSL, DOT, CRA/LA	F2-21	F2-56
Mukai	Susan	BU39	Nishi Center	F2-342	F2-343
Myers	Joseph	PC49		F3-120	F3-121
Nakamura	Ken	BU17	Ken Nakamura, D.D.S.	F2-196	F2-197
Ng	Bryant and Kim Luu	BU22	The Spice Table	F2-232	F2-234
Nishimura	Sakiko	PC89		F3-220	F3-221
Nishimura	Howard	PC116	Little Tokyo Community Council & Tokyo Villa HOA	F3-309	F3-310
Nishio	Alan	PHA20	California Japanese American Community Leadership Council	F3-404	F3-444
Norton	Hilary	CN16	Fixing Angelenos Stuck in Traffic	F2-443	F2-445
Norton	Hilary	PHB1	Fixing Angelenos Stuck in Traffic	F3-465	F3-491
Obana	Yaeko	PC96		F3-234	F3-235
Oh	Jannie	PC66		F3-156	F3-157
Okamoto	Yuji	BU35	Hair Craft Salon	F2-326	F2-327

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Okamoto	Mike	PHA2	Japanese Chamber of Commerce	F3-356	F3-423
Orona	Phil	PC73		F3-181	F3-182
Ortiz	Lupe	PC67		F3-158	F3-159
Ozawa	Michael	CN12	Go For Broke National Education Center	F2-424	F2-427
Park	Jong Hyung	BU16	Favorite Snack	F2-193	F2-195
Percus	Allon	PC48		F3-118	F3-119
Pereyra	Jose	AS3	State of California - Public Utilities Commission	F2-128	F2-130
Perry	Jan	AL2	City of Los Angeles City Council	F2-17	F2-19
Perry	Patrick A.	BU32	Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Tribune Company	F2-312	F2-315
Philibosian	Robert	PHB5	Metropolitan News Enterprise	F3-467	F3-495
Poosti	Ali	AL6	City of Los Angeles - Department of Public Works, Bureau of Sanitation	F2-99	F2-101
Popov	Yuri O.	PC4		F3-14	F3-15
Potter	Meghan	CN5	Japanese American Citizens League - Pacific Southwest District	F2-385	F2-387
Reed	Bart	CN15	The Transit Coalition	F2-441	F2-442
Reed	Bart	PHB9	The Transit Coalition	F3-474	F3-499
Ricci	Thomas S.	BU36	Thomas Properties Group Inc.	F2-328	F2-332
Roderick	Trina	PC15		F3-36	F3-37
Rumme	Daigaku	CN21	Zenshuji Temple	F2-487	F2-488
Sachs	Arnold	PHB13		F3-479	F3-504
Sakamoto	Tadao	PC94		F3-230	F3-231
Sakamto	Yoshiko	PC97		F3-236	F3-237

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Salumbides	Romeo	PC38		F3-95	F3-96
Santana	Elana	PC59		F3-141	F3-142
Schatz	Carol E.	BU29	Central City Association of Los Angeles	F2-305	F2-306
Schumacher	Richard	PC74		F3-183	F3-184
Sein	Christina	PC71		F3-176	F3-177
Shinchi	Masumi	PC83		F3-207	F3-208
Simonian	Irene Tsukada	BU3	Bunkado, Inc.	F2-141	F2-142
Sitty	Rani	PC50		F3-122	F3-123
Smith	Jim	BU27	Japanese Village Plaza	F2-290	F2-291
Springer	Jay	PHA16		F3-394	F3-440
Springhetti	Joan	PC104		F3-270	F3-272
Springhetti	Joan	PHB10		F3-475	F3-501
Suzuki	Kenji	BU23	Suehiro Café, Inc.	F2-305	F2-306
Suzuki	Kenji	PHB6	Suehiro Café, Inc.	F3-471	F3-496
Tae	Susan	PC109	Savoy MTA Committee	F3-285	F3-287
Taiyoshi	Elaine	BU12	Little Tokyo Arts & Gifts	F2-181	F2-183
Takashima	Wilbur	PC69		F3-162	F3-163
Takayama	George	BU37	Rothenberg Sandy Architects	F2-336	F2-337
Todd	John R.	AL1	County of Los Angeles - Fire Department	F2-14	F2-16
Tong	Kam	PC13		F3-32	F3-33
Tooley	Eric	PC8		F3-22	F3-23

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Tower	Carlos	PC5		F3-16	F3-17
Volk	Robert D.	PC88		F3-218	F3-219
Wakayama	Tsutae	PC95		F3-232	F3-233
Walker	Daniel	PC46		F3-113	F3-114
Walker	Justin	PC106		F3-277	F3-279
Wang	Sidney	PC108		F3-283	F3-284
Watanabe	Bill	CN1	Little Tokyo Community Council	F2-351	F2-360
Watanabe	Bill	CN8	Little Tokyo Service Center	F2-395	F2-396
Watanabe	Bill	CN20	Little Tokyo Community Council	F2-477	F2-486
Watanabe	Bill	PHA9	Little Tokyo Community Council	F3-374	F3-430
Watson	Dianna	AS1	State of California - Department of Transportation, District 7	F2-123	F2-125
Westwater	Brady	PC102		F3-263	F3-265
Westwater	Brady	PHA15		F3-390	F3-439
Witte; Broad	William A.; Eli	BU28	Related/Companies, L.P./Grand Avenue L.A., LLC/The Broad Collection	F2-293	F2-300
Wright	Jerard	PC2		F3-9	F3-10
Wright	Jerard	PHB15		F3-482	F3-506
Yamaguchi	Jayson	PHA19	GetFit Little Tokyo	F3-402	F3-443
Yamauchi	Hiroshi	BU5	Koraku Group, Inc.	F2-155	F2-160
Yamauchi	Hiroshi	PHA21	Koraku Group, Inc.	F3-406	F3-445
Yamauchi	Hiroshi	PHB12	Koraku Group, Inc.	F3-477	F3-503
Yano	Akemi Kikumura	CN11	Japanese American National Museum	F2-420	F2-423

Last Name	First Name	Comment Letter/ Speaker	Affiliation	Comment Page	Response Page
Yasuda	Hiroko	PC78		F3-196	F3-197
Yeh	Paul	PC107	Savoy MTA Committee	F3-280	F3-282
Yen	Brigham	PC21		F3-50	F3-51
Yick	Andrew	PC53		F3-129	F3-130
Yoon	Young S.	PC40		F3-99	F3-100
Yoon	Simon S.	PC92		F3-226	F3-227
Zablen	Nathan	PHA7		F3-370	F3-428
Zhao	Yuqiao	PC36		F3-84	F3-85
		BU18	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-198	F2-201
		BU19	Little Tokyo Business Association and Little Tokyo Business Improvement District	F2-203	F2-204

Responses to Public Comment Letters

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC1		Fujita	James
PC2		Wright	Jerard
PC3		Covarrubias	Joel
PC4		Popov	Yuri O.
PC5		Tower	Carlos
PC6		Mason	Matt
PC7		Kassimir	Spencer V.
PC8		Tooley	Eric
PC9		Helfand	Morley
PC10		Furlong	Aaron
PC11		Bilski	Jonathan
PC12		Herrasti	Jose
PC13		Tong	Kam
PC14		Gonzalez	Rachel
PC15		Roderick	Trina
PC16		Magdaleno	George
PC17		Mandel	John
PC18		Alossi	Rich
PC19		Egdal	David
PC20		Kassimir	Spencer V.

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC21		Yen	Brigham
PC22		Donato	Carol
PC23		Hymel	Chad
PC24		Federis	Frank
PC25		Ho	Jean
PC26		Covarrubias	Joel
PC27		Aldava	Lawrence
PC28		Howard	Les
PC29		Hogge	Richard
PC30		Kawaratani	Yukio
PC31		Baisez	Christine
PC32		Montijo	Jorge
PC33		Lee	Nelson
PC34		Axelrod	Steve
PC35		Avitabile	Travis
PC36		Zhao	Yuqiao
PC37	NARP-TRAC-PRS	Johnston	Mark R.
PC38		Salumbides	Romeo
PC39		Lim	Teressa
PC40		Yoon	Young S.
PC41		Grewal	AnnMarie

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC42		Garcia	Dan
PC43		Gove	John
PC44		Aima	Matthew
PC45		Mendiores	Rupert
PC46		Walker	Daniel
PC47		Chen	Jay
PC48		Percus	Allon
PC49		Myers	Joseph
PC50		Sitty	Rani
PC51		Gross	Spencer
PC52		Adelman	Charles
PC53		Yick	Andrew
PC54		Moore	David G.
PC55		Axelrod	Rise B.
PC56		Axelrod	Steven
PC57		Hom	Japhet
PC58		Centeno	Adriana
PC59		Santana	Elana
PC60		Berk	Fred
PC61		Barnes	Jason
PC62		Kahn	Aaron

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC63		Lo	Derrick
PC64		Cheung	Domino
PC65		Lu	Grace
PC66		Oh	Jannie
PC67		Ortiz	Lupe
PC68		Marks	Wally
PC69		Takashima	Wilbur
PC70		Havens	Alan D.
PC71		Sein	Christina
PC72		Frevele	Dave
PC73		Orona	Phil
PC74		Schumacher	Richard
PC75		Lin	Susan
PC76		Kawaratani	Yukio
PC77		Davidson	Christopher
PC78		Yasuda	Hiroko
PC79		Hur	Jenny
PC80		Mochizuki	John
PC81		Hirase	Kikue
PC82		Kim	Kun Ja
PC83		Shinchi	Masumi

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC84	Metcalf Associates	Metcalfe	Michael
PC85		Koh	Mija
PC86		Iki	Nobuko
PC87		Mochizuki	Noriko
PC88		Volk	Robert D.
PC89		Nishimura	Sakiko
PC90		Chang	San Ok
PC91		Koh	Sang Soo
PC92		Yoon	Simon S.
PC93		Kim	Suk Hee
PC94		Sakamoto	Tadao
PC95		Wakayama	Tsutae
PC96		Obana	Yaeko
PC97		Sakamto	Yoshiko
PC98		Altamirano	Jaime
PC99	Higgins Lofts	Agnew	Jonno
PC100		Chaiken	Stacie
PC101		Garza	Bobby
PC102		Westwater	Brady
PC103		Fung	Hank
PC104		Springhetti	Joan

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PC105		Montijo	Jorge
PC106		Walker	Justin
PC107	Savoy MTA Committee	Yeh	Paul
PC108		Wang	Sidney
PC109	Savoy MTA Committee	Tae	Susan
PC110		Levey	Sam
PC111		Fishel	Alan
PC112	Westwood South of Santa Monica Blvd. HOA	Broide	Barbara
PC113	Downtown Los Angeles Neighborhood Council	Brown	J. Russell
PC114	The Transit Coalition	Alpern	Ken
PC115	Japanese American Cultural and Community Center	Handa	Toshio "Terry"
PC116	Little Tokyo Community Council & Tokyo Villa HOA	Nishimura	Howard
PC117		Byun	Myunghee

Subject: FW: Little Tokyo station name
Date: Tuesday, September 14, 2010 12:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

-----Original Message-----
From: James Fujita [mailto:jim61773@yahoo.com]
Sent: Friday, September 03, 2010 2:26 PM
To: Regional Connector
Subject: Little Tokyo station name

I hear that the MTA has recently released the Draft EIR for the Regional Connector. Good! I am glad to hear that this vital project is moving forward. 1

However, I am concerned that recent documents show the Little Tokyo train station does not have the name Little Tokyo.
The new station at 2nd and Central will clearly be in the very heart of Little Tokyo. It is not on the border of Little Tokyo and the Arts District like the existing Little Tokyo/Arts District station.
I would hope that if the existing Little Tokyo station is destroyed in the process of building the new station, that the new station be given the name "Little Tokyo." 2
The Little Tokyo community has fought hard to have the all-underground option; and they have fought hard to preserve the community of Little Tokyo as a Japanese-American community. They deserve recognition for their efforts.

I am also curious to know where the station entrances will be. I would hope that at least one entrance would face north towards the Japanese American National Museum. 3
Little Tokyo deserves a Little Tokyo station. Thank you,

- James Fujita

PC1

Responses to Comments from Fujita, James

Response to Comment PC1-1

Comment acknowledged.

Response to Comment PC1-2

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Response to Comment PC1-3

Station entrances are shown in the station plans included in Final EIS/EIR Appendix 1, Updated Locally Preferred Alternative Drawings.

September 3, 2010 (*updated October 17. 2010*)

To the Regional Connector Project Team,

I support the Underground AND Fully Underground options for the Regional Connector. Both options are cost-effective, both will enable Metro to acquire FTA New Starts funding and I support leaving the 5th/Flower station for the FEIR as a *design option* to enable Metro staff to come up with either new suggested funding strategies OR urban design strategies to cover this gap. 1

Funding Strategy

- DEIR assumes only a 50% FTA New Starts match, maybe Metro could assume a 60% Federal funding match as this project is rated High in Cost-effectiveness one of the few projects that is rated 'High' per the FTA rules. 2
- DEIR makes no mention or use of Local Prop A and C funding. The Regional Connector could learn from the Eastside Gold Line and get creative in the funding to use some Prop A and C funds to fund the non-subway components of the project like the Pedestrian bridge that would link the Upper Grand Avenue to the Bunker Hill station, or the 1st St. widening to build the new portal, the re-striping and repaving of Flower street from 3rd to 5th Street (this could also work as an urban design component in lieu of a 5th/Flower Station), the property take of the DWP Maintenance site to build the new portal incline as a portion of it is not fully underground or in open-cut therefore going around the Prop. A and C ban on subway funding. 3
- Have the property owners chip in for the cost of the station at 5th/Flower. 4

Urban Design Strategy

The key to making the urban design strategy work for the Regional Connector is to leave the 5th/Flower station into the DEIR as a design option; much like it is done with other recent DEIR's such as Crenshaw Corridor and Expo Phase 2. 5

- *It enables the project team to work with stakeholders to look at pedestrian and streetscape improvements that can be incorporated into tying the 5th/Flower area to the Bunker Hill Station.*
- *Combining the Bunker Hill and Financial District stations into a 'super-station' that would have additional entrances around 3rd/Flower or 4th/Flower to tie into the main platform.* 6

Personally, if there is a station that should be considered for removal it is the 2nd/Broadway one as it appears to be the weakest of the 4 stations. With the Broadway Streetcar connecting at Bunker Hill, Financial District AND Convention Center which would also serve the Regional Connector, this portion can be served by the streetcar and actually strengthen the utility of the streetcar by linking this at other areas. 7

Thank you for your time and continued efforts on this essential project for the Greater L.A. region and keep up the great work. 8

Sincerely,
Jerard Wright

PC2
Responses to Comments from Wright, Jerard

Response to Comment PC2-1

Support for the Underground Emphasis LRT Alternative and Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC2-2

In response to the increased cost-effectiveness of the three-station Locally Preferred Alternative over the four-station Fully Underground LRT Alternative, Metro is requesting a 60 percent federal funding match. The Federal Transit Administration New Starts Cost-Effectiveness Index for the proposed project, as of the publication of the Draft EIS/EIR, was $13.68 (a "medium-high" rating). Refer to Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives, of this Final EIR/EIR.

Response to Comment PC2-3

Metro is actively seeking ways to reduce the costs of the project, and is considering all available funding sources. Proposition A and C funds are largely unusable for the fully underground Regional Connector due to the voter-approved Metropolitan Transportation Authority Reform and Accountability Act of 1998.

Response to Comment PC2-4

After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC2-5

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC2-6

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The station at 2nd and Hope Streets is included in the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC2-7

Preference for removal of the 2nd/Broadway station instead of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative.

Response to Comment PC2-8

Thank you for your comment.

Subject: FW: Thank You, But...

Date: Tuesday, September 14, 2010 12:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Joel Covarrubias [mailto:JCovarrubias@Loopnet.com]
Sent: Friday, September 03, 2010 4:50 PM
To: Regional Connector
Subject: Thank You, But...

Hello,

First I just want to say how much I (one member of the public) appreciate all the hard work that went into the DEIR (and for that matter, the Westside Extension DEIR too). This is a great start to an excellent transit facility for the people of Los Angeles. 1

Having said that, I am not happy about the new names given to the stations. The names should reflect a sense of place. The new names are unambiguous but cold, technically correct but unmemorable. They add nothing to the cultural landscape of Downtown. Not to mention the fact that replacing the "Little Tokyo" name with 2nd/Central is an insult to the community which has put up with so much related to rail construction.

I recommend using the following names:

- **Central Library**
- **Bunker Hill** and/ or **Disney Hall**
- **Broadway**
- **Little Tokyo**

2

Again, thank you for your time, and have a great (long) weekend.

Thank You,

Joel Covarrubias

PC3

Responses to Comments from Covarrubias, Joel

Response to Comment PC3-1

Thank you for your comment.

Response to Comment PC3-2

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Subject: FW: Draft EIS/EIR comments
Date: Tuesday, September 14, 2010 12:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Yuri Popov [mailto:yopopov@gmail.com]
Sent: Friday, September 03, 2010 10:29 AM
To: Regional Connector
Subject: Draft EIS/EIR comments

This is my formal comment on Draft EIS/EIR.

I strongly support the Fully Underground LRT Alternative. This alternative has the highest ridership potential, the shortest travel times, the greatest connectivity of the rail network, and low operating budget. So, it satisfies all the criteria of a successful rail transit project. As for its high capital cost - well, we are building the future of our region, and we cannot really afford to build it cheaply and badly. We build it once, but we will have to live with it forever. Therefore, Fully Underground LRT Alternative should be chosen as the locally preferred alternative. 1

Sincerely yours,
Yuri O. Popov, Ph.D.

PC4

Responses to Comments from Popov, Yuri O.

Response to Comment PC4-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: [Metro.net] customer comment
Date: Tuesday, September 14, 2010 12:14 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Saturday, September 04, 2010 10:56 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Carlos
Last Name: Tower
Email: clostower@gmail.com
Phone:
URL:

9/4/10

To Whom it May Concern:

I am very pleased with the progress and planning of the Regional Connector project. As a former resident of the San Gabriel Valley, this project is in dire need. I consistently take the metro to LAX, so originating from the gold line I transfer three times to get there. Each transfer, I typically wait five to ten minutes for the next train and that adds up to an additional 30 minutes. The connector will decrease my transfers to one and decrease the travel time by 20 minutes, so needless to say, I'm very ecstatic of the time I will save. There are a number of other occasions where such transfers are necessary, like heading to staples center or downtown. 1

I reviewed the DEIR. I'd like to say that both the underground option and the completely underground option are terrific and preferred over the other options. 2

Is Metro aware of the proposed land swap for the Federal courthouse parcel and the Parker Center Parcel. I bring this up because of the location of the Federal courthouse on Hill and 2nd. It was always a glaring omission to me that there wasn't a transfer hub at the Civic Center station for the regional connector and the red/purple lines. Building an additional station only one block from the existing civic center station seems illogical, but now with the possible switch of these two parcels, there is an incredible opportunity to expand the Civic Center station to this parcel and creating an underground transfer hub. The station for the regional connector would be located on 2nd between Hill and Broadway and an underground transfer plaza can span over to 1st and Hill, bypassing any pedestrian crossing. Right now, the proposed station in the completely underground option is on 2nd between Broadway and Spring, creating a great obstacle for metro riders to transfer in this area. An entrance for this transfer hub that I am proposing will still be at 2nd and Broadway servicing this LA Times area and connecting it to the Civic Center station as well. Without this proposed Civic Center hub the alternative is to transfer at Union station or 7th St and that is fine for commuter travel and long distance travel, but for those traveling within downtown, the more options the better, as is the case with any transit system. 3
I hope it is not too late for Metro to consider this proposal in it's planning.

Thank You,
Carlos Tower

PC5

Responses to Comments from Tower, Carlos

Response to Comment PC5-1

Thank you for your comment. Support for the project is noted.

Response to Comment PC5-2

Thank you for your comment. Support for the Underground Emphasis LRT and Fully Underground LRT Alternatives is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC5-3

Metro is aware of the proposed project, as indicated in Table 4.19-6 of the Draft EIS/EIR and Section 4.19, Cumulative Impacts, of this Final EIS/EIR. The primary transfer points between the light rail system and the heavy rail system would occur at Union Station and 7th Street/Metro Center Station. An additional transfer point at Civic Center Station would be redundant, though the station would be approximately one to one-and-a-half blocks away, which is within walking distance. Metro is anticipating connections to other transit routes, such as the proposed downtown streetcar, at the 2nd/Broadway station.

Subject: FW: [Metro.net] customer comment
Date: Tuesday, September 14, 2010 12:15 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Monday, September 06, 2010 11:24 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Matt
Last Name: Mason
Email: mattmason999@yahoo.com
Phone:
URL:

I urge you to keep the name Little Tokyo for that station as well as look at changing station names across the MetroRail system to more recognizable neighborhood/landmark names.

For example, no one knows where Memorial Park is, but almost everyone knows Old Town Pasadena, so why not name it that. The same applies for 2nd/Central and Little Tokyo. For the all important tourist industry this is much more important.

1

Thank you...

PC6

Responses to Comments from Mason, Matt

Response to Comment PC6-1

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Subject: FW: Draft Study

Date: Tuesday, September 14, 2010 12:15 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Spencer Kassimir [mailto:spencer.kassimir@gmail.com]
Sent: Monday, September 06, 2010 7:36 AM
To: Regional Connector
Subject: Draft Study

To Whom It May Concern:

Though I am greatly looking forward to the opening of the regional connector, I am a little confused as I was under the impression that the routes connected would be Culver City to Pasadena and Long Beach to East Los Angeles. Why was there this change? I believe that these routes would be much more effective based on the passenger reports that I have reviewed. 1

I look forward to hearing your answers and comments.

Best,

--
Spencer V Kassimir

PC7

Responses to Comments from Kassimir, Spencer V.

Response to Comment PC7-1

The proposed Long Beach-Pasadena and East Los Angeles-Culver City routes have been used consistently since the Alternatives Analysis phase of the project, which concluded in early 2009. Preference for Culver City-Pasadena and Long Beach-East Los Angeles routes is noted.

Subject: FW: Regional Connector Underground Option Comments
Date: Tuesday, September 14, 2010 12:16 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Eric Tooley [mailto:erictooley1@mac.com]
Sent: Friday, September 10, 2010 8:47 AM
To: Regional Connector
Subject: Regional Connector Underground Option Comments

My comments about the Draft Environmental Impact Statement for the Regional Connector:

I support the regional connector and feel it will finally connect downtowns 2 (soon to be 3) light rail lines into one cohesive system. In addition the new downtown stations will enhance my use of the downtown. I support the fully underground option, I feel it will best handle the traffic flow and cause the least delays. I would use all of new stations proposed, although mostly the little Tokyo station since I visit the area often. I am wondering what would happen to the current little Tokyo station, if it would be demolished or converted into a small park. I think the later would serve the area better. The new station and 2nd and Central should be called the "Little Tokyo" station, not 2nd and Central. It wont be easy to build, but it will be worth it for the future of a cleaner Los Angeles. Easier access to a more fully connect rail system will serve as an excellent alternative the horrible experience of driving, which I tend to avoid as much as I can. 1 2 3 4 5

Thanks

Eric Tooley
1741 Maltman Ave.
Los Angeles, CA 90026

PC8

Responses to Comments from Tooley, Eric

Response to Comment PC8-1

Thank you for your comment. Support for project is noted.

Response to Comment PC8-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC8-3

The current Little Tokyo/Arts District Station would be taken out of service once the Regional Connector opens. Metro will explore possible future uses for the station or its eventual removal with input from the community.

Response to Comment PC8-4

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Response to Comment PC8-5

Thank you for your comment.

Subject: FW: [Metro.net] customer comment
Date: Tuesday, September 14, 2010 12:17 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Friday, September 10, 2010 9:55 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Morley
Last Name: Helfand
Email: mhelfand@mountsinaiparks.org
Phone: (323)769-1346
URL:

Now that Metro is finally able to get Los Angeles back "on track" after the unnecessary hiatus of rail traffic for the past several decades, the planning for "through traffic" seems to be dragging Metro down instead of giving it a boost. Case in point, the Regional Connector should have been part of the original design for the Blue and Gold (and now the Expo) Lines in the first place. We found ourselves transferring from one to another, wasting time and energy and costing more for each transfer. The time has come to give the public the entire transit plan, including rail access into (not just near) LAX airport and to once and for all create a "Master Plan" that can be adhered to and one that will make sense for all communities and transit patrons. By all means GO with the Regional Connector but look at all the upcoming plans for the Red and Purple Lines and don't make the same mistakes over again. The Orange Line will someday become a rail line, and that too, should be taken into account for propert connectability with existing lines and yet-to-be proposed lines. Congratulations on moving forward, just make sure it's going to be beneficial to all. Morley Helfand.(Arcadia, CA)

1

PC9

Responses to Comments from Helfand, Morley

Response to Comment PC9-1

Metro's 2009 Long Range Transportation Plan (LRTP) serves as the long-term master plan for the transit system. The Regional Connector is being planned in a way that is consistent with other corridor projects identified in the LRTP.

Leung, Julie

From: Cornejo, Laura
Sent: Wednesday, September 15, 2010 2:40 PM
To: Leung, Julie
Subject: FW: Public Comments

From: Regional Connector
Sent: Wednesday, September 15, 2010 2:27 PM
To: 'Ginny Brideau'; Clarissa Filgioun; Roybal, Dolores; Cornejo, Laura
Subject: FW: Public Comments

From: Aaron Furlong [mailto:aaronfurlong@sbcglobal.net]
Sent: Tuesday, September 14, 2010 1:58 PM
To: Regional Connector
Subject: Public Comments

Hello,

I live in Santa Monica and work in downtown Los Angeles. I would like to request that any Regional Connector plan include bike paths and/or spacious and well marked bike lanes. I currently commute by a bike only a few times each month. I would ride more if there were safer alternatives to what is now available. Additionally I would prefer to ride rather than take any metro option, especially when the weather outside is nice, which it usually is. 1

Thank you,

Aaron Furlong

PC10

Responses to Comments from Furlong, Aaron

Response to Comment PC10-1

The Regional Connector would include bicycle lockers and racks at stations where feasible to facilitate bicycle use, as noted in Section 3.3.5.2.4 of the Draft EIS/EIR and this Final EIS/EIR. Since the alignment is entirely underground, few alterations to existing streets would occur. The Regional Connector does not include any new bike lanes along the alignment, but would not preclude the City of Los Angeles from installing bike lanes near the alignment in the future.

Leung, Julie

From: Cornejo, Laura
Sent: Wednesday, September 15, 2010 2:42 PM
To: Leung, Julie
Subject: FW: New Little Tokyo Station

From: Regional Connector
Sent: Wednesday, September 15, 2010 2:29 PM
To: 'Ginny Brideau'; Clarissa Filgioun; Roybal, Dolores; Cornejo, Laura
Subject: FW: New Little Tokyo Station

From: Jonathan Bilski [mailto:paulrelca@gmail.com]
Sent: Tuesday, September 14, 2010 11:29 PM
To: Regional Connector
Subject: New Little Tokyo Station

Hey I use the Metro all the time I think it's foolish that the new station your trying to build will be called Second and Central instead of Little Tokyo. It'll just confuse people instead of just being Little Tokyo. Please give it the name it deserves. 1

PC11

Responses to Comments from Bilski, Jonathan

Response to Comment PC11-1

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Leung, Julie

From: Cornejo, Laura
Sent: Wednesday, September 15, 2010 2:41 PM
To: Leung, Julie
Subject: FW: Regional Connector

From: Regional Connector
Sent: Wednesday, September 15, 2010 2:28 PM
To: 'Ginny Brideau'; Clarissa Filgioun; Roybal, Dolores; Cornejo, Laura
Subject: FW: Regional Connector

From: Jose Herrasti [mailto:jherrasti@gmail.com]
Sent: Tuesday, September 14, 2010 7:48 PM
To: Regional Connector
Subject: Regional Connector

I am a resident at the Higgins building on 2nd Street between Spring Street and Main Street. 1
I support the city's effort to build the regional connector, however I am against the At-Grade Emphaisi LRT and the Underground Emphasis LRT.

I support the fully underground LRT
The reason for my support of this option is that unlike the other alternatives the urban environment and fabric around the Higgins, the LA Times, the police building, the Caltrans building, the surrounding streets and neighborhood, and Little Tokio will remain as they are. The at grade option will rupture the urban fabric, splitting the neighborhood into 2 pieces at either side of the tracks. 2
Another concern I have is the noise of having a surface train running at street level below my window. 3
A third concern is the modification (increased width or removal of vehicular circulation) of 2nd street and the historical 2nd street tunnel. 4
A fourth concern is the effect that a surface rail track will have on vehicular circulation and traffic in the area. 5

I support the Fully Underground LRT
I oppose the At-Grade Emphasis LRT
I oppose tyhe Underground Emphasis LRT 6

Sincerely,

Jose Herrasti
Resident at 108 W 2nd Street (Higgins Building)

PC12

Responses to Comments from Herrasti, Jose

Response to Comment PC12-1

Comment acknowledged.

Response to Comment PC12-2

Comment acknowledged. The Fully Underground LRT Alternative has been designated as the Locally Preferred Alternative.

Response to Comment PC12-3

Noise impacts associated with operation of the At-Grade Emphasis LRT Alternative were analyzed in Section 4.7, Noise and Vibration, of the Draft EIS/EIR and this Final EIS/EIR, which included analysis of noise generated from LRT vehicle pass-by, and were determined to be less than significant. Nonetheless, the Fully Underground LRT Alternative, which was designated by the Metro Board of Directors on October 28, 2010 as the Locally Preferred Alternative, would be below-grade when traveling past the Higgins Building. Therefore, noise generated from LRT vehicle pass-by would not affect residents of the Higgins Building.

Response to Comment PC12-4

After implementation of the mitigation measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, the Locally Preferred Alternative would not cause modifications or adverse impacts to the 2nd Street Tunnel.

Response to Comment PC12-5

Comment acknowledged. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative would operate underground. Therefore, the concern stated in this comment regarding operation of an at-grade LRT system is not an issue under the Locally Preferred Alternative.

Response to Comment PC12-6

Thank you for your comment. It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the At-Grade Emphasis LRT and Underground Emphasis LRT Alternatives. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Leung, Julie

From: Cornejo, Laura
Sent: Wednesday, September 15, 2010 2:39 PM
To: Leung, Julie
Subject: FW: [Metro.net] customer comment

-----Original Message-----
From: Regional Connector
Sent: Wednesday, September 15, 2010 2:27 PM
To: Clarissa Filgioun; 'Ginny Brideau'; Roybal, Dolores; Cornejo, Laura
Subject: FW: [Metro.net] customer comment

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Tuesday, September 14, 2010 1:36 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Kam
Last Name: Tong
Email: dtsworld@sbcglobal.net
Phone: 626 -354-8708
URL:

DEAR SIR/MADAM,
WE HAVE REC'D YOUR RECENTLY SENT FLYERS RE 'HELP US PLAN THE REGIONAL CONNECTOR', THEY ARE IN ENGLISH, SPANISH, KOREAN, JAPANESE, CAN YOU TELL US WHY YOU DO NOT HAVE THEM IN 'CHINESE'? 1
REGARDS
KAM TONG

PC13

Responses to Comments from Tong, Kam

Response to Comment PC13-1

Project materials have been translated into appropriate languages based on predominate languages spoken in the project area. Requests for additional translations can be made to Metro at:

Phone: (213) 922-7277

Email: regionalconnector@metro.net

Subject: FW: Connection to Santa Monica
Date: Tuesday, September 14, 2010 12:18 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Raquel Gonzalez [mailto:rgonzalez@lsflaw.com]
Sent: Tuesday, September 14, 2010 11:33 AM
To: Regional Connector
Subject: Connection to Santa Monica

It would be fantastic, to have a Metro connection to Santa Monica from Downtown, especially an underground one.

I am really looking forward to hear more about this project. 1

Kindly,
Rachel

PC14

Responses to Comments from Gonzalez, Rachel

Response to Comment PC14-1

Thank you for your comment.

Subject: FW: [Metro.net] customer comment
Date: Tuesday, September 14, 2010 12:18 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Tuesday, September 14, 2010 8:20 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Trina
Last Name: Roderick
Email: trinarae30@hotmail.com
Phone:
URL:

Please adopt the fully underground LRT plan for the Metro Eastside to Santa Monica regional connector.] 1

PC15

Responses to Comments from Roderick, Trina

Response to Comment PC15-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: Metro Connector - DLANC
Date: Wednesday, September 15, 2010 10:51 AM
From: george.magdaleno@nmfn.com
To: Ginny Brideau <ginny@therobertgroup.com>

Hello Ginny,

I was in the audience for the Downtown Los Angeles Neighborhood Council Meeting. I live and work in downtown and use the metro every week about 4 to 5 time to get to and from Pasadena and Hollywood.

I often rather walk to the Little Tokyo Station rather than use the Pershing Square to connect to Gold Line, so I can see the appeal of a Metro Connector.

I would very much like to participate in the dialogue and planning you have for this project.

Please keep my information handy. Look forward to speaking with you personally.

1

Sincerely,

George Magdaleno
Strategic Financial Group -
Northwestern Mutual Financial Network
515 S. Flower St. 33rd Fl, Los Angeles, CA 90071
Office: 213-243-7041
Fax: 213-652-0636
george.magdaleno@nmfn.com
LIC#0G88986

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Northwestern Mutual
720 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4797.

PC16

Responses to Comments from Magdaleno, George

Response to Comment PC16-1

Comment acknowledged. The commenter's information has been added to the list of recipients who receive updates and notices regarding the Regional Connector Transit Corridor project.

Leung, Julie

From: Regional Connector
Sent: Thursday, September 16, 2010 1:10 PM
To: Roybal, Dolores; Cornejo, Laura; Leung, Julie; 'Ginny Brideau'; 'Clarissa Filgioun'
Subject: FW: My public comment

From: John Mandel [mailto:gittes@earthlink.net]
Sent: Thursday, September 16, 2010 11:13 AM
To: Regional Connector
Subject: My public comment

The Regional Connector MUST be fully underground (including Little Tokyo)! It is the only option that makes sense for today and the future. That is my vote. Start tunneling!! 1

John Mandel
685 Lucas Ave., Apt. 1009
Los Angeles, CA 90017

PC17

Responses to Comments from Mandel, John

Response to Comment PC17-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Public Comment

Date: Friday, September 17, 2010 11:20 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>

From: Rich Alossi [mailto:alossix@gmail.com]
Sent: Thursday, September 16, 2010 7:51 PM
To: Regional Connector
Subject: Public Comment

Please include this comment as part of the public commentary for the environmental reports on the project.

I understand that funding may be limited, but the 5th + Flower station is extremely important and would improve ridership and congestion in the Financial District. Please don't let this station be removed due to funding constraints. It's even more essential (serves a much larger ridership) than a 2nd/Hope station would. 1

Thank you.

--
Rich Alossi, RPR, CSR
CSR No. 13497
(213) 235-7968 phone
(213) 254-0566 fax

PC18

Responses to Comments from Alossi, Rich

Response to Comment PC18-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. This deletion of the station was done in an effort to reduce the costs of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Ridership modeling indicates that deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: FW: Little Tokyo Station / Regional Connector
Date: Monday, September 20, 2010 11:43 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: David Egdal [mailto:david.egdal@gmail.com]
Sent: Saturday, September 18, 2010 12:58 PM
To: Regional Connector
Subject: Little Tokyo Station / Regional Connector

I am writing to ask the MTA to name the station to be built at Second and Central as part of the regional connector as the "Little Tokyo" station. The station is in the heart of one of Los Angeles true historic districts, and provides direct access to the local museums, monuments and businesses of Little Tokyo. To do otherwise is to fail to acknowledge the cultural importance of this neighborhood and the important contributions of the generations of Japanese Americans who have lived and worked here, and who still do. 1

Thanks for your consideration.

--
David Egdal
310.614.7511
david.egdal@gmail.com

PC19

Responses to Comments from Egdal, David

Response to Comment PC19-1

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Subject: FW: Input

Date: Monday, September 27, 2010 9:50 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>

From: Spencer Kassimir [mailto:spencer.kassimir@gmail.com]
Sent: Sunday, September 26, 2010 12:22 PM
To: Regional Connector
Subject: Input

I am in favor of the fully underground LRT option.

Downtown is already transit heavy with pedestrians, busses, and cars so by having any of the route at grade would severely and negatively impact the former. 1

I am also in favor of having the Flower and 4th/5th Street station because it will allow riders greater mobility around the downtown area and not just to the downtown area. My example of success with this model can be seen in San Francisco's BART. Though it goes a great distance in covering ground, once it is downtown, it makes many local stops. This encourages more people to ride as they can go more directly from the outskirts to the center while providing local transit within the area. The opposite would be Los Angeles' Union Station as it only provides one station that is not close to many of the businesses, housing, and other desirable locations in the downtown area. Eliminating this station would be a mistake as it would further congest other surrounding stations while providing less flexibility for both long and short distance ridership. 2

In regards to the 2nd Street and Hope station, it is imperative that a functional escalator and elevator system are built into its design to allow for easy access to the top of Bunker Hill and such landmark destinations as the Disney, Chandler and Ahmanson, MOCA, and other businesses that would otherwise require an extremely steep or elongated route to get to on foot. Ensuring easy accessibility to the top of the hill must be a priority that is met otherwise the station is likely to only serve a much more limited crowd walking west to Flower and Figueroa and the few that want the exercise of climbing a hill. 3

Though not an essential, I believe having extended underground connections to the eatery/mall on 6th and Flower would also provide both convenience for rider but also greater signage for using the new train. Employees of the local businesses and others that go to the underground shopping area are a great audience to using transit as they have already gone "undergound" into an area that they are familiar with. It also provides a more hospitable environment with livelihood by using multi-modal and multi-use tactics for transit and retail development as seen in such cities like New York, Montreal, London, and 4

Tokyo. 4 cont'd

Finally, I believe that that Culver City to Pasadena and East Los Angeles to Long Beach should be the designated routes. However, the density and direction of people's living and working locations does fluctuate. We can see that freeways such as the 110 heading through downtown are in gridlock in part due to its design being too rigidly geared toward the specific directional flow of traffic occurring when it was built. Now, traffic is moving from different directions and it will take a lot of construction to correct this. Thus, I urge that there be greater options for flexibility in the rail structure for the regional connector to allow for such inevitable things as change. 5

As a downtown resident I do believe that these are the most important issues, unless I have missed any, that could negatively impact the success of the Regional Connector. 6

--
Spencer V Kassimir
(917)770-7041

PC20

Responses to Comments from Kassimir, Spencer V.

Response to Comment PC20-1

Comment acknowledged. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative.

Response to Comment PC20-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC20-3

Comment acknowledged. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grande Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue. The pedestrian bridge, if built as part of the Broad Art Foundation Museum or the Locally Preferred Alternative, would be ADA compliant and elevator access, built as part of the Locally Preferred Alternative, would also be provided to the station.

Response to Comment PC20-4

Metro has met with the owners of the underground shopping center at 6th and Flower Streets, and they indicated that they would prefer not to have a station entrance into their shopping area.

Response to Comment PC20-5

Preference for Culver City-Pasadena and Long Beach-East Los Angeles routes is noted. The Locally Preferred Alternative includes Long Beach-Pasadena (eventually Montclair) and East Los Angeles-Culver City (eventually Santa Monica) routes. However, the track configuration would

allow Culver City-Pasadena and Long Beach-East Los Angeles train movements to occur when necessary.

Response to Comment PC20-6

Comment acknowledged. Please refer to Responses to Comments PC20-1 through PC20-5, above, for detailed responses regarding concerns raised by the commenter.

Subject: FW: FULLY UNDERGROUND OPTION
Date: Wednesday, September 29, 2010 1:07 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Brigham Yen [mailto:brighamyen@gmail.com]
Sent: Monday, September 27, 2010 11:06 AM
To: Regional Connector
Subject: FULLY UNDERGROUND OPTION

Hi Metro,

I am a resident of LA County and I fully support the **underground option** from the current 7th/Metro stop to a new underground station in Little Tokyo (2nd/Central). 1

Also, please consider **renaming** "2nd/Central" to the "Little Tokyo Station" like we have for Chinatown. 2

Thank you

_____

Brigham Yen | Century 21 | DRE#01817137
482 N Rosemead Blvd | Pasadena CA 91107
M: 626.590.9105 | Blog: www.brighamyen.com <http://www.brighamyen.com>

PC21

Responses to Comments from Yen, Brigham

Response to Comment PC21-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC21-2

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Position Statement on the Regional Connector Transit Corridor DEIS/DEIR
(Response to Metro Staff On September 28, 2010, But No Later Than October 10, 2010)

Date: September 28, 2010

Individual ~~Company~~ Name: Carol Donato

Address: P.O. Box 220025 - Newhall, CA 91322

Telephone/E-Mail

Name:

☐ Owner ☐ Employee ☐ Manager ☒ Other: Little Tokyo Business Partner

Metro Staff:

With respect to the Regional Connector Transit Corridor Project, we are in support of the ***Little Tokyo Business Association*** and the ***Little Tokyo Business Improvement District*** current position that:

1. ***Locally Preferred Alternative:*** Metros Staff's current recommended ***Fully Underground LRT Alternative*** as the ***locally preferred alternative*** is premature and this recommendation did not adequately seek out the input from the business sector. Therefore, we are cannot support the ***Fully Underground LRT Alternative,*** until the ***Little Tokyo Business Improvement District*** has completed a survey of its membership of all the build alternatives, construction impacts, mitigation issues and solutions, which require implementation and documentation in the ***Final Environmental Impact Statement and Environmental Impact Report.*** 1

2. ***Construction Phase Mitigations:*** The current DEIS/DEIR has identified substantial construction related impacts affecting our business community. Among the key concerns which has not been adequately addressed in the current DEIS/DEIR, but is not limited too, is as follows: 2

   A. ***Preservation of Japanese Business Influence and Culture:*** Little Tokyo is a commercial district, which has served as a ***Japanese Community Center*** for decades. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street. The current DEIS/DEIR has identified serious construction impacts under all the build alternatives currently considered by the Regional Connector Project. Serious and real discussion needs to take place with Metro Staff and the Little Tokyo business community to preserve the ***Japanese business influence and culture.***

   B. ***Business Interruption:*** The current DEIS/DEIR has identified numerous construction impacts that will affect the conduct of business and impede access to the business concerns. This will result in serious economic impacts to the Little Tokyo business community. During the 3

course of construction, every effort shall be made to minimize adverse impacts, which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo Community. Additional funding shall be made available for those businesses, tenants, or property owners, whose business endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property owners, along with those governmental agencies, having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction of the Regional Connector Project. 3

C. ***Replace of On-Street and Off-Street Parking:*** The current DEIS/DEIR has identified serious construction impacts that will affect traffic and parking within the Little Tokyo community under all the build alternatives. Construction of the Regional Corridor Project will result in the loss of on-street parking and reduction in travel lanes. Lane closures during construction will result in temporary removal of existing on-street spaces and loading stalls. Certain construction requirements will require temporary sidewalk detours, which will impede pedestrian flow. Numerous Little Tokyo street level businesses relay upon the on-street parking spaces for their patrons and street- level pedestrian flow. With the traffic congestion and on-street parking losses, the patrons to these street-level businesses will seriously be economically impacted by customers seeking alternative communities for similar products and services. Therefore, we support the replacement of all off-street parking spaces loss through eminent domain shall be replaced. Further, all on-street and off-street parking spaces taken away during the course of construction shall be replaced. 4

The Regional Connector Transit Corridor is a major project. Construction of this project will affect current businesses and property owners with serious economic impacts, which in turn will affect the future of the Little Tokyo Community. 5

Respectfully yours,

cc: Los Angeles County Metropolitan Transit Authority
Delores Roybal Saltarrelli, Project Manager
One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Little Tokyo Business Improvement District
Wilson Liu
200 S. San Pedro Street, Suite 400B
Los Angeles, CA 90012

PC22

Responses to Comments from Donato, Carol

Response to Comment PC22-1

Metro's outreach to and involvement with the Little Tokyo community, including the business community, has been extensive. For a more detailed description of this outreach effort, please refer to Chapter 7, Public and Agency Outreach, of this Final EIS/EIR.

Metro held public meetings during the Draft EIS/EIR process, meetings with the Little Tokyo Working Group and individual stakeholders in the Little Tokyo neighborhood, hired an independent consultant for the Little Tokyo Community Council, and performed outreach activities to gather input that ultimately led to the creation of the Fully Underground LRT Alternative. The results of the Little Tokyo Business Improvement District's survey poll on the Regional Connector Transit Corridor project are provided in Comment Letter BU20, above. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, including those suggested by the Little Tokyo community to the extent feasible, in order to minimize impacts to businesses.

Response to Comment PC22-2

Metro recognizes the significance of Little Tokyo to Japanese Americans nationwide, and expressed the community's importance in Section 4.17.2 of the Draft EIS/EIR and this Final EIS/EIR. Metro acknowledges the disproportionate adverse impacts that Regional Connector construction would have in Little Tokyo, and addresses them in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro has been working closely with the Little Tokyo community since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings, Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Metro will enact the measures listed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to minimize impacts to businesses, and will coordinate activities with the community throughout the construction process. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, since publication of the Draft EIS/EIR, alignment refinements have been made to reduce construction impacts in Little Tokyo, reduce the amount of cut and cover activities, and reduce the extent of acquisitions needed on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These refinements would reduce construction impacts near the Japanese Village Plaza by eliminating the need for cut and cover activities on 2nd Street in Little Tokyo. It is Metro's goal to help preserve the Little Tokyo community and its businesses during construction. Metro will continue to meet with the community for the duration of the project.

Response to Comment PC22-3

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting

Program (Chapter 8) of this Final EIS/EIR. Metro will work with a business interruption committee to serve all businesses affected by Regional Connector construction.

Response to Comment PC22-4

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Response to Comment PC22-5

Comment acknowledged. Please refer to Responses to Comments PC22-1 through PC22-4, above, for detailed responses to concerns raised by the commenter about project-related construction impacts to the Little Tokyo community. In addition, construction and economic impacts associated with the project were analyzed in Sections 4.14, Economic and Fiscal Impacts, and 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
Chad Hymel			
Organization	Organización	団体	단체
Self			
Address	Dirección	住所	주소
888 N Alameda 103			
Telephone	Teléfono	電話	전화
(514) 507-3549			
Email	Correo electrónico	電子メール	이메일
chad.hymel@yahoo.com			

Comment Comentario コメント 의견

I fully support the Fully underground option with Station entrances on 2nd & 3rd. 1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

[illegible] 2010年10月18日 [illegible] regionalconnector@metro.net [illegible] Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. [illegible] www.metro.net/regionalconnector [illegible]

의견을 하루시 2010년 10월 18일까지 접수되어야 공식 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견을 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

PC23

Responses to Comments from Hymel, Chad

Response to Comment PC23-1

Thank you for your comment. Support for the Fully Underground LRT Alternative and station entrance preferences are noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
FRANK FEDERIS			
Organization	Organización	所属	단체
Address	Dirección	住所	주소
100 S. ALAMEDA ST. #351, LA, CA 90012			
Telephone	Teléfono	電話	전화
562-858-2523			
Email	Correo electrónico	電子メール	이메일
FFEDERIS@HOTMAIL.com / FG_FED@YAHOO.com			

Comment Comentario コメント 의견

I SUPPORT THE FULL UNDERGROUND PROJECT OF THE REGIONAL CONNECTOR. 1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部と考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.net へ電子メールで送ることもできます。あなたのコメントを郵便で送りたい場合は下記の住所へ送ってください。 Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書を閲覧するには、ウェブサイトwww.metro.net/regionalconnectorを閲覧してください。

의견은 반드시 2010년 10월 18일까지 접수되어야 공공 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

PC24

Responses to Comments from Federis, Frank

Response to Comment PC24-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, September 29, 2010 1:06 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Tuesday, September 28, 2010 4:04 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Jean
Last Name: Ho
Email: jean@vconline.org
Phone: 213-680-4462
URL:

I work in Little Tokyo, on Judge John Aiso St. between First and Temple. As someone who will be here during the construction of the project, Monday - Friday, I support the locally-preferred, fully underground alternative for the Metro Regional Connector. The other build alternatives would pose a threat to the future of the Little Tokyo community, and are not acceptable. 1

In addition, I believe it's important that Metro provide a safety net for the small businesses, nonprofit arts centers, and Little Tokyo community/cultural events affected by construction. Any construction will have a huge negative impact on these businesses and organizations that give this historic community its unique culture and identity.

The Metro Regional Connector will create seamless travel between different neighborhoods in Los Angeles, but Metro must make sure that it does not destroy any communities in the process. 2

PC25

Responses to Comments from Ho, Jean

Response to Comment PC25-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC25-2

Metro intends to work with the Little Tokyo community to support businesses, non-profit organizations, and community/cultural events throughout the construction phase of the project. It is Metro's goal to minimize the adverse impacts of Regional Connector construction, and to support community culture and identity. Targeted marketing efforts and other technical assistance are included as confirmed mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro believes that, once completed, the Regional Connector will be beneficial for the Little Tokyo community.

Metro Board and Staff,

The Regional Connector is an absolutely critical project. Please build it as quickly and safely as possible. 1

Metro staff has done a fine job identifying possible alternatives, including routing and station options, as well as involving the public. What follows are my thoughts about the project, starting with the highest priority items. 2

- **Preferred Alternative.** Please build the **Fully Underground Alternative**. Despite the higher cost, this alternative will result in a faster and more reliable line for all riders, with fewer impacts to the Downtown community.

- **5th/Flower Station.** Please **do not remove the station at 5th/Flower**. Once all the lines are running and connected, 7th/Metro Center station is going to be an increasingly busy transfer station. By contrast, the 5th/Flower station will function as a "destination station" rather than a "transfer station". Thousands of people will enter and exit the system using 5th/Flower, reducing pressure on 7th/Metro. The new station will be more central to the Financial District, and will serve workers in City West and lower Bunker Hill as well. 3

- **7th/Metro North Entrance.** In the event that you decide to drop the 5th/Flower station, please study **a new north entrance for 7th/Metro Center station**. I believe this could be done by extending the mezzanine north under Flower Street to an entrance at 6th/Flower. 4

- **Station Names.** Please **name the stations after the neighborhoods served**, rather than after intersections. I suggest the following names: 5

  - Station 1: **Little Tokyo**
  - Station 2: **Broadway** or **Historic Core** or **Old Bank District**
  - Station 3: **Bunker Hill**
  - Station 4: **Financial District** or **Central Library**

- **Three-Track Tunnel Under Flower.** Plans call for a cut-and-cover tunnel under Flower Street. Please build this tunnel **wide enough to accommodate three tracks over its entire length**. I've seen the plans in the DEIR that call for a pocket track south of Bunker Hill station. Designing the tunnel for three tracks now will give Metro the space to accommodate future trackwork needs, such as a second pocket track north of 7th/Metro, or a passing track along the entire length. At least study how much the extra tunnel width would cost. It would be very bad if Metro did not allow for future needs, and then later had to go back and widen the tunnel, which would be very expensive and create new construction impacts. 6

- **All stations.** Please build every station with **at least two entrances, and if possible, three**. I understand the construction and cost issues involved with building extra entrances, but we are going to live with this subway for decades, so it's imperative the stations be done right. An excellent example of a good station is Pershing Square, with entrances on three different street corners, up to a block away from each other. Wilshire/Western, on the other hand, is an example of a station with only one (massive) portal entrance. No entrance on the south side of Wilshire, and none on the west side of Western. Entrances can't possibly be that hard or costly to build, right? 7

Thank You,

Joel Covarrubias
3610 Walnut Avenue
Long Beach, CA 90807

PC26

Responses to Comments from Covarrubias, Joel

Response to Comment PC26-1

Thank you for your comment. Support for the project is noted.

Response to Comment PC26-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC26-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC26-4

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC26-5

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Response to Comment PC26-6

The Locally Preferred Alternative includes double track beneath Flower Street, and a pocket track for the storage or reversal of trains. Metro performed a rail simulation as part of the Draft EIS/EIR process, which verified that the current design of the Fully Underground LRT Alternative would be able to accommodate the anticipated volume of trains.

Response to Comment PC26-7

The number of entrances at each station is based on ridership levels as well as community needs. Metro will integrate the station entrances into the surrounding neighborhoods through design.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, September 29, 2010 1:07 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Tuesday, September 28, 2010 11:46 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Lawrence
Last Name: Aldava
Email: lawrence.aldava@gmail.com
Phone: 310-658-6942
URL:

Hello,

I have not been able to attend the draft EIR meetings for the Downtown Connector Project due to work schedule conflicts, however I wanted to share my comments: 1

This is a very important line and will be the missing link that currently prevents our metro system from being truly regional. I strongly support the underground option and encourage Metro to maintain the proposed station at 5th and Flower Streets. The 7th Street/Metro station, while not too far away, will be very busy once it also serves as the Expo Line terminus.

To help relieve crowding and to better serve the financial district for workers and visitors alike, a 5th and Flower Station is needed. This also allows the downtown area, which is the largest employment center in the region to be well served by our transit network. 2

Thank You,

Lawrence M. Aldava

PC27

Responses to Comments from Aldava, Lawrence

Response to Comment PC27-1

Thank you for your comment. Support for the project is noted.

Response to Comment PC27-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
Les Howard			
Organization	Organización	所属	단체
Whittier College			
Address	Dirección	住所	주소
7232 Bright Ave 90620			
Telephone	Teléfono	電話	전화
562 907-7321			
Email	Correo electrónico	電子メール	이메일
lhoward@whittier.edu			

Comment Comentario コメント 의견

Why has the MTA not yet announced the announcements of stations on the Gold Line Eastside Ext?

Since recently Mariachi Plaza has been promoted Regional Mariachi Plaza has been promoted Mariachi Plaza These pronouncations gets on the ear of any informed Angeleno and one might be one of the major hangups of your project.

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.net へ電子メールで送ることもできます。あなたのコメントを郵便で送付する場合は、下記の住所へ送ってください。 Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書全てはこちらのウェブサイトwww.metro.net/regionalconnectorで閲覧してください。

의견은 반드시 2010년 10월 18일까지 접수되어야 공식 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로도 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

PC28

Responses to Comments from Howard, Les

Response to Comment PC28-1

This comment regarding the mispronunciation of stations on the Eastside Extension portion of the Gold Line will be forwarded to Metro Rail Operations.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, September 29, 2010 1:06 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Tuesday, September 28, 2010 12:39 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Richard
Last Name: Hogge
Email: chardhogge@yahoo.com
Phone: 805-630-1786
URL:

I'm excited to see this come to fruition... and all underground! 1

I hope you can secure funding for the 5th and Flower stop as it would be very busy and convenient for commuters (serving the financial district more directly than the 7th St. Metro stop) and it would also relieve a lot of pedestrian congestion at the 7th St. Metro stop since that will probably be crazy packed during rush hour, once all lines are up and running. 2

If 5th and Flower cannot be funded, I'm wondering if you've considered building a basic "box" stop space there (non-operational), in order to leave open the option for a future stop without going over budget, or disrupting service in the future (should it get funded and built at a later date.) Or is that even feasible/cheaper? 3

PC29

Responses to Comments from Hogge, Richard

Response to Comment PC29-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC29-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC29-3

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

REGIONAL CONNECTOR HEARING YK 9/28/10

Yukio Kawaratani -- Representing myself

The Regional Connector is a worthwhile project, but only if the Fully Underground Locally Preferred Alternative is selected by the MTA Board. 1

The Draft EIS/EIR correctly states that the Little Tokyo community, in comparison to all other areas along the route, will suffer many disproportionate adverse impacts during construction. 2

Hopefully, the Draft will be modified to include more effective mitigation measures to lesson the economic suffering and in some cases the demise of Little Tokyo businesses. 3

The Draft does not adequately address the adverse impacts that the Underground Emphasis Alternative would impose on Little Tokyo. 4

For instance, the Alameda underpass will adversely impact Little Tokyo traffic during and after construction. 5

The four surface rail tracks at 1st and Alameda will create dangerous conflicts between pedestrians, vehicles and trains. 6

The proposed pedestrian bridge will be a permanent visual blight and liability. 7

Little Tokyo pedestrian movements are all at sidewalk level. Who will want to go up 20 feet by stairs or elevator, cross the 100 feet long bridge and go down 20 feet? People will take their chances. With trains coming frequently from 4 tracks and 4 directions, some will be injured or killed. 8

These are just some of the reasons the Japanese American Community cannot accept the Underground Emphasis Alternative. I urge the MTA Board to approve the Fully Underground, Locally Preferred Alternative. 9

PC30

Responses to Comments from Kawaratani, Yukio

Response to Comment PC30-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC30-2

Concurrence with the Draft EIS/EIR conclusions is noted.

Response to Comment PC30-3

Mitigation measures were identified in Section 4.14, Economic and Fiscal Impacts, of the Draft EIS/EIR to reduce economic impacts associated with construction of the Locally Preferred Alternative to the Little Tokyo community. Since publication of the Draft EIS/EIR, refinements to the Locally Preferred Alternative have reduced the significance of potentially adverse economic and fiscal impacts during construction in Little Tokyo, refer to Section 4.14, Economic and Fiscal Impacts, of this Final EIS/EIR. The refinements reduce the amount of cut and cover, the need for roadway and sidewalk closures, property acquisitions, and overall disruption to businesses during construction. The refinements to the Locally Preferred Alternative have also reduced the number of privately-owned parcels that would be completely or partially acquired. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The Locally Preferred Alternative would not have significant economic effects after implementation of mitigation. Refer to Section 4.14, Economic and Fiscal Impacts, of this Final EIS/EIR.

Response to Comment PC30-4

The Draft EIS/EIR adequately analyzed impacts to Little Tokyo as a result of the Underground Emphasis LRT Alternative in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation. Please refer to Responses to Comments PC30-5 through PC30-9, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC30-5

The Locally Preferred Alternative would not include an Alameda Street underpass. The traffic lanes and pedestrian crossings at 1st and Alameda Streets would remain at-grade, as they are today.

Response to Comment PC30-6

Metro designs its grade crossings to minimize potential conflicts between pedestrians, vehicles, and trains. No grade crossings would be constructed as part of the Locally Preferred Alternative. The Little Tokyo pedestrian bridges are included only in the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC30-7

The Locally Preferred Alternative does not include any pedestrian bridges in Little Tokyo.

Response to Comment PC30-8

Metro designs its grade crossings to minimize potential conflicts between pedestrians, vehicles, and trains. No grade crossings would be constructed as part of the Locally Preferred Alternative. The Little Tokyo pedestrian bridges are included only in the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC30-9

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: metro

Date: Wednesday, September 29, 2010 1:04 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Christine Baisez [mailto:reinebaisez@yahoo.com]
Sent: Wednesday, September 29, 2010 10:15 AM
To: Regional Connector
Subject: metro

To whom it concerns ,

My name is Christine Baisez i live at the Higgins with my daugter(6 years old) since 2004 and we love it ,i will be very upset to get a metro line in front of our front door ,I love mass transit (we are french, public transportation are so amazing and a must to a greener healthiersocial communauty) but 'at-grade' will have very negative impacts for our building and for neighborhood traffic (congestions, deaths & serious injury...). Apart from the noise and visual impacts, 'at-grade' would mean a very high volume of train traffic along 2nd Street outside our door during peak times.
Really hope our(higgins residents and owners) concern will be taken seriously into consideration .
Cordially ,christine and Lea

1

PC31

Responses to Comments from Baisez, Christine

Response to Comment PC31-1

Comment noted. The Locally Preferred Alternative would run underground beneath 2nd Street, and no at-grade tracks would be built in front of the Higgins Building.

Subject: FW: Comment on draft EIS/EIR
Date: Wednesday, September 29, 2010 1:03 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Jorge Montijo [mailto:loft811@gmail.com]
Sent: Wednesday, September 29, 2010 10:46 AM
To: Regional Connector
Subject: Comment on draft EIS/EIR

I wish to express my strong preference for the fully below-grade option and full opposition to the at-grade alternative. 1

Jorge Montijo

108 W 2nd St #811

Los Angeles, CA 90012

Sent from my iPad

PC32

Responses to Comments from Montijo, Jorge

Response to Comment PC32-1

Thank you for your comment. It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Below Grade Option Please
Date: Thursday, September 30, 2010 12:54 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Laura Cornejo CORNEJOL@metro.net, Leung, Julie LEUNGJ@metro.net, Clarissa Filgioun clarissa@therobertgroup.com, Ginny Brideau ginny@therobertgroup.com
Conversation: Below Grade Option Please

From: jEEM tAO [mailto:jeemtao@yahoo.com]
Sent: Wednesday, September 29, 2010 1:58 PM
To: Regional Connector
Subject: Below Grade Option Please

To Whom It May Concern:

As a resident of the Higgins Building and a long time Downtowner, I would like to strongly urge the committee to only consider the Below Grade Regional Connector option. Traffic is bad enough in Downtown and to have above grade construction and additional interference to the traffic we must deal with is horrible. In addition, having train operation during the many needs to close off Broadway and adjacent streets due to festivals, protests, events, etc.. would be detrimental to the efficiency of this project. 1

Thank you for your time.

Nelson Lee
Higgins Building Unit Owner on 2nd Street.

PC33

Responses to Comments from Lee, Nelson

Response to Comment PC33-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: regional connector

Date: Thursday, September 30, 2010 12:53 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Steven Axelrod [mailto:steven.axelrod@gmail.com]
Sent: Wednesday, September 29, 2010 6:10 PM
To: Regional Connector
Subject: regional connector

Hello:

As a resident downtown, who lives at 108 W. 2nd, and as a metro user, I strongly urge you to make the connector fully underground. This will be the fastest, most efficient route and will gain the highest patronage. Any at-grade segment would move more slowly and would disrupt traffic flow, making downtown driving worse instead of better.

The underground choice is best for subway travelers, drivers, pedestrians, and residents. Everyone would love it.

1

Thanks very much,

Steve Axelrod

108 W. 2nd St., #609

Los Angeles, CA 90012

Professor of English

University of California, Riverside

PC34

Responses to Comments from Axelrod, Steve

Response to Comment PC34-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Full below grade option
Date: Wednesday, September 29, 2010 1:03 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Travis Avitabile [mailto:tavitabile@laserpacific.com]
Sent: Wednesday, September 29, 2010 10:17 AM
To: Regional Connector
Subject: Full below grade option

Hi,

My name is Travis Avitabile and I own and live at the Higgins Building at 108 W 2nd st unit # 408. I would just like to let you know that my wife and I would strongly prefer the fully below-grade option and we are fully opposed to the at-grade alternative . As you know this will cause great stress and hardship to have all of our hard work in buying , creating, and maintaining a home in downtown LA with above ground option . Please consider our voices in this matter and choose the fully below grade station to better serve the people of downtown Los Angeles..

1

Thank You For Your Time,
Travis Avitabile
323-810-2099

Electronic Privacy Notice. This e-mail, and any attachments, contains information that is, or may be, covered by electronic communications privacy laws, and is also confidential and proprietary in nature. If you are not the intended recipient, please be advised that you are legally prohibited from retaining, using, copying, distributing, or otherwise disclosing this information in any manner. Instead, please reply to the sender that you have received this communication in error, and then immediately delete it. Thank you in advance for your cooperation.

PC35

Responses to Comments from Avitabile, Travis

Response to Comment PC35-1

Thank you for your comment. It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: regional connector

Date: Thursday, September 30, 2010 12:53 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Yuqiao Zhao [mailto:yuqiaozhao@ymail.com]
Sent: Wednesday, September 29, 2010 10:33 PM
To: Regional Connector
Subject: regional connector

Hello,

I have heard that the Blue Line is currently running at near-capacity, and will require very expensive upgrades in order to further increase its capacity. If trains were to run all the way to Pasadena or Azusa, these upgrades will have to be made due to the large influx of passengers. Therefore, wouldn't it make more sense to have an Eastside - Long Beach Line and a Pasadena / Azusa - Santa Monica Line? The Eastside corridor is less than 1/3 of the length of the combined Pasadena and Foothill corridors, and thus will generate far less passengers and will create a lesser strain to the Blue Line, while the newer, better designed Expo Line will not be inundated by passenger traffic from Azusa and Pasadena like the Blue Line. Also, this would create two lines of more equal distance.

1

PC36

Responses to Comments from Zhao, Yuqiao

Response to Comment PC36-1

It is Metro's goal to operate its rail lines in a manner that maximizes convenience and ridership. Ridership modeling indicates sufficient capacity on the Blue Line to accommodate changes in travel patterns caused by the Regional Connector. Preference for Culver City-Pasadena and Long Beach-East Los Angeles routes is noted. The Locally Preferred Alternative includes Long Beach-Pasadena (eventually Montclair) and East Los Angeles-Culver City (eventually Santa Monica) routes. However, the track configuration would allow Culver City-Pasadena and Long Beach-East Los Angeles train movements to occur when necessary.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name / Nombre / 名前 / 이름	
MARK R. JOHNSTON	
Organization / Organización / 所属 / 단체	
NARP-TRAC-PRS-	
Address / Dirección / 住所 / 주소	
4185 Van Buren St Chino CA. 91710	
Telephone / Teléfono / 電話 / 전화	
909-591-6691	
Email / Correo electrónico / 電子メール / 이메일	
Canammj (at) Yahoo.com	

Comment Comentario コメント 의견

(See Attached)

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

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あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

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Metro

DOWNTOWN CONNECTOR COMMENTS

From Mark R. Johnston
4185 Van Buren Street, Chino, CA. 91710

I BELIEVE THIS LINE IS EVEN MORE IMPORTANT THAN THE WILSHIRE SUBWAY EXTENTIONS, AS THIS EFFECTS 4 SEPARATE LIGHT RAIL LINES, WHILE THE SUBWAY IS BASICALLY AN EXTENTION OF 1 LINE. BECAUSE OF THIS, I ASK YOU DO WHATEVER YOU CAN TO PUSH THIS TO THE HEAD OF THE LINE. MY COMMENTS SPECIFIC TO THIS LINE ARE AS FOLLOWS: 1

1/ The fully underground option is the only one I will support and from the comments tonight, the community as well. If you use this option, you will find more support from the community as they will have to deal with construction for 3-4 years. 2

2/ Each of the existing light lines, plus the one being built have very slow sections=
>Pasadena Gold through Highland Park
>ELA Gold through the Indiana zig=zag
>Blue to Long Beach has slow street running on Washington in LA and on LB Blvd in Long Beach
>Expo is going to have slow street running on Flower in LA, and then again on Colorado Blvd in Santa Monica.
Because of this, you need to make the downtown section of the Regional connector as fast as possible- fully underground only ! 3

3/ Get your mitigation measures agreed upon NOW, so the community will know what you will cover. I work insurance and proof of claim is always hard in cases like this. Small businesses are the hardest to prove loss of business/loss of use etc. Why not considering things like offering to paint their buildings or physical improvements like trees and sidewalks in lieu of cash payments? Double win, makes area look great and business gets an upgrade they may not be able to afford otherwise 4

4/ Make sure the junction at 2nd/Alameda is a "Stacked" cross-over. For example, the north and east direction on the top and the west and south direction on the bottom. Eliminates trains having to cross-over in front of each other- good for safety. Will be no outbound delays waiting for cross-over movements. Will only have to worry about inbound moves when 2 trains show up at the same time. Basically like the Wilshire/Vermont station on the Red=Purple line. 5

5/ Consider " double stacking" in stretches of 2nd street as that street is very narrow in places. Keeps you away from the bottoms of older buildings. 6

6/ Get Eli Broads museum, the Grand Park , whatever tower/shopping mall or housing that is build, plus Disney Hall all on board with the 2nd/Hope station. Have them contribute to pedestrian connections and walk ways. 7

7/ Do not leave out Flower/4th/5th. 7th and Flower will be overloaded and this station will relieve the pressure. If you have to skip it now, build the station box and come back later with more money to finish it and open it. 8

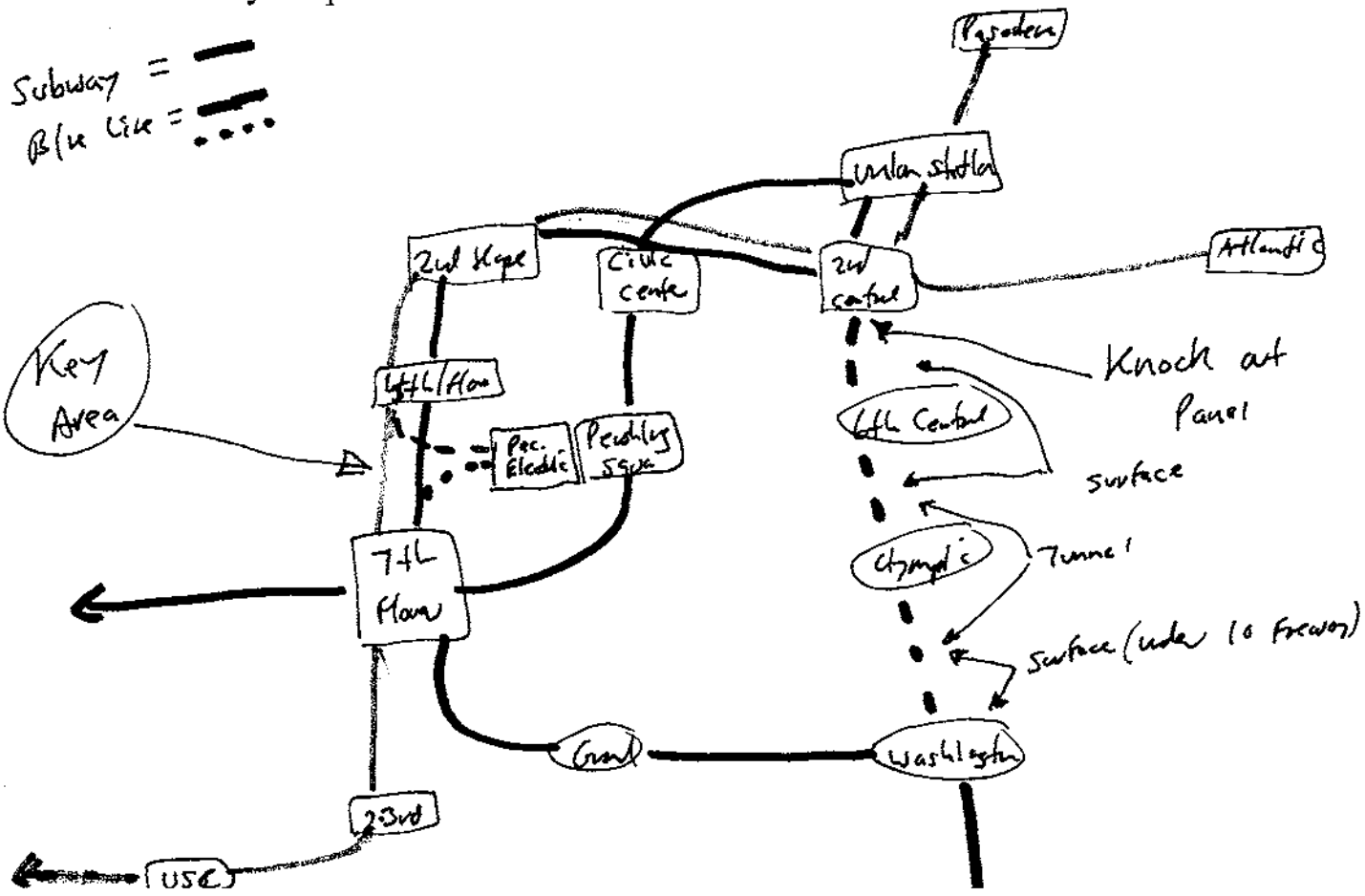
8/ Build all stations for 4 cars. Look what happened on the Blue, You build 2 car and had to go back and build for 3. Both sections of the Gold are 3 and Expo will be also....But think for the future. What if you have to go back and go to 4 car platforms on all these lines.. Since these lines are at ground or aerial outside Downtown LA, they could be extended to 4 (admittedly expensive). But downtown is different. If you don't do 4 now, it will almost be impossible to go back later and go from 3 to 4. 9

9/ Make sure you go with the absolutely best high-tech signaling to allow 2-3 minute headways 10

All the above items are pretty straight forward, common sense and I think most have been mentioned before. Now I have 2 comments a little outside the box, but will greatly affect the future of transit in downtown. A little creative, but I think will be really helpful. .

1/ Consider a connection as a stub line into the old Pacific Electric building basement. It is on the same level as the Pershing Square subway station. (PS- This idea came from the father of light rail, the gentlemen who started the SD Trolley, James Mills). My suggestion is that you can turn back blue line trains or even gold, off the main line. You can hold extra rush hour trains.. It can become another transfer point to the subway, not just 7th/flower. The Blue and Expo are going to have much higher ridership than either of the Gold Line legs, so instead of always running 3 car sets all the way to the end, you can turn back some. Plus stack up additional rush hour only sets. While you can use as storage track, it may be easier than building a 3 track pocket track under the streets when width is an issue. I believe would not be hard to accomplish, but will give you really great operational flexibility. My map=

11



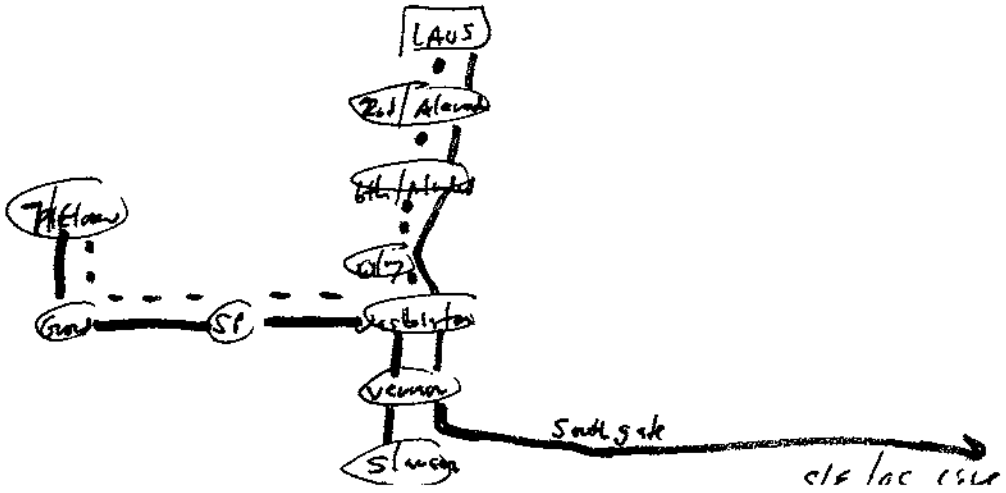
2/ My other suggestion is to build a "knock out panel" just west of the new 2nd/Alameda station in order to facilitate a line down Central Ave as the one day (and it will come) as the Blue Line shortcut to/from Union Station. Central is plenty wide for several miles south towards Olympic. At which point, a short tunnel will be needed to then align the track into the north end of the MTA owned property just north of the Santa Monica freeway where it could come up to ground level, go under the freeway and then continue right into the existing junction with the Blue at Washington. I propose stations at 6th and Central (as 6th turns into Whittier Blvd) Central and Olympic. Nice spacing between 2nd/Central and Washington/LB Blvd. This need to be coordinated with the Harbor Subdivision people who had talked about some kind of elevated line on Alameda to get to 1st/Alameda to allow the Harbor Sub Line (if build as a light rail) to get access I assume to Union Station. I see this segment as allowing= 12

>alternating Blue Line trains to go direct to LA Union Station

>East LA line passengers to transfer at 2nd /Alameda for a much quicker ride to Long Beach

>You could bring some Gold Line trains (either Pasadena or ELA) down this line to Washington to allow West or South transfers to the Blue Line

>Or depending on what happens with the SE corridor (the PE Orange County line study), this also could be an entry point for that project to get to Union Station by joining that line down near South Gate/Slauson into the extisting Blue, then traveling up my new connection to LAUS. My map is on the ~~next~~ page.



I have lots of ideas and every MTA meeting I have ever gone to for all the lines, never have heard back . Do you really review all the suggestions submitted? Just interested. Thanks again for the time. This is a great project. Wish you could build it a lot faster. Thank you.

13

PC37

Responses to Comments from NARP-TRAC-PRS, Johnston, Mark R.

Response to Comment PC37-1

Support for prioritized implementation of the Regional Connector project is noted. Please refer to Responses to Comments PC37-2 through PC37-13, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC37-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC37-3

Comment acknowledged. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The east-west and north-south routes of the Locally Preferred Alternative would each operate with five minute headways during peak hours, combining to yield trains every 2.5 minutes in each direction along the Regional Connector.

Response to Comment PC37-4

Comment acknowledged. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR. The community has been involved in the refinement of the mitigation measures through meetings held during the preparation of this Final EIS/EIR. Metro has committed to other mitigation measures in lieu of cash payments to assist business in Little Tokyo.

Response to Comment PC37-5

Metro performed a rail simulation for both the single-level junction and two-level junction configurations of the 1st and Alameda Streets intersection. The simulation revealed that both configurations would be able to adequately handle the maximum volume of trains anticipated for the Regional Connector without propagating delays through the system. The two-level junction (Little Tokyo Variation 2) was not pursued for further study in the Draft EIS/EIR because of its potential impacts to the Los Angeles Hompa Hongwanji Temple. Trackside signals, cab signaling, and automatic train control systems would be used to ensure the safety of the single-level junction.

Response to Comment PC37-6

Constructing tunnels stacked on top of each other would require higher-risk tunneling activities than the side-by-side tunnels identified for the Locally Preferred Alternative. Construction of the 2nd/Broadway station would also require deeper excavation in the vicinity of historic buildings in order to accommodate stacked tunnels. As such, the Locally Preferred Alternative includes side-by-side tunnels beneath 2nd Street.

Response to Comment PC37-7

The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way Connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue. Metro will work with the Related Companies and the Broad Foundation to enhance the pedestrian connections at the 2nd/Hope Street station.

Response to Comment PC37-8

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC37-9

All light rail stations on the Metro Rail system can now accommodate three-car trains. Four-car trains would exceed the distance between crossings on some street-running portions of the system. As such, four-car trains are not practicable.

Response to Comment PC37-10

East-west and north-south LRT routes would each operate with five minute headways during peak hours, combining to yield trains every 2.5 minutes in each direction, with development of the Fully Underground LRT Alternative (the Locally Preferred Alternative). Adequate signaling would be incorporated into the LRT lines that would connect to the Regional Connector to achieve headway goals.

Response to Comment PC37-11

The Regional Connector alignment beneath Flower Street would not be level with the abandoned Belmont Tunnel leading to the former Pacific Electric subway terminal. The tunnel has also been severed by the foundations of high-rise buildings built since its abandonment in the 1960s. The Locally Preferred Alternative includes a pocket track between the 7th Street/Metro Center Station and the 2nd/Hope Street station, which can accommodate the need to turn back trains.

Response to Comment PC37-12

The alignment immediately west of the new underground station in Little Tokyo would be constructed using tunnel boring machine excavation. Knockout panels are not feasible in bored tunnels. Extension of the station box farther west is not practicable due to the potential for impacts to the Japanese Village Plaza parking structure. Similar alignments on Alameda Street were studied in the Metro Blue Line connection studies in the early 1990s, but were not pursued

due to a desire to serve the major activity centers in downtown Los Angeles. A potential connection between the Metro Blue Line and potential future rail service on the Harbor Subdivision was studied in the Metro Harbor Subdivision Alternatives Analysis Report.

Response to Comment PC37-13

Yes, all comments from meetings are reviewed, and all Draft EIS/EIR comments are responded to in writing.

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Enrico Valenzuela

Savoy Resident
Unit # 160

PC38

Responses to Comments from Salumbides, Romeo

Response to Comment PC38-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC38-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

October 1, 2010

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Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

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Thank you for your consideration.

Sincerely,

Savoy Resident
Unit # 263

Teressa Lim

PC39

Responses to Comments from Lim, Teressa

Response to Comment PC39-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC39-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

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I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Savoy Resident
Unit # 449

Young S. Yoon

PC40

Responses to Comments from Yoon, Young S.

Response to Comment PC40-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC40-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Little Tokyo Business Improvement District
Survey of the Regional Connector Transit Corridor Project DEIS/DEIR

Date: 10/4/10

Company Name: Nishi Center / Parent

Address:

Telephone/E-Mail 323-580-5309

Name: Ann Marie Grecval

☐ Owner ☐ Employee ☐ Manager ☒ Other: Nishi Center Parent

1. Locally Preferred Alternative:	Support	No-Support	
No Build Alternative	☐	☒	1
Transportation System Management Alternative	☐	☐	
At-Grade Emphasis Alternative	☒	☐	
Underground Emphasis LRT Alternative	☒	☐	
Fully Underground LRT Alternative	☒	☐	
2. Preservation of Japanese Business Influence and Culture: Serious and real discussions needs to take place with Metro Staff and the Little Tokyo business community to preserve the Japanese business influence and culture.	☐	☐	
3. Business Interruption: Additional funding shall be made available for those businesses, tenants, or property owners whose businesses endeavors are adversely impacted during the course of construction of the Regional Connector Project. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants, and property Owners, along with those governmental agencies, Having jurisdiction to make policy to resolve issues from adverse business interruption during the course of construction of the Regional Connector Project.	☒	☐	2
4. Replacement of On-Street and Off-Street Parking: All off-street parking spaces loss through eminent domain shall be replaced. All on-street and off-street parking spaces taken away during the course of construction shall be replaced.	☒	☐	3

Please return survey form before October, 10, 2010 to:
Little Tokyo Business Improvement District
200 S. San Pedro Street, Suite 400B, Los Angeles, CA 90012

PC41

Responses to Comments from Grewal, AnnMarie

Response to Comment PC41-1

Thank you for your comment. It is noted that the commenter supports the At-Grade Emphasis LRT, Underground Emphasis LRT, and the Fully Underground LRT Alternatives, and opposes the No Build Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Metro has and will continue to coordinate with the Little Tokyo business community regarding the Regional Connector project.

Response to Comment PC41-2

It is Metro's goal to minimize adverse impacts to the Little Tokyo community, including impacts to businesses. Metro will implement the mitigation measures proposed by the Little Tokyo Community Council and Little Tokyo Business Improvement District/Little Tokyo Business Association regarding business interruption shown in the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. Metro will work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment PC41-3

Metro understands the impacts that construction would have in the Little Tokyo community, and will work with the community to minimize impacts to businesses. During construction, Metro will minimize lane and sidewalk closures, and will provide adequate detours to maintain pedestrian flow. Temporary replacement parking will be provided during construction as needed to offset the impact of on-street and off-street parking removal. As part of temporary replacement parking efforts, Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction. Please refer to the Transportation Impacts and Environmental Justice sections of Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, for more information regarding construction parking mitigation measures.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
DAN GARCIA			
Organization	Organización	所属	단체
PAN AMERICAN LOFTS			
Address	Dirección	住所	주소
253 S. [illegible]			
Telephone	Teléfono	電話	전화
626-433-0164			
Email	Correo electrónico	電子メール	이메일
DANGINCHINA@ [illegible]			

Comment Comentario コメント 의견

I FULLY SUPPORT THE FULL UNDERGROUND OPTION AND WOULD LIKE TO SEE A 2ND HAND ESCALATOR AT THE 2ND STREET STATION. THANKS FOR ALL YOUR HARD WORK!

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

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Metro

PC42

Responses to Comments from Garcia, Dan

Response to Comment PC42-1

Thank you for your comment. Support for the Fully Underground LRT Alternative and 2nd/Broadway station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: A Public Comment on the Regional Connector DEIR
Date: Monday, October 4, 2010 3:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: John Gove [mailto:johnpgove@gmail.com] On Behalf Of John Gove
Sent: Monday, October 04, 2010 12:04 AM
To: Regional Connector
Subject: A Public Comment on the Regional Connector DEIR

Hello RC Staff,

My name is John Gove, and I am a life-long resident of the San Gabriel Valley. Presently I live in Monrovia and sometimes use the gold line to get to downtown. However, reaching the city center and historic core require a cumbersome transfer to the red line at Union Station. The delay makes driving more expedient for Main Street or 7th St. and Grand destinations. I look forward to a single seat ride from the Sierra Madre Villa station to the Broadway station or the 7th St. Metro Center. I have closely followed the Regional Connector's evolution for the past 3 years, and I'm by and large pleased with the current DEIR. However, please consider the following comments for the record. 1

1) The inclusion of the "fully underground" alternative is wonderful and the only elegant, modern solution for the RC. It shows foresight on the part of the Little Tokyo residents' who fought for it. The at-grade alternative is too cumbersome for the grid and reminiscent of the painfully slow transit already experienced on the blue line along Washington Blvd. The train portal and pedestrian bridge structure proposed in the underground-emphasis alternative are downright reminiscent of the hulking ELs of Chicago and Brooklyn. I am aware of the cost increase for going fully underground, but I consider it money well spent, offset by the potential for better development. Moving the train portals and eliminating the pedestrian bridge will leave the Office Depot block less constrained for redevelopment. Not grade-separating Alameda and not splitting the Little Tokyo station over an intersection will open the intersection for street-facing retail, generating better tax revenue and pedestrian activity. I will definitely use the underground station to get to the Lazy Ox Canteen. 2

2) I am very concerned about the connectivity of the Hope St. station to Upper Grand Ave. I have combed through the published diagrams and see scant reference to such a connection. From a single DEIR diagram, I see a "pedestrian bridge". Since there is a three-story grade difference to Hope St., I assume the diagram's depiction is an elevator at the end of the "pedestrian bridge". I have serious concerns about this under-designing. Even large capacity elevators seem to be designing for congestion. I easily imagine an event on Grand Avenue attracting more people in a concentrated time than elevators can accomodate. Escalators are essential. Perhaps the assumption is that people will simply walk up 2nd St. along Disney Hall's south wall, but that seems like bad market research. People avoid walking up hills. Angels Flight is good market research from over 100 years ago; people don't want to hike Bunker Hill. I bet I 3

would not be the only one walking up the hill thinking, "So they made a Bunker Hill stop that doesn't get you to Bunker Hill?" Prior to the DEIR, I attended an RC meeting at Lake Ave. Congregational Church and asked Metro representatives about the connection. They said they had spoken with the developer but deferred to Related Co. and the Grand Avenue Authority on the final details. Since the Broad Foundation is now leasing the most adjacent parcel, I want to know a more useful answer on the nature of the connection and when it will be implemented. Will the "pedestrian bridge" open when the line opens , or will it wait until Related Co. develops the southern parcel adjacent to the Broad Foundation museum? If it is the latter, that practically seems like saying it won't happen, since their projections for groundbreaking are repeatedly postponed.

3 cont'd

3) The proposed 5th St. station should not be eliminated. Some people suggest this station is too close, just a 1/4 mile to either station, so it should be cut to save money and speed up the transit time. This is short-sighted for two reasons. First, the 5th St. station will lessen the RC's traffic impact at the 7th St. station. Second, this Regional Connector stop is poised to provide front door service smack in the middle of the financial core next to a hotel with 1354 rooms. The job density at this stop is remarkable and more than enough to generate trips for three close stations. Some argue that these office tower jobs don't generate transit trips. That claim accurately depicts only a particular generation of workers. However, attitudes about transit are shifting between the generations, and younger generations are increasingly pro-transit, especially rail transit. For example, on a recent trip to Washington, D.C., I researched the federal redevelopment at the Suitland, just outside the district in Maryland. This major government center was initially constructed 60 years ago as an auto-centric employment hub for government departments, namely the Census Bureau, which competes among Fortune 500 companies for executives and analysists - workers comparable to any found Downtown Los Angeles. They studied their employees and found that new hires favorably viewed commuting via metro rail. Since a wave of retirement coincided with the redevelopment, the entire master plan for the redevelopment abandoned the highway and centered on the rail stop. Billions of dollars of present and future development were cast in favor of changing attitudes about rail transit. Meanwhile, the old Suitland is set to be demolished. It seems foolish for LA to do the opposite, especially when the development is already there! Yes, the station is close to 7th and cutting the station could save a whole 2 minutes of transit time, but people aren't fools, this stations is just too useful to pass up. If this generation doesn't get that, no big deal, the next one already does.

4

Thank you for all your hard work,

John

PC43

Responses to Comments from Gove, John

Response to Comment PC43-1

Thank you for your comment. Please refer to Responses to Comments PC43-2 through PC43-4, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC43-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC43-3

The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevation would be built as part of the Locally Preferred Alternative from 2nd/Hope Street station to the plaza, if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue, both of which would accommodate demand and provide access for persons with disabilities.

Response to Comment PC43-4

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. Metro agrees that the presence of enhanced rail transit would draw more riders from the nearby office towers, and believes that the pedestrian enhancement to 7th Street/Metro Center Station would improve access to businesses in the vicinity of 5th and Flower Streets. The additional information about the Suitland development is appreciated. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name / Nombre / 名前 / 이름	Organization / Organización / 所属 / 단체
M. ESTRADA.	STUDENT / GEOLOGIST.

Address / Dirección / 住所 / 주소	Telephone / Teléfono / 電話 / 전화
—	(310) 039. 3992

Email / Correo electrónico / 電子メール / 이메일: MATTHEW AND DOROTHY @ YAHOO.COM (LONG CASE.)

Comment / Comentario / コメント / 의견

I RIDE 1 1 SEAT. GREAT. TIME IS OUR BIGGEST FACTOR(S). I DO NOT FEEL OR SEE A GREAT NEED FOR A WHOLE-LOT-OF BUS / TRAIN, STATION(S) / PLATFORM(S). THE MORE WALKIN' AND BIKE RIDIN' AND EXERCISIN' WE ALL DO, THE BETTER. HOPE-FULLY THIS PROJECT WILL HAPPEN. I BOARD 1 OR MORE TRAIN / BUS DAILY AND I WOULD LIKE TO GET TO AND FRO, WITH

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.netへ電子メールで送ることもできます。
あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

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Metro

LESS STOPIN' (on THE PUBLIC TRANS. SYS).

PRIVATE AUTOS WERE BUILT TO UNDER-
TAKE THIS PROCESS BETTER. - I THINK -

1 cont'd

THANKS. MATTHEW.

AND I WILL BE AROUND.

PC44

Responses to Comments from Aima, Matthew

Response to Comment PC44-1

Thank you for your comment.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Speaker Card

Name / **Nombre** / 名前 / 이름	
Ruperto Mendiores downtown Resident	

Organization / **Organización** / 所属 / 단체
Fully underground choice is correct. Other plans will increase congestion + force eventual conversion to underground at much greater cost.

1

Please limit your comments to two minutes. You can submit written comments.

PC45

Responses to Comments from Mendiores, Rupert

Response to Comment PC45-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Comments on draft EIR Regional Connector
Date: Wednesday, October 6, 2010 9:13 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Walker, Daniel [mailto:daniel.walker2@boeing.com]
Sent: Tuesday, October 05, 2010 4:35 PM
To: Regional Connector
Subject: Comments on draft EIR Regional Connector

We support building this downtown area Light Rail project, as proposed, ASAP to improve mobility, reduce congestion, reduce air pollution, and reduce our dependency on imported oil. 1
This regional connector will provide a one seat ride from Santa Monica to East LA, and from Long Beach to Pasadena / San Gabriel Valley. As overall ridership for the entire Metro rail system continues to rise, this downtown connection will be essential to avoid overcrowding and reduce total trip durations for many commuters. Let's build it right (underground option) from the beginning. Eliminating one key underground station to save money upfront is shortsighted. 2
This project will enhance other good Metro Light Rail extensions: 3
Expo phase 2 to Santa Monica
Gold phase 2 to Claremont / Ontario
East LA phase 2

Thanks and good luck,
Daniel Walker
7416 West 82nd Street
Los Angeles, CA 90045

PC46

Responses to Comments from Walker, Daniel

Response to Comment PC46-1

Thank you for your comment. Support for the project is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC46-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC46-3

Thank you for your comment.

Subject: FW: Public Comment regarding Regional Connector
Date: Tuesday, October 5, 2010 5:27 PM
From: Ann Kerman <kermana@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Jay Chen [mailto:jaychen@gmail.com]
Sent: Tuesday, October 05, 2010 5:00 PM
To: Regional Connector; Kerman, Ann
Subject: Public Comment regarding Regional Connector

Dear Ann,

I wish to state my concerns with the Metro Regional Connector underground option. Unfortunately I have not been able to attend the hearings, but I have had personal meetings with consultants for the Metro and am aware of what the plans are. My family owns the brick building on the southeast corner of First and Hewitt St. First, I would like to say that I am happy that plans are underway to make the Metro more efficient and useful for the Los Angeles community. However it is unfortunate that plans for the connector were not built into the plans for the Gold Line extension as it would have saved much time, money, and inconvenience. 1

While I am glad that the Gold Line extension was created, it has brought its share of difficulties as well, foremost being the elimination of parking. Free and metered street parking all along First St were eliminated for this project. In combination with the number of high-end condos and apartments that were built over pre-existing parking lots in the immediate vicinity (Mura, Artisan on Second, Savoy), this part of the Arts District/Little Tokyo has suffered a severe drop-off in parking options, which has been very detrimental to the lower-income individuals who reside in the area, many of whom reside in my building. 2

The plus side to all of this is the potential business and liveliness that a major transit center can bring. There are plans underway to turn the Mangrove site (kitty corner to my building) into a major mixed-use development, and to continue Hewitt St past my building and past First St all the way to Temple St. This would certainly help spark an otherwise neglected area. 3

The Regional Connector Underground Option as currently proposed would have a negative impact on this area in that it would cause trains to emerge right at the Hewitt/First intersection, thereby eliminating that cross walk, turn signal, and plans to continue Hewitt north to Temple St. It would serve to further isolate the south side of 1st Street from the north; Rose St to the west has already been shut off and privatized, and plans are underway to turn Garey St to the west into a pedestrian street. Hewitt St will soon be the only street within a two block radius to provide access to west-bound traffic on First St. To eliminate that option would be severely detrimental to the south side of First St and all of its residents. 4

I am not asking that the underground connector be eliminated, I am only asking that additional thought and engineering be evaluated to allow the new Gold Line train to emerge prior to the Hewitt/First intersection so that the intersection can be preserved. I am confident that it can be done. 5

Thank you for your consideration.

Sincerely,

Jay Chen

626-534-3544

PC47

Responses to Comments from Chen, Jay

Response to Comment PC47-1

Comment acknowledged. Please refer to Responses to Comments PC47-2 through PC47-5, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC47-2

Experience with the Gold Line Eastside Extension Phase 1 is noted.

Response to Comment PC47-3

Comment acknowledged. Metro is aware of the project and has coordinated with the owner.

Response to Comment PC47-4

Comment noted. Right turns, left turns, and pedestrian crossings on 1st Street would still be possible at Vignes Street and at Alameda Street as they are today. Both Vignes and Alameda Streets would provide access to westbound traffic on 1st Street. Metro believes that these intersections would provide adequate connections between the north and south sides of 1st Street in the absence of left turns and pedestrian crossings at 1st and Hewitt Streets.

Response to Comment PC47-5

Moving the proposed portal on 1st Street farther west is not feasible because it would create too steep of a grade for trains rising to the surface from the proposed junction beneath 1st and Alameda Streets.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, October 6, 2010 5:50 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Wednesday, October 06, 2010 12:11 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Allon
Last Name: Percus
Email: allon.percus@cgu.edu
Phone:
URL:

I am opposed to keeping the 5th & Flower station in the Regional Connector plans. It is absurdly close to the present Metro Center station, and having too many stops will slow trains down and make the line less competitive. It doesn't seem to be a wise use of resources to spend scarce transit dollars on a station that may harm the alignment more than help it. 1

PC48

Responses to Comments from Percus, Allon

Response to Comment PC48-1

Preference for the removal of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, October 6, 2010 5:51 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Wednesday, October 06, 2010 5:50 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Joseph
Last Name: Myers
Email: pslma7499@yahoo.com
Phone:
URL:

If the 5th/Flower station is going to be removed from the Regional Connector to save money, would it be possible to add an underground walkway (with above the ground exit) from 7th/Metro Center station to 5th/Flower?

Could be a good way to get people to that location easily (walking underground is convenient) without building a whole station.

1

PC49

Responses to Comments from Myers, Joseph

Response to Comment PC49-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, October 6, 2010 5:50 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Wednesday, October 06, 2010 1:46 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Rani
Last Name: Sitty
Email: rsitty@gmail.com
Phone:
URL:

I urge Metro to construct a station at 5th/Flower as part of the fully underground option for the Regional Rail Connector. Although such a station would add to the expense of the project, it will provide a great benefit to the heart of L.A.'s highrise financial district, and will be a key link in an extensive neighborhood transit network that's quickly transforming Downtown L.A. into the first Southern California community where it's truly feasible (and in fact, advantageous) to live without an automobile. Additionally, a 5th/Flower station would relieve pressure from the already-crowded Metro Center station, which will only see more congestion after the opening of the Regional Connector.

Elimination of the 5th/Flower station is not a prudent strategy to address the funding gap presented by the fully underground option. The gap is relatively minor, and elimination of the 5th/Flower station would permanently hobble Metro's flourishing rail network.

1

PC50

Responses to Comments from Sitty, Rani

Response to Comment PC50-1

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: FW: [Metro.net] customer comment
Date: Wednesday, October 6, 2010 5:49 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Wednesday, October 06, 2010 2:40 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Spencer
Last Name: Gross
Email: Spencer.gr@gmail.com
Phone: Spencer.gr@gmail.com
URL:

The 5th/Flower Station is too important as relief for the heavily used 7th/flower station to be dropped from the Regional Connector plans. 1

PC51

Responses to Comments from Gross, Spencer

Response to Comment PC51-1

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Metro Regional Connector Transit Corridor Study
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Name	Nombre	名前	이름
Charles A Adelman			
Organization	Organización	所属	단체
Address	Dirección	住所	주소
6146 Eleanor Ave #107 Los Angeles CA 90038			
Telephone	Teléfono	電話	전화
(323) 460 6982			
Email	Correo electrónico	電子メール	이메일

Comment Comentario コメント 의견

On page 2-54 2.6.3, The Fully Underground LRT Alternative - Little Tokyo Variation 2 is rejected due to higher Cost and Concerns over its effects on the Buddhist Temple. This alternative however is the only design that can safely accomidate the projected 2½ minute headways for the combined Blue/Gold LRT. Running trains this close together through a single level Junction creates an over-dependance on technology always working and people not erring. All it takes is a signal failing (See Washington DC Metro Accident of last Spring) or an oppose- 1

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Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

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あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

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Metro

Blowing through a signal (See recent Blueline Vs MTA Bus accident or Chatsworth Metrolink accident). If we build a single level junction and run trains at 2½ min headways, Murphys law will prevail and sooner or later, 2 trains will meet with horrible results.

1 cont'd

Shortly after reading this document, I personely visited the area around the Buddhist Temple at 1st street and Vignes. While the main entrance to the temple is on 1st street, this is a pedestrian entrance only, and would not therefore be affected by having the LRT portal in the middle of the street. The parking Lot entrance is on Vignes street, thus also not affected by the portal. There is a gated driveway just west of the building, that leads to the rear of the temple, however left turn access from 1st street is already blocked by the existing Goldline LRT ROW running down the middle of 1st street. Replacing this At-Grade Row with a portal will have no practical effect on the Buddhist Temple

The Temple may be affected by construction activities along 1st street however, but this should take no more the two years. This negative short term effect can be minimized by simply shutting down the eastside Gold line during the construction period rather then re-routing the tracks. Given the extremely low ridership on this Line, few people would be affected by it disappearing for a few years.

2

Metro

PC52

Responses to Comments from Adelman, Charles

Response to Comment PC52-1

Fully Underground LRT Alternative – Little Tokyo Variation 2 was eliminated from further study due to potential impacts to the Los Angeles Hompa Hongwanji Temple. A rail simulation was performed to ensure that the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be able to accommodate the Regional Connector's projected 2.5 minute headway. Metro would use measures such as trackside signals, cab signaling, and automatic train control systems to ensure safety. Safety systems would be included to prevent train operators from passing red signals.

Response to Comment PC52-2

The Locally Preferred Alternative's portal on 1st Street would be positioned away from the front of the Los Angeles Hompa Hongwanji Temple per the temple's request. Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to minimize impacts to all businesses and organizations, including the Los Angeles Hompa Hongwanji Temple. Metro would maintain Metro Gold Line service during the construction phase of the project, though two primary closures of the tracks around the existing Little Tokyo/Arts District station would be needed lasting up to six weeks each. Bus bridge substitution would be needed during these times. As with any existing operating lines, maintenance of tracks and overhead power lines may result in incidental service interruptions along the Metro Gold Line during construction. Metro will attempt to minimize closures and shorten the overall project construction schedule in order to reduce customer inconvenience. Additional information is provided in Section 4.18.2.6.1 of this Final EIS/EIR.

ANDREW YICK

222 S. Central Avenue, Unit #410 • Los Angeles, CA 90012 • (213) 613-1492 • andrew_yick@juno.com

October 9, 2010

Ms. Delores Roybal-Saltarelli
LA County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

I am a homeowner and resident of Little Tokyo. I am writing to express my strong desire that Metro choose the Fully Underground alternative.

For the past six (6) years, I have lived in Little Tokyo. I chose this section of downtown LA to live in because of its established unique community character, sense of history, and distinctive independent retail and restaurant options. I believe that any above-ground regional connector option would jeopardize the unique community character that makes Little Tokyo attractive to many visitors, current residents, and potential future residents.

A Fully Underground option would reduce the noise level, prevent any unnecessary tragic accidents between cars and/or pedestrians and on-coming trains. In addition, a fully underground option is aesthetically more appealing. Visible railroad tracks would create visual blight and serve as an eyesore. 1

Finally, please know that appealing urban neighborhoods are largely products of independent retailers and restaurants. Because these types of stores are not omnipresent, they serve as destination drivers. We cannot afford to lose these stores due to loss of revenue caused by the construction of the Regional Connect. Therefore, I urge Metro to fairly compensate these stores during the construction period so that they will emerge as continuing operations after the completion of the Metro. 2

Again, as a homeowner and resident of Little Tokyo, I urge Metro to choose the Fully Underground option. 3

Sincerely,

Andrew Yick

PC53

Responses to Comments from Yick, Andrew

Response to Comment PC53-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC53-2

Metro recognizes the important ways that independent retailers and restaurants contribute to community identity. Metro has included measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to offset impacts to businesses affected by construction. These include providing in-kind support and assistance to businesses in an effort to minimize impacts of the project.

Response to Comment PC53-3

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Fully Underground LRT Alternative
Date: Monday, October 11, 2010 3:33 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: David Moore [mailto:mrmooreinsem@earthlink.net]
Sent: Saturday, October 09, 2010 2:16 AM
To: Regional Connector
Subject: Fully Underground LRT Alternative

I was pleased to attend the Little Tokyo presentation of alternatives last month. I support the concept of the Fully Underground LRT Alternative. I do have a question, however; will the tunnel along Second Street be built by excavating a trench and then covering, or by using the kind of tunneling machine that was used for the red line? A tunneling machine would have much less impact on the businesses in Little Tokyo. 1

Thank you. Yours,

David G. Moore

PC54

Responses to Comments from Moore, David G.

Response to Comment PC54-1

Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The tunnels beneath 2nd Street would be constructed using a tunnel boring machine, and stations would be constructed using the cut and cover method. Similar tunnel boring machine equipment was used for Red Line construction, but the technology has since advanced to yield better performance and safety. Metro agrees that tunnel boring machine excavation is generally less impactful than the cut and cover method, and has refined the Locally Preferred Alternative to maximize tunnel boring machine use. No cut and cover would occur on 2nd Street in Little Tokyo, and the tunnel under Flower Street between 3rd and 4th Streets would be excavated using a tunnel boring machine instead of cut and cover.

Subject: FW: Regional Connector on 2nd Street
Date: Monday, October 11, 2010 3:33 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

-----Original Message-----
From: Rise Axelrod [mailto:rise.axelrod@gmail.com]
Sent: Saturday, October 09, 2010 10:27 AM
To: Regional Connector
Subject: Regional Connector on 2nd Street

I am a resident of the Higgins Building at 108 W. 2nd Street. I very much oppose the At-Grade Alternative because of the negative impacts on the neighborhood including noise and traffic congestion on 2nd street so near to my home. There is already a great deal of traffic on 2nd Street and I am concerned that an at-grade train would make the traffic congestion much worse and increase the likelihood of accidents.

I am very much in favor of the Below-Grade option, and often use public transportation.

1

Thank you,
Rise B. Axelrod
McSweeney Professor of Rhetoric and Teaching Excellence
Chair, Committee on Academic Personnel
Director of Composition
Department of English
University of California
Riverside, CA 92521

PC55

Responses to Comments from Axelrod, Rise B.

Response to Comment PC55-1

Thank you for your comment. It is noted that the commenter supports a below-grade option and opposes the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: regional connector

Date: Monday, October 11, 2010 3:34 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Steven Axelrod [mailto:steven.axelrod@gmail.com]
Sent: Saturday, October 09, 2010 12:28 AM
To: Regional Connector
Subject: regional connector

Thank you for your email.

My wife and I strongly support the fully underground option. It's much better for metro users like ourselves--and for street traffic and street ambience.] 1

Thank you for your solicitation of my views.

Sincerely,

Steven Axelrod

108 W. 2nd Street, #609

Los Angeles, CA 90012

Professor of English
University of California
Riverside, CA 92521

PC56

Responses to Comments from Axelrod, Steven

Response to Comment PC56-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

October 10, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Japhet Hom
Savoy Resident
100 South Alameda Street, Unit #337
Los Angeles, CA 90012
(213) 709-7147 cell
Email: captk1701@aol.com

PC57

Responses to Comments from Hom, Japhet

Response to Comment PC57-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC57-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Subject: FW: 2nd & Main

Date: Tuesday, October 12, 2010 1:18 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Adriana Centeno [mailto:acenteno76@yahoo.com]
Sent: Tuesday, October 12, 2010 10:57 AM
To: Regional Connector
Subject: 2nd & Main

As a home owner at 108 W. 2nd Street, Unit 204, I would like it noted that the preference of our community is to have the fully below-grade option.

We love mass transit but 'at-grade' will have very negative impacts for our building and for neighborhood traffic (congestions, deaths & serious injury...). Apart from the noise and visual impacts, 'at-grade' would mean a very high volume of train traffic along 2nd Street outside our door during peak times. 1

Thank you in advance for noting my preference in this matter,

Adriana Centeno

PC58

Responses to Comments from Centeno, Adriana

Response to Comment PC58-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Metro Connect
Date: Tuesday, October 12, 2010 1:19 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

-----Original Message-----
From: elana saviolis [mailto:elanasav@yahoo.com]
Sent: Tuesday, October 12, 2010 9:04 AM
To: Regional Connector
Subject: Metro Connect

Dear Sir or Madam:

I am the owner of a loft at 2nd and Main, facing 2nd street, and I am writing you today to tell you of my strong sentiments against the "at-grade" option for the metro connector. This will be right outside of my window, and the amount of noise it will generate will be unbearable. The street is narrow, and cars drive very fast on both Main and 2nd Streets, so I believe it could also be a very dangerous option to put this at street level. Please, for the consideration of downtown residents, please select the underground option. 1

Thank you,
Elana Santana
108 W. 2nd St. #414
Los Angeles, CA 90012

PC59

Responses to Comments from Santana, Elana

Response to Comment PC59-1

Thank you for your comment. It is noted that the commenter supports an underground option and opposes an at-grade option. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Regional Connector Transit Corridor Feedback Form [#2]
Date: Wednesday, October 13, 2010 11:50 AM
From: Ginny Brideau <ginny@therobertgroup.com>
To: Ann Kerman <kermana@metro.net>

From: Roybal, Dolores [mailto:ROYBALD@metro.net]
Sent: Wednesday, October 13, 2010 9:24 AM
To: Leung, Julie
Cc: Ginny-Marie Brideau
Subject: FW: Regional Connector Transit Corridor Feedback Form [#2]

FYI

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Tuesday, October 12, 2010 8:03 PM
To: Roybal, Dolores
Subject: Regional Connector Transit Corridor Feedback Form [#2]

Name * Fred Berk
Email (you@email.com) * fredaberk@gmail.com
Phone Number (818) 789-4372
Select a Subject * I have a suggestion
Comment * I think the only way that the Downtown Connector will be successful is to make it underground, so that the Gold Line - Blue Line route will be a true rapid transit route until it meets the street south of downtown. In every city I know of that has rapid transit, the lines go directly through the central business district without being hindered by street traffic. 1

PC60

Responses to Comments from Berk, Fred

Response to Comment PC60-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Regional Connector Transit Corridor Feedback Form [#1]**
Date: October 19, 2010 9:59:16 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: Webmaster
Sent: Friday, October 15, 2010 4:50 PM
To: Regional Connector
Subject: FW: Regional Connector Transit Corridor Feedback Form [#1]

FYI,

Form results for you.

Joe A. Simpson, Jr.
Webmaster - Interactive Design and Strategy
Creative Services
Metro
One Gateway Plaza
99-19-20c
Los Angeles, CA 90012-2952
213.922.2353 (Phone)
213.216.9286 (Cell)

www.metro.net
simpsonj@metro.net
webmasters@metro.net

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Tuesday, October 12, 2010 3:29 PM
To: Lam, Lan-Chi
Subject: Regional Connector Transit Corridor Feedback Form [#1]

Name *	Jason Barnes
Email (you@email.com) *	jason64128@mac.com

Phone Number	(559) 684-2798
Select a Subject *	I have a suggestion
Comment *	I agree with eliminating the 5th/Flower station. It is unnecessary because it is only 2 blocks from another station. It will slow the trains considerably and add expense to the project. People are not so lazy that they cannot walk two extra blocks to come to another station.

1

PC61

Responses to Comments from Barnes, Jason

Response to Comment PC61-1

Preference for the removal of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: RE: Regional Connector Transit Corridor Feedback Form [#3]
Date: Wednesday, October 13, 2010 11:52 AM
From: Ginny Brideau <ginny@therobertgroup.com>
To: Dolores Roybal Saltarelli <roybald@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>
Cc: Ann Kerman <kermana@metro.net>, Laura Cornejo <CORNEJOL@metro.net>

Dolores,

Do you know if Laura is already set up to receive the comments that come in from the feedback form? If not, is it possible to have these redirect to regionalconnector@metro.net so that they all go to the same place?

Ginny

From: Roybal, Dolores [mailto:ROYBALD@metro.net]
Sent: Wednesday, October 13, 2010 11:04 AM
To: Leung, Julie
Cc: Ginny-Marie Brideau
Subject: FW: Regional Connector Transit Corridor Feedback Form [#3]

FYI

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Wednesday, October 13, 2010 10:51 AM
To: Roybal, Dolores
Subject: Regional Connector Transit Corridor Feedback Form [#3]

Name * Aaron Kahn
Organization/Company White & Case LLP
Email (you@email.com) * scakahn@gmail.com
Phone Number (323) 640-1582
Select a Subject * I have a suggestion
Comment *
I have recently read the suggestion that the regional connector may save money by eliminating the proposed 5th & Flower station. I write to urge Metro not to do this. I am an attorney at a major law firm in the financial district (US Bank Tower) and I ride the subway almost everyday to work from my home in Hollywood. I am a lifelong proponent of public transportation in Los Angeles. Putting another station in the financial district will help convince busy professionals that riding the rail lines are in their interests. Whether I get off the red line at 7th & Metro or at Pershing Square it is a ten minute walk to my building. That adds a significant amount of time to my commute. A station at the heart of the financial district at 5th & Flower would cut that time drastically and would convince other professionals the that the system is accessible and convenient. The number of added riders who would purchase monthly passes over the years could very well help offset a large portion of the cost of building the station. I urge you to retain the 5th & Flower station. 1

PC62

Responses to Comments from Kahn, Aaron

Response to Comment PC62-1

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: FW: Regional Connector Transit Corridor Feedback Form [#4]
Date: Wednesday, October 13, 2010 1:12 PM
From: Dolores Roybal Saltarelli <roybald@metro.net>
To: "Leung, Julie" <LEUNGJ@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Wednesday, October 13, 2010 12:43 PM
To: Roybal, Dolores
Subject: Regional Connector Transit Corridor Feedback Form [#4]

Name * Derrick Lo
Email (you@email.com) * djlo7@sbcglobal.net
Select a Subject * I have a suggestion

Comment * The 5th/Flower station MUST be built. If funding for it is out of reach, then provisions need to be made to make it easier to construct as a future infill station. 1

PC63

Responses to Comments from Lo, Derrick

Response to Comment PC63-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Street area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Domino Cheung

Savoy Resident
Unit #242

PC64

Responses to Comments from Cheung, Domino

Response to Comment PC64-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC64-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments on Draft EIS/EIR for Regional Connector**
Date: October 14, 2010 1:01:01 PM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, "'Ginny-Marie Brideau'" <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

From: grace lu [mailto:glu1688@gmail.com]
Sent: Wednesday, October 13, 2010 9:16 PM
To: Regional Connector
Subject: Comments on Draft EIS/EIR for Regional Connector

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Grace Lu
Savoy Resident
Unit #108

PC65

Responses to Comments from Lu, Grace

Response to Comment PC65-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC65-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Jannie Oh
Savoy Resident
Unit #251

PC66

Responses to Comments from Oh, Jannie

Response to Comment PC66-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC66-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Lupe Ortiz, Savoy Resident
Unit #459

PC67

Responses to Comments from Ortiz, Lupe

Response to Comment PC67-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC67-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Subject: FW: Subway Pro Comment
Date: Wednesday, October 13, 2010 3:21 PM
From: Dolores Roybal Saltarelli <roybald@metro.net>
To: "Leung, Julie" <LEUNGJ@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>

FYI

From: Westside Extension
Sent: Wednesday, October 13, 2010 2:09 PM
To: Regional Connector; Kerman, Ann; Roybal, Dolores
Subject: FW: Subway Pro Comment

For you guys as well!

From: Wally Marks [mailto:Wally@wnmrealty.com]
Sent: Wednesday, October 13, 2010 1:54 PM
To: Westside Extension
Subject: Subway Pro Comment
Let's move forward with these two projects, Wilshire Subway and the Downtown Regional Connector. Our traffic, our town our economy and our environment needs them all.] 1

Thank you.

Wally Marks
WALTER N. MARKS, INC.
Helms Hall of Fame
8758 Venice Boulevard, Suite 100
Los Angeles, CA 90034

310-204-1865 (o)
310-836-2208 (f)
310-678-5524 (m)

Check out our new Helms Bakery website: www.helmsbakerydistrict.com

"If you give something away, you never lose it."

PC68

Responses to Comments from Marks, Wally

Response to Comment PC68-1

Thank you for your comment. Support for the project is noted.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments Regarding Draft EIS/EIR for the Regional Connector**
Date: October 14, 2010 1:00:38 PM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, "'Ginny-Marie Brideau'" <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

From: wktakashi@aol.com [mailto:wktakashi@aol.com]
Sent: Wednesday, October 13, 2010 9:37 PM
To: Regional Connector
Subject: Comments Regarding Draft EIS/EIR for the Regional Connector

October 13, 2010

Dolores Roybal Saltarelli, Transportation Planning Manager
Los Angeles County Metropolitan Transportation Authority

Ms. Roybal Saltarelli:

As we approach the conclusion of the review period for the Draft EIS/EIR of the Regional Connector Transit Corridor Project, I would like to offer the following comments:

1. I fully support the concept of the Regional Connector as it is a uniquely critical component of a sorely needed rail transit system in the greater Los Angeles region.
   a. The various light rail lines now in existence, and those that are either under construction or in the early planning stages, will serve a diverse group of communities that deserve to be connected to each other in a manner that will be the most efficient and cost effective for the large population of riders that is expected to materialize over the next generation.
   b. Continuing to construct rail lines that do not permit "one-seat" or "one-ticket" rides to the outer reaches of the rail system not only may discourage long distance commutes, but it may create a hesitation to board a train even for shorter commutes if riders know that the ride will require a transfer(s), additional fare(s) and/or longer commute times.
   c. The location of the Regional Connector Transit Corridor, as depicted in the Draft EIS/EIR, appears to offer the best option for the system as a whole.
2. With the conditions noted below, I can support only the Fully Underground alternative as the Locally Preferred Alternative (LPA). Any other build options are completely unacceptable as they will create environmental chaos and long-term difficulties for the Little Tokyo community. These concerns were well noted during the long community review process that was undertaken by the Metro staff prior to the release of the Draft EIS/EIR. Should the Fully Underground alternative not be selected as the LPA, I believe that the Little Tokyo community will fight the Regional Connector project with great intensity.

   My support for the Fully Underground alternative comes with the following conditions:
   a. To whatever extent possible, begin the tunnel boring from the west end of the project, near the 2nd Street/Flower Street/Hope Street intersection.
   b. Ensure that the Little Tokyo community stakeholders have a full seat at the table when developing and approving any impact mitigation measures.
   c. Ensure that the Little Tokyo community stakeholders are fully involved in the execution of the Mitigation Monitoring Plan that is created for this project.
   d. Ensure that the businesses within the Little Tokyo community are provided with a secure safety net, including:
      i. A designated fund set aside for targeted marketing for all businesses
      ii. Establishment of a Business Interruption Committee, composed of local businesses and property owners, that will have a direct line of contact with Metro so as to minimize business disruptions during all phases of the Regional Connector construction, and that will have the ability to ensure a timely resolution to any unforeseen problems.
      iii. The establishment of a business compensation fund that will assist the businesses in Little Tokyo in surviving the years-long disruption that is sure to heavily affect their business operations. Many individuals within the business community are strongly advocating for the "No Build" option. A business compensation fund would help to allay the concerns of many business people.
   e. The redevelopment of the current Office Depot block (bounded by 1st Street, 2nd Street, Central Avenue and Alameda Street) must not be planned without formal and equitable input from the Little Tokyo community stakeholders.

If the Fully Underground alternative is selected as the LPA, and the cost of the project becomes excessive, I would advocate for the dropping of the station at 5th Street and Flower Street, as it may be unnecessary due to the proximity of the two flanking stations.

Thank you for accepting these comments and entering them into the official records for the review of the Draft EIS/EIR.

Wilbur Takashima

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PC69

Responses to Comments from Takashima, Wilbur

Response to Comment PC69-1

Comment acknowledged. Support for the Regional Connector Transit Corridor project is noted. It is the vision of the Regional Connector Transit Corridor project to connect the spokes of the regional system and provide a "one-seat ride" from Long Beach to Montclair and from East Los Angeles and the San Gabriel Valley to Santa Monica.

Response to Comment PC69-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC69-3

Comment acknowledged. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, a range of durations, 2-4 months for the TBM insertion site and 24-48 months for the 2nd Street TBM tunnel, was assumed for tunneling activities at both insertion site options. These ranges are conservative estimates. Disproportionate impacts associated with each alternative were discussed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR.

The small size of the 2nd/Hope Street station site would require a substantial portion of construction staging activities to occur in the surrounding streets, necessitating longer downtown street closures and increased cut and cover activities. This would have the effect of reducing mobility downtown and could deter visitors from frequenting many downtown communities, including Little Tokyo. In addition, the 1st/Central Avenue station site in Little Tokyo would need to be used as the TBM receiving site if the tunnel boring machines are inserted at the 2nd/Hope Street station site.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and the 2nd/Hope Street station are no longer being considered. Instead the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. The TBM would be inserted approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street and result in fewer acquisitions. Tunnel boring activities from this site would proceed farther down Flower Street to 4th Street, instead of ending at the proposed 2nd/Hope Street station. Spoils would be removed within the Mangrove property, and trucks would be routed to the east and/or north to reach the freeway, and would not pass through Little Tokyo. Section 4.18, Construction Impacts, of this Final EIS/EIR contains further detail regarding estimated construction durations, construction scenarios, and tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised based on the new TBM insertion site in this Final EIS/EIR. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR. Inserting the

TBM at the Mangrove property would not result in new significant impacts or substantially increase the severity of impacts previously identified in the Draft EIS/EIR.

Worksite Traffic Control Plans will be developed in coordination with the Los Angeles Department of Transportation and presented to the community prior to construction activities. Metro will provide the community with updates regarding the construction schedule prior to and during construction.

Response to Comment PC69-4

During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included meetings with the Little Tokyo Working Group, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8), which are presented in this Final EIS/EIR.

Response to Comment PC69-5

Please refer to Response to Comment PC69-4, above.

Response to Comment PC69-6

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains confirmed mitigation measures that Metro will implement to address the adverse impacts of the Regional Connector. This includes targeted marketing for affected businesses during the construction phase.

Response to Comment PC69-7

Comment acknowledged. As indicated in Section 4.3 Community and Neighborhood Impacts, mitigation to reduce community and neighborhood impacts during construction of the Locally Preferred Alternative involves the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours.

In addition, Metro will create a Regional Connector Community Leadership Council, consisting of local business and property owners, to streamline Metro's communication with all communities affected by the project and respond to their concerns during construction of the Locally Preferred Alternative.

Response to Comment PC69-8

Metro intends to work with the Little Tokyo community to support businesses throughout the construction phase of the project. It is Metro's goal to minimize the Regional Connector's adverse impacts to businesses. Targeted marketing efforts and other technical assistance are included as confirmed mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro believes that, once completed, the Regional Connector will be beneficial for the Little Tokyo business community.

Response to Comment PC69-9

Metro has refined the Locally Preferred Alternative and reduced the need for acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. Only the northern portion of the parcel would need to be acquired for the Regional Connector. Any redevelopment of this portion of the block would occur separately from the Regional Connector project, but Metro would seek formal and equitable input from Little Tokyo stakeholders.

Response to Comment PC69-10

Preference for the removal of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

~~For Copies~~: COPY IDENTICAL TO THE ONE I SENT OCT. 15

To: MS. DOLORES ROYBAL SARTARELLI

202 S. Juanita Ave., # 2-211
Los Angeles, CA 90004
Oct. 14, 2010

Ms. Dolores Roybal Sartarelli, Project Manager
Metro, One Gateway Plaza, 99-22-2
Los Angeles, CA 90012

Subject: Comments on the Draft EIS/EIR
For the Regional Connector Transit Corridor Study

Dear Ms. Sartarelli:

This letter is primarily in support of the underground option included in the downtown connector EIS/EIR. I believe that the basic Flower-2nd Street-Alameda/1st Street light rail transit connector is of great importance in linking major parts of the LA County rail transit system, tying together the Long Beach line to Pasadena/Azusa, and Santa Monica to East LA and likely cities east-southeast of this point.

Many have said that this connector is long overdue; but with financial needs elsewhere, it has finally taken the completion (well, Expo is very close to completion of its first segment) of four major light rail spokes approaching the LA CBD from different directions to finally build up the momentum to install this major connecting link in the light rail system.

Although I have spent a few minutes during public comments at meetings discussing the future (preservation or otherwise) of the existing surface track linking Union Station with Little Tokyo and Boyle Heights, currently in use, I now conclude that the opening of the all-underground LRT connector is of far greater importance than long-term retention, for various purposes, of this Alameda Street-1st Street surface track operation. This is based on expected high levels of ridership by transit with a minimum of transfers, from and to outlying cities in the county, via the CBD connector which is expected to open in 2019.

I have a few comments on certain aspects of the downtown connector as follows; with some modifications of things I said in the recent public meetings.

1

STATIONS

Of the four downtown connector stations listed earlier, now I understand that one of the four (either 5th or 2nd /3rd and Flower) might have to be dropped (at least for initial operations, anyway) for reasons of available funding. Although I was rather lukewarm about the need for the 5th and Flower station at one of the public meetings, upon thinking this one through I

2

now favor the 5th Street station (perhaps 5th to 6th street), in part because it would serve the main downtown library, and in part because of the steep hill linking a 2nd/3rd Street station with the Disney facility, Music Center, DWP, and so forth (I suspect many people, not just the elderly and handicapped) would prefer a small shuttle bus, which could start at 5th or 6th, to go up and down this hill. 2 cont'd

I support the 2nd Street station east of Bunker Hill without a specific preference between Broadway, Spring, or Main; and the 2nd-1st Street underground station for Little Tokyo. 3

POCKET TRACKS

The red/purple lines have a combined pocket track west of Alvarado, in occasional use, and are able to use the major maintenance facility east of Union Station for other such needs. The Blue Line has two end tracks along Flower north of 7th, allowing room for two x three-car trains. There has been speculation that when the Exposition Line opens, there may be inadequate storage space in this area. With the downtown connector, this may be somewhat less of a problem, although there will be trains coming in from Gold Line routes (perhaps one to receive a different color designation) from the east side of the CBD.

My question is whether a single pocket track will suffice (for a single 3-car train or allowing two such consists in a row) in a center section south or north of 5th Street (cut-and-cover?), or whether a second center-section pocket track (bored tunnel?) would also be needed along 2nd, west of the Little Tokyo underground station? 4

STATION DECORATIONS/ART-WORK

This project should be a transit "showcase" in this arena. We may have an opportunity to improve over some of the station art-work in place at some of the existing rail stations, such as the Red/Purple Line from the CBD to Vermont Avenue. (Some of the Red Line stations in the Hollywood/North Hollywood sections have much more impressive station art). Improved station art has been going in at Blue Line and Green Line stations "after the fact" which is understandable; an interesting example of rather extensive science-fiction movie 'artwork', now being colorized, exists at the Blue Line level at 7th/Metro Center in the CBD (I am still occasionally photographing some of these small pictures!).

I have provided some comments on possible station art subjects in Appendix A as there may be some interest in it, though perhaps doesn't require major elaboration at this point in the EIS/EIR, other than reference to the "transit showcase" concept. 5

FUTURE STATUS OF THE PRESENT SURFACE TRACKS FROM UNION STATION TO LITTLE TOKYO AND BOYLE HEIGHTS

Although in verbal comments on the Regional Connector project I have supported retaining the present Gold Line trackage linking the east end of Little Tokyo with Union Station to the north and Boyle Heights/East LA to the east, I recognize there are a number of drawbacks to retaining this short rail link, during and after construction/completion of the downtown connector.

Partial positive features had included a maintenance link to the facility north of Chinatown (of more use to East LA runs, than future runs from the other direction); possible use as a pocket track (though it would not be as useful as a pocket track in the tunnel); possible special service runs from East LA to Pasadena without the need for passengers to transfer at a tunnel station; and the fact that the MTA does own the track in this location. 6

But a negative feature would be that it may be more difficult to retain this when the double track portals north along Alameda and east along 1st are installed, with the likely widening of Alameda Street (and possibly parts of 1st Street). Retaining this surface track from north to east would likely require moving parts of the surface track to the east of the Alameda segment, possibly allowing utility of only a single track where we now have a double track with a station.

With regard to passenger transfers from what is now the Gold Line from the east, to the Gold Line north at the Little Tokyo underground station, possibly to access the Red Line or Metrolink at Union Station; I note that in Boston the MBTA regards a transfer from rail to rail to rail in their CBD area to be very common for transit riders, being much less annoying than transfers say, from bus to bus to bus. So, passenger movements using the downtown connector for transfers at the new Little Tokyo subway station, to get from East LA to Pasadena or Union Station, may be much less of a problem than I had previously thought. 7

At present, the surface station on the 1st/Alameda link east of Little Tokyo involves two car trains every five minutes (10 min. west/north and 10 min. south/east), with probably few major complaints. However, as we move on towards 2019, what would be the local reaction of pedestrians trying to cross Alameda if there are train movements here every two or three minutes, with three car trains? 8

And another consideration that could impact both elimination of this surface track or its long-term retention, is how to maintain service to Little Tokyo before the portals open to the north and the east? 9

It looks as though to save this surface track, it would probably have to be moved over, and probably shortened to only two car service at the surface station where the tunnel trains approach the portal/the surface near Temple at the north end of the present station. A question here is, how long it will take to construct each portal? A link from single track to 10

the subway double tracks north to Union Station and east to Boyle Heights would probably require a switch to one track, with a diamond allowing the surface trains to also go over that track and switch to the other track; with improvements to the signaling system and at least gates over the westbound 1st street traffic. Do-able, but it might actually be easier to eliminate the surface link altogether. 10 cont'd

Although I hate to see even short rail links removed, there are always alternatives. For the period when the downtown connector tunnel portals are constructed, it may instead be possible to install a short-term bus shuttle linking the Gold Line Mariachi Plaza station with a stop at Little Tokyo (1st and Alameda), and then on to Union Station, with a stop at the Gold Line run down from Pasadena. If this were done it would be advisable to have articulated buses (maybe with two front doors in addition to double center and double rear doors), provided with traffic signal interconnects to that they would be delayed less by street traffic; and if possible even some bus lane segments to speed up service for this short term period. 11

Of course, the Pasadena Gold Line service south to Union Station would not be impacted; the impacts would be on the Gold Line from East LA to the west. If this kind of service modification were implemented, it would of course be necessary to inform affected passengers that it would be only a short term solution, to be withdrawn when the LRT connector service becomes operational. 12

OTHER POSSIBLE TRANSIT LINKS/CONNECTIONS

If a downtown streetcar line is installed along Broadway or a parallel street running north/south and passing the 2nd street Regional Connector station, it could be viewed as a beneficial transit link, allowing among other things a connection south to the Garment District and north to 1st Street and the Disney and Music Center facilities. I am guessing that 4-axle, 3-section low floor articulated streamlined cars would be used; though possibly also some single section, 4 axle vintage car designs. In any case, I believe with a run up the 1st street hill, all the axles should be powered so that this unique downtown service would not be impaired by a steep gradient on that hill. 13

Sincerely

Alan D. Havens

Alan D. Havens
213-736-7466

202 S. Juanita Ave., # 2-211
Los Angeles, CA 90004
Oct. 14, 2010

Comments on the Draft EIR/EIR
For the Regional Connector Transit Corridor Study

APPENDIX A
STATION DECORATIONS/ART-WORK

In regard to the Regional Connector, it is possible that station art themes relating to the west side of downtown Los Angeles, including library, literary and educational subjects, among others, might be focused on at a 5th Street station; and that the 2nd Street station east of Bunker Hill and south of the Los Angeles City Hall might have art work focusing on, at least partially, themes relating to the history of the City of Los Angeles and Los Angeles County.

At one or more points on the tunnel walls between stations, the recent concept of moving lights that parallel the speed of a train could be employed, providing a little bit of interest for passengers looking out of the train windows, where it would otherwise be just blackness. I believe that this has been used in at least one transit system somewhere else in the world, I do not recall exactly where. 14

Of course, other kinds of stationary colored light displays could be installed in stations, not limited to neon lights and including various moving pictorial displays.

I have already suggested that the Little Tokyo underground station could warrant a variety of themes, which might include the famous Mineki Neko cats and oriental dragons, which are both good luck symbols; and some scenes from old Japan, which would include Samurai warriors in armor from the 1500's or later, and Japanese musketeers from the same period (many people don't know that they existed!). Not seen very often are crabs with "human faces" on their backs, which are revered in respect to drowned warriors after a famous naval battle of roughly the same period.

Dr. Kohei Yoshida ("Sensei Yoshida") who owned a Japanese armor and sword museum, told me years back that the Naginata, a pole with a curved blade at the end, was especially a women's weapon on ancient Japan—when their menfolk were called to local military use in Japan, the women of the villages had to defend themselves from marauding bandits on horseback, and often took up the Naginata.

Any of these natural or historical subjects, and many others including botanical themes, might be usable for station art in this location, using not a single artist, but a number of local artists especially from Little Tokyo or elsewhere in the LA area.

Regarding recent technology from Japan, it might be useful to display photos of the famous Shinkansen or bullet trains, for which there are at least four or five designs of electric locomotives; and also some moderately high speed narrow gauge passenger trains. The relevance to what is happening today in LA and other parts of California is obvious, as we are now looking at high speed trains operating in this state, coming right through downtown.

And, many people may have forgotten that in Los Angeles, the first modern light rail vehicles for use on our regional system were built in Japan by Sumitomo/Nippon Sharyo, after the "light rail revolution" spread from Europe to the US, Japan, and many other parts of the world. These LRVs still run on the Long Beach Blue Line, but may or may not be still in use by the time the Regional Connector will come through (they may by then be used for rush hour or special service only, or only found in a transit museum!). The one I just rode on was labeled as arriving here in 1994, still a comfortable ride after all these years. 14 cont'd

So, another possible 'modern technology' candidate for display at the Little Tokyo station would be a model replica of one of these original Nippon Sharyo cars, with an elaborate roof-top design and the first colorful paint scheme used on the Long Beach Blue Line, which was red, two-tone blue, white, and black.

The above are possible items that might be included in light rail underground station and tunnel artwork that come to mind at present. I am not recommending any specifics, as in most cases, artistic displays will not be developed in detail until the transit facility is adopted, designed, and even after it has begun construction.

But, I recommend that likely candidates for station displays should be considered fairly early in the game as the Regional Connector is developed, with a particular focus on a number of artists and art organizations, and considerable local input.

Alan D. Havens, Ph.D.
Transit Advocate
213-736-7466

DEAR MS. ROYBAL SCHARFF,

THOUGH I SENT THE ORIGINAL OF THIS 8/15, I AM UNSURE OF THE RELIABILITY OF MY LOCAL POST OFFICES 3RD/WESTERN AND 6TH/HARVARD HAVE BEEN KNOWN RECENTLY TO RETURN LETTERS/CHECKS TO ME, IN POOR CONDITION CHECK SENT TO EAST COAST THAT SHOULD HAVE GONE TO NEVADA; CHECK MANGLED; LETTERS RETURNED THAT THEY SHOULD HAVE KNOWN WENT TO CORRECT ADDRESS

SO THIS ONE I AM HAND DELIVERING TODAY TO MOB OFFICE, OR LAST RESORT.

PLS CARD IF THE ORIGINAL ACTUALLY DID GET THROUGH!

Thank You!

PC70

Responses to Comments from Havens, Alan

Response to Comment PC70-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC70-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project. The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza if one is not already provided. However, if the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue. Under either scenario, riders would be able to easily access the top of Bunker Hill.

Response to Comment PC70-3

Support for stations on 2nd Street east of Bunker Hill and in Little Tokyo is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which includes stations at 2nd and Broadway and on the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street in Little Tokyo.

Response to Comment PC70-4

Metro's operations staff has determined that the single pocket track underneath Flower Street would be sufficient.

Response to Comment PC70-5

Metro will work with the community to develop station artwork that enhances the transit experience for passengers and contributes meaningfully to the urban environment. One-half of one percent (0.5 percent) of the project's construction budget will be dedicated to public art.

Response to Comment PC70-6

Comment noted. The surface tracks would no longer be in service once the Regional Connector opens, and may ultimately be removed.

Response to Comment PC70-7

Comment noted. Direct Red Line transfers for passengers traveling from East Los Angeles would also be possible at 7th Street/Metro Center Station.

Response to Comment PC70-8

Rush hour Metro Gold Line headways are currently 7.5 minutes in each direction (averages 3.75 minutes combined). The surface tracks along Alameda Street would no longer be in service once the Regional Connector opens; therefore, pedestrian movements across Alameda Street would no longer be limited by passing trains.

Response to Comment PC70-9

Temporary surface track would be installed in the vicinity of 1st and Alameda Streets to allow Metro Gold Line service to run during construction.

Response to Comment PC70-10

Comment Noted. Some reconfiguration of the surface tracks around the existing Little Tokyo/Arts District Station would be needed to maintain Metro Gold Line service during construction. Portal construction would take approximately 12 to 24 months for each portal, as was shown in Table 4.18-2 of the Draft EIS/EIR and Table 4.18-1 of this Final EIS/EIR. Construction of the two portals could be done simultaneously to reduce the overall construction time. Some single tracking would be needed.

Response to Comment PC70-11

Metro would maintain Metro Gold Line service during the construction phase of the project, though two primary closures of the tracks around the existing Little Tokyo/Arts District station would be needed lasting up to six weeks each. Bus bridge substitution would be needed during these times. Bus size and configuration would be selected based on ridership demand. Metro would attempt to minimize passenger delays. As with any existing operating lines, maintenance of tracks and overhead power lines may result in incidental service interruptions along the Metro Gold Line during construction. Metro will attempt to minimize closures and shorten the overall project construction schedule in order to reduce customer inconvenience. Additional information is provided in Section 4.18.2.6.1 of this Final EIS/EIR.

Response to Comment PC70-12

Metro would inform Gold Line passengers in advance of scheduled service disruptions and provide alternate transit service.

Response to Comment PC70-13

Comment acknowledged.

Response to Comment PC70-14

Metro appreciates the detailed suggestions for station artwork. Metro will actively engage the community when developing station artwork.

October 14, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Christina Sein
Savoy Resident
Unit # 305

PC71

Responses to Comments from Sein, Christina

Response to Comment PC71-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC71-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

October 14, 2010

Dolores Roybal Saltarelli, Project Manager, Metro
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli,

Please allow me to add to my verbal remarks during Regional Connector meetings and emphatically support the "fully underground" option for the Connector. 1

I wish Metro saw fit to adopt the suggestion of Alan Fishel to align the Connector on a much faster curve east of the the aerial structure currently used by the Gold Line at Alameda St. and the 101 Freeway. His suggestion would return the street frontage along Alameda St. to the planned residential project that would abut the current Little Tokyo Gold Line station. 2

I think the relatively few people who have supported any Central Library station at Fifth and Flower Sts. do so only for personal convenience, neglecting the prime fact that the 7th/Metro station on 7th St. is indefensibly close to that proposed location. I realize that federal requirements can mandate a minimum of three stations in order to best qualify the project for funding but the proposed stations are so numerous and close together than the bulk of the Connector's riders would be better served by only a Broadway station being built. I'm sure the Connector will be quickly if not instantly so useful, so badly needed, that it would have been best to design it as only half of a total of four tracks from Alameda St. to past its 7th/Metro station junction, and all the way down to Flower St. and Washington Blvd. Maybe a pair of four such tracks would be further underground, to permit two tracks in each direction to run side by side, and best accommodate the crowds I'm sure will find it necessary to use the connector. 3

The Regional Connector is so critical to making transit more useful, it would so greatly change the ability of rail transit to assume its proper and long overdue role of best moving around greater Los Angeles. It may not have been as critical to our county as the Long Beach Blue Line since the Blue Line got us to awaken to how important a responsible system of rail transit is to so large an area as metropolitan Los Angeles. Because of this vital lack that the Regional Connector would go so far to help fill, thank you most kindly for your 4

significant and most welcome way you've ran the public Regional Connector meetings, it's much appreciated. 4 cont'd

Sincerely,

Dave Frevele

Dave Frevele
622 S. Wall St. #A337
Los Angeles, CA 90014

PC72

Responses to Comments from Frevele, Dave

Response to Comment PC72-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC72-2

This proposal would involve additional impacts to the City of Los Angeles Department of Water and Power property, which can be mostly avoided with the Locally Preferred Alternative alignment.

Response to Comment PC72-3

Preference for the removal of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Three stations are included in order to fulfill the project goal of expanding rail transit coverage of downtown Los Angeles. Ridership modeling shows that a two-track connector would provide sufficient capacity to accommodate demand. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC72-4

Thank you for your comment.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector Transit Corridor - opinion**
Date: October 15, 2010 9:25:28 AM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, 'Ginny Brideau' <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

From: Phil Orona [mailto:porona@earthlink.net]
Sent: Thursday, October 14, 2010 8:12 PM
To: Regional Connector
Subject: Regional Connector Transit Corridor - opinion

To whom it may concern,

I am writing today to voice my opinion about the Regional Connector Transit Corridor project being planned right now by Metro. I am very concerned and dismayed to hear that Metro is even considering an above-ground option for this line.

Being a resident of downtown and a frequent patron of businesses in and around the Little Tokyo area, I can state that this above-ground option would have a very negative impact on not only traffic, but surrounding businesses as well. I have been to some of the planning meetings, and viewed the diagrams of the various route options.

The above-ground option would completely change the historic and unique look of this area, permanently degrade property value around it, and create very undesireable living conditions for neighboring residents.

As I'm sure you know, Downtown Los Angeles has in recent years undergone an unprecedented revival! More people are living in and doing business in Downtown that many ever thought was possible. Being a life-long resident of Los Angeles County, this has been amazing to witness, as well as be a part of now that I live in Downtown.

I urgently and strongly request that you consider what this great city is becoming, and still has the potential to become if the city planners do this project correctly, and consider the many concerns of it's residents and businesses. We do not need additional above-ground rail systems, or anything that will give our city a more congested look and feel. 1

We need to consider our historic roots, and realize that our city's buildings, streets, and its unique look are what make it a place of amazement and destination that everyone wants to visit and be a part of. We should make every attempt to make improvements to transportation as non-disruptive as possible.

Please, help us keep the historic look of downtown and Little Tokyo! Please consider the long-term consequences of your decisions. And mostly, please listen to the many voices of the concerned residents and businesses of this area who want only to keep this a great city to be proud to live and work in.

I strongly feel that the above-ground option should NOT be even be in consideration, and that any amount of extra money spent to make this Metro below ground will pay off in dividends for all future residents, business, and visitors.

Thank you for reading this. I'm sure that for every one person like me who expresses this feeling in writing, there are dozens more who also feel this way without being heard.

Sincerely,

Phil Orona
Higgins Building Resident
porona@earthlink.net

PC73

Responses to Comments from Orona, Phil

Response to Comment PC73-1

Thank you for your comment. It is noted that the commenter opposes an at-grade option. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Regional Connector Transit Corridor Feedback Form [#6]
Date: Thursday, October 14, 2010 8:08 AM
From: Dolores Roybal Saltarelli <roybald@metro.net>
To: "Leung, Julie" <LEUNGJ@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>

FYI

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Thursday, October 14, 2010 6:51 AM
To: Roybal, Dolores
Subject: Regional Connector Transit Corridor Feedback Form [#6]

Name * richard schumacher
Email (you@email.com) * r_a_schumacher@sbcglobal.net
Select a Subject * I have a suggestion

Comment * Given the funding situation, accept all staff recommendations for the Regional Connector Underground Option.] 1

PC74

Responses to Comments from Schumacher, Richard

Response to Comment PC74-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments on Draft EIS/EIR for Regional Connector (from Savoy Resident)**
Date: October 15, 2010 9:28:13 AM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, 'Ginny Brideau' <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

-----Original Message-----
From: Lin, Susan M [mailto:susan.m.lin@boeing.com]
Sent: Thursday, October 14, 2010 1:55 PM
To: Regional Connector
Subject: Comments on Draft EIS/EIR for Regional Connector (from Savoy Resident)

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the Fully Underground Alternative that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Susan Lin
Savoy Resident
Unit # 430

PC75

Responses to Comments from Lin, Susan

Response to Comment PC75-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC75-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Draft EIS/EIR Comments**
Date: October 15, 2010 9:25:13 AM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, 'Ginny Brideau' <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>
▶ 1 Attachment, 28.5 KB

From: yukio kawaratani [mailto:yklk@att.net]
Sent: Thursday, October 14, 2010 10:07 PM
To: Regional Connector
Cc: douglaskim@verizon.net
Subject: Draft EIS/EIR Comments

Dear Dolores Roybal Saltarelli

My name is Yukio Kawaratani, former Downtown Redevelopment Planner. I spoke at the Regional Connector public hearing at JANM on September 28, 2010. I emphasized the need for a compensation fund to keep Little Tokyo businesses alive during the four year construction period. 1
I also said that the Draft EIR/EIS did not adequately address the major adverse impacts and safety concerns regarding the Underground Emphasis Alternative and why it cannot be accepted by the Little Tokyo and Japanese American communities. 2

Attached are my additional comments to the Draft EIS/EIR regarding the existing Little Tokyo/Arts District Station, the starting end of the tunneling, and the Office Depot block joint development. Note: To assure receipt of my comments, I will also mail them to you.

Best --

Yukio Kawaratani, former downtown redevelopment planner
1332 Grandridge Avenue, Monterey Park, CA 91754
yklk@att.net

REGIONAL C...doc (28.5 KB)

REGIONAL CONNECTOR -- DRAFT EIS/EIR COMMENTS 10/14/10

BY YUKIO KAWARATANI, Former Downtown Redevelopment Planner

LITTLE TOKYO/ARTS DISTRICT STATION

I realize the desire to keep this station in operation as long as possible.
However, there will be four or more unavoidable periodic disruptions to service:

- o During construction of the 3 way junction under the First and Alameda intersection.
- o During construction of the tracks around the First Street portal.
- o During construction of the First Street portal.
- o During demolition and reconstruction of the connecting track structure to over the 101 Highway.

I recommend providing continuous uninterrupted operation of the Little Tokyo/Arts District Station and tracks to Pasadena and East LA until the last 8 months of construction of the total project. (Note: There will be a 4 months or more stop in operation in the Station anyway).

Under this recommendation, all Regional Connector construction affecting the operation of the Station would be postponed until the last 20% of the overall project. Advantages:

- o No intermittent interruption of service to the Gold Line to East LA or Pasadena.
- o Just a little longer closure at the end of the Regional Connector project.
- o No need to purchase land from the Nikkei Center or the LADWAP.
- o Use cheaper cut and cover construction for the tunnel in the existing station area.
- o Would directly align with the existing tracks and structure going over the 101 Freeway, thereby avoiding a permanent "S" curve in the connecting tracks.

3

STARTING END OF THE TUNNELING

The Little Tokyo Community and especially the many businesses will already be disproportionately adversely affected during construction of the Regional Connector project.

Fairness and justice should mitigate against starting the tunneling at Second Street and Central Avenue. Little Tokyo will already suffer from the loss of businesses and property on the Office Depot block. In addition, will be the significant consequences of the enormous dirt haling and construction materials and construction activities of the new station, Alameda and First Street junction intersection, and tunnels and portals to connect to the Pasadena and East Los Angeles lines.

4

Adding to this, many trucks hauling millions of cubic feet of earth from the mile long tunnels and delivering materials for the construction of the tunnels and tracks would be an intolerable impact on Little Tokyo business that could not be adequately mitigated. With access problems discouraging customers, many of them will be forced to abandon their businesses. In a recent public meeting on the Regional Connector, many of the businesses opted for the "No Build" alternative. They are rightfully very concerned.

4 cont'd

The Second/Third and Flower site for starting tunneling has the Central Plant landscaped area and The Flower/Hope interchange to work for tunneling and truck hauling of dirt and supplies. There are no nearby retail businesses to impact. Traffic is light except during the morning and evening rush hour. There is limited traffic during the weekends.

Flower/Hope Street could remain in operation. The interchange with Kosciuszko Way will have to be closed anyway to excavate and construct the Bunker Hill Station.

This would also be a convenient location from which to tunnel Flower Street down to the Seventh Street Station.

OFFICE DEPOT BLOCK DEVELOPMENT

The optimum development and design of this block requires a carefully orchestrated joint development agreement. It would integrate the Station and development design to the benefit of Little Tokyo for the next 100 years.

To accomplish this desired goal, it is essential that the MTA purchase, relocate and demolish all businesses, buildings and properties on the Office Depot block.

5

To cater to the desire of a few property owners to retain ownership of property, buildings and businesses on the block would not be in the best interests of Little Tokyo in the short and more importantly in the long run.

The Regional Connector will require cut and cover construction for the Station, the junction under First and Alameda Streets, and the tunnel connecting them.

To try to save a few buildings, underpin them and maintain the businesses in operation during up to 4 years of construction would be folly. The uses are nearly all restaurants, including outdoor dining and surface parking. How can the contractor keep them dust, safety, vibration and noise free for four years? The contractor must secure the entire block free of contingencies and problems. Also, he can use the remainder of the block for heavy machinery, construction supply storage, offices and parking to major advantage and thereby reduce the construction cost of the Regional Connector Project.

Good coordinated development will be impossible to achieve after construction of the Station and tunnels if fragments of properties and buildings are preserved, thereby missing an opportunity and adversely impacting Little Tokyo into the future.

This new station, with direct ties to and from the four points of the region, will be a strong economic stimulus for Little Tokyo. It needs a direct pedestrian portal to First Street, the most important street in Little Tokyo.

Development of this block with continuous street frontage retail uses along First, Second and Central Avenue is essential to integrate it in a positive way with the rest of Little Tokyo.

Development of the upper levels of the block should be primarily residential and office uses, but at a density and heights compatible with adjacent Little Tokyo development.

The block development needs to also provide and be a resource for the over all parking needs of Little Tokyo. If the site is fragmented, this essential parking will be nearly impossible to be built on the block.

5 cont'd

PC76

Responses to Comments from Kawaratani, Yukio

Response to Comment PC76-1

Metro intends to work with the Little Tokyo community to support businesses throughout the construction phase of the project. Targeted marketing efforts and other technical assistance are included as confirmed mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Construction durations for the Fully Underground LRT Alternative were shown in Table 4.18-2 of the Draft EIS/EIR and for the Locally Preferred Alternative in Table 4.18-1 of this Final EIS/EIR. The entire construction process would take four to five years, but the duration of construction in any one location in Little Tokyo would be less than four years.

Response to Comment PC76-2

Impacts associated with the Underground Emphasis LRT Alternative were adequately analyzed in accordance with NEPA and CEQA in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR. Safety impacts associated with the Underground Emphasis LRT Alternative were also adequately analyzed in Section 4.15, Safety and Security, of the Draft EIS/EIR and this Final EIS/EIR. The commenter mentions comments made during the public hearing held on September 28, 2010. Please refer to Responses to Comments PHA10-1 through PHA10-9, below, for detailed responses regarding concerns raised by the commenter during the public hearing. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC76-3

Metro will maintain continuous Metro Gold Line service between Union Station and East Los Angeles to the maximum extent feasible during construction. Metro would maintain Metro Gold Line service during the construction phase of the project, though two primary closures of the tracks around the existing Little Tokyo/Arts District station would be needed lasting up to six weeks each. Bus bridge substitution would be needed during these times. As with any existing operating lines, maintenance of tracks and overhead power lines may result in incidental service interruptions along the Metro Gold Line during construction. Metro will attempt to minimize closures and shorten the overall project construction schedule in order to reduce customer inconvenience. Additional information is provided in Section 4.18.2.6.1 of this Final EIS/EIR.

The Mangrove property, the vacant property at the northeast corner of 1st and Alameda Streets, would need to be acquired for tunnel boring machine staging. Cut and cover and open cut construction methods would be used for the alignment segments in the vicinity of the 1st and Alameda Streets junction. Metro would ensure operability of the connection to the bridge over the US 101 Freeway.

Response to Comment PC76-4

Comment acknowledged. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, a range of durations, 2-4 months for preparation of the TBM insertion site and 24-48 months for the 2nd Street TBM tunnel, was assumed for tunneling

activities at both insertion site options. These ranges are conservative estimates. Disproportionate impacts associated with each alternative were discussed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR.

The small size of the 2nd/Hope Street station site would require a substantial portion of construction staging activities to occur in the surrounding streets, necessitating longer downtown street closures and increased cut and cover activities. This would have the effect of reducing mobility downtown and could deter visitors from frequenting many downtown communities, including Little Tokyo. In addition, the 1st/Central Avenue station site in Little Tokyo would need to be used as the TBM receiving site if the tunnel boring machines are inserted at the 2nd/Hope Street station site.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and the 2nd/Hope Street station are no longer being considered. Instead the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. The TBM would be inserted approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street and result in fewer acquisitions. Tunnel boring activities from this site would proceed farther down Flower Street to 4th Street, instead of ending at the proposed 2nd/Hope Street station. Spoils would be removed within the Mangrove property, and trucks would be routed to the east and/or north to reach the freeway, and would not pass through Little Tokyo. Section 4.18, Construction Impacts, of this Final EIS/EIR contains further detail regarding estimated construction durations, construction scenarios, and tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised based on the new TBM insertion site in this Final EIS/EIR. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR. Inserting the TBM at the Mangrove property would not result in new significant impacts or substantially increase the severity of impacts previously identified in the Draft EIS/EIR.

Worksite Traffic Control Plans will be developed in coordination with the Los Angeles Department of Transportation and presented to the community prior to construction activities. Metro will provide the community with updates regarding the construction schedule prior to and during construction.

Response to Comment PC76-5

Metro has refined the Locally Preferred Alternative and reduced the need for acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. Only the northern portion of the block would need to be acquired. Consistent with the community's request that Metro minimize business acquisitions, Metro does not plan to acquire the entire block. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to minimize dust, safety, vibration, and noise impacts throughout the construction process. Other construction staging areas farther from the center of Little Tokyo have been identified for contractor use. Metro believes that focusing construction staging activities away from the center of Little Tokyo would

reduce community impacts. Metro intends for any future development projects to be integrated with existing community businesses and resources. Preference for a station entrance on 1st Street, street-fronting retail, upper level residential and office uses, and additional parking is noted.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: [Metro.net] customer comment**
Date: October 19, 2010 10:01:20 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Friday, October 15, 2010 9:57 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Christopher
Last Name: Davidson
Email: cdmitridavidson@gmail.com
Phone: 8182818731
URL:

How will the regional connector connect with the Gold Line?] 1

PC77

Responses to Comments from Davidson, Christopher

Response to Comment PC77-1

The Regional Connector would connect with the Metro Gold Line via two new portals: one northeast of Temple and Alameda Streets, and one in the median of 1st Street just east of Alameda Street. This connection was described in greater detail in Section 2.3.6 of the Draft EIS/EIR and this Final EIS/EIR.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

1. Seniors want all the station signs and instructions in various languages/ English, Spanish, Japanese, Korean, including ticketing machines.
   Also the announcements of approaching train in Japanese and Korean will [1]

2. As residents of Little Tokyo and senior citizens, we want enforcement of the safety of Alameda St and 1st or 2nd during the construction years. Especially handicap access, rerouting bus route, detour, and please consider that a little bump on the street could be very crucial for seniors and disabled people. [2] Also please post or announce the re-routing or road closures in Japanese and Korean in a timely manner.. [3]

3. Seniors want to be able to have good air quality during construction. If they won't be able to open windows because of the dust, seniors want metro to install AC or air filters. [4]

4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Hiroko Yasuda
Signature

HIROKO YASUDA
Printed name

455 E 3RD ST #1412
LOS ANGELES CA 90013
Address

PC78

Responses to Comments from Yasuda, Hiroko

Response to Comment PC78-1

Metro already has some signage in English, Spanish, Japanese, and Chinese at selected stations. Metro is exploring the addition of more languages to ticket vending machines and train announcements.

Response to Comment PC78-2

Appropriate candidate mitigation measures included in Chapter 3, Transportation Impacts and Mitigation, and Section 4.15, Safety and Security, of the Draft EIS/EIR and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR include coordination with the City of Los Angeles and potentially affected transit operators, relocation of bus stops, providing alternate walkways for pedestrians around construction staging sites in accordance with Americans with Disability Act (ADA) requirements, and signage properly marking all pedestrian detour locations around staging sites in accordance with applicable local and state requirements. These mitigation measures would reduce safety impacts associated with project construction to the maximum extent feasible. As indicated in the Draft EIS/EIR and this Final EIS/EIR, safety impacts during construction of the Locally Preferred Alternative would be reduced to less than significant with incorporation of mitigation.

Response to Comment PC78-3

Comment Acknowledged. Metro will translate notices of detours or road closures into appropriate languages, which has been included in the following mitigation measure identified in Section 4.15.4.2, Safety and Security, and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

- Metro shall develop a Construction Mitigation Program that includes protocol for community notification of construction activities, including traffic control measures, schedule of activities, and duration of operations, with written communications to the community translated into appropriate languages.

Response to Comment PC78-4

As indicated in Section 4.5, Air Quality, and Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the Locally Preferred Alternative would not result in adverse impacts associated with PM_{10} or $PM_{2.5}$ emissions during construction with implementation of mitigation.

Dust emissions and dirt track-out will be minimized during construction through compliance with SCAQMD Rule 403. Projects are required to follow all of the Best Available Control Measures described in the rule. The following are several key measures applicable to this project:

- For cut and fill at large sites, pre-water with sprinklers or water trucks and allow time for penetration.
- Apply water or stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
- Track-out shall not extend 25 feet or more in cumulative length from the point of origin from an active operation. All track-out from an active operation shall be removed at the conclusion of each workday or evening shift.

If the disturbed surface area is five acres or more, or if the daily import or export of bulk material is 100 cubic yards or more, then at least one of the following precautions must also be taken:

- Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.
- Pave the surface extending at least 100 feet and at least 20 feet wide.
- Use a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- Install and use a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

Therefore, dust will not affect sensitive receptors adjacent to the Locally Preferred Alternative construction area. In addition, a Metro staff member will be assigned and a 24-hour hotline number will be posted on signage along the perimeter of active project construction sites to address day-to-day issues. Notices will also be sent out to adjacent property owners, which will indicate the hotline number and Metro contact and will be translated into appropriate languages.

Response to Comment PC78-5

As indicated above, a Metro staff member will be assigned and a 24-hour hotline number will be posted on signage along the perimeter of active project construction sites to address day-to-day issues. Notices will also be sent out to adjacent property owners, which will indicate the hotline number and Metro contact and will be translated into appropriate languages.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments on Draft EIS/EIR for Regional Connector**
Date: October 14, 2010 1:01:32 PM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, "'Ginny-Marie Brideau'" <Ginny@TheRobertGroup.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>

From: Jenny Hur [mailto:jennyhur916@gmail.com]
Sent: Wednesday, October 13, 2010 4:17 PM
To: Regional Connector
Subject: RE: Comments on Draft EIS/EIR for Regional Connector

October 13, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Savoy Resident
Unit # 333

--
Jenny Hur

PC79

Responses to Comments from Hur, Jenny

Response to Comment PC79-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC79-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

1. Seniors want all the station signs and instructions in various languages/ English, Spanish, Japanese, Korean, including ticketing machines.
   Also the announcements of approaching train in Japanese and Korean will [1]

2. As residents of Little Tokyo and senior citizens, we want enforcement of the safety of Alameda St and 1st or 2nd during the construction years. Especially handicap access, rerouting bus route, detour, and please consider that a little bump on the street could be very crucial for seniors and disabled people. [2] Also please post or announce the re-routing or road closures in Japanese and Korean in a timely manner.. [3]

3. Seniors want to be able to have good air quality during construction. If they won't be able to open windows because of the dust, seniors want metro to install AC or air filters. [4]

4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

JOHN MOCHIZUKI
Printed name

455 E. 3RD ST. # 1611
LOS ANGELES CA. 90013
Address

PC80

Responses to Comments from Mochizuki, John

Response to Comment PC80-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC80-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC80-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC80-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC80-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Kikue Hirase
Signature

KIKUE HIRASE
Printed name

2235o. CENTRAL AVE. #512
LOS ANGELES
CA. 90012
Address

PC81

Responses to Comments from Hirase, Kikue

Response to Comment PC81-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC81-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC81-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC81-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC81-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Kun Ja Kim
Signature

KUN JA KIM
Printed name

455 E 3RD ST # 706
L.A CA 90013

Address

PC82

Responses to Comments from Kim, Kun Ja

Response to Comment PC82-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC82-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC82-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC82-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC82-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Masumi Shinoki
Signature

Masumi Shinoki
Printed name

465 E. 3rd St. #1106
LA 90013

Address

PC83

Responses to Comments from Shinchi, Masumi

Response to Comment PC83-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC83-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC83-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC83-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC83-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Downtown Los Angeles Regional Connector Project**
Date: October 19, 2010 10:00:35 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: Michael Metcalfe [mailto:m.metcalfe@verizon.net]
Sent: Friday, October 15, 2010 6:05 PM
To: Regional Connector
Subject: Downtown Los Angeles Regional Connector Project

Dear METRO LA County MTA Decision-Makers:

The all-underground Regional Connector LRT alternative as currently planned, is an outstanding and, by far, the smartest option to select as the LPA. Please support the all-underground alternative. 1

Also, please doing everything possible to preserve the Fifth & Flower station. The immediate Fifth & Flower Street neighborhood contains an extraordinarily high concentration of potential ridership in the office towers, job centers & work place destinations. Together with the major hotels, conference facilities, retail & restaurant activity, as well as the great civic spaces around & within the Central Library and Bunker Hill, it would be a major mistake, and a probable loss of ridership, to cut out the Fifth & Flower Street station. Please keep it in the all-underground plan. 2

Thank you for late reminder to comment.
And thank you for creating what will be an outstanding, and as I like to call it, a "synergistic" addition to the entire regional transportation system. 3

Sincerely,
Michael S. Metcalfe
Principal

METCALFE ASSOCIATES
Urban Design
Development Planning
1421 Pandora Avenue
Los Angeles, CA 90024
Ph/Fax: 310-474-6418
Email: m.metcalfe@verizon.net

PC84

Responses to Comments from Metcalfe, Michael

Response to Comment PC84-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC84-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC84-3

Thank you for your comment.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

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2. As residents of Little Tokyo and senior citizens, we want enforcement of the safety of Alameda St and 1st or 2nd during the construction years. Especially handicap access, rerouting bus route, detour, and please consider that a little bump on the street could be very crucial for seniors and disabled people. [2] Also please post or announce the re-routing or road closures in Japanese and Korean in a timely manner.. [3]

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Kmija
Signature

MIJA KOH
Printed name

455 East 3rd street #1112
Los Angeles CA 90013
Address

PC85

Responses to Comments from Koh, Mija

Response to Comment PC85-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC85-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC85-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC85-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment P85-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Nobuko Iki
Signature

NOBUKO IKI
Printed name

223, S Central Ave #101
LA CA
90012
Address

PC86

Responses to Comments from Iki, Nobuko

Response to Comment PC86-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC86-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC86-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC86-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC86-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

NORIKO MOCHIZUKI
Printed name

455 E. 3RD ST. APT. 1611
LOS ANGELES, CA 90013

Address

PC87

Responses to Comments from Mochizuki, Noriko

Response to Comment PC87-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC87-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC87-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC87-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC87-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

From: "Kerman, Ann" <KERMANA@metro.net>
Subject: **Fw: Public Comment Metro Regional Connector Project**
Date: October 18, 2010 7:10:13 AM PDT
To: "'ginny@therobertgroup.com'" <ginny@therobertgroup.com>, "'Clarissa@TheRobertGroup.com'" <Clarissa@TheRobertGroup.com>, "Leung, Julie" <LEUNGJ@metro.net>, "Cornejo, Laura" <CORNEJOL@metro.net>

From: Robert Volk [mailto:rdv@volkproperties.com]
Sent: Friday, October 15, 2010 05:25 PM
To: Regional Connector
Cc: Kerman, Ann
Subject: Public Comment Metro Regional Connector Project

My family has owned land in Little Tokyo for over 125 years. In fact my Great Uncle, James Davies, was the person who subdivided the SW corner of 1st and Alameda as well as much of what is Little Tokyo today..

Over the years, Little Tokyo has had its ups and downs. The greatest low point came in 1942 when the Japanese Americans were sent to Detention Camps. After World War II, the Japanese Americans gradually returned to this community .Thanks to their tenacity and hard work, the Little Tokyo economy has gradually prospered in spite of having a major portion of the land taken for Parker Center and other City facilities.

A major step forward was the creation of the Little Tokyo Community Redevelopment Project by CRA over 35 years ago. Under CRA auspices the west side of Little Tokyo has flourished thanks to such projects as the construction of the Sumitomo Bank Building and the New Otani Hotel. However, the east side continued to anguish. Central Avenue was all but vacant until it was widened about 15 years ago between 1st and 2nd Streets. Now with the construction of the Japanese American National Museum, the Office Depot project. numerous restaurants and a variety of condominium and apartment projects, this ares is flourishing. 1

The MTA proposal to take all of the Block bounded by 1st, Alameda, 2nd and Central for the Metro Regional Connector will be devastating to all of Little Tokyo. It will totally disrupt traffic for the 4 plus years of construction. Small merchants will not be able to survive the lost business and revenues for this long a period. The statement was made in one of the meetings that typically less than 50% of businesses survive the completion of such a major construction project.

WHY MUST THIS ETHNIC COMMUNITY BE SACRIFICED JUST SO THAT SOME FUTURE COMMUTERS WILL NOT TO MAKE ONE TRANSFER?

Robert D. Volk

PC88

Responses to Comments from Volk, Robert D.

Response to Comment PC88-1

The information about the history of the Little Tokyo neighborhood is appreciated. The refined Locally Preferred Alternative presented in Chapter 2 of this Final EIS/EIR avoids acquisition of approximately half of the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue in response to community input received during the Draft EIS/EIR process. Refinements have also been made to eliminate cut and cover activities on 2nd Street and begin tunnel boring machine operations on the Mangrove property instead of at 2nd and Central. These refinements would reduce impacts to businesses and result in less traffic congestion during construction. Metro will work with the community throughout the construction period to minimize impacts to businesses, and believes that the mitigation measures presented in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR will offer adequate protection for businesses. Metro will implement these mitigation measures identified in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative to support the Little Tokyo community while achieving the project purpose of eliminating transfers from the light rail system.

The statement that typically less than 50 percent of businesses survive large-scale construction projects appears to be misinformed. No Metro project has ever resulted in such business losses.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Sakiko Nishimura
Signature

SAKIKO NISHIMURA
Printed name

455 E. 3RD ST. 713
Los Angeles, Ca. 90013
Address

PC89

Responses to Comments from Nishimura, Sakiko

Response to Comment PC89-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC89-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC89-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC89-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC89-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Sanok Chang
Signature

SAN OK CHANG
Printed name

267 S. San Pedro St #222
Los Angeles CA 90012
Address

PC90

Responses to Comments from Chang, San Ok

Response to Comment PC90-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC90-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC90-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC90-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC90-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Young A. Koh
Signature

SANG SOO KOH
Printed name

455 East 3rd Street #1112
~~Los Angeles CA 90013~~
Address

PC91

Responses to Comments from Koh, Sang Soo

Response to Comment PC91-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC91-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC91-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC91-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC91-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

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Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

Simon S. Yoon
Printed name

455 E. 3rd St. #1012
L.A. CA 90013
Address

PC92

Responses to Comments from Yoon, Simon S.

Response to Comment PC92-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC92-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC92-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC92-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC92-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Suk Hee Kim
Signature

SUK HEE KIM
Printed name

555 E 3rd St # 916
L.A. CA. 90013

Address

PC93

Responses to Comments from Kim, Suk Hee

Response to Comment PC93-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC93-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC93-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC93-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC93-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

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3. Seniors want to be able to have good air quality during construction. If they won't be able to open windows because of the dust, seniors want metro to install AC or air filters. [4]

4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

TADAO SAKAMOTO
Printed name

455 E. 3RD ST. APT. 313
LOS ANGELES CA. 90013

Address

PC94

Responses to Comments from Sakamoto, Tadao

Response to Comment PC94-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC94-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC94-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC94-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC94-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

1. Seniors want all the station signs and instructions in various languages/ English, Spanish, Japanese, Korean, including ticketing machines. Also the announcements of approaching train in Japanese and Korean will [1]

2. As residents of Little Tokyo and senior citizens, we want enforcement of the safety of Alameda St and 1st or 2nd during the construction years. Especially handicap access, rerouting bus route, detour, and please consider that a little bump on the street could be very crucial for seniors and disabled people. [2] Also please post or announce the re-routing or road closures in Japanese and Korean in a timely manner.. [3]

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

TSUTAE WAKAYAMA
Printed name

455 E. 3RD ST. APT. 1614
LOS ANGELES, CA 90013

Address

PC95

Responses to Comments from Wakayama, Tsutae

Response to Comment PC95-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC95-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC95-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC95-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC95-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

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4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

YAEKOOBANA
Printed name

349 E, 1ST St #3C
LA CA 90012

Address

PC96

Responses to Comments from Obano, Yaeko

Response to Comment PC96-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC96-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC96-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC96-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC96-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

.

Dolores Roybal Saltarelli,
Project Manager, Metro,
1 Gateway Plaza, MS 99-22-2,
Los Angeles, CA 90012

October 15, 2010

Dear Ms. Saltarelli,

1. Seniors want all the station signs and instructions in various languages/ English, Spanish, Japanese, Korean, including ticketing machines.
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3. Seniors want to be able to have good air quality during construction. If they won't be able to open windows because of the dust, seniors want metro to install AC or air filters. [4]

4. Please let the seniors know where and how to complain during construction when something come up. [5]

Signed,

Signature

YOSHIKO SAKAMTO
Printed name

455 E. 3RD ST. APT. 313
LOS ANGELES, CA. 90013

Address

PC97

Responses to Comments from Sakamto, Yoshiko

Response to Comment PC97-1

Comment acknowledged. Please refer to Response to Comment PC78-1, above.

Response to Comment PC97-2

Comment acknowledged. Please refer to Response to Comment PC78-2, above.

Response to Comment PC97-3

Comment Acknowledged. Please refer to Response to Comment PC78-3, above.

Response to Comment PC97-4

Comment Acknowledged. Please refer to Response to Comment PC78-4, above.

Response to Comment PC97-5

Comment acknowledged. Please refer to Response to Comment PC78-5, above.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: [Metro.net] customer comment**
Date: October 19, 2010 10:01:47 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Saturday, October 16, 2010 7:30 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Jaime
Last Name: Altamirano
Email: j.altamirano.jr@gmail.com
Phone:
URL:

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally
support the Fully Underground Alternative that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation
and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on 2

residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures, as well as compensation to small businesses that will be affected. 2 cont'd

Thank you for your consideration.

Sincerely,

Savoy Resident
Unit #168

PC98

Responses to Comments from Altamirano, Jaime

Response to Comment PC98-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC98-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative with the goal of supporting businesses throughout the construction phase. This will include targeted marketing efforts and other in-kind assistance. Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction in order to preserve the accessibility of the neighborhood during construction. Metro will minimize street closures, and will maintain access to businesses throughout the construction process.

Leung, Julie

From: Cornejo, Laura
Sent: Wednesday, September 15, 2010 2:41 PM
To: Leung, Julie
Subject: FW: *This does affect you & your unit*

From: Regional Connector
Sent: Wednesday, September 15, 2010 2:28 PM
To: 'Ginny Brideau'; Clarissa Filgioun; Roybal, Dolores; Cornejo, Laura
Subject: FW: *This does affect you & your unit*

From: Jonno Agnew [mailto:jonno.agnew@sbcglobal.net]
Sent: Tuesday, September 14, 2010 6:13 PM
To: higginsbuilding@yahoogroups.com
Cc: Regional Connector
Subject: *This does affect you & your unit*

For those new to the building (or needing a reminder), two important meetings are scheduled for the **Metro's Regional Connector** light-rail plan.

This project involves study of three build alternatives for light rail along second street (at Main) and therefore would directly impact the Higgins Building, your investment and/or quality of life. The three alternatives are: Fully underground; At-Grade and Underground emphasis.

The Higgins Lofts homeowners association, as well as other community groups in Little Tokyo, have all repeated urged (in writing and in person) that the project be built as a subway (Fully underground), rather than run at-grade (street level) in front of the building. However, I believe we need **sustained community involvement to maximize the chances of a good outcome for the building and the community**.

The first meeting is being held at the **Japanese American National Museum**, 369 E 1st St in Little Tokyo on **September 28, 6:30pm - 8pm**. The second meeting is being held at the Los Angeles Police Headquarters, 300 W 1st St. in the **Deaton Auditorium** (across the street from the Higgins), on **October 4, 11:30am-1pm**. 1

If you cannot attend either of these dates in person, I urge you to write a letter or email outlining your views and **support of the fully underground option** so that it becomes part of the permanent record:

email: **regionalconnector@metro.net** or

mail: Dolores Roybal Saltarelli, Project Manager
Metro
One Gateway Plaza, 99-22-2
Los Angeles, CA 900012

Finally, to mix my transportation metaphors and throw Joan Springhetti under the bus (so to speak), may I suggest if you have questions, that Joan is an excellent person to contact on this subject. She's been leading the charge and is very informed about this topic.

I the hopes of someday going down an escalator to catch the subway, yours,

1 cont'd

Jonno Agnew (President of the Board)
Higgins Lofts
108 W 2nd St #906
Los Angeles, CA 90012

PC99

Responses to Comments from Higgins Lofts, Agnew, Jonno

Response to Comment PC99-1

Comment acknowledged. Metro looks forward to ongoing coordination with the Higgins Building.

From: Stacie Chaiken [mailto:stacie.chaiken@gmail.com]
Sent: Sunday, October 17, 2010 02:00 PM
To: Regional Connector
Cc: Kerman, Ann; Ginny Brideau <Ginny@TheRobertGroup.com>; Greg Fischer <greg.fischer@lacity.org>; Jan Perry <Jan.Perry@lacity.org>
Subject: Comments on Regional Connector - PLEASE CONFIRM RECEIPT

To whom it may concern:

PLEASE CONFIRM YOUR RECEIPT OF THIS EMAIL

I am writing to add my comments to those of the Higgins Building Board of Directors and Higgins residents with regard to the EIR for the Regional Connector.

I am a resident of the building, and served until February of 2010 as the Chair of the Architecture and Design Committee of the Board of Directors. In that role, I have been in conversation with MTA Community Relations Director Ann Kerman and the Planning Committee about the project for a couple of years. I am also part of the team that put together the application for the Higgins' Historic Landmark designation in 2007, and am in conversation with both the City's Office of Historic Resources and the Los Angeles Conservancy, both of whom serve as consultants and important advocates for the building. 1

I conclude that the EIR, as presented, is inadequate and request that it be redone to more thoroughly and accurately address the following issues:

1. Concern about plans on which you base predictions about the effect of proposed construction on the Higgins Building

To my knowledge, no one from the EIR team or the MTA has entered the building or made true inspection of the building. The building is one hundred years old this year, and plans for the building, in terms of where our basement, sub-basement, and foundation lie sub-surface, have on more than one occasion proved unreliable. 2

I strongly request an on-site review of the building, so that your estimates of how the underground drilling will effect our foundation are based on actual and current measurements. Once those exact measurements have been made, I request that the EIR contain precise distances from Higgins property—above- and below-surface—that drilling and/or construction is intended.

I also request that an adequate contingency fund be included in the project in the event of damage to the Higgins Building, so that when the unexpected does occur, we are not mired in court suits to get the funding for whatever repairs may be necessary. The contingency fund should be large enough that, should the building be destroyed by your project, or made unlivable, there will be fair compensation to homeowners, who will need to find somewhere else to live.

2. Concern about proposed removal of the Wilcox Building at the corner of Second and Spring, and staging of construction directly adjacent to the Higgins Building

We live here. We have endured, for the past four years, the demolition of the former CalTrans building and construction of the LAPD headquarters across the street and the demolition and construction of the LAPD carport on Main Street, south of the building. Now we are looking at another major construction project that will further decay our quality of life and property values, 3

not to mention the threat to the infrastructure of this historic site.

There is a large parking lot on Second Street, between Spring and Broadway that would make far more sense to me as a staging site than the lot immediately adjacent to our home.

Please, figure out a way to keep the construction far, far away from the Higgins Building.

3 cont'd

3. Challenge to the EIR finding that the Higgins Building is not eligible for National Registry

The Office of Historic Resources and the LA Conservancy, as well as our own research, has led us to believe otherwise. Please cite specifically what disqualifies the Higgins Building from that designation, and what that disqualification means to you.

Please provide us with a basis for the finding that we are ineligible for National Registry status.

I am sending in a separate email our application for Landmark status, in the event that your EIR team did not review it.

4

4. Request for funding for independent assessment of potential damage to the Higgins Building

I request that the MTA provide funding for an assessment of potential Regional Connector construction damage to the Higgins Building by an independent expert in the restoration and preservation of historic buildings.

5

5. Reiteration of request for construction mitigation funding for the Higgins Building

In January 2010, Higgins HOA Board Members Martin Berg, Cheryl McDonald and I met with members of the Regional Connector Planning Committee, MTA's Ann Kerman, and Ginny Brideau, and Lambert Giessinger (Historic Preservation Architect,
Historic Resources) in the Office of Historic Resources at City Hall.

We discussed possible approaches to financial mitigation for the blow to our building — in the best of all circumstances — of the prolonged construction of the Regional Connector.

First, we discussed the possibility of MTA funding prophylactic stabilization of the building's facade in anticipation of the drilling. The building is old, and its facade ornamentation already fragile.

We also spoke about the one percent of the total cost of the project that is mandated for use for public art and the precedent set in Portland, Oregon (whose mid-city transit system serves as model and promise here) that public-art funding be used for the preservation and restoration of historic buildings. In addition to mitigation funding for essential preservation, we would like some of that public-art funding to be dedicated to cosmetics and restoration of this grand old building, standing proudly and prominently in our Civic Center.

The effect on the building of the project, as currently proposed, is far greater than we were led to expect, with the proposed demolition of the Wilcox Building and Higgins-adjacent staging. We request a continuation of the conversation about mitigation as soon as possible.

6

s t a c i e c h a i k e n
the higgins building
los ángeles 90012
310.713.8841

www.staciechaiken.com
blog: staciechaiken.wordpress.

HISTORIC-CULTURAL MONUMENT APPLICATION

photo © 2006 Brad Buckman

Higgins Building

At the corner of 2nd and Main in Los Angeles, California

HIGGINS BUILDING

HISTORIC-CULTURAL MONUMENT APPLICATION
Los Angeles Cultural Heritage Commission
200 N. Spring Street, Room 66. Los Angeles, California, 90012. (213) 978-1183

IDENTIFICATION

1) **Name of proposed monument:** The Higgins Building
2) **Street address:** 108 W. 2nd Street, Los Angeles, CA 90012
3) **Assessor's parcel numbers:** From 5149 006 010 through 5149 006 151
4) **Legal description:** Lot 1, Tract 53327
5) **Range of addresses:** Residential: 108 W. 2nd Street, # 201-215, 301-315, 401-415, 501-515, 601-615, 701-715, 801-815, 901-915, 1001-1015.
   Commercial: 108 W. 2nd Street, #101, 102, 103, 104, 105, 106, 107, 108
6) **Owners:** Private ownership, 135 individual residences and 7 commercial spaces.
   Present use: Residential and commercial. **Original**: Offices and commercial.

DESCRIPTION

7) **Architectural style:** French Renaissance influences
8) **Architectural description of building:** (Attached)
9) **Construction:** 1909-1910 factual
10) **Architect, designer or engineer**: Architecture by A.L. Haley; engineering and architecture by A.C. Martin.
11) **Contractor or other builder:** MA Rowland and Kenneth Pruess (concrete), A. Barmann (steel), San Francisco Cornice Company (doors and windows), B.V. Collins (tile and marble), H.J. McGuire (excavation)
12) **Dates of enclosed photographs:** 1910, 1916, 1941, 1959, 2006
13) **Condition:** Good
14) **Alterations:** Ground-level storefronts have been altered by original and subsequent owners; basement levels and the rooftop have been modified. Upper 9 floors have been converted from offices into residential with 231 units combined into 135
15) **Threats to site**: none known
16) **Site:** original

SIGNIFICANCE

18) **Historic and architectural importance:** The Higgins Building, located within the downtown historic district, is an important early example of monolithic concrete construction in a high-rise building. It is also important for the role it played in the cultural and civic development of Los Angeles.
19) **Sources:** (Attached)
20) **Preparation of application:** Date: Dec. 4, 2006.

Prepared on behalf of the Higgins Lofts Homeowners Assn. by:

Stacie Chaiken
108 West 2nd St, #507, LA, CA 90012
phones: 310 450 1312, 310 713 8841
stacie.chaiken@gmail.com

Joan Springhetti
108 W. 2nd St. #613, LA, CA 90012,
phones: 213 621 7895, 714 271 6612
jnspr@myloft.net

HIGGINS BUILDING

ARCHITECTURAL DESCRIPTION

The Higgins Building is a 10-story monolithic concrete high-rise constructed in 1909-1910 with architectural details in the French Renaissance style. It is rectangular in shape – 120 feet facing Main Street, 160 feet facing 2nd Street – and has a flat roof. At its center is a light well that brings sunlight and air to the interior.

Its clean lines, visible structural columns and architectural belts at the second and eighth stories distinguish the exterior. Large 6-foot-by-8-foot windows occur in pairs and indicate the original office configurations. The exterior is fully detailed on three sides; capping the building is a deep cornice and crown of white lights designed to show off the building and its electrical power plant in the sub-basement.

The building's support columns, beams, walls, floors and roof are all constructed of poured concrete reinforced with steel rebar; architectural details on the exterior and interior are also of poured concrete. After pouring forms were removed, all walls were finished with an additional coat of cement. To make the building fireproof, all wood doors and window frames were clad in zinc sheeting – a detail that remains one of the building's most distinctive. Narrow channels left at the interior edges of the concrete floors held the only exposed wood in the entire building: tack strips so carpets could be secured.

The lobby is finished in Italian marble, as is the bottom half of most hallway walls. Two staircases, including the one leading from the lobby, are also marble-finished. Hallway and lobby floors are in small black and white mosaic tile with a Greek key border; elevator doors and stair railings are of ornamental metal.

Although the Higgins Building has undergone a number of modifications since its initial construction and suffered losses to vandals during a period of disuse, its architectural integrity remains intact.

HIGGINS BUILDING

ARCHITECURAL AND CULTURAL SIGNIFICANCE

The Higgins Building, named for the man who built it, Thomas P. Higgins, is an important example of early monolithic concrete construction in a high-rise building. It set a new height record in Los Angeles for concrete, then considered unproven for tall buildings. Every element of the Higgins was designed to be fireproof – and it was engineered to withstand earthquakes. Years ahead of when electricity would be offered as a utility in Los Angeles, the Higgins had a self-contained electrical power plant in its basement. In addition to advancing the use and acceptance of concrete construction, the building launched the engineering and architecture legacy of A.C. Martin and led its primary architect, A.L. Haley, to another major concrete project, the Lanterman House in La Canada, which is on the National Register of Historic Places. The tenants who occupied the Higgins Building – from attorney Clarence Darrow to the leadership of the Catholic diocese – helped shape the cultural life and civic spirit of the city.

▤ ▤ ▤

When Thomas Patrick Higgins arrived in Los Angeles in 1902, he had money to spend – a fortune made in the copper mines of Arizona. He was born July 12, 1844, in Ireland, near Boyle, County Roscommon. He came to the United States at about age 20, first doing iron mining in New York, then lumbering in Wisconsin.

He was one of only a handful of settlers – all hardscrabble prospectors – in Bisbee, Ariz., when he arrived there in 1877. By the time he left Arizona for Los Angeles, he was nearly 60 and had made his mark on that state's economy and landscape. Ready to settle in a new home and invest in still-young Los Angeles, he took cash from the sale of mine holdings and began investing in real estate.

One of his early projects was the Bisbee Hotel on East 3rd Street. Now known as the St. George Hotel, it was recently restored as housing for the homeless. As construction on the Bisbee was wrapping up in 1903, Higgins bought a large parcel just a block away, across the street from St. Vibiana's Cathedral. He paid $200,000 cash for the lot on the southwest corner of 2nd and Main.

It was where Higgins was determined to make a lasting impression in Los Angeles by constructing an office and retail building that would be architecturally unrivaled. It would tower over its surroundings, be "absolutely fire and earthquake proof" – a timely selling point given the devastation in San Francisco – and make the best use of modern technology.

Higgins hired architect A.L. Haley and engineer A.C. Martin to make his building a reality – and the three men collaborated to create what would quickly be considered one of the best examples of monolithic concrete construction in the United States. At a time

when steel, brick and wood were the standard, Haley and Martin pushed the accepted limits of concrete – the material that would eventually become and remains favored for construction of nearly all types, including the world's very tallest skyscrapers.

In an embrace of another new technology, the basement of the Higgins Building contained one of the earliest electrical generating stations in Los Angeles. The city would not put up its first power pole until 1916. In the Higgins, six years earlier, massive boilers and two four-valve engines – one connected to a 75-kilowatt electric generator, and one to a 50-kilowatt electric generator – formed a power plant that Haley described as "the most complete found in any Los Angles building."

The list of advertised amenities included hot and cold running water in each office, electric lights, steam heat, purified water (sent through filters as it entered the building), telegraph and telephone service and three high-speed passenger elevators.

After construction was well underway, Higgins decided that he needed to build higher than the originally planned 8 stories – he was not to be outdone by an emerging plan for a 10-story building at 2nd and Broadway.

Taking the Higgins two stories higher meant getting the city to change its ordinance limiting the height of concrete buildings. A few years earlier – over the objections of brick, steel and stone men who had been petitioning to have concrete construction outlawed – the city council adopted a policy that allowed for the use of concrete within strict limits. Then, in 1910, with the Higgins half-built, Haley made an impassioned and successful case for raising the height limit to 133 feet – a decision the Los Angeles Times would characterize as "radical" and that generated a fierce debate in the architectural community.

To accommodate the greater height, Martin reengineered the building to stiffen the walls from the fourth story upward. So impressed with the building was The Architect and Engineer of California that it featured the Higgins in an 18-page spread in its April 1910 issue – with construction photos, diagrams and detailed specifications on the concrete process.

In a Jan. 2, 1910, article in the LA Times, Haley describe the many benefits concrete held for Los Angeles: "Reinforced concrete construction is made economical from the fact that material can be obtained from the local market, while the best structural steel can be manufactured … only by the heavy rolling mills of the East. There is also a great time saving in this kind of building. The fourth and fifth floors of the Higgins building, for example, were built complete within a period of twenty-eight days." In short, this was the material that would allow Los Angeles to quickly and efficiently build itself into a great city.

His partner in the design of the Higgins, Albert Carey Martin, had arrived in Los Angles in 1904 as a new engineering graduate from the University of Illinois. When the Higgins was completed in 1910, Martin was just 30 years old and made a name for himself with his concrete work on the project. Nearly a century later, the engineering and architecture

firm he launched – and would be joined in by his sons – still bears his name. "You can't envision Los Angeles without their work," said Ken Starr, state librarian and urban planner, in a 1997 magazine article. "They are among the half-dozen architectural firms that over the past 100 years have given us the major buildings of Los Angeles, the city in its public dimension." Martin headquartered his company in the Higgins for 35 years – and worked there on plans for such landmarks as Grauman's Million Dollar Theater (1917), St. Vincent de Paul Roman Catholic Church (1925) and Los Angeles City Hall (1928). By the time of Martin's death in 1960, his firm had worked on some 1,500 building projects – and cemented its reputation with innovative use of concrete.

The architect on the Higgins Building – Arthur L. Haley – was 45 years old and already established for his commercial and residential work in the city. Born in Malone, N.Y., in 1865, he had been designing buildings in Los Angeles since at least 1899, in particular downtown apartment buildings and residential hotels that helped build the city's housing stock. Many featured his patented invention – "The Sanitary Concealed Metal Wall Bed" – which is credited with altering the layout of thousands of apartments on the West Coast.

In 1904 he built a large home for the president of the LA City Council – the Pomery Powers Residence at 1345 Alvarado Terrace. Today, it is a Los Angeles Historic-Cultural Monument and elegantly houses a drop-in center for the homeless. The year after Haley finished the Higgins Building, he was commissioned to build a fireproof home for Dr. Roy Lanterman, a refugee from the San Francisco earthquake and fires. The house, restored to its original condition, is recognized as one of the earliest homes of poured concrete in the region. Open to the public, it houses a museum on La Canada history.

Despite his remarkable achievements, several years after work on the Higgins Building was completed, Haley's career became marred by charges of investor fraud – and by bankruptcy. He is believed to have left the city, perhaps for the Seattle area.

▤ ▤ ▤

When the Higgins Building opened in the last half of 1910, it quickly became the cultural center that its millionaire developer had imagined. It was the place to see and be seen – and by an eclectic mix. Attorneys, businessmen, socialists, clerics and chess champs would all walk its halls.

The Chess and Checker Club of Southern California was founded in the Higgins; the Women's Progressive League made it its headquarters and held luncheons on the rooftop. The first piece of mail delivered by regularly scheduled aerial post – sent Sept. 9, 1911, from England – arrived 17 days later, addressed to J.A.S. Furlonge, 411 Higgins Building. The Assn. of Liquor Dealers helped spearhead the fight against prohibition from the Higgins; the volunteer City Cleaning Bureau sought to clean up vacant lots.

Among those who set up offices on the 9th floor was criminal defense attorney Clarence Darrow, who came in from Chicago to defend the McNamara brothers, charged in the deadly Oct. 1, 1910 bombing of the Los Angeles Times. The brothers were spared the

death penalty after Darrow advised them to plead guilty. The case was not over for Darrow, however, who was forced to stay in Los Angeles to defend himself against charges he bribed a juror. After two lengthy trials, he was found not guilty. The bombing of The Times and its aftermath were pivotal events in the labor history of Los Angeles – and the case was pivotal in the life of Darrow. By the time he left LA, his reputation was tarnished and his health fragile. His most famous case, the Scopes Monkey Trial, would not come for another 14 years, but his trials in Los Angeles, personally and in court, had a dramatic impact on him.

Job Harriman, a labor attorney and a national leader in the socialist movement, had already set up his offices in the Higgins when Darrow came to town. Harriman would serve as co-counsel in the bombing case and the Higgins became the defense team's headquarters. Harriman, the onetime vice presidential candidate on the Eugene Debs ticket and candidate for governor of California, would run nearly successful campaigns (in 1911 and 1913) to become socialist mayor of Los Angeles. It was also in the Higgins that he developed his plans for a socialist community, Llano del Rio Colony, which was established in 1914 in the Antelope Valley. It struggled and eventually moved to Louisiana, but is considered one of the most important utopian colonies in the American West. Harriman died in Los Angeles in 1925.

Many early tenants in the Higgins Building were lawyers and investors, but its star became the General Petroleum Co. — a highly successful independent firm that would become one of the precursors to Mobil Oil. After starting in a single small office in 1911, it quickly took command of the 10th Floor and eventually occupied nearly the entire building. General Petroleum had refineries and pipelines throughout the area and is credited with the find in 1936 of the last major oil reserve in the LA Basin.

The Higgins served as the Chancery Office for the Catholic Diocese of Los Angeles and Monterey for nearly two decades. With the arrival of Bishop John J. Cantwell in 1917, the chancery moved from a house next to St. Vibiana's to the 8th floor of the Higgins – overlooking the cathedral.

Despite Thomas Higgins' grand vision for the north end of downtown, the focus of development began shifting to the south and west. He did not live to see the turn, however – he died March 15, 1920, at age 76.

Higgins, who never married, was eulogized as a major contributor to the cultural and social life of the city. He readily lent his support to causes Irish and Catholic. Despite his extensive mining wealth and real estate holdings, his home at 12th Street and Magnolia Avenue was large but unimposing. He supported charities in Los Angeles and Arizona, and prided himself in funding college educations for numerous young men he saw as deserving. And, before and after his death, he supported his extended family and their descendents, many in Ireland and a number of whom settled in California.

Higgins is buried in Los Angeles, at Calvary Cemetery, alongside his sister and other relatives in a family mausoleum – designed in 1904 by A.L. Haley.

In 1949, the Higgins Building underwent a major shift: General Petroleum and its signature symbol – the Pegasus – moved out and into a brand-new building at 6th and Flower. The Higgins Estate, which still operated out of the Higgins Building, called it quits that year, too, liquidating its real estate and other holdings.

The Higgins Building was sold for about $1 million to the County of Los Angeles, which was looking for a new headquarters for its Bureau of Engineering. It was given a new name: the Los Angeles County Engineering Building – which is how many in Los Angeles remember it. After more than 25 years of overseeing construction projects large and small from one of the city's strongest buildings, the county determined that the department needed more modern quarters and pulled up stakes in 1977.

Abandoned to the elements for the next two decades, the Higgins became such a painful eyesore that it was the subject of a 1997 article in the LA Times Magazine, "The Building That Time Forgot." Its windows gone and doors boarded up, only pigeons, human trespassers and vandals visited it.

When its future seemed bleakest, the Higgins Building was sold – in 1998 for just over $1 million – and it began life again.

It became one of the first of what would be many adaptive reuse projects that have helped to revitalize downtown. Its original name reclaimed, the Higgins Building reopened in 2003 with its 231 offices converted into 135 residences and its 7 ground-level commercial spaces ready for new enterprises.

It had survived, in good times and terrible ones, and as its builders had intended – resistant to fire and earthquakes. Today, it is filled with homeowners and businesses drawn to its architecture and history – and to bringing new energy to downtown at the turn of a second century.

HIGGINS BUILDING

SOURCES

The Architect and Engineer of California, Pacific Coast States. (April 1910), "A 10-story Monolithic Reinforced Concrete Building." (LA Public Library) *Attached*

Los Angeles City Directories. (LA Public Library) 1911-1940

Los Angeles Times. "Big Sale of Copper Mines" (May 10, 1903); "Second and Main Street Corner Sold" (July 18, 1903); "Would Prohibit Concrete Buildings" (Oct. 23, 1905); "Hollow-Block Men Agitated" (Oct. 30, 1906); "May Reach 10 Stories," (Dec. 26, 1909); "Great Cement Deposits of Southland to Provide Material for Skyscrapers of Future" (Jan. 2, 1910); "Half Million Dollar Block at Second and Main" (June 23, 1909); "Believes in North End" (Jan. 16, 1910); "Going Higher. Higgins Building Will Have Ten Stories" (March 2, 1910); "New Ordinance Knocks Old Act Topsy-Turvy" (May 27, 1910); "Are Buildings to Go Higher?" (April 3, 1910); "Players Form a Chess Club" (Dec. 11, 1910); "Women's Progressive League Inaugurates Plan for New Organization" (March 17, 1912); "Mail Here by Aerial Post; (Sept. 29, 1911); "Haley Makes Hot Reply" (Feb. 26, 1911); "Great Philanthropies by Late Thomas Higgins Bared" (March 19, 1920); "Albert C. Martin Sr., 80, Noted Architect, Dies" (April 10, 1960); "A Socialist Who Was Almost Mayor" (Oct. 31, 1999), and other articles.

Los Angeles Times Magazine. "The Trials of Clarence Darrow," by Geoffrey Cowan (May 16, 1993); "The Building that Time Forgot" by Ed Leibowitz (Aug. 17, 1997)

Thomas P. Higgins family records, shared by Moira G. Bailis (grand-niece) and Thomas P. Higgins (great grand-nephew), including Higgins Estate records, 1914-1949.

The Longford (Ireland) Leader. "A Great Irishman, The Wonderful Life Story of the Late Mr. Thomas Higgins, Millionaire, Mine Owner" (April 3, 1920)

USC Libraries. USC Family Magazine, "Building Los Angeles" by Linda Arntzenius (Fall 1997); "Plugged In: The History of Power in Los Angeles" (published online)

Who's Who on the Pacific Coast, 1913. (LA Public Library) A.L. Haley

Port of Los Angeles. The California Petroleum Co., a history of the LA port

Encyclopedia of California's Catholic Heritage. Msgr. Francis J. Weber (2001)

American Utopia: a brief history of Llano del Rio Cooperative Colony. Produced by Louisiana Public Broadcasting.

Lanterman House. Archival information on concrete home and architect A.L Haley

LA Department of Building and Safety. Building permits for Higgins Building

HIGGINS BUILDING

IMAGE KEY PLAN

#1. Thomas P. Higgins (1844-1920). 1916 portrait of namesake. Courtesy Moira G. Bailis.

#2. Postcard. Higgins Building promotional postcard published @ 1908 by Newman Postcard Co. Courtesy Thomas P. Higgins.

#3. At 8 Stories. Architectural sketch and article introducing plans for 8-story Higgins Building. Published June 23, 1909, Los Angeles Times.

#4. At 10 Stories. Architectural sketch and article announcing Higgins Building height will increase to 10 stories. Published Jan.16, 1910, Los Angeles Times.

#5. First-Floor Plan. Plans by architect A.L. Haley for lobby and commercial spaces in Higgins Building. Published in Architect and Engineer of California, April 1910.

#6. Typical Floor Plan. Plans by architect A.L. Haley for offices on floors 2-10 of Higgins Building. Published in Architect and Engineer of California, April 1910.

#7. Sub-basement Plan. Plans by architect A.L. Haley for power plant in sub-basement of Higgins Building. Published in Architect and Engineer of California, April 1910.

#8. Power plant. 1910 photo of one of the engines in the power plant in sub-basement of Higgins Building. Published in Architect and Engineer of California, April 1910,

#9. Construction. 1910 photo looking west from 2nd Street, the Higgins Building as 8th and 9th stories are being added. USC Digital Archives/Ticor.

#10. Clarence Darrow and Job Harriman. 1910 or 1911 photo of co-counsels in defense of McNamara brothers, accused of bombing the Los Angeles Times. Darrow, standing at center, and Harriman, seated at left, had offices in the Higgins Building. Also shown are attorney Joseph Scott, Mrs. Ortie McManigal (whose husband was among the accused) and three children. USC Digital Archives.

#11. General Petroleum era. 1941 photo of Higgins Building during period it was headquarters of General Petroleum Co. Photo by Art Streib. Published Jan. 29, 1941, Herald Examiner. (USC Digital Archives/Herald Examiner).

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#12. County Engineering Building. 1959 photo taken from Main Street shows back of renamed Higgins Building during period it was owned by Los Angeles County and housed the Engineering Department. (USC Digital Archives/LA Examiner)

#13. Adaptive Reuse. Sept. 12, 2006 view from 2nd and Main after offices converted to residential lofts and Higgins Building name restored. Photo by Brad Buckman.

HIGGINS BUILDING

ADDITIONAL MATERIALS

Compact Disc. CD contains the photographic images and text of this application.

"A Ten-Story Monolithic Reinforced Concrete Building," by A.L. Haley. The architect's account of the specialized concrete construction methods used in the Higgins Building. Published in The Architect and Engineer of California, April 1910. Los Angeles Public Library Archives.

"The Building Time Forgot," by Ed. Leibowitz. An account of the history of the Higgins Building when its future was bleakest. Published Los Angeles Times Magazine, August 17, 1997.

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PC100

Responses to Comments from Chaiken, Stacie

Response to Comment PC100-1

Comment acknowledged. Please refer to Responses to Comments PC100-2 through PC100-6, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC100-2

A comprehensive pre-construction survey of the Higgins Building will be performed prior to construction to document the building's condition and verify construction plans. This will be done after the Final EIS/EIR process has been completed; therefore, inclusion of this level of detail in the environmental document will not be possible. Findings of the pre-construction survey will be shared with the homeowners association. Metro will request permission to place vibration monitors in the building to ensure that vibration from the tunnel boring machines does not exceed acceptable thresholds and cause damage to the building. Metro will verify any damage to the building that occurs as a result of Regional Connector construction and restore the building to its pre-construction survey condition. Metro will compensate homeowners should temporary displacement be necessary as part of such repairs. Funding for this type of contingency is included in the financial plan presented in Chapter 6 of this Final EIS/EIR.

Response to Comment PC100-3

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

Response to Comment PC100-4

Metro reviewed the background research and other information on the Higgins Building including the application for California Landmark Status. As indicated in the historic property inventory form, the building is eligible for the California Register due to its association with Job Harriman and Clarence Darrow. Background research did not indicate that the building is eligible for the National Register under Criterion B for its association with these individuals. Although the building had tenants who were noted for their involvement with the development of the oil industry in California, background research did not indicate that the Higgins Building is the location of significant events relating to those activities, therefore the building is not eligible for the California Register under Criterion 1 or the National Register under Criterion A. Due to the loss of its integrity of design, workmanship and materials from alterations, the building was recommended as not eligible for the California Register under Criterion 3 or the National Register of Historic Places under Criterion C. The State Historic Preservation Officer reviewed the inventory form and concurred with Metro's determination on June 1, 2010. No additional information has been presented to indicate that the building is eligible for the National Register.

Response to Comment PC100-5

Metro will hire a qualified contractor to perform a pre-construction survey of the Higgins Building, including analysis performed by an architectural historian or historical architect who

meets the Secretary of Interior's Professional Qualification Standards, as indicated in Section 4.12.1.4.3 of the Draft EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment PC100-6

Appropriate mitigation measures identified in Section 4.7, Noise and Vibration, of the Draft EIS/EIR, which have been refined and confirmed in Section 4.7 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, would preserve the pre-construction condition of the Higgins Building. With implementation of mitigation, construction-related vibration impacts to historic buildings and sensitive buildings (Category I, II, III, IV buildings as defined in Table 4.7-4) would be reduced to less than significant. Metro has performed an additional vibration study, and concluded that no impacts to the Higgins Building would occur after mitigation. The results of this study are presented in Section 4.7, Noise and Vibration, of this Final EIS/EIR. The alignment would provide operational benefits including higher train speeds, more efficient operations, and better access to Upper Grand Avenue for passengers. Given that the Locally Preferred Alternative would not impact the Higgins Building, funding for restoration of the Higgins Building would not be required. However, Metro will explore funding options for restoration of historic buildings in the future as part of a separate project.

During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included the Higgins Building HOA, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8), which are presented in this Final EIS/EIR.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Regional Connector draft EIS/EIR comment**
Date: October 19, 2010 9:58:31 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: Bobby Garza Jr [mailto:bobbygarzajr@yahoo.com]
Sent: Monday, October 18, 2010 5:40 PM
To: Regional Connector
Subject: Regional Connector draft EIS/EIR comment

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

I am a resident of Savoy, the condominium complex on the corner of 1st and Alameda streets, and I would like to add my name to the list of residents and community members who support the fully underground alternative for the regional connector. I would also like to state that I am against the other options (Above-ground and underground emphasis), including the no-build alternatives. 1

As a regular transit rider, I am very excited about this project and I understand its importance. I am, however, concerned about the impact that the construction will have on the Little Tokyo community. So far, I am pleased with the communication between Metro and the Little Tokyo community. Metro seems to be listening to our concerns. I hope that the lines of communication will remain healthy and open during the construction phase. 2

Thank You

Bobby Garza
100 S. Alameda St. #371
LA, CA. 90012

PC101

Responses to Comments from Garza, Bobby

Response to Comment PC101-1

Thank you for your comment. It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the No Build, At-Grade Emphasis LRT, and Underground Emphasis LRT Alternatives. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC101-2

Metro will continue coordinating with the Little Tokyo community during construction of the Locally Preferred Alternative. A community outreach plan will be developed to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Metro will also coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: There are several points I wish to make on the Regional Connector EIR.**
Date: October 19, 2010 9:56:00 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: brady westwater [mailto:bradywestwater@gmail.com]
Sent: Monday, October 18, 2010 11:57 PM
To: Regional Connector
Cc: Ginny-Marie Brideau
Subject: There are several points I wish to make on the Regional Connector EIR.

There are a number related points I wish to make on the Regional Connector EIR. First, any new fixed rail improvement needs to be accompanied with new development that will make the system more productive. This is particularly true during non-rush hours and on nights and weekends.

That is why the land surrounding this proposed Second Street Station should be considered an unique opportunity to remove and rebuild the redundant existing infrastructure, repurpose the greatly under-utilized land, relocate the Sempra facility, remove the barriers between the parts of Bunker Hill presently separated by a maze of roads, bridges, underpasses and awkwardly shaped, inaccessible patches of green and find a way to create new transit destinations, enhance the existing cultural destinations and create economic development by creating greater opportunities for cultural tourism. 1

The obstacle to this happening though is the single biggest flaw of the present plan - the lack of a vision for a greater master plan for the area. And the greatest obstacle to creating that plan is the assumption that the present patchwork of barely used roads that crisscross the site should remain untouched and the digging of the trenches for the subway and the station should take place incrementally rather than the wholesale excavation of the site - with a temporary loop road making the necessary connections and first

rationalize the streets and possibly even platform over some of them to create both real park space and opportunities to fulfill existing cultural needs.

The first primary need is lack of a building for MOCA to house its permanent The Geffen is great for larger temporary shows and the building on Grand is a wonderful - though small - place for either touring shows or the permanent collection. But it is far too small to house even a fraction of the already existing permanent collection. And since the Broad Collection - across the street - will have one of the world's greatest collections of mid to last 20th Century Art - with many artists collected in depth - is is imperative that it be located by the permanent collection and that the permanent collection remains on Grand avenue. But since the it can not be expanded for a variety of reasons - then a site must be found - or created - that is adjacent to both MOCA and the Broad.

This site can also fulfill another cultural problem. MOCA's photography collection is still developing However - the Getty has a world class collection and that is the only contemporary art form they collect. The Getty also has a deed restriction that they can never add even one square foot to the Brentwood Campus - making it impossible for them ever to build a new museum there. And as it has often been suggested that the Getty also have a museum in a more urban setting - what better place than to complement the MOCA collection as the Broad Collection will soon do

1 cont'd

Lastly, if the financial district station is removed - it needs to still have the elevator proposed for that station to still be built to better bring pedestrians on up to the top of Bunker Hill to better connect the flats with the top of the hill.

2

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Brady Westwater
213-804-8396

PC102

Responses to Comments from Westwater, Brady

Response to Comment PC102-1

Metro will work with the community to determine re-use of construction staging areas after construction is completed. In doing so, Metro hopes to create destinations compatible with transit use. Suggestions for improvement of the Bunker Hill area are noted. Roadway reconfiguration in the vicinity of the 2nd/Hope Street station would occur as part of the Regional Connector project. Metro is committed to minimizing construction impacts. All station facilities would be made accessible to persons with disabilities using features such as elevators and ramps as needed.

Response to Comment PC102-2

The Broad Art Foundation Museum, currently under construction, is projected to include a plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue. In order to provide access from the 2nd/Hope Street station to Upper Grand Avenue, an elevator would be built as part of the Locally Preferred Alternative from the station entrance to the plaza, as required to accommodate persons with disabilities, if one is not already provided. If the plaza is not built as part of the Broad Art Foundation Museum, a pedestrian connection (such as a pedestrian bridge) would be built as part of the Locally Preferred Alternative from the elevator to Upper Grand Avenue.

Subject: Regional Connector Draft EIR comments
Date: Monday, October 18, 2010 1:11 AM
From: Hank Fung <hank@bleeble.org>
Reply-To: "hank@bleeble.org" <hank@bleeble.org>
To: "ray.tellis@dot.gov" <ray.tellis@dot.gov>, Dolores Roybal Saltarelli <roybald@metro.net>, Regional Connector <RSC_RegionalConnector@metro.net>

Dear Mr. Tellis and Ms. Roybal-Santelli:

I agree with MTA's staff recommendation that the Locally Preferred Alternative remove the 5th and Flower station, as it is two to three blocks to other rail stations (downhill if one walks in the right direction) and would increase the cost significantly. However, I do not share the same thought about the fully underground option as the LPA. The underground emphasis option is sufficient to relieve the vast majority of impacts to the Little Tokyo community at a much lower cost. The difference in cost can be used to provide goodwill for businesses, acquire properties that would be impacted or for construction staging, etc. while, in the long term, the community will grow around the at-grade crossing at Alameda under the underground emphasis option. I prefer the Los Angeles Street Option due to a reduced impact on existing businesses on Broadway and the distance between the stations to the east and west. Also, the Broadway station is very close to the Red Line station, and the Regional Connector should provide more access to Downtown, not just to similar locations as today. 1 2

If the LPA selects the Fully Underground option, then MTA staff should create a Benefit Assessment District for the area within a reasonable surrounding distance from the at-grade intersection removed and require those property owners to approve a property tax increase to pay for the undergrounding of the 1st/Alameda intersection, which my understanding will cost tens of millions of dollars and additional construction time. If the property owners fail to approve this tax, then the underground emphasis option provides most of the travel time benefits as the fully underground option, eliminates a confusing station at 1st/Alameda for downtown customers, and the underground emphasis option should be the LPA following this vote. 3

Also, there needs to be flexibility to select options for train routing other than the proposed East LA-Santa Monica and Pasadena-Long Beach routes. Perhaps trip travel patterns show something differently. In any event, the EIR should not constrain future operational configurations. 4

Finally, the estimated service frequency in the EIR is too optimistic (Chapter 2). The EIR projects a peak hour headway of 2.5 minutes along the Regional Connector. it is my understanding that LADOT has constrained the number of trains that are allowed to operate on the surface sections of the Blue/Expo Lines between the portal south of 7th Street/Metro Center and Washington Boulevard, where the Expo and Blue Lines diverge. Chapter 2 also presupposes one option for Eastside Extension Phase II over another, through the use of the term "I-605" - as far as I know, only the SR-60 option has a I-605 option. The terminology should be used as the existing proposed termini options, which are South El Monte (Peck Road/SR-60) and Whittier (Washington/Greenleaf?). 5 6

In addition, on some sections of Appendix I, it is indicated that "Portions of this appendix have been intentionally left blank. This 7

information is available from Metro upon request." What is this information? Why is it left blank? A brief description of the information omitted would be helpful in evaluating the completeness of the EIR. If the concern is privacy, all comenters' names, addresses, and phone numbers if they chose to provide them are in the scoping reports and incorporated in the EIR, so I fail to see why any information needs to be omitted, especially in an electronic copy where there is an unlimited amount of space available.

7 cont'd

Sincerely,

Hank Fung, P.E.

PC103

Responses to Comments from Fung, Hank

Response to Comment PC103-1

Preference for the removal of the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC103-2

Thank you for your comment. Support for the Underground Emphasis LRT Alternative and station preference is noted. It is also noted that the commenter does not support the Fully Underground LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC103-3

Metro has used benefit assessment districts to fund rail transit projects in the past, but this is not part of the current financial plan, as summarized in Chapter 6 of the Draft EIS/EIR. The introduction of the Fully Underground LRT Alternative into the Draft EIS/EIR was done to offset the potential disproportionate adverse impacts that the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative would have in Little Tokyo. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC103-4

The proposed routings for the Regional Connector service are from East Los Angeles (eventually I-605) to Santa Monica and from Pasadena (eventually Montclair) to Long Beach. The tracks would be constructed in a way that allows train movements from Pasadena to Santa Monica and from East Los Angeles to Long Beach.

Response to Comment PC103-5

The Regional Connector is designed to accommodate 2.5 minute headways, independent of any headway restrictions in place on other parts of the Metro Rail system.

Response to Comment PC103-6

Both the SR 60 LRT Alternative and Washington Boulevard LRT Alternative for the Eastside Extension Phase 2 would terminate in the vicinity of I-605. No Locally Preferred Alternative designation has occurred for the Eastside Extension Phase 2 project yet; therefore, "I-605" was used in the Regional Connector Draft EIS/EIR as an approximate terminus that applies to both build alternatives for the Eastside Extension Phase 2 project.

Response to Comment PC103-7

The information omitted from Appendix I, Agency Coordination and Public Involvement, and Appendix G, Final Scoping Report, of the Draft EIS/EIR are the sign-in sheets used during various outreach meetings held for the project. The sign-in sheets contain attendee's personal information and it is customary to omit sign-in sheets when circulating environmental documents to protect an individual's personal information.

Joan Springhetti
108 W. 2nd Street
Los Angeles, CA 90012
Oct. 18, 2010

Dolores Roybal Saltarelli,
Metro Project Director
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli,

I am writing to express my concerns about the impact of noise from construction of the proposed Regional Connector Transit Corridor on the residents of the Higgins Building. The Higgins Building faces 2nd Street on the route of the proposed project and is very near the site of a proposed station. It is my home and home to 134 other families. 1

The report fails to address this issue in terms of expected noise levels, hours of operation and cumulative impact. Additionally, in assessing existing noise levels at the location of the building, it used an estimate from other locations in the area rather than taking actual measurements. I contest that assumption. 2

How does this project propose to stay within the city and county standards for construction noise? 3

How does it reconcile with the Federal Transit Administration's report on noise and vibration and the special protections it affords historic properties, including the Higgins Building, and passive parks, including the community park next to the LAPD Headquarters? 4

CITY ORDINANCE:

41.40 LAMC- Construction Noise

- Engaging in construction, repair, or excavation work with any construction type device, or job-site delivering of construction materials without a Police Commission permit;
- Between the hours of 9:00 p.m. and 7:00 a.m.;
- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, nor at any time on any Sunday;
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

5

SEC. 111.03. MINIMUM AMBIENT NOISE LEVEL.
(Amended by Ord. No. 156,363, Eff. 3/29/82.)
Where the ambient noise level is less than the presumed ambient noise level designated in

this section, the presumed ambient noise level in this section shall be deemed to be the minimum ambient noise level for purposes of this chapter.

TABLE II
SOUND LEVEL "A" DECIBELS

(In this chart, daytime levels are to be used from 7:00 a.m. to 10:00 p.m. and nighttime levels from 10:00 p.m. to 7:00 a.m.)

	PRESUMED AMBIENT NOISE LEVEL (dB(A))	
ZONE	**DAY**	**NIGHT**
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
M1, MR1, and MR2	60	55
M2 and M3	65	65

At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used.

5 cont'd

City, county and federal laws governing noise and vibration were designed to safeguard the health and well-being of the city's people and buildings. It is critical that they be adhered to, especially with a project of this scope and duration.

Sincerely,

Joan Springhetti

PC104

Responses to Comments from Springhetti, Joan

Response to Comment PC104-1

Section 4.7, Noise and Vibration, and Appendix S, Noise and Vibration Technical Memorandum, of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR identified construction activities, relevant construction equipment, and construction-related noise levels for each build alternative. As indicated in Chapter 2, Alternatives Considered, of the Draft EIS/EIR and this Final EIS/EIR, construction schedules would be established with community input and consideration of community activities.

Section 4.19, Cumulative Impacts, of the Draft EIS/EIR and this Final EIS/EIR summarized cumulative impacts for resource areas where an alternative would result in a considerable contribution. Since none of the build alternatives would result in a considerable contribution to cumulative noise impacts during construction, cumulative noise impacts were not discussed in detail in this section. Appendix GG, Cumulative Impacts Technical Memorandum, of the Draft EIS/EIR discussed cumulative noise impacts associated with construction of each alternative. As indicated in Section 4.7, Noise and Vibration, of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, with implementation of potential mitigation, construction of the Fully Underground LRT Alternative (the Locally Preferred Alternative) would not contribute to potentially adverse cumulative noise or vibration impacts.

Response to Comment PC104-2

Comment acknowledged. Noise levels at the Higgins Building were estimated based on nearby measurements because existing noise levels at the Higgins Building could not be accurately measured due to construction at Saint Vibiana and on Main Street, as indicated in Section 4.7, Noise and Vibration, of the Draft EIS/EIR and this Final EIS/EIR. Additionally, estimation of noise levels is acceptable by the FTA Transit and Vibration Impact Assessment when buildings have exposure to the same noise sources.

Response to Comment PC104-3

The Regional Connector project is located in the jurisdiction of the City of Los Angeles and would not need to be consistent with goals of the County of Los Angeles noise standards as the project is located outside the County's jurisdiction. Construction of the Locally Preferred Alternative would be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, typical types of Best Management Practices (BMPs) the contractor can use to be consistent with the goals of applicable local ordinances include, but are not limited to, the following:

- Placement of temporary noise barriers around the construction site;
- Placement of localized barriers around specific items of equipment or smaller areas;
- Use of alternative back-up alarms/warning procedures;

- Higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Response to Comment PC104-4

As indicated in Section 4.7, Noise and Vibration, and Appendix S, Noise and Vibration Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the noise and vibration impact analysis for this project is based on criteria defined in the *FTA Transit Noise and Vibration Impact Assessment* (USDOT 2006). CEQA does not provide quantitative thresholds for a substantial noise impact or a significant adverse vibration impact. This analysis applies FTA criteria to determine the threshold for significance. The Los Angeles Municipal Code section 41.40(a) does not set acceptable noise level limits for either daytime or nighttime construction activities.

Construction noise and vibration were analyzed using the procedures presented in the *FTA Transit Noise and Vibration Impact Assessment*. This document includes FTA guidance on minimum safe distances between construction equipment and buildings based on the types of construction equipment and the category of a building. The most conservative minimum safe distance was used to analyze vibration impacts to sensitive and historic buildings in the vicinity of construction activities, including the Higgins Building. Metro has performed an additional vibration study, and concluded that no impacts to historic resources would occur after mitigation. The results of this study are presented in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment PC104-5

As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, construction of the project would be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. The Regional Connector project is located in the jurisdiction of the City of Los Angeles and would not need to be consistent with the goals of the County of Los Angeles noise standards as the project is located outside the County's jurisdiction. In addition, the ambient noise levels measured in the project area were higher than the presumed ambient noise level designated in Section 111.03 of the Los Angeles Municipal Code. Therefore, the presumed ambient noise levels were not used.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Draft EIS/EIR**
Date: October 20, 2010 3:17:30 PM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

Jennifer

Jennifer Gill
Communications Assistant
Constituent Programs
Metro - Regional Communications Department
One Gateway Plaza
Los Angeles, CA 90012

213-922-4224 (O)
213-922-8868 (F)

-----Original Message-----
From: Jorge Montijo [mailto:loft811@gmail.com]
Sent: Monday, October 18, 2010 5:00 PM
To: Regional Connector
Subject: Draft EIS/EIR

I wrote previously in support of the all underground option and in opposition to both of the other options. Upon careful review, I realized that two properties on the SE corner of Spring and 2nd Streets are scheduled to be demolished and used for staging. I am strongly opposed to the demolition of these buildings. Tenants in those buildings such as the Southland Credit Union and the 2nd Street Cigar and Gallery are important members of our community and it would be a huge loss to most stakeholders in the area if these businesses were closed or moved. I understand the need for a staging area and suggest the open lot at 2nd and Broadway be used since construction on the Federal Court Building is not scheduled to begin for a few more years. 1

Further, as a stakeholder in this immediate area for the last 8 years, I and my neighbors have endured the construction of the Cal Trans Building, the demolition of the previous Cal Trans offices, the construction of the new PHF, the remodeling of Saint Vibiana's,

and the construction of two parking lots adjacent to Vibiana's.

While I'm willing to support the construction of the Regional Connector in close proximity to my home, I am extremely displeased that building demolition and staging will be taking place at a mere 5 meters from my property. It is inconceivable that sound levels during construction will be remotely near the range permitted by Los Angeles code. I will gladly perform a demonstration for the Board as to what actual sound levels will be for the duration of construction (I provided this service to the City Council during EIR review for the PHF.)

1
cont'd

There are many stakeholders in this area, but none will be affected more than residents, and much of that inconvenience can be avoided by staging further from residences and closer to businesses. Please reconsider the demolition of the two buildings on Spring Street, just south of 2nd Street.

Jorge Montijo
108 W 2nd St #811
Los Angeles, CA 90012
626.222.4593

Sent from my iPad

PC105

Responses to Comments from Montijo, Jorge

Response to Comment PC105-1

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

October 18, 2010

Dolores Roybal Saltarelli, Project Manager
One Gateway Plaza, MA 99-22-2
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

As Metro completes its Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Regional Connector project, I urge that the Fully Underground Light Rail Transit (LRT) Alternative be adopted as the project's Locally Preferred Alternative (LPA). This alternative will provide for the fastest travel of light rail trains through Downtown Los Angeles. This will be key as the Regional Connector must meet the both the goals of 1) providing access to Downtown destinations and of 2) providing means for crossing through Downtown to reach destinations elsewhere in the county. 1

As a fully-grade separated facility, the Regional Connector will not only provide fast travel, but also reliable travel. Given that our light rail lines will combine to reach headways as low as 2.5 minutes along the Regional Connector, it will be critical to keep trains moving efficiently to prevent delays to the rest of the light rail network. A predominantly at-grade Regional Connector would introduce significant variability in train performance, much like the street-running portion of our current light rail lines do, and would be inadequate for handling high-frequency service. 2

It is regrettable that between 12th Street and Washington Boulevard along the existing Blue Line, trains will run at-grade with vehicular traffic for the foreseeable future. This will be a limiting element of the Regional Connector and our entire light rail network as long as it remains in its current configuration. I recommend strategies for improving this segment of track be studied as soon as possible and incorporated into the Regional Connector project. Possible strategies could include improved signal timing, signal priority, street closures, and grade separation. 3

Reliability and travel times will also be limited by the configuration of the Regional Connector junctions at 1st Street and Alameda Street and at Washington Boulevard and Flower Street. Unfortunately, the Washington/Flower junction is currently being constructed as part of the Exposition Line project as a flat junction, as opposed to a flying junction. Operationally, a flat junction will impose strict limitations on the movements on trains through the junction because southbound Blue Line trains cannot pass through the junction at the same time as northbound Expo Line trains. Schedules for trains in opposing directions will therefore have to be coordinated. Delays in one direction of trains will therefore not only propagate to other trains in the same direction but also to trains in the opposite direction. 4

Internally, Metro studied "Little Tokyo Variation 2," an alternative including a flying junction at 1st/Alameda, much like at the Wilshire/Vermont station, instead of the otherwise planned flat junction. I strongly encourage that the Fully-Underground Alternative Variation 2 be adopted to ensure reliable operation of light rail trains through the Regional Connector for decades to come. In the future, the Washington/Flower junction could also be upgraded to a flying junction by adding a flyover for northbound Expo Line movements.

In addition, I also recommend that the 5th/Flower station be retained in the project LPA. When both the Expo Line and the Regional Connector are in place, we will see a drastic increase in riders traveling through the 7th Street/Metro Center station. Even now, the station sees crush loading on its trains and platforms. The 5th/Flower station is therefore critical to serving passengers in the Financial District, who would otherwise turn to the 7th Street/Metro Center station. The Financial District is also 5

among the densest portions of the county in terms of employment density and is certainly deserving of a station on its own merits. 5 cont'd

Thank you for your consideration.

Sincerely,
Justin Walker

PC106

Responses to Comments from Walker, Justin

Response to Comment PC106-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC106-2

Support for a fully grade-separated alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC106-3

The Regional Connector would connect to the existing Metro Blue Line tracks at 7th Street/Metro Center Station, and trains on both the North-South Line and East-West Line would use the existing at-grade tracks on Flower Street between 12th Street and Washington Boulevard. The Regional Connector would not preclude improvement from being made to these at-grade tracks as a possible future project.

Response to Comment PC106-4

Metro performed a rail simulation for both the single-level junction and two-level junction configurations of the 1st and Alameda Streets intersection. The simulations revealed that both configurations would be able to adequately handle the maximum volume of trains anticipated for the Regional Connector without propagating delays through the system. The two-level junction (Little Tokyo Variation 2) was not pursued for further study in the Draft EIS/EIR because of its potential impacts to the Los Angeles Hompa Hongwanji Temple. The Regional Connector would not preclude the Washington/Flower junction from being converted to a two-level junction as a possible future project.

Response to Comment PC106-5

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Subject: Regional Connector draft EIS/EIR comments
Date: Monday, October 18, 2010 10:51 AM
From: Paul Yeh <paulyehster@gmail.com>
To: Regional Connector <RSC_RegionalConnector@metro.net>
Cc: Susie Tae <eatms2@gmail.com>, Bobby Garza <bobbygarzajr@yahoo.com>, Sidney Wang <shwang12@gmail.com>

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street and Chair of the Savoy MTA Committee, I like to formally support the **Fully Underground Alternative** that was added into the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

One issue I had with the draft was that a letter from the Savoy HOA against the first two build alternatives submitted in the fall of 2009 included over 200 signatures and they were not included or mentioned in the appendix of the draft document. I have had our HOA manager submit that document again in case it is missing so it is either included or cited in the final EIS/EIR. 2

Other continuing issues include my concerns with construction, traffic, and impacts on residents as the project moves forward. I am very concerned for the businesses in Little Tokyo as they add to the quality of life in my neighborhood and are the livelihood of many independent mom-and-pop operations. I ask the MTA to continue to work in protecting the vibrancy of this community through mutual cooperation and adequate mitigation measures. 3

Thank you for your consideration.

Sincerely,

Paul Yeh

Savoy Resident/Savoy MTA Committee, Chairperson

Unit # 203

http://www.pyehdesign.com

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_____

Paul Yeh Design Inc.

100 s alameda st unit 203
los angeles, ca 90012

714.458.9728

PC107

Responses to Comments from Savoy MTA Committee, Yeh, Paul

Response to Comment PC107-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC107-2

Comment acknowledged. The Final Scoping Report, which was included as an appendix (Appendix G) in the Draft EIS/EIR and this Final EIS/EIR, summarized the CEQA/NEPA scoping process through the close of the NOI/NOP scoping period, May 11, 2009. The signed petitions were submitted after the close of the scoping period, which is why they were not included in the Scoping Report and thus not included in the Draft EIS/EIR. However, Comment Letter CN10, which includes the signed petitions, is included in this volume of the Final EIS/EIR.

Response to Comment PC107-3

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Comments on Draft EIS/EIR for Regional Connector**
Date: October 19, 2010 9:57:06 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>

From: Sidney Wang [mailto:shwang12@gmail.com]
Sent: Monday, October 18, 2010 9:27 PM
To: Regional Connector
Subject: Comments on Draft EIS/EIR for Regional Connector

October 18, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Sidney Wang, Savoy Resident
Unit # 408

PC108

Responses to Comments from Wang, Sidney

Response to Comment PC108-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC108-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

October 18, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy at the corner of 1st and Alameda Street and a member of the Savoy MTA Committee, I like to formally support the Fully Underground Alternative that was added into the Draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

However, I have several concerns with the Draft EIR/EIS discussion and analysis, particularly as they relate to Underground Emphasis Alternative. By minimizing any impacts from the Underground Emphasis Alternative, the document does not disclose many of the concerns the community raised to prompt the addition of the Fully Underground Alternative. These differences between the Underground Emphasis, and Fully Underground Alternative, are important to document to all stakeholders and decisionmakers as part of this process. A few examples of such discussion are included below: 2

- Potential impacts to Community and Neighborhoods (Section 4.3.3). Table 4.3-4 lists "Physically Divide Community" as a potential impact, and "None" for each Alternative. While "Physically Divide Community" is not defined in this Section, the fact that "none" is concluded for the Underground Emphasis Alternative is in direct conflict with the fact that the grade separation of Alameda Street between Temple Street and 2nd Street, creates a physical barrier between the Little Tokyo and Arts District communities. The need for a pedestrian bridge to cross the intersection of 1st and Alameda Streets only further emphasizes the need for a safe means to cross a physical barrier between communities. 3

- Mitigation measures for Community and Neighborhoods (Section 4.3.4). Additional mitigation measures should be added to address the phasing of construction tunneling along 2nd Street, and the fact that impacts to the Little Tokyo community will be far greater should tunneling work begin on the easterly end of 2nd Street. Stronger language should also be adopted in these measures to provide both clarity to the 4

community and future construction contractors of the importance of these mitigation measures. Such stronger language could include:

> Develop a community outreach plan to notify local communities of construction schedules, road and sidewalk closures, and detours. Coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events to the greatest extent feasible. Strongly consider limiting construction activities during special events where feasible.
>
> Erect barriers and provide security personnel during construction to minimize trespassing and vandalism. Barriers should be enhanced with artwork and attractive design features where possible.

4 cont'd

- Potential impacts to Visual Resources (Section 4.4). Figure 4.7 depicts significant properties along 1st Street between Judge John Aiso and Central Streets. However, Table 4.4-2 describes operational impacts to Scenic Resources as less than significant. The analysis fails to discuss the pedestrian bridge (approximately two stories in height above grade) may significantly impact the scenic resources of the Little Tokyo historic buildings from an easterly approach or view.

5

I also have general concerns with deferring many construction-related mitigation measures to be developed in the future. If the extent of these construction measures are not included within the analysis of impacts for the original project, how can it be presumed that these future construction mitigation measures will be effective in mitigating such impacts? How will the impacts of these proposed construction mitigation measures be analyzed?

6

Other minor corrections include:

- Figure 4.4-3: Photo is actually of the 1st Street corridor, and not 2nd Street

7

I ask that MTA continue to work the Savoy community and Little Tokyo community to ensure protection of the vibrancy of this community through mutual cooperation and acceptable mitigation measures.

8

Thank you for your consideration.

Sincerely,

Susan Tae
Savoy Resident/Savoy MTA Committee Member
Unit # 376

PC109

Responses to Comments from Tae, Susan

Response to Comment PC109-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC109-2

As required under NEPA and CEQA, mitigation must be identified which could reduce significant impacts. Chapter 2, Alternatives Considered, of the Draft EIS/EIR discussed the reasons for the addition of the Fully Underground LRT Alternative. The Executive Summary of the Draft EIS/EIR and this Final EIS/EIR contains a summary comparison of the alternatives considered, which includes the Underground Emphasis LRT and Fully Underground LRT Alternatives, and a summary of unavoidable impacts associated with each alternative. Please refer to Responses to Comments PC109-3 through PC109-8, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PC109-3

As indicated in Section 4.3, Community and Neighborhood Impacts, and Appendix O, Community and Neighborhood Impacts Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the Underground Emphasis LRT Alternative would not physically divide an established community. Automobiles, pedestrians, and bicycles would still be able to cross the alignment at roadway intersections to access the communities to the north and south. At the intersection of 1st and Alameda Streets in the Little Tokyo community, an automobile underpass would facilitate movement of traffic on Alameda Street by allowing it to travel below the intersection without stopping and, thus, enhancing community mobility. In addition, an optional overhead pedestrian bridge structure would maintain pedestrian and bicyclist access to the north and south sides of Alameda Street and enhance mobility. The Underground Emphasis LRT Alternative would not create a barrier that would impede vehicle, bicycle, or pedestrian access. Vehicle, bicycle, and pedestrian access at the intersection of 1st and Alameda Streets would be maintained as indicated above. Therefore, this alternative would not physically divide a community and impacts would be less than significant. Nonetheless, the Underground Emphasis LRT Alternative is not the designated Locally Preferred Alternative and will not be studied further.

Response to Comment PC109-4

2nd Street in Little Tokyo is no longer under consideration as a potential site for beginning tunnel boring machine operations. Metro intends to insert the TBM from the Mangrove property, located at the northeast corner of 1st and Alameda Streets, away from the community's key business areas. Appropriate mitigation measures presented in the Draft EIS/EIR are candidate measures for further refinement, and are worded as such. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains confirmed mitigation measures with more definitive wording and explicit assignment of monitoring responsibilities. These mitigation measures will be confirmed in the Record of Decision.

Response to Comment PC109-5

Impacts to scenic resources in light of the portal area structures for the Underground Emphasis LRT Alternative were discussed in Section 4.4.3.4.2 of the Draft EIS/EIR and this Final EIS/EIR. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which would not have a pedestrian bridge in Little Tokyo.

Response to Comment PC109-6

Mitigation measures identified in the Draft EIS/EIR were not deferred. If any of the build alternatives resulted in significant impacts, mitigation was identified in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR to reduce impacts to the maximum extent feasible. In addition, any mitigation measure that could result in an indirect impact was identified in Chapters 3 and 4 of the Draft EIS/EIR. Until a Locally Preferred Alternative is designated by the lead agency, the mitigation measures identified in the Draft EIS/EIR are considered candidate measures. Once a Locally Preferred Alternative is designated, appropriate mitigation measures are refined based on the alternative chosen as the Locally Preferred Alternative and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Response to Comment PC109-7

Comment acknowledged. The title of Figure 4.4-3 has been revised to accurately describe the location of the photo as follows.

Figure 4.4-3. ~~2nd~~ 1st Street Corridor and the Los Angeles Times Building

Response to Comment PC109-8

Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the Little Tokyo community, including the Savoy residents, during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Subject: Regional Connector Draft EIR/EIS Public Comment
Date: Monday, October 18, 2010 2:02 AM
From: Tobias Parkins <tobias0087@gmail.com>
To: Regional Connector <RSC_RegionalConnector@metro.net>

To be included in the Public Comment record for the DEIR/EIS for the Regional Connector:

Dear Ms. Roybal Saltarelli

First, please let the record show my support for the Regional Connector project and it's goals, and the accelerated construction in the 30/10 Initiative. 1

Second, I support the Fully-Underground Alternative for adoption as the Locally Preferred Alternative along with the following recommendations: 2

1. Metro should keep the 5th/Flower st. Station in the LPA.

With the addition of the Expo line soon, and the new ridership created by the Regional Connector, foot-traffic at the 7th St. Metro Center station is going to exceed the capacity of the station, reaching unmanageable levels. The 5th/Flower station will be able to relieve some of the foot traffic, as people traveling to destinations closer to 4th and 5th street will be able to de-board at the new station instead of walking from 7th st. Furthermore, there are several important destinations that would be easily accessible from the 5th st. station, including the Bonaventure Hotel and the Central Library. As a cultural note, it would be a very significant gesture to have our Central Library directly connected to the rail system. This would also mean that students coming from colleges along the rail system, including CSU Long Beach, Citrus College, Santa Monica College, California Institute of Technology, Pasadena City College, and, most importantly, USC, would have a direct, one-seat ride from their respective schools to Los Angeles's most important Library. Although this station is quite close to its neighbor stations, since this is the very dense Downtown Area, having very close station spacing is not a detriment, but in fact a benefit. Since this project will be one of the most important for the LA, and already has a very low cost effectiveness number, there is no reason to be stingy. We should not let a slight lack of money now cause us to have an inadequate transportation system for hundreds of years to come. Metro should seek any way possible to make up the cost of this station, including 3

- value engineering
- phasing the opening of portals
- adopting a slower construction schedule (by as much as a year or 2)
- allowing for public-private partnerships to fund the station
- allowing private businesses to buy development rights to place retail inside stations
- delaying funding and installation of art
- selling advertising rights
- cutting back on advertising for the project
- leverage savings created by 30/10 plan for use on this project
- identify any other ways to cut costs
- identify any other sources of additional revenue

The 5th and Flower station, which should be named the "Central Library" station, will be an important part of the rail network for the county, and is worth taking some extra measures to ensure its existence.

2. Metro should study a way to improve operations at the junctions joining the two branches of the Gold line, and the Blue and Expo Lines.

Due to the use of flat junctions instead of flying junctions, operations at these 2 junctions must be precisely timed in order to ensure on-time performance on both directions of both the North/South and East/West lines. Metro should work to secure funding in the future to convert these junctions to flying junctions (grade-separated) to prevent left-turn motion of opposing trains. 4

3. The name of the 2nd and Central station should be the "Little Tokyo" station.

This should be done to preserve the cultural identity of the neighborhood. 5

Thank you to your team and staff for all of your hard work
Sincerely,
Sam Levey

PC110

Responses to Comments from Levey, Sam

Response to Comment PC110-1

Thank you for your comment. Support for the project is noted.

Response to Comment PC110-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC110-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. This enhancement is in proximity to destinations such as the Central Library and the Bonaventure Hotel. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. Though the cost-effectiveness index for the project is favorable, Metro will continue to seek additional funds and ways to reduce the costs of the project to bring them in line with allocated funding levels. Metro believes that the Locally Preferred Alternative with an enhanced pedestrian walkway to 7th Street/Metro Center Station would adequately serve the transportation system. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PC110-4

Metro performed a rail simulation for both the single-level junction and two-level junction configurations of the 1st and Alameda Streets intersection. The simulations revealed that both configurations would be able to adequately handle the maximum volume of trains anticipated for the Regional Connector without propagating delays through the system. The two-level junction (Little Tokyo Variation 2) was not pursued for further study in the Draft EIS/EIR because of its potential impacts to the Los Angeles Hompa Hongwanji Temple. The Regional Connector would not preclude the Washington/Flower junction from being converted to a two-level junction as a possible future project.

Response to Comment PC110-5

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

From: "Gill, Jennifer" <GILLJ@metro.net>
Subject: **FW: Regional Connector**
Date: October 20, 2010 9:30:52 AM PDT
To: 'Ginny Brideau' <Ginny@TheRobertGroup.com>
1 Attachment, 190 KB

Jennifer

Jennifer Gill
Communications Assistant
Constituent Programs
Metro - Regional Communications Department
One Gateway Plaza
Los Angeles, CA 90012

213-922-4224 (O)
213-922-8868 (F)

From: Interurbans [mailto:afishel@interurbans.com]
Sent: Tuesday, October 19, 2010 11:15 PM
To: Regional Connector
Subject: Regional Connector

Mrs. Dolores Roybal Saltarelli

I along with so many others strongly support the Regional Connector and want to see it built ASAP. The MTA plan after its most recent modification is much improved but the First and Alameda section design needs to be reworked. The MTA design requires several 10 mph curves as well as the use of the current bridge over the I 10 freeway which also has curves requiring slow speed operation. With this new

1

2

design the overall speed can be increased by more than double between the Broadway Station and the Union Station stop. This design provides many advantages over the MTA design with the cost being about the same but will provide a much better and more user friendly design when the project is complete. The biggest advantage of this design will be the almost total lack of disruption during construction to the community west of Alameda and fast easy travel over the eitire connector..

2 cont'd

1. There are no grade crossings.
2. There are no 10 mph curves. All curves are for 35 mph or faster.
3. The Station is conveniently located and requires minimal area disruption during construction with no taking of historical buildings. The Office Depot and mini maul would not have to be taken.
4. The Junction under First St East of Alameda would be separated.
5. The new elevated structure over the 101 and Commercial St could be built in conjunction with the Los Angeles Union Station Run through and the California High Speed Rail projects that will also need to span the 101 and Commercial Streets.
6. The curve on the new line from Union Station to First street will be below ground and will take only a few underground parking spaces of the New Center to be built at the North East corner of first and Alameda.
7. The negative side of this alignment would be the taking of the two

story parking structure at Ducommun and Garey St. and the taking of the 30 foot eastern section of the DWP property north of Temple. Everything else would be underground.

8. During construction a temporary bypass and station could be built on the present parking lot at the north east corner of First and Alameda with a minimum disruption of service. The connection at Union Station would also require minimal service disruption.

9. The boring machines could be placed for drilling on the DWP property and dirt removal could also take place there to avoid any disruption to the Little Tokyo community. The boring machine should be able to make the radius curve from south to west and under First Street to the new Little Tokyo Station site and under the parking lot built on the former AT&SF right of way for a gentle curve onto Second Street. The subway section would begin in the DWP lot and go under Temple St just east of the 500 Temple Building and west of the parking structure to curve from Banning and west of the Nishi Hongwanji Buddhist Temple to the junction under First Street.

10. The current Little Tokyo Station at First and Alameda would remain in use as a turn back for trains on the Foothill extension that would not be continuing west to Culver City and Santa Monica.

11. Any passengers that would want to go to or from Union Station, Pasadena and East from East First Street would have a simple cross platform transfer at the new Little Tokyo Station.

2 cont'd

The 5th & Flower and 2nd and Broadway Stations need to be part of the original design, but if funding is not available then the underground station “boxes” should be built with the line and the stations can then be added later “as needed”. The same goes for the Crenshaw station on

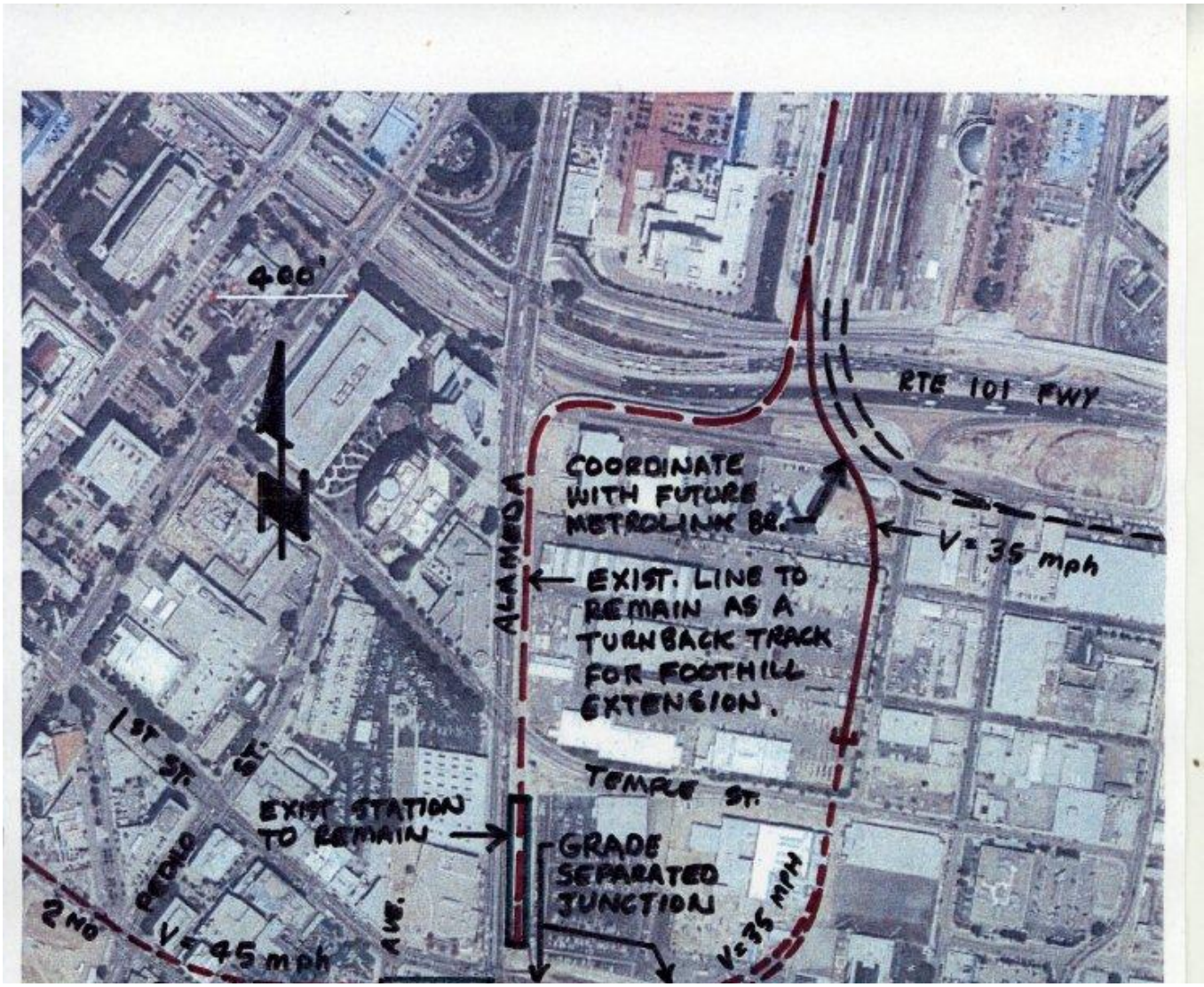
3

the Purple line when it is built. 3 cont'd

Please consider this design for all of the all of the reasons shown and when this project is complete you and all involved can look back and be proud and not have to apologize for a design that is less than it could or should have been. 4

Thank you for my consideration

Alan Fishel



STATION SHELL AVOIDS HISTORICAL BUILDINGS ON CENTRAL AVE.

BORED TUNNEL UNDER EXIST. BUILDINGS

CONCEPT BY ALAN FISHEL

PC111

Responses to Comments from Fishel, Alan

Response to Comment PC111-1

Thank you for your comment. Support for the project is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC111-2

As described in Chapter 2, Alternatives Considered, of this Final EIS/EIR, the alignment in Little Tokyo has been refined to increase curve radii and allow for higher speed train operation through the curves. The refinements would also reduce cut and cover excavation within Little Tokyo and increase tunnel boring machine use, thereby reducing impacts to the community. The Regional Connector would connect to the existing bridge over the US 101 Freeway, but would not preclude improvement from being made to this bridge as a possible future project. The design shown in the comment would involve greater impacts to the City of Los Angeles Department of Water and Power facilities, which the Locally Preferred Alternative alignment would avoid. Metro appreciates the submission of the detailed conceptual alignment.

Response to Comment PC111-3

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project. The proposed Metro Purple Line extension is part of the separate Westside Extension project.

Response to Comment PC111-4

Comment acknowledged. Please refer to Responses to Comments PC111-1 through PC111-3, above, for detailed responses regarding concerns raised by the commenter.

Subject: FW: Support of Fully Underground Alternative for the Light Rail Regional Connector
Date: Monday, October 11, 2010 3:34 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Barbara Broide [mailto:bbroide@hotmail.com]
Sent: Saturday, October 09, 2010 12:11 AM
To: Regional Connector
Cc: Litvak, Jody Feerst; Jay Greenstein
Subject: Support of Fully Underground Alternative for the Light Rail Regional Connector

To the Metro Regional Connector Team and Metro Staff:

Please accept this email as a letter in support of the Fully Underground Alternative for the Downtown Light Rail Regional Connector. This alternative appears to be the most cost-effective and long-term alternative to support the needs of Downtown Los Angeles City/County as well as the other regions throughout the County that will benefit from this Connector. This is in many ways a "missing link" to the downtown transit puzzle and worthy of the investment of resources needed to make its construction and completion possible. 1

Thank you for your consideration.

Sincerely,

Barbara Broide
President, Westwood South of Santa Monica Blvd. HOA

PC112

Responses to Comments from Westwood South of Santa Monica Blvd. HOA, Broide, Barbara

Response to Comment PC112-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Subject: FW: Regional connector question.
Date: Tuesday, September 14, 2010 12:16 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>
Cc: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: J. Russell Brown [mailto:dlanc.jr2brown@gmail.com]
Sent: Wednesday, September 08, 2010 7:50 PM
To: Regional Connector
Subject: Regional connector question.

This is the public info that is listed concerning the Regional Connector project.

Questions? If the project is listed as 1.32 billion and the latest numbers I see are 1.24 billion, why is this project short money and the 5th and Flower station may need to be omitted?

The list below shows the entire budget accounted for. Is the local funding not taken care of?

Regional Connector (links local rail lines)

$ 1,320 total costs

$ 160 Minimum Measure R

$ - additional

$ 160 Total

$ 708 Feds

$ 186 state

$ 266
b Local funding

FY 2014-16 FY 2023-25
b. Systemwide ridership forecasts indicate need for a Regional Connector downtown. This expenditure plan assumes that Metro Long Range Transportation Plan funds freed-up from the Exposition Phase II project by passage of this sales tax will be redirected to the Regional Connector project by the Metro Board.

1

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Words Of Wisdom

Teamwork divides the task and doubles the success.

The art of being wise is the art of knowing what to overlook. William James

"The best way out is through." Robert Frost

"The line that is straightest offers the most resistance." Leonardo DaVinci

"Genius is eternal patience." Michaelangelo

J. Russell Brown
President DLANC
Downtown Los Angeles Neighborhood Council
DLANC.jr2brown@gmail.com
Cell 213-999-0379
Home 213-687-0898

Proposed One-Half Cent Sales Tax for Transportation **ATTACHMENT A**

Outline of Expenditure Categories

Sunsets in 30-Years: Fiscal Year (FY) 2010 - 2039

(millions)

Subfund	Program	% of Sales Tax (net of administration)	First Year Amount	10-Year Amount	30-Year Amount
Transit Capital	New Rail and/or Bus Rapid Transit Capital Projects - project definition depends on final environmental review process	35%	$ 241	$ 2,930	$ 13,790
Transit Capital	Metrolink Capital Improvement Projects within Los Angeles County (Operations, Maintenance, and Expansion)	3%	$ 21	$ 251	$ 1,182
Transit Capital	Metro Rail Capital - System Improvements, Rail Yards, and Rail Cars	2%	$ 14	$ 167	$ 788
Highway Capital	Carpool Lanes, Highways, Goods Movement, Grade Separations, and Soundwalls	20%	$ 138	$ 1,675	$ 7,880
Operations	Rail Operations (New Transit Project Operations and Maintenance)	5%	$ 34	$ 419	$ 1,970
Operations	Bus Operations (Countywide Bus Service Operations, Maintenance, and Expansion. Suspend a scheduled July 1, 2009 Metro fare increase for one year and freeze all Metro Student, Senior, Disabled, and Medicare fares through June 30, 2013 by instead using Metro's Formula Allocation Procedure share of this subfund.)	20%	$ 138	$ 1,675	$ 7,880
Local Return	Major street resurfacing, rehabilitation and reconstruction; pothole repair; left turn signals; bikeways; pedestrian improvements; streetscapes; signal synchronization; and transit. (Local Return to the Incorporated Cities within Los Angeles County and to Los Angeles County for the Unincorporated Area of the County on a Per Capita Basis.)	15%	$ 103	$ 1,256	$ 5,910
	TOTAL PROGRAMS	**100%**	**$ 689**	**$ 8,373**	**$ 39,400**
	1.5% for Administration		$ 11	$ 127	$ 600
	GRAND TOTAL		**$ 700**	**$ 8,500**	**$ 40,000**

PC113

Responses to Comments from Downtown Los Angeles Neighborhood Council, Brown, J. Russell

Response to Comment PC113-1

The $1.32 billion figure represents the budgeted cost of the project in year of expenditure (escalated) dollars. $1.24 billion would be the projected cost of the four-station alternative in 2009 (non-escalated) dollars, which is equivalent to $1.44 billion in escalated dollars as was shown in Table 6-1 of the Draft EIS/EIR. This indicates a desire to bring the projected cost of the project in line with the budgeted amount. The financial information in the Draft EIS/EIR included the Measure R allocation to the Regional Connector.

Subject: FW: Support of Fully Underground Alternative for the Light Rail Regional Connector
Date: Monday, October 11, 2010 3:34 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Laura Cornejo <CORNEJOL@metro.net>, "Leung, Julie" <LEUNGJ@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: sealnbear@aol.com [mailto:sealnbear@aol.com]
Sent: Friday, October 08, 2010 10:44 PM
To: Regional Connector
Cc: bartreed1951@gmail.com; jerardwright@gmail.com; esirgen@usc.edu; Bob@fogl.us; darrclarke@gmail.com
Subject: Support of Fully Underground Alternative for the Light Rail Regional Connector

To the Metro Regional Connector Team and Metro Staff:

I support the Fully Underground Alternative for the Downtown Light Rail Regional Connector as the most cost-effective and long-term alternative to support the needs of Downtown Los Angeles City/County as well as the other regions throughout the County that will benefit from this Connector. 1

Ken Alpern

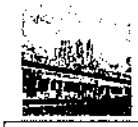
President, The Transit Coalition

PC114

Responses to Comments from The Transit Coalition, Alpern, Ken

Response to Comment PC114-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.



Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name	Nombre	名前	이름
TOSHIO "TERRY" HANDA			
Organization	Organización	所属	단체
JACCC			
Address	Dirección	住所	주소
244 S. San Pedro St., L.A., CA 90012			
Telephone	Teléfono	電話	전화
213-626-3067			
Email	Correo electrónico	電子メール	이메일
tanlaca@gmail.com			

Comment Comentario コメント 의견

I support the fully underground alternative, subject to only clarification of "~~cut~~ cut & cover tunnel" (I object to all other alternatives.) tion and confirmation of availability/non-availability of existing parking.

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

あなたのコメントが公的記録の一部として考慮されるには2010年10月18日までに到着する必要があります。あなたのコメントを次のアドレス regionalconnector@metro.netへ電子メールで送ることもできます。
あなたのコメントを郵便で送付する場合は下記の住所へ送ってください。Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 完全な文書をご覧になりたい方は次のサイトwww.metro.net/regionalconnectorを閲覧してください。

의견은 반드시 2010년 10월 18일까지 접수되어야 공공 기록의 일부로 간주됩니다. 의견은 이메일로 regionalconnector@metro.net으로 보내주셔도 됩니다. 의견은 다음 주소로 우편으로 보내주셔도 됩니다: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. 웹사이트 www.metro.net/regionalconnector를 방문하시면 전체 문서를 보실 수 있습니다.

Metro

PC115

Responses to Comments from Japanese American Cultural and Community Center, Handa, Toshio "Terry"

Response to Comment PC115-1

It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the other alternatives. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

A description of cut and cover operations is provided in Chapter 2, Alternatives Considered, Section 4.18, Construction Impacts, and Appendix K, Description of Construction, of the Draft EIS/EIR and this Final EIS/EIR. Cut and cover entails a construction shoring system, excavating down from the ground surface, placing a temporary deck over the excavated area, constructing the underground facilities beneath the deck, and then backfilling and restoring the surface once the facilities are completed. Temporary concrete decking can be placed over the cut immediately following the first part of excavation (at about 12 to 15 feet below ground surface) to allow traffic to pass above. Once the deck is in place, excavation and internal bracing would continue to the required depth. Once the desired construction is completed inside the excavated area, the deck would be removed, the excavation would be backfilled, and the surface would be restored permanently. Refinements have been made to the Locally Preferred Alternative since publication of the Draft EIS/EIR. These refinements would reduce the extent of cut and cover activities and associated street lane and sidewalk closures. Chapter 2, Alternatives Considered, of this Final EIS/EIR identifies locations where cut and cover would occur during construction of the Locally Preferred Alternative.

Chapter 3, Transportation Impacts and Mitigation, and Section 4.2, Displacement and Relocation, of the Draft EIS/EIR identified the number of on-street and off-street parking that would be removed during construction and operation of each alternative, respectively. Chapter 3, Transportation Impacts and Mitigation, and Section 4.2, Displacement and Relocation, of this Final EIS/EIR identifies the number of on-street and off-street parking that would be removed during construction and operation of the Locally Preferred Alternative, respectively.

Metro Regional Connector Transit Corridor Study
Draft EIS/EIR Public Hearing
Comment Form Formulario de comentarios コメント用紙 의견서

Name Nombre 名前 이름	
HOWARD NISHIMURA	
Organization Organización 所属 단체	LITTLE TOKYO COMMUNITY COUNCIL + TOKYO VILLAGE HOA
Address Dirección 住所 주소	222 S. CENTRAL AVE #208 L A CA 90012
Telephone Teléfono 電話 전화	213-305-7630
Email Correo electrónico 電子メール 이메일	hinishimura@msn.com

Comment Comentario コメント 의견

AS SCHEDULES FOR CONSTRUCTION ARE DETERMINED PLEASE KEEP THE OWNERS AND ~~STORE~~ BUSINESS OWNERS INFORMED AND THE EFFECT THAT THE STREET TRAFFIC AS WELL AS PEDESTRIAN TRAFFIC WILL BE EFFECTED AND FOR HOW LONG.

1

Your comment must be received by October 18, 2010 in order to be considered as part of the public record. You can send your comment in by email to regionalconnector@metro.net. You can send your comment in by postal mail to: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. You can view the entire Document by visiting www.metro.net/regionalconnector

Su comentario se debe recibir antes del 18 de octubre de 2010, para que sea considerado como parte del registro público. Puede enviar su comentario por correo electrónico a la dirección regionalconnector@metro.net. Puede enviar su comentario por correo postal a: Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012. Puede ver todo el documento en el sitio web www.metro.net / regionalconnector

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Metro

PC116

Responses to Comments from Little Tokyo Community Council & Tokyo Villa HOA, Nishimura, Howard

Response to Comment PC116-1

Appropriate candidate mitigation measures included in Section 4.3, Community and Neighborhood Impacts, of the Draft EIS/EIR and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR includes development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Metro will continue to coordinate with the community during project construction.

October 1, 2010

Ms. Dolores Roybal-Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

RE: Comments on Draft EIS/EIR for Regional Connector

Dear Ms. Roybal-Saltarelli:

As a resident of Savoy on the corner of 1st and Alameda Street, I would like to formally support the **Fully Underground Alternative** that was added to the draft EIS/EIR as the only truly viable build option for this community. I agree with the team's recommendation and endorsement of the Fully Underground Alternative as the "locally-preferred" alternative. 1

I also want to voice my concerns about construction, traffic, and related impacts on residents as the project moves forward. I ask the MTA to work to protect the vibrancy of this community through mutual cooperation and adequate mitigation measures. 2

Thank you for your consideration.

Sincerely,

Savoy Resident
Unit # 468
MYUNGHEE BYUN

PC117

Responses to Comments from Byun, Myunghee

Response to Comment PC117-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PC117-2

Comment acknowledged. Traffic and construction impacts associated with the Locally Preferred Alternative were discussed in Chapter 3, Transportation Impacts and Mitigation, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Metro has coordinated with the Little Tokyo community throughout the design and environmental process of this project. For example, Metro has assisted the community in establishing the Little Tokyo Working Group, provided funding for a consultant to assist the community in understanding the potential project impacts during preparation of the Draft EIS/EIR, and coordinated with community groups during preparation of this Final EIS/EIR. Metro will continue to coordinate with the community during project construction, which will include the development of a community outreach plan to notify local communities of construction schedules, street lane and sidewalk closures, and detours. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8).

Responses to Public Hearing Comments

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PHA1		Fishel	Alan
PHA2	Japanese Chamber of Commerce	Okamoto	Mike
PHA3	Little Tokyo Business Association and Little Tokyo Business Improvement District	Liu	Wilson
PHA4		Kay	Greg
PHA5		Adelman	Charles
PHA6		Havens	Alan
PHA7		Zablen	Nathan
PHA8	Los Angeles Hompa Hongwanji Temple	Briones	William
PHA9	Little Tokyo Community Council	Watanabe	Bill
PHA10		Kawaratani	Yukio
PHA11	Historic Downtown Business Improvement District of the L.A. City Chapter	Brown	Russ
PHA12		Covarrubias	Joel
PHA13	Downtown Los Angeles Neighborhood Council	Berman	Patti
PHA14	Electric Railway Historical Association	Frevele	Dave
PHA15		Westwater	Brady
PHA16		Springer	Jay
PHA17	Nikkei Center, LLC Project	Kaji	Jon
PHA18	The Spice Table	Luu-Ng	Kim
PHA19	GetFit Little Tokyo	Yamaguchi	Jayson
PHA20	California Japanese American Community Leadership Council	Nishio	Alan

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PHA21	Koraku Group, Inc.	Yamauchi	Hiroshi
PHA22	Fugetsu-Do Confectionery	Kito	Brian
PHA23		Kerr	John
PHA24	Gold Line Washington Alignment Advocacy Group	Howard	Les
PHB1	Fixing Angelenos Stuck in Traffic	Norton	Hilary
PHB2		Grace	Roger
PHB3	Metropolitan News Enterprise	Bobigian	Vahn
PHB4		Grace	Jo-Ann
PHB5	Metropolitan News Enterprise	Philibosian	Robert
PHB6	Suehiro Café, Inc.	Suzuki	Kenji
PHB7		Havens	Alan
PHB8		Berg	Martin
PHB9	The Transit Coalition	Reed	Bart
PHB10		Springhetti	Joan
PHB11		Miyoshi	Ellen
PHB12	Koraku Group, Inc.	Yamauchi	Hiroshi
PHB13		Sachs	Arnold
PHB14	Little Tokyo Business Association and Little Tokyo Business Improvement District	Liu	Wilson
PHB15		Wright	Jerard
PHB16	Central City Association	Chavira	Tracey
PHB17	Historic Downtown Theater	Brown	Russell

Comment Letter/ Speaker	Affiliation	Last Name	First Name
PHB18		Garza	Don
PHB19	Shabu Shabu House Restaurant	Maruyama	Yoshi
PHB20		Baisez	Christine

COUNTY OF LOS ANGELES

REGIONAL CONNECTOR TRANSIT CORRIDOR PUBLIC HEARING

DOLORES ROYBAL-SALTARELLI, PROJECT MANAGER

In the Matter of:)
)
METRO REGIONAL CONNECTOR TRANSIT)
CORRIDOR)
_____)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Tuesday, September 28, 2010

Reported by:

DANA JACOBS
CSR No. 13499

Job No:

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25   B5710NCO
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COUNTY OF LOS ANGELES

REGIONAL CONNECTOR TRANSIT CORRIDOR PUBLIC HEARING

DOLORES ROYBAL-SALTARELLI, PROJECT MANAGER

In the Matter of:)
)
METRO REGIONAL CONNECTOR TRANSIT)
CORRIDOR)
_____)

TRANSCRIPT OF PROCEEDINGS, taken at the Japanese American National Museum, 369 East 1st Street, Los Angeles, California, commencing at 6:30 p.m. on Tuesday, September 28, 2010, reported by DANA JACOBS, CSR No. 13499, a Certified Shorthand Reporter in and for the State of California.

25

APPEARANCES:

DOLORES ROYBAL-SALTARELLI
PROJECT MANAGER

ANN KERMAN
COMMUNITY RELATIONS

CHRIS KOMAI
PUBLIC INFORMATION OFFICER
JAPANESE AMERICAN NATIONAL MUSEUM

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Mr. Kay	25
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Los Angeles, California, Tuesday, September 28, 2010

6:30 p.m.

MS. KERMAN: Good evening, everybody. Can you hear me in the back? I'd like to thank you all for coming tonight. This is a very, very exciting moment for us because we reached a milestone on this project, and we'll be talking more in detail about that milestone.

But in order to get to that milestone, it was really because of community involvement and lots and lots of meetings and lots and lots of time spent by a variety of individuals, and I'd like to thank the community for allowing us to get to this day, which is the public hearing for the regional connector.

Among those community organizations that were so instrumental in making this happen were the Little Tokyo Community Counsel, the Little Tokyo Service Center, the Buddhist Temple, the Japanese Chamber of Commerce, the Downtown Los Angeles Neighborhood Council, the Lincoln Heights Neighborhood Council, the Historic Cultural Neighborhood Council and many others.

So I would like to take this moment, before we get any further, to thank the community and all of you

that are here today for allowing us to get to this moment,

for allowing us to get through the process that included our alternatives analysis and, today, our Draft EIS/EIR process.

I'd like to bring up Chris Komai, who is with the Japanese American National Museum to welcome you all here today. This is their facility. They're our host.

And Chris, if you could step forward.

MR. KOMAI: That's great. I didn't know any of my family was here. I'm Chris Komai. I'm the public information officer for the Japanese American National Museum, and we did want to welcome you all to our facility.

You're in the George and Sakaye Aratani Central Hall of our pavilion, which opened in 1999. It's interesting because this year is the year of anniversaries, so it's the Japanese American National Museum's 25th anniversary since its incorporation back in 1985.

What's interesting about that is if you had known us in 1985, no facility, no endowment, one staff member sitting at the local Merit Savings Bank here, but because we were a community-based organization, we were able to galvanize the support of our community and the greater community here in Los Angeles, renovate the former

25 Buddhist temple behind you, the Nishi Hongwan, former

Buddhist Temple there, and here, this pavilion, which actually was a $45 million project.

All of that has made it possible to do what its founders wanted, which is to have public gatherings like we're having today. We think, here at the museum and certainly within our community, that the most important thing that we can do is get together and discuss what are the important issues of the day.

Now, before we get on to the meeting, I have just one thing. I noticed we're being streamed tonight. Isn't that right? And for those of you who are watching, we invite you to come to Little Tokyo, come to the Japanese-American National Museum, come here because there are times when you can come and share in our community as well.

The space that we're in right now, we have Target's Free Family Saturdays, most months, and like the word says, it's free. You can come, even on the Gold Line because the station is right across the street from us over here, and there are many activities that we have here, Nisei Week, New Years and things like that for you where we can all come, and we all invite you to come to them.

The last thing I wanted to say is that speaking

of anniversaries, today we celebrated the 10th anniversary

of Little Tokyo Community Council, ten years in which our community has tried to work together, not just in Little Tokyo, but in the greater area.

In this hearing here, in this meeting, this is really an example of how that should work. Here we're dealing with a very important process, but the most important thing is that we have a place and an opportunity for us to meet and talk about those issues.

So thank you all for coming. Welcome. If any of you want to come any other time, come and see me.

Thank you.

MS. KERMAN: Thank you so much, Chris, and we do appreciate your hospitality.

Well, let's get started. Good evening. Welcome to this public hearing on the Regional Connector Transit Corridor Project Draft EIS/EIR. My name is Ann Kerman. I'm Metro's constituent program manager for this project and tonight I will be facilitating the meeting, and I will also be acting as your hearing officer.

Is there anyone in need of translation assistance? If so, if you would please advise our registration in the back, and I would also like our interpreters to make that announcement. Alex. Thank you very much.

Before we begin, I do want to introduce you to

the project manager of this project. You'll be hearing from her shortly, and that's Dolores Roybal-Saltarelli. Dolores, if you could stand up. Diego Cardoso, who is the executive officer from our planning department. Diego.

We have several people here from Metro and our consultant team, and we're all wearing these badges. To everyone in that group, I'd like to introduce you individually, but I want to move it along. Please wave your arm, and you can speak to any of us later. We are here until 8:00 tonight, and after the formal presentation, we'll still be here to take your comments and questions.

Well, tonight's meeting is a formal process in the environmental review of the connector project, and we have a legal obligation to make sure that we hear your comments on the Draft EIS/EIR. We're here tonight to hear from you, and we want to give everyone a chance to speak.

Now, because this is a formal process and formal public hearing, we will not be answering your questions, but we will certainly be recording every comment, every question. We have a court reporter here this evening, and she will be taking note of every word.

You may comment on the Draft EIS/EIR at tonight's the meeting during our formal comment session, or you may

fill out a comment card. You may also mail us a letter or

send us an E-mail. All public comments must be received by 5:00 p.m. on October 18th.

As this is a formal NEPA/CEQA process, I now need to provide you with the following statement: The Regional Connector Transit Corridor Studies Draft Environmental Statement and Environmental Impact Report was released on September 3rd, 2010 along with the notice of availability and notice of intent to hold public hearings.

To comply with the National Environmental Policy Act, NEPA, and the California Environmental Quality Act, CEQA, Section 15087, the Federal Transit Administration, FTA, and the Los Angeles Metropolitan Transportation Authority, METRO, have prepared a draft environmental impact statement, environmental impact report. FTA is the lead agency for the purposes of NEPA, and METRO is the lead agency for the purposes of CEQA.

A notice of availability and an intent to hold public hearings was published in the Federal Register, State of California Clearinghouse, Los Angeles Times, La Opinion, Nikkan San, and filed with the Los Angeles County Clerk and the California State Clearinghouse. The notices were published on September 3rd, 2010.

Copies of the Draft EIS/EIR are available for public review between September 3rd and October 18th, and

are located at the following venues: The Los Angeles City

Public Library, Central Library, Little Tokyo Branch Library, Chinatown Branch Library, the Von Kleinschmidt Center at the University of Southern California, the Pasadena Central Library, East Los Angeles Library, Culver City Library, Santa Monica Library and of course, Metro's library, the L.A. County Metropolitan Transportation Authority Agency's library on our 15th floor.

In addition, electronic copies of the document, i.e., CDs, were distributed by mail to participating agencies, listed owners of properties identified in the document, local elected officials and additional interested stakeholders.

Display ads about the public hearings were published in Our Weekly, Eastside Sun, Downtown News, Korea Times, Korea Daily, blogdowntown, Japanese Daily, Nikkan San, The Rafu Shimpo and the Pacific Citizen.

Copies of the press release about the release of the Draft EIS/EIR were sent to a distribution list of over 50 media organizations. The Draft EIS/EIR and information about the hearing is posted on Metro's Web site, www.metro.net.

Information about the release of the Draft EIS/EIR and the hearings were also printed in brochure

form and widely distributed on Metro buses and trains as

well as hand delivered at key locations in the study area.

In addition, brochures that we commonly called "Take Ones" were sent by U.S. Mail to a list of over 65,000 contacts in the project study area. The statement information was also sent electronically to a distribution list of 1,725 mailings.

All of these materials included information about how to find the Draft EIS/EIR as well as more information about the Regional Connector Transit Corridor study on the Web. Affidavits of publication and copies of detailed mailing lists are available upon request.

And now for the fun part. I would now like to bring up our project manager, Dolores Roybal-Saltarelli and invite her to begin her presentation.

MS. ROYBAL-SALTARELLI: Good evening everyone. Thank you very much for taking the time to attend this public hearing. My presentation is going to be brief. We're here this evening to listen to you, to document your comments on the draft environmental document and with that, I'll get started.

Regional connector is one of seven projects that is a part of the Measure R projects that are moving forward and is part of our 2035 plan. The purpose and need of the regional connector is to improve public

transit service and mobility, directly connect the Metro

Gold, Blue and future Expo Line, improve rail travel times and reduce transfers by providing a one-seat ride between Azusa and Long Beach and Santa Monica and East Los Angeles and provide increased high-capacity transit coverage of Downtown Los Angeles with the new stations.

Our need: Continued growth in population and transit demand, both in downtown and across the region transit system expansion, will also bring more riders into downtown. The existing rail system requires multiple transfers for many trips, both local and regionally.

Project overview: As I mentioned earlier, the regional connector will be connecting the Metro Blue, Gold and Expo Line; will provide a one-seat ride for travel between Azusa and Long Beach and Santa Monica and East L.A. and ultimately provide an efficient manner to travel through the downtown as well as the rest of the region.

Project development: We initiated this process in '07 with alternative analysis where we looked at 36 alternatives. It was the end of that process that recommended two build alternatives that will be a part of the draft, and we initiated the draft environmental document in January of 2009.

Due to all of your hard work and participation,

we're now at the conclusion of the draft, and we're here

to listen to your comments and ultimately continue to study through the final environmental document, which will be initiated in November.

Project progress: When we started in '07, this study did not have any potential funding. With the passage of Measure R, we do have some Measure R funds dedicated to this project. We also initiated the draft in January of 2009.

We've been working extensively with the communities in the project study area. We've also been able, in that process through the Little Tokyo community, to include an additional alternative that's a part of the draft.

We've also been able to look at extensive potential mitigation measures that were also included in the draft and ultimately have been able to release that in the draft environmental document that was released on September 3rd, which many of you have received.

The draft environmental document has five alternatives that need to be analyzed. The No Build. What will the project study area be like without the project in place? The Transportation System Management alternative. That is the project that uses the comparison of what you could do without building permanent

infrastructure, and the three build alternatives. The

at-grade emphasis light-rail alternative, the underground emphasis alternative, and the fully underground light-rail transit alternative that is included in the -- excuse me.

This is interesting. I apologize. I guess all of the maps are like this. My apologies. It didn't look this way 30 minutes ago. Luckily for us, we do have the three build alternatives on the board, and the TSM alternative. What we're recommending is two additional bus routes essentially to connect 7th Street/Metro to the existing Little Tokyo/Arts District station.

The next alternative, which is the at-grade alternative is connecting the 7th Street/Metro station to the existing Little Tokyo/Arts District. And many of you have seen this alternative before. What's important to know -- oh, there we are. Thank you.

As I was saying, connecting 7th Street/Metro Center station to the existing Little Tokyo/Arts District station. What's unusual about this alternative is that 50 percent of it is underground. That's what you see in purple, because ultimately you're connecting 7th Street/Metro, which is an underground station, to an as to be completed at, possibly, 1st and Alameda.

The next alternative is the underground emphasis alternative, which, as stated in the alternative analysis

document, is about 94 percent underground. Again, leaving

7th Street/Metro, underneath Flower, underneath the 2nd Street tunnel, and underneath 2nd Street, moving west towards Little Tokyo with an at-grade connection at 1st and Alameda to connect to the Little Tokyo/Arts District station.

The fully underground alternative is exactly the same alignment, except where it differs is in the Little Tokyo area. Instead of connecting to the existing Little Tokyo/Arts District station, we now have a station located at 2nd and Central. You're now underneath 1st and Alameda, and it includes two portals, one north of Temple and one between Alameda and Hewitt to connect to the existing at-grade Gold Line.

The fully underground alternative has four stations, one at 5th and Flower to access the Financial District, one at 2nd and Hope to access Bunker Hill, one at 2nd and Broadway and the fourth at 2nd and Central.

As Ann mentioned earlier, there's various ways for you to submit comment, either at this evening's public hearing -- we will have a second one on October 4th. You can also submit comments to me in writing and via our website as well as our E-mail.

There are two big important meetings that are coming up in this project. We'll be going to the

Measure R Project Delivery Committee on October 21st at

9:00 a.m., if you'd like to attend and provide comment. The same item will be going towards our Metro Board scheduled for October 28th at 9:30.

With that, that concludes my presentation, and we're here to listen to you and to document your comments on the draft environmental document.

MS. KERMAN: Thank you, Dolores.

As we quickly set up to take your comments, I did see that Kim Tachiki came in, and we'd like to thank her for representing Congresswoman Lucille Roybal-Allard.

Thank you, Kim. We have so appreciated all the support that we've had from her office and other electives, so I did want to mention that.

So as we quickly set up to take your comments, please note that the format for tonight's hearing does not include dialogue or our response to your statements or questions. If you would like to speak, we request that you fill out a speaker card, and you can turn them into the registration desk. If you don't have a speaker card and would like one, raise your hand, and we'll be sure to get you one.

The purpose of this hearing is for Metro to receive your comments and input on the Draft EIS/EIR. As I mentioned earlier, this hearing is part of the formal

NEPA and CEQA process. Your statements will become part

of the public record and will be addressed in the final document, which we currently expect to release in the summer of 2011.

In addition to oral testimony received tonight, all written comments will be addressed in the final EIS/EIR. So you have an option of speaking tonight or providing your comments by mail, E-mail or filling out a comment form and submitting it at tonight's meeting.

All comments will be addressed with equal attention. All comments will be communicated to the Metro Board and to the FTA and ultimately the Metro Board and FTA will use the final EIS/EIR containing your comments and our responses in making their final decision on the regional connector project, including an adoption of a locally preferred alternative.

When you're called to the microphone, before you begin your statement, if you could please state your name clearly for the record. You have two minutes, and we'll have a time clock up on the screen and four minutes if you require translation.

If you have a prepared statement, we encourage you to leave that with a member of our staff, and as I said earlier, oral and written comments will be considered equally.

In order to fit your comments into the public

record, your comments must be received by Metro before the close of the comment period, which we mentioned is October 18th. Comments, again, may be submitted via E-mail, mail, et cetera, and we'll repeat that at the end of the meeting.

And at this point, this is your time. We're going to turn it over to you.

Ginny, do you have some comment cards? I'm going to call you up three at a time so you can be prepared. The mic is in the center of the room, and our first speaker is Alan Fishel, followed by Mike Okamoto, representing the Japanese Chamber of Commerce and then Wilson Liu, representing the Little Tokyo Business Association, Little Tokyo BID.

PHA1

MR. FISHEL: Good evening. My name is Alan Fishel. I've been following this project from the very beginning, and I want to comment on Dolores and the staff for doing one heck of a job in a very short time. The services were certainly put together not just so it's possible that the underground route would be the only selection.

1

The original route that was picked was not all that good, but thanks to the community here and their oversight, the route was changed for Alameda to be underground, fully underground, and that's a great job.

PHA1
cont'd

25 You guys have done one heck of a job.

1
cont'd

PHA1
cont'd

But I think that -- I know the Alameda/1st Street intersection could be improved considerably. The present design requires four 50-mile an hour curves, slow into the stations, slow out of the station, and the overall design is not done by people who are really familiar and use transit, and the lines need to be straight.

And there is a way of having a much faster, much straighter, much better way of handling the 1st and Alameda intersection, and also the ability to have the station literally between Alameda and 2nd and Central, so it would be very easy for access.

It's a much better location for community, for this community, to be able to have access to 1st Street and the Little Tokyo community along 1st Street, so the overall design can be improved just a little bit for about the same amount of cost, but the impact will be very, very different, and the outcome would be ideal.

I prepared a map to show how it's going to be done. It's in the hands of the staff here, and I urge you to look at the possibilities of making this a better line. 2

MS. KERMAN: Thank you, Mr. Fishel.

Mike Okamoto, followed by Wilson Liu, followed by Greg Kay.

PHA2

MR. OKAMOTO: Good evening. My name is Mike Okamoto 1

PHA2
cont'd

with the Japanese Chamber of Commerce. I spent a very | 1
cont'd

PHA2
cont'd

quiet afternoon in the library flipping through the pages of the EIS/EIR. It's a lot, seven volumes. It's a lot of pages, and through looking at those, I fully support the fully underground alternative.

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But at the same time, I noticed that with the at-grade option, 11 out of 18 intersections in the morning and 15 out of 26 intersections will be adversely impacted traffic-wise. Also, the underground emphasis option has two out of three intersections in the morning and three out of seven intersections in the peek evening hours that would be adversely impacted, and these numbers are really scary, and I don't think this is less than significant; this is pretty significant.

2

Also, when we look at the no build option, there was 69,000 tons, metric tons, of greenhouse gas reduction, which is a significant amount. Just to visualize it, it's a football field with a six- or seven-story building filled with water. That's how much 69,000 tons of greenhouse gas is. That's in terms of water as a weight, and with the no build option, we will be losing the chance to reduce that much greenhouse gas emission.

So as a responsible citizen, I think it is important for us to look into the future generations. Just like the glass door of this room shattered into

3

PHA2
cont'd

pieces yesterday, and that's because of the unusual heat.

3
cont'd

MS. KERMAN: Thank you, Mike.

MR. OKAMOTO: Thank you very much.

MS. KERMAN: Wilson Liu, representing Little Tokyo Business Association, followed by Greg Kay, followed by Wilson Liu, representing the Cherry Land Company.

PHA3

MR. LIU: I'll try to consolidate all four of my presentations here, but I don't want to deal with it in my time. Otherwise --

MS. KERMAN: I wanted to break you up a little bit.

MR. LIU: My name is Wilson, and I'm currently up here now representing two entities, the Little Tokyo Business Association and the Little Tokyo Business Improvement District. I have a joint statement from both the association and the BID, which is our position, which is dated September 28, 2010.

1

Metro staff. On May 1st 2009, Little Tokyo Business Association submitted to Dolores Roybal-Saltarelli their support for the underground emphasis alternative with the station location at 2nd Street, between Los Angeles and San Pedro Street, along with the list of concerns with mitigating measures that will be implemented and documented in the final environmental impact statement, the final impact report.

In light of the current efforts by the

Little Tokyo Community Council and the Nikkei Center

PHA3
cont'd

developers, the property owners of businesses on 1st Street, Alameda Street, 2nd Street and Central Avenue and adjacent property owners, businesses, non-profits and residences adjacent to the intersection of 1st and Alameda Streets, Metro staff expected a fully underground alternative to be designated as a locally preferred alternative in the current Draft EIR.

The Little Tokyo Business Association and the Little Tokyo Business Improvement District has never taken formal action on the fully underground alternative. In light of the additional fully underground and the release of the Draft Environmental Impact Report, the Little Tokyo Business Association, the board of directors and the advisory board need to revisit the build alternatives, construction impacts and mitigation issues, solutions which require implementation and documentation in the final EIS/EIR.

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cont'd

On September 22nd, both boards held joint sessions, which we have identified four particular issues that are really important to us. We, at this point on the locally preferred alternative as far as the board is concerned, have rescinded support for the underground alternative pending --

MS. KERMAN: Thank you, Wilson. Is your

PHA3
cont'd

representation of these other companies a continuation

1
cont'd

of that letter, or are they separate letters?

MR. LIU: It is. If you will allow me, I would like to submit them to you now.

MS. KERMAN: Absolutely.

MR. LIU: I will waive all the rest of the time.

MS. KERMAN: Okay. We'd be delighted. Thank you.

Next, Greg Kay, followed by Charles Adelman, followed by Alan Havens.

MR. KAY: Hello. My name is Greg Kay, and I was delighted to see the addition of the all underground alternative. I think that's the only thing that makes sense, as far as having two separate lines traveling on the same route, which should not have grate crossings.

The only thing that I don't like about the alternative is the lack of service to the central city. It seems that that's a little neglected. I thought I remembered an alternative that had a station between San Pedro and Los Angeles, but it seems to me it's important to build also for the future, where future development might occur, rather than concentrating on where it already is.

Thank you very much.

MS. KERMAN: Thank you, Mr. Kay.

Charles Adelman, followed by Alan Havens,

PHA3 cont'd
1 cont'd
PHA4
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2

followed by Nate Zablen.

PHA5

MR. ADELMAN: Hi. My name is Charles Adelman. I'm an L.A. native and used to work in Little Tokyo many years ago. Now I work all over the place, including down in the L.A. Live area.

Two comments. Generally, this is the only project being considered by any agency for downtown that will actually improve mobility in the downtown area, provided that we do the entirely underground option. L.A. is too dense to be running trains down the middle of the street, and especially not in that kind of a way. 1

My second comment is a more technical thing. An alternative that was considered and rejected, which would be a variation on it, which would make the junction over here at Alameda over/under rails, rather than two tracks side-by-side. The over/under is the only way to create a safe junction for two and a half minute headway trains.

Side-by-side means that the train making the turn is going to be crossing the other track with the potential for two trains colliding in the event that either the signals fail or the driver misses the signal. And as we know, both of those things have been known to happen. 2

Just recently, an MTA Blue Line train plowed into a bus because the driver of the train missed the signal. There was an event in Washington, D.C. earlier this year,

I think it was, that they had a big Metro accident because

PHA5 cont'd
2 cont'd

the signals failed.

Thank you.

MS. KERMAN: Thank you, Mr. Adelman.

Alan Havens, followed by Nate Zablen, followed by William Briones, representing the Los Angeles Buddhist Temple.

PHA6
1

MR. HAVENS: My name is Alan Havens. I'm a train advocate, retired from Skagit Transit. I fully support MTA's fully underground LRT alternative. I can accept a real opinion on what's done at the 5th Street and Flower station. I would note that it might better facilitate a center pocket track between 6th and 3rd, something like that.

2

I recommend in addition to the Little Tokyo underground station, maintaining the Watts line, the existing Union Station as well. I support the surface track in some way, shape or form for the following reasons: One, for maintenance connections.

Two, for possible use of additional pocket tracks.

Three, it might facilitate some special events running between Pasadena and East L.A.

Fourth, in the future, if we get that line out to Whittier -- I might mention Norwalk -- it might

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PHA6
cont'd

let some trains to go directly to the station, and

3
cont'd

fifth, looking real far into the future, if the 60 Freeway service might be capable, I think we'd have to use something like this, this surface track, to go to Union Station without congesting the main downtown connector with too many LRT lines.

MS. KERMAN: Thank you, Mr. Havens.

Next, Nathan Zablen, followed by Bill Watanabe.

MR. ZABLEN: Good evening. I'm Nate Zablen. I'm a member of the Southern California Transit Advocates, but I'm speaking for myself. Generally, I support the all underground alternative. I think that's the best way to connect these lines because downtown has a lot of traffic, and there's going to be a lot of interruptions, so it's important so you can build up kind of a good speed on the train, so it's best if they go underground.

As far as the exact location of the station, I'm not a resident of Little Tokyo, so I would definitely defer to the residents of Little Tokyo and the business people in exactly how that station should be built. For those people, though, that live in the other parts of Los Angeles County, it's one way to connect.

We have a lot of rail in L.A., but it doesn't really connect, so here it is, giving people the opportunity who live in the northern part of the county,

PHA6 cont'd
3 cont'd
PHA7
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PHA7
cont'd

live in Azusa, Pasadena and go all the way to Long Beach.

3
cont'd

PHA7
cont'd

And those people who live in East L.A. can now go to Santa Monica.

At the present time, we really don't connect. We've got all of these lines, but we have to transfer, so it really is inconvenient. This could really be a breakthrough. I only hope that there is funding for it, and it has to be done.

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cont'd

Thank you very much.

MS. KERMAN: Thank you, Mr. Zablen.

William Briones, representing the Los Angeles Nishi Buddhist Temple, followed by Bill Watanabe, followed by Yukio Kawaratan.

PHA8

MR. BRIONES: Good evening. I'm William Briones. I'm one of the ministers at the Los Angeles Hompa Hongwanji Temple.

This afternoon at the LTCC meeting, there was a vote, and I'll let Bill Watanabe give the results, but we are part of LTCC. Our temple is located on the corner of Vignes and 1st Street, right pass the 1st Street bridge, right there.

We've been impacted by light-rail, and it was inconvenient, but now it's very nice. We enjoy the train being our neighbor. However, we are concerned with the portal that is being planned to be put on 1st Street. We

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PHA8
cont'd

do have property that goes to the end. I believe it's

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cont'd

PHA8
cont'd

Garey Street and then Hewitt, so our property line ends at Garey, and the plan is to bring the portal to Hewitt. Hopefully, that portal does not infringe on our property. We just built a new building, and that is our concern.

1 cont'd

Otherwise, we are in total favor for the underground light-rail, as Bill Watanabe will attest to.

2

MS. KERMAN: Thank you so much, Reverend.

Bill Watanabe, representing the Little Tokyo Community Council, followed by Yukio Kawaratan and then Russ Brown.

PHA9

MR. WATANABE: My name is Bill Watanabe, and I'm currently the chair of Little Tokyo Community Council, and also I'm the executive director of Little Tokyo Service Center, and I also happen to chair Little Tokyo Historical Society.

The Little Tokyo community has had a number of meetings throughout the past few months. Many, many meetings, many discussions, looking at all the alternatives, looking at all the different ways that we could consider the community and its impact.

And today at the Little Tokyo Community Council meeting, we did approve a letter, which will be sent to Dolores, and you should be getting it, but I'd like to just touch on some of the main points.

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PHA9
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25 Number one: We support the fully underground | 1
cont'd

PHA9
cont'd

option. We feel that that's the best one, and we'd like to have the Metro Board consider that. We feel that 1st and Alameda and the treatment of it as proposed originally divides the community having Alameda being such a busy, big road with all of this traffic to go underground with bridges, we just felt it was not feasible.

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cont'd

We want to urge the boring of the subway under 2nd Street be done from west to east. In my mind, there's a big hole where the state building used to be. It seems like the idea was to put a bunch of dirt in there.

2

We feel that Metro has given us a great start in terms of meeting with us, discussing with us. The community would like to continue that process, to be a part of the discussions and decision making from here on out in terms of the decisions by the Board and also to ask for mitigation to minimize or compensate for business losses.

3

Thank you very much.

MS. KERMAN: Thank you, Bill.

Yukio Kawaratan, followed by Russ Brown, followed by Joel Covarrubias.

MR. KAWARATAN: That's pronounced Kawaratan.

PHA10

The regional connector is a worthwhile project, but only if the fully underground locally preferred

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PHA10
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alternative is selected by the MTA Board. The Draft

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cont'd

PHA10
cont'd

EIS/EIR correctly states that the Little Tokyo community, in comparison to all other areas along the route, will suffer many disproportionate adverse impacts during the construction. 2

Hopefully, the draft will be modified to include more effective mitigation measures to lessen the economic suffering, and in some cases the demise of Little Tokyo businesses. 3

The draft does not adequately address the adverse impacts of the underground emphasis alternative it would impose on Little Tokyo. 4 For instance, the Alameda underpass will adversely impact Little Tokyo traffic during and long after construction. 5 Four surface rail tracks at 1st and Alameda will create dangerous conflicts between pedestrians, vehicles and trains. 6

A proposed pedestrian bridge will be a permanent visual plight and liability. 7 The Little Tokyo pedestrian movement are all at sidewalk level. Who will want to go up 20 feet by stairs or elevator, cross 100 feet across Alameda and then go down 20 feet? People will, instead, take their chances. With trains coming frequently from four tracks in four different directions, some will be injured or killed. 8

These are just some of the reasons the Japanese 9

PHA10
cont'd

American community cannot accept the underground emphasis

9
cont'd

alternative. I urge the MTA Board to approve the fully underground locally preferred alternative.

Thank you.

MS. KERMAN: Thank you, Mr. Kawaratan.

Russ Brown, representing the Historic District, BID, followed by Joel Covarrubias, followed by Patti Berman.

MR. BROWN: Russ Brown, Historic Downtown Business Improvement District of the L.A. City chapter. I think the gentleman before me -- I won't try to pronounce his name, much less spell it -- did an excellent job of understanding the really horrible problems of the above ground emphasis and the partially underground.

We especially want to thank the team. You all worked with the neighborhood council. You worked with the community for almost four years on this. I remember the very, very beginning when there was no money, there was no chance that any of this was going to happen, and today to see the community involvement and how this is really going through the process.

We're very much in support of the fully underground project. Especially, the 2nd and Broadway station, which will connect with the streetcar and will connect with the Red Line at the Civic Center, the 5th and

PHA10 cont'd
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PHA11
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Flower station, which will also connect with the 5th and

PHA11 cont'd

Grand streetcar, and the fully underground Office Depot site. 4 cont'd

And again, we want to thank you for engaging the community and really listening to the community from the very beginning, and especially working really closely with the Little Tokyo community to figure out a tricky situation. 5

That's all.

MS. KERMAN: Thank you, Russ.

Joel Covarrubias, followed by Patti Berman, followed by Dave Frevele.

PHA12

MR. COVARRUBIAS: Hi. My name is Joel Covarrubias. The regional connector is an absolutely critical project. Please build it as quickly and safely as possible. 1

You have done a fine job identifying possible alternatives, including station options as well as an underground prospect. I'll talk about the project as quickly as I can.

Preferred alternative. Please build the fully underground alternative, despite the higher cost. This alternative will result in more passengers and a more reliable line for all riders with fewer impacts in the downtown community. 2

Item two. Please do not remove the station at 3

25 5th and Flower. There are some rumors going around about

PHA12
cont'd

that. Once all lines are running and connected, the Metro Center is going to be a busy transfer station. We're going to need 5th and Flower as the destination station for the people going to the Financial District. 3 cont'd

Three. If you do decide to get rid of the Financial District station, which I hope you don't, please study a new north entrance at the Central Metro station. I believe this can be done by extending the existing mezzanine north between 6th and Flower. 4

Item four. Station names. Please name the stations after the neighborhoods served, rather than intersections. We saw a bunch of 2nd and Broadway, 2nd and Hope. Please think about names like Little Tokyo, historical Bunker Hill and the Financial District. 5

Point five. Plans call for a covered tunnel under Flower Street. Please build this tunnel wide enough to accommodate three tracks. I've seen plans that call for pocket tracks south of the Bunker Hill station. Designing the tunnel, the entire tunnel, for three tracks now will give Metro the space to accommodate future track, such as a second pocket track from Metro for a passing track along the entire length of that tunnel. 6

And finally, all stations. Please build the 7

stations, every station, with at least two entrances and 7 cont'd

PHA12
cont'd

7
cont'd

possibly three. I understand there are cost issues involved, but we all want the best stations possible.

MS. KERMAN: Thank you, Joel.

And if you'd like to turn in your comments, we'd be happy to take them.

Patti Berman, representing the Downtown Los Angeles Neighborhood Council, then followed by Dave Frevele, ERHA, and then I have a speaker card for Dave Satara (phonetic).

PHA13

MS. BERMAN: My name is Patti Berman. I'm the president of the Downtown Los Angeles Neighborhood Council, and I would like to reiterate something that Russ Brown just said, which is this process has really been so wonderful to work with in terms of Metro by making this a really smooth, easy process, and I know we all appreciate that.

Obviously, the Downtown Neighborhood Council has been very vocal on this. We accept only the idea of the fully underground alignment. We feel that adding trains into the mix of traffic in the downtown area would be disastrous, and we also feel that when it comes to the exact design of how this will come up in Little Tokyo, the people that live in this area should be the ones to make the decision, not us.

But please look at the fully underground

alternative, and again, thank you so much for getting this going. It's just been a really, really great process.

MS. KERMAN: Dave, you're up next, followed by Dave Satara, followed by Brady Westwater.

MR. FREVELE: My name is Dave Frevele. I'm with the ERHA, which is the Electric Railway Historical Association. There were a lot of us that are very intent, what we call rail fans. Some of us get to the point where there's a nickname for us where they would call us foaming, referring us to rabid dogs. There's some of us that were very beloved of the rail system that was here that was completely erased in Los Angeles.

Prior to MTA, there was RTD. Prior to RTD, there was the first MTA Board that had oil company executives, car dealers, contractors that would pave streets. I use the word "naturally," but it was completely against the public interest to remove the rail system that was here. I want to say more than any project, but getting the first rail to come back to the line is also important.

This project also is very critically important, even more so than the subway. We're very lucky that Antonio Villaraigosa tonight is in Washington, D.C. He understands fully and with the MTA, completely supports 30/10, which is a very overdue measure to help us in

PHA13 cont'd 1 cont'd

PHA14 1

Los Angeles.

PHA14
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I should say something about the staff for the regional connector. I did write the Board last week and some meetings don't go well, Expo and other meetings. When you come to regional connector meetings, we're fully listened to. We're fully communicated with, not just by Dolores, but also Ann and Libby are very helpful.

It's a very different atmosphere than many other MTA meetings. Not everybody will turn around and say we appreciate that or remark on it, but it's a very, very good thing. 2

As far as the downtown connector, please, MTA, build that even before you do anything to the subway. Build that instantly, fully underground. I'm grateful that you don't molest 1st and Alameda with a fully underground option. 3

MS. KERMAN: Thank you, Dave. You're right on time.

Brady Westwater, followed by Jay Stringer, followed by Jon Kaji.

PHA15

MR. WESTWATER: My name is Brady Westwater. Like everybody else, I support the fully underground. I think it's the only thing in this chain where everybody has agreed about the same thing. I have three comments to make, though. 1

First is at 2nd and Hope on the top of 2

Bunker Hill, it says no further development is planned.

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PHA15
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We have an area there with Bunker Hill Towers, separate from the rest of Bunker Hill, with a maze of streets, which need to be reorganized, park spaces are unusable and other activities that need to be rationalized. This is the opportunity to do that.

MOCA also needs a permanent home for its permanent collection that's large. What better place than this? The Getty needs a house for its collection. They're not allowed to add one foot to their existing campus. What better place than this?

I suggest that they rewrite the report to say that the land freed up by the construction here should be considered for specific uses that would also make it a destination, making people more likely to use rapid transit in the city.

2
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Second point is Little Tokyo where the underground portal is. They should make it a prime consideration to restore the brick buildings that date back to the early days of Little Tokyo on that site. They were originally going to be torn up by the cut that was going to go through Little Tokyo.

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Last point is when the community was first presented, the cut through Little Tokyo was not even going to be in the study group to study whether that should be

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PHA15
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done or not. That was just what everybody was told was

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PHA15
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going to happen. Someone in the community spoke up. MTA listened and because of that, we've have a fully underground proposal.

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Thank you.

MS. KERMAN: Thank you, Brady.

Next, we have Jay Springer, followed by Jon Kaji, followed by Kim Luu-Ng.

And I would like to also take this opportunity before Mr. Springer starts to let you know that you can still turn in speaker cards. If you need one, raise your hand. We'll be happy to get it to you.

And Mr. Springer, please.

PHA16

MR. SPRINGER: Good evening. My name is Jay Springer. I'm a resident of 1130 South Flower Street, Flower Street Lofts. I'm also the president of the Flower Street Lofts Homeowners Association, a community of over 250 residents. Tonight I'm speaking on behalf of myself personally. I've also been employed in Downtown Los Angeles, I'm afraid to say, for over 30 years now.

First of all, I'd like to offer my hearty congratulations to MTA and the staff. You've really put together a very nice set of alternatives. You really deserve the community's thanks for that effort. Thank you very much.

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PHA16
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And I'm really pleased to see your fully 2

PHA16
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underground alternative now shows the location of the Little Tokyo station. I appreciate that. We can all understand the plan now.

I'm speaking tonight to support the fully underground alternative. This is an appropriate investment, not only for this area, but for the entire downtown community and for the entire metropolitan Los Angeles area. Please build the fully underground alternative.

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Thank you.

MS. KERMAN: Thank you, Mr. Springer.

I would also like to mention that we're live streaming this meeting, and I've been advised that we have several people watching online, so welcome to all of you.

And with that, Jon Kaji, you're up next, followed by Kim-Luu Ng, followed by Jayson Yamaguchi.

PHA17

MR. KAJI: Thank you. My name is Jon Kaji. I'm with the Nikkei Center, LLC Project.

First of all, as many have said before me, I'm very appreciative to the MTA staff for spearheading this effort, and also, I thank you for all of you who represent working with your communities, your constituents. I really think that this is a wonderful -- it's been a wonderful process.

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It hasn't been easy, and yet I think now that 1 cont'd

PHA17
cont'd

we're here together moving forward to the Metro Board meeting, I think that this is a great time to kind of look around the room, look at all who are represented here because to me, this has really been a remarkable and inclusive process.

I did want to speak about the next steps. I know that we're moving towards the Metro Board meeting, but we're entering into a very highly competitive phase in Washington. As you know, other communities, other cities, other states are competing for a limited number of transportation dollars, and I think Downtown L.A., and I think Los Angeles and the region has often been short shrifted, that we haven't received our fair share of those tax dollars, which we have been paying to Washington.

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I think the regional connector is a wonderful way to show that we are getting a return on those tax dollars, and in a way that will enhance the economic viability, not only of downtown, but of Los Angeles and the region.

So my hats are off to the staff and all of you for your commitment to make this a wonderful process and also the end result. We're looking forward to seeing it delivered in a timely manner.

Thank you.

MS. KERMAN: Thank you, Jon.

Kim. Kim, please, if you could pronounce your

name better than I can. Kim is representing The Spice Table, followed by Jayson Yamaguchi, followed by Alan Nishio.

PHA18

MS. LUU-NG: Good evening. My name is Kim Luu-Ng, and my husband and I, Chef Brian Ng, are owners of The Spice Table, which you can see if you look out this window. We're located at 115 South Central, the old Cuban restaurant across the street over here, and we hope to open in November.

That said, I understand that there are a lot of people here, as well as Metro, who support the fully underground option, and it's extremely critical for our long-term existence in Little Tokyo that if you are to fully pursue the fully underground option, that you go with the option that does not displace our restaurant.

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There are two scenarios. One is where our building and other businesses on this block across the street here will be wiped out to make room for a staging area for MTA. The second is that it is not touched. It is not displaced at all. In order to preserve our business, which is about to open its doors in less than a month, in about a month, go with the option that preserves our restaurant.

Number two. I greatly encourage the MTA to

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PHA18
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seriously consider viable and fair business compensation

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PHA18
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mitigation measures for Little Tokyo businesses. The construction will be loud, extremely disruptive to the area. Access points to Little Tokyo are going to be cut off, people are not going to be able to eat at our restaurant and shop at stores.

So therefore, we need some kind of compensation measure that is fair and viable. If you're going to spend billions of dollars to invest in construction, then you should also invest in small business, and we should not be forced to die at the expense of construction.

Thank you.

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MS. KERMAN: Thank you, Kim, and if you have additional comments, please put them in writing to us.

Jayson Yamaguchi, representing GetFit Little Tokyo, followed by Alan Nishio, followed by Hiroshi Yamauchi.

PHA19

MR. YAMAGUCHI: Good evening. My name is Jayson Yamaguchi. I am a resident of Little Tokyo, and I'm supporting the fully underground alternative, but recently I heard that when the Red Line that goes underneath in the tunnel, during the construction, the smaller portion of the Kaiser Hospital sunk. That's what I heard.

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So if that is the case, it's a big concern for me

PHA19
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because that subway is going under 2nd Street, so if we

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have any park for the residents or merchants or business people from outside Flower Street, if you can give us that, that would help Little Tokyo.

Thank you.

MS. KERMAN: Thank you, Jayson.

Alan Nishio, followed by Hiroshi Yamauchi, followed by Brian Kito.

MR. NISHIO: Hi. I'm Alan Nishio, and I'm the company chair for California Japanese American Community Leadership Council. We're a statewide organization of Japanese American community organization centers that are dedicated to the preservation of the three remaining Japantowns in San Francisco, San Jose and Los Angeles.

Prior to World War II, there were over 70 Japantowns in California alone and well over 100 in the nation. Now there are only three remaining in the nation and all three are in California, so the location of the regional connector to Little Tokyo is very important to our community, so we're very concerned.

While we support the Metro Regional Connector fully underground, we need to understand that we're making, as a community, great sacrifices for this station to occur, and we want to make sure that the construction of this does not jeopardize the future and threaten

PHA19 cont'd

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PHA20

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Little Tokyo as a community.

PHA20
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We believe Metro staff has heard that we support the fully underground, but we want to emphasize other things because what is really key to Little Tokyo is small business, the small family-owned businesses, the non-big-box franchise types of things are what makes Little Tokyo such a unique community.

So we want to make sure that during the construction, the concerns of small businesses are heard and that includes where the tunnel boring begins because we do not want four years of disruption for the small business in Little Tokyo, and it also means some sort of compensation for those businesses to ensure that the character of Little Tokyo survives well into the 21st Century.

Thank you.

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MS. KERMAN: Thank you, Alan.

Hiroshi Yamauchi, followed by Brian Kito, followed by John Kerr.

And this is also a good opportunity to let you know that if you would still like to speak tonight, raise your hand. We'll get you a speaker card, and we'll be delighted to hear your thoughts.

PHA21

MR. YAMAUCHI: My name is Hiroshi Yamauchi, owner of a Japanese restaurant in Little Tokyo on 2nd Street --

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PHA21
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25 I think I need an interpreter. Is that okay?

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PHA21
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MS. KERMAN: Hiroshi, we would like to give you an interpreter, if you would like one.

MR. YAMAUCHI: Yes, yes. I'm Hiroshi Yamauchi. I have a small restaurant on 2nd Street between Central and San Pedro, right in the middle of Little Tokyo on 2nd Street. What everybody is saying, I support the fully underground option, but I have a little question about that.

It seems to me that you guys are going to use a cut-and-cover method, that's a construction method, but if you do this, our business cannot last for four years. Please, everybody, reconsider your support because for people who don't live here, this sounds like a great idea, but for us who live here, it is a very serious matter, so please reconsider because it is going to threaten our lives. 400 businesses here in Little Tokyo and 2000 residents and people who work for the businesses included. The population will become ten times as many.

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But the plan sounds great, but in reality, the whole Little Tokyo will become the construction site for four long years. It is very serious for us.

Thank you.

MS. KERMAN: Thank you, Hiroshi.

Brian Kito, followed by John Kerr.

25 And then if there are any others that would like

to speak tonight, please raise your hand. We'll get you a comment card.

PHA22

MR. KITO: My name is Brian Kito. I own Fugetsu-Do Confectionery, which is a three-generation old business. It's the oldest business here in Little Tokyo, 107 years.

When I first heard about the alternatives for us to have a Metro Rail line coming down to Little Tokyo, I was very happy. I think the first vote was between Temple Street connector or 2nd Street or even 3rd or 4th Street connector. Obviously, I voted for Temple Street, so I was very disappointed that that was taken off the possibilities.

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We have a long history here. I lived through the redevelopment through the '80s here. My dad had two stores here at that time, so we've experienced eminent domain and losing one of our stores, the first American-style bakery here in Little Tokyo, so I'm very aware of what the small businesses have to go through during construction and redevelopment and these types of issues.

I do know what it feels like to have to deal with government agencies like CRA, try to get relocation benefits and things like that. I beg you guys to make sure that whatever we can do about saving this block, the one that's down by 2nd, Central and Alameda. I don't

want to see that block be lost. If there's any other

PHA22 cont'd

alternative that would save that block, I would vote for it for sure. 1 cont'd

Thank you.

MS. KERMAN: Thank you very much.

John Kerr, followed by Les Howard.

MR. KERR: Good evening. I live in the Wilshire Center neighborhood.

MS. KERMAN: John, if you could introduce yourself again.

Thank you.

PHA23

MR. KERR: Hi. My name is John Kerr, and I live in the Wilshire Center neighborhood, but I frequent downtown a lot, one of my favorite neighborhoods, and Little Tokyo is a large part of it, so I also urge Metro to do everything they can to make sure that the businesses and the wonderful pedestrian atmosphere that Little Tokyo provides, keep intact during all of the construction. 1

Secondly, I want to voice my support for the fully underground option. It will truly keep L.A.'s rapid transit rapid. And along those lines, I just want to voice a little concern for the eventual through running of the trains to Pasadena into Long Beach, East L.A. to Santa Monica. 2

A 50-mile light-rail transit line is pretty much

PHA23
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unheard of in this area of the United States, and the 2 cont'd

travel times between those two destinations, especially one that extends beyond Azusa further on into the foothills, it seems like the line might be almost too long.

So I hope there are thoughts for other through running options such as East L.A. to Long Beach and Pasadena to Santa Monica before accomplishing this for those of us who look forward to this project being completed.

Thank you.

MS. KERMAN: Thank you, John.

Les Howard.

I'd also like to use this opportunity while Les is coming to the mic to invite anyone else who would like to speak tonight to fill out a speaker card.

MR. HOWARD: I'm a member of the Gold Line --

MS. KERMAN: Les, if you could introduce yourself, please.

MR. HOWARD: Les Howard from Whittier and member of the advocacy group for the Washington Boulevard alignment for the extension of the Gold Line. I am excited as a potential stakeholder, if I live long enough, of what this project here does as a multiplier for the investment being made across the metropolitan area as we go forward with

PHA23 cont'd
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PHA24
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PHA24
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MTA extension.

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PHA24
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I deeply appreciate the sacrifices the people in this neighborhood will be called upon to make and support any effective form of mitigation that can be provided, but your neighbors even further afield, as we look forward to this, join you in looking forward to the benefit.

Tonight, I had to drive to Atlantic to take the Gold Line to Little Tokyo. Soon, I hope many of us will be able to come to Little Tokyo directly.

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MS. KERMAN: Thank you, Les.

Do I have any additional speaker cards? We will leave this mic open until 8:00, and if you do want to speak, please provide me a speaker card, raise your hand. We'd be delighted to get you one.

In the meantime, let me also remind you that if you could please make sure that you have signed in tonight, we want to make sure that we have current contact information for all of you so that we can keep you up-to-date on the process and progress of the study.

You can also complete a comment form at the registration desk or again, you may E-mail us or mail us by postal mail, all of the various ways that you can comment on this project or the EIS/EIR through October 18th are up on the screen.

We encourage you to stay informed on this

process, and we do have a Web site at

metro.netregionalconnector -- metro.net/regionalconnector.

Do I hear any other comments? Well, for those that would like to -- Diego, please.

MR. CARDOSO: I just want to thank the community that came tonight to this meeting. We did a lot of work with the community, and I also want to thank Dolores and the new baby that is coming for Dolores.

We are a city that is transforming and will continue to transform, and as we build transit, we're building a more livable community, and the people that will enjoy it more so than us are the young people that are ahead of us in the future.

So I really thank the community, thank all of the technical people that helped us, Ray and everybody. If I start calling names, I will forget. And our engineer in the back, thank you so much for coming tonight and any speakers please come up. And Ginny, thank you.

MS. KERMAN: No more speaker cards. Okay.

Again, we're taking comments until 8:00, but I will remind you that there's a very, very important board meeting to put on your calendar. That is when the Metro Board of Directors will choose a locally preferred alternative. That is October 28th. And prior to that board meeting, we plan to go to Metro Committee, the

Measure R Committee, on October 21st. That's a 9:00

meeting.

If you've provided your E-mail address on the registration form or if we have you in our database, we will make sure that we notify you of that meeting.

And on behalf of all the Metro staff and the project team, that includes our consults, The Robert Group, CDM, the entire team Ted Tanaka (phonetic), PD, we do thank you for joining us this evening, for being part of our process, for participating, and please get us your comments, continue to let us know how you feel about this project.

And again, we thank you so much, so good night.

(Hearing adjourned at 7:48 p.m.)

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PHA1

Responses to Comments from Fishel, Alan

Response to Comment PHA1-1

Comment acknowledged.

Response to Comment PHA1-2

Metro has refined the Locally Preferred Alternative since publication of the Draft EIS/EIR to soften the alignment curves in the Little Tokyo area, thereby allowing higher train speeds. Metro appreciates the submission of the map, and addresses it in responses to Comment Letter PC111.

PHA2

Responses to Comments from Japanese Chamber of Commerce, Okamoto, Mike

Response to Comment PHA2-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA2-2

Intersection impacts were analyzed in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR. The Draft EIS/EIR and this Final EIS/EIR determined that during the AM peak hour 18 intersections and during the PM peak hour 26 intersections would experience significant adverse impacts under the At-Grade LRT Alternative, and three intersections during the AM peak hour and only seven intersections during the PM peak hour would experience significant adverse impacts under the Underground Emphasis LRT Alternative.

Response to Comment PHA2-3

Comment acknowledged. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which would result in a regional decrease in greenhouse gas emissions compared to the No Build Alternative.

PHA3

Responses to Comments from Little Tokyo Business Association and Little Tokyo Business Improvement District, Liu, Wilson

Response to Comment PHA3-1

Comment acknowledged. Letters, submitted by the Little Tokyo Business Association and Little Tokyo Business Improvement District, referenced in this comment are contained in this volume of the Final EIS/EIR as Comment Letters BU18 through BU20. Please refer to Responses to Comments BU18-1 through BU20-8, above, for detailed responses to concerns raised in these comment letters.

PHA4

Responses to Comments from Kay, Greg

Response to Comment PHA4-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA4-2

Preference for a station between Los Angeles and San Pedro Streets is noted.

PHA5

Responses to Comments from Adelman, Charles

Response to Comment PHA5-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA5-2

Fully Underground LRT Alternative – Little Tokyo Variation 2 was eliminated from further study due to potential impacts to the Los Angeles Hompa Hongwanji Temple. A rail simulation was performed to ensure that the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be able to accommodate the Regional Connector's projected 2.5 minute headway. Metro would use measures such as trackside signals, cab signaling, and automatic train control systems to ensure safety. Safety systems would be included to prevent train operators from passing red signals.

PHA6

Responses to Comments from Havens, Alan

Response to Comment PHA6-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA6-2

Comment noted.

Response to Comment PHA6-3

Union Station and Metro Blue Line service to Watts would be maintained. The Fully Underground LRT Alternative was designated as the Locally Preferred Alternative in part to avoid the impacts of surface tracks in the dense downtown area. The Locally Preferred Alternative includes a new underground pocket track north of 7th Street/Metro Center Station. The surface tracks connecting the Pasadena and East Los Angeles branches of the Metro Gold Line would no longer be in service once the Regional Connector opens, and may ultimately be removed. The majority of transit passengers riding the Metro Gold Line from East Los Angeles are destined for downtown Los Angeles and points westward. These passengers would benefit from seamless travel to westside destinations. Transit riders traveling from East Los Angeles to Pasadena (and in the future to Montclair) would be required to transfer at the new underground station in Little Tokyo. The Eastside Extension Phase 2 project would extend the Metro Gold Line farther east, and would have direct trains into the Regional Connector. The Regional Connector ridership forecasting assumes that the Eastside Extension Phase 2 will be in operation by the year 2035, and results show that the Regional Connector would have adequate capacity to accommodate the projected volumes of transferring passengers.

PHA7

Responses to Comments from Zablen, Nathan

Response to Comment PHA7-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA7-2

Comment acknowledged. Metro has included the Little Tokyo community in meetings involving station planning and Metro will continue to coordinate with the Little Tokyo community during the course of the project.

Response to Comment PHA7-3

Comment acknowledged. Thank you for your comment.

PHA8

Responses to Comments from Briones, William

Response to Comment PHA8-1

Comment acknowledged. Construction of the Locally Preferred Alternative would not require temporary easement, partial, or full taking of the Los Angeles Hompa Hongwanji Temple property.

Response to Comment PHA8-2

Thank you for your comment. Support for an underground LRT is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHA9

Responses to Comments from Little Tokyo Community Council, Watanabe, Bill

Response to Comment PHA9-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA9-2

Comment acknowledged. As indicated in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, a range of durations, 2-4 months for the TBM insertion site and 24-48 months for the 2nd Street TBM tunnel, was assumed for tunneling activities at both insertion site options. These ranges are conservative estimates. Disproportionate impacts associated with each alternative were discussed in Section 4.17, Environmental Justice, of the Draft EIS/EIR and this Final EIS/EIR.

The small size of the 2nd/Hope Street station site would require a substantial portion of construction staging activities to occur in the surrounding streets, necessitating longer downtown street closures and increased cut and cover activities. This would have the effect of reducing mobility downtown and could deter visitors from frequenting many downtown communities, including Little Tokyo. In addition, the 1st/Central Avenue station site in Little Tokyo would need to be used as the TBM receiving site if the tunnel boring machines are inserted at the 2nd/Hope Street station site.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site options at 2nd/Central Avenue station and the 2nd/Hope Street station are no longer being considered. Instead the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. The TBM would be inserted approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street and result in fewer acquisitions. Tunnel boring activities from this site would proceed farther down Flower Street to 4th Street, instead of ending at the proposed 2nd/Hope Street station. Spoils would be removed within the Mangrove property, and trucks would be routed to the east and/or north to reach the freeway, and would not pass through Little Tokyo. Section 4.18, Construction Impacts, of this Final EIS/EIR contains further detail regarding estimated construction durations, construction scenarios, and tunnel boring operations at the Mangrove property. Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR have been revised based on the new TBM insertion site in this Final EIS/EIR. A portion of the Mangrove property was identified for construction staging in the Draft EIS/EIR. Inserting the TBM at the Mangrove property would not result in new significant impacts or substantially increase the severity of impacts previously identified in the Draft EIS/EIR.

Worksite Traffic Control Plans will be developed in coordination with the Los Angeles Department of Transportation and presented to the community prior to construction activities.

Metro will provide the community with updates regarding the construction schedule prior to and during construction.

The tunnel boring machine insertion site needs to be located at the end of the tunneled segment of the alignment. The former state office building site is located near the middle of the tunneled segment, and would therefore not be practicable, and would not greatly reduce construction impacts in Little Tokyo or at 2nd and Hope.

Response to Comment PHA9-3

Metro will continue to coordinate with the Little Tokyo community during the course of the project. During preparation of this Final EIS/EIR, Metro held meetings with community groups, which included meetings with the Little Tokyo Working Group, and identified municipal leaders to guide them in the decision-making process as it relates to the proposed station locations, alignment options, and anticipated mitigation measures. Community input during these meetings has been taken into account in the refinement of the Locally Preferred Alternative and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8), which are presented in this Final EIS/EIR. A community outreach plan will also be developed to notify local communities of construction schedules, street lane and sidewalk closures, and detours during project construction.

In accordance with the State CEQA Guidelines, the Metro Board of Directors will decide whether or how to approve or carry out the project after considering this Final EIS/EIR and in conjunction with making findings under Section 15091 of the State CEQA Guidelines.

Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to minimize impacts to local businesses.

PHA10

Responses to Comments from Kawaratani, Yukio

Response to Comment PHA10-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA10-2

Concurrence with the Draft EIS/EIR conclusion is noted.

Response to Comment PHA10-3

Mitigation measures were identified in Section 4.14, Economic and Fiscal Impacts, of the Draft EIS/EIR to reduce economic impacts associated with construction of the Locally Preferred Alternative to the Little Tokyo community. Since publication of the Draft EIS/EIR, refinements to the Locally Preferred Alternative have reduced the significance of potentially adverse economic and fiscal impacts during construction in Little Tokyo, refer to Section 4.14, Economic and Fiscal Impacts, of this Final EIS/EIR. The refinements reduce the amount of cut and cover, the need for roadway and sidewalk closures, property acquisitions, and overall disruption to businesses that would occur during construction. The refinements to the Locally Preferred Alternative have also reduced the number of privately-owned parcels that would be completely or partially acquired. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The Locally Preferred Alternative would not have significant economic effects after implementation of mitigation. Refer to Section 4.14, Economic and Fiscal Impacts, of this Final EIS/EIR.

Response to Comment PHA10-4

The Draft EIS/EIR and this Final EIS/EIR adequately analyzed impacts to Little Tokyo as a result of the Underground Emphasis LRT Alternative in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation. Please refer to Responses to Comments PHA10-5 through PHA10-9, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PHA10-5

The Locally Preferred Alternative would not include an Alameda Street underpass. The traffic lanes and pedestrian crossings at 1st and Alameda Streets would remain at-grade, as they are today.

Response to Comment PHA10-6

Metro designs its grade crossings to minimize potential conflicts between pedestrians, vehicles, and trains. No grade crossings would be constructed as part of the Locally Preferred Alternative. The Little Tokyo pedestrian bridges are included only in the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA10-7

This impact was discussed in Section 4.17.3.4.2 of the Draft EIS/EIR.

Response to Comment PHA10-8

Metro designs its grade crossings to minimize potential conflicts between pedestrians, vehicles, and trains. No grade crossings would be constructed as part of the Locally Preferred Alternative. The Little Tokyo pedestrian bridges are included only in the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA10-9

It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the Underground Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHA11

Responses to Comments from Historic Downtown Business Improvement District of the L.A. City Chapter, Brown, Russ

Response to Comment PHA11-1

Thank you for your comment.

Response to Comment PHA11-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA11-3

Support for the 2nd/Broadway station is noted. The Locally Preferred Alternative includes a station at 2nd and Broadway.

Response to Comment PHA11-4

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHA11-5

Thank you for your comment.

PHA12

Responses to Comments from Covarrubias, Joel

Response to Comment PHA12-1

Thank you for your comment. Support for the Regional Connector project is noted.

Response to Comment PHA12-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHA12-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHA12-4

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHA12-5

Metro will undergo a formal station naming process that includes community participation. The stations are referred to in the EIS/EIR by intersection so as to be as descriptive as possible about their locations, but these will not necessarily become the actual station names.

Response to Comment PHA12-6

The Locally Preferred Alternative includes double track beneath Flower Street, and a pocket track for the storage or reversal of trains. Metro performed a rail simulation as part of the Draft EIS/EIR process, which verified that the Fully Underground LRT Alternative would be able to accommodate the anticipated volume of trains.

Response to Comment PHA12-7

The number of entrances at each station is based on ridership levels as well as community needs. Metro will integrate the station entrances into the surrounding neighborhoods through design.

PHA13

Responses to Comments from Downtown Los Angeles Neighborhood Council, Berman, Patti

Response to Comment PHA13-1

Thank you for your comment. Metro has and will continue to coordinate with the Little Tokyo community regarding the Regional Connector Transit Corridor project. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHA14

Responses to Comments from Electric Railway Historical Association, Frevele, Dave

Response to Comment PHA14-1

Thank you for your comment. Support for the Regional Connector project is noted.

Response to Comment PHA14-2

Thank you for your comment.

Response to Comment PHA14-3

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHA15

Responses to Comments from Westwater, Brady

Response to Comment PHA15-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Please refer to Responses to Comments PHA15-2 through PHA15-4, below, for detailed responses regarding concerns raised by the commenter.

Response to Comment PHA15-2

Metro will work with the community to determine re-use of construction staging areas after construction is completed. In doing so, Metro hopes to create destinations compatible with transit use. Suggestions for improvement of the Bunker Hill area are noted. Roadway reconfiguration in the vicinity of the 2nd/Hope Street station would occur as part of the Regional Connector project. Based on the refinements to the Locally Preferred Alternative, only the northern portion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street would need to be acquired as part of the Locally Preferred Alternative for the 1st/Central Avenue station site. The Señor Fish, Weiland Brewery, associated parking, and the former Café Cuba (The Spice Table) would still need to be displaced. However, the remaining businesses on that block would remain, including the Office Depot and associated parking. It is Metro's goals to minimize such acquisitions. Metro added the Fully Underground LRT Alternative during the Draft EIS/EIR process in response to community input.

Response to Comment PHA15-3

Unlike the Underground Emphasis LRT Alternative, the Locally Preferred Alternative does not include a portal on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. However, some brick structures on that block (Weiland Brewery, Señor Fish, associated parking, and Café Cuba [The Spice Table]) would still need to be displaced to make room for a new underground station. The remaining businesses on that block would remain, including the Office Depot and associated parking. A portion of the land acquired for the station would be available for development after construction is completed.

Response to Comment PHA15-4

Comment acknowledged.

PHA16

Responses to Comments from Springer, Jay

Response to Comment PHA16-1

Thank you for your comment.

Response to Comment PHA16-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHA17

Responses to Comments from Nikkei Center, LLC Project, Kaji, Jon

Response to Comment PHA17-1

Thank you for your comment.

PHA18

Responses to Comments from The Spice Table, Luu-Ng, Kim

Response to Comment PHA18-1

No feasible options are available for the Fully Underground LRT Alternative that would avoid displacement of The Spice Table restaurant at 115 South Central Avenue. Metro has refined the Locally Preferred Alternative alignment to minimize acquisition on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street, but The Spice Table would still be among the businesses that must be displaced. As indicated in Section 4.2.1 of the Draft EIS/EIR and this Final EIS/EIR, compensation and relocation assistance will be provided to displaced businesses consistent with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Response to Comment PHA18-2

It is Metro's goal to minimize construction impacts to businesses. As indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, consistency with the goals of the applicable local ordinances and implementation of Best Management Practices, would ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in a significant adverse impact to sensitive land uses. Although, noise generated during construction of the Locally Preferred Alternative would not result in a significant impact, Metro will implement the construction noise mitigation measures listed in the Mitigation Monitoring and Report Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in order to further minimize disruption. Metro will also provide assistance to Little Tokyo businesses during construction, which could take the form of in-kind advertising, Metro-sponsored coupons, city-wide advertising that Little Tokyo is open for business during construction, and similar supportive measures. Metro believes that these mitigation measures will help attract potential customers to the neighborhood during construction.

PHA19

Responses to Comments from GetFit Little Tokyo, Yamaguchi, Jayson

Response to Comment PHA19-1

Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Tunnel boring machine technology has advanced during the time since Metro Red Line construction occurred. Metro recently completed tunneling for the Eastside Extension Phase 1 with no measurable subsidence, and would use similar techniques when building the Regional Connector. Metro recognizes the value of park space for communities, but no parks would be created as part of this transportation project.

PHA20

Responses to Comments from California Japanese American Community Leadership Council, Nishio, Alan

Response to Comment PHA20-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Metro coordinated with the Little Tokyo community to develop an effective mitigation program, the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR, acceptable to the community, Metro, and FTA. Metro has and will continue to coordinate with the Little Tokyo community during project construction.

Based on comments received on the Draft EIS/EIR and input received from community meetings held during preparation of this Final EIS/EIR, the TBM insertion site option at 2nd/Central Avenue station is no longer being considered. Instead, the vacant property at the northeast corner of 1st and Alameda Streets, formerly known as the Mangrove Site, would be used as the insertion site. At this location, the TBM would be inserted approximately 700 feet from the originally proposed 2nd/Central Avenue insertion area, which would reduce the intensity of construction on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street, and result in fewer acquisitions. Please refer to Section 4.18, Construction Impacts, of this Final EIS/EIR for further detail regarding tunnel boring operations at the Mangrove property.

Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative with the goal of supporting businesses throughout the construction phase. This will include targeted marketing efforts and other in-kind assistance. Metro will provide two acres of land on the Mangrove property, located at the northeast corner of 1st and Alameda Streets, for the purposes of providing supplemental parking services, such as valet parking services during construction in order to preserve the accessibility of the neighborhood during construction. Metro will minimize street closures, and will maintain access to businesses throughout the construction process.

PHA21

Responses to Comments from Koraku Group, Inc., Yamauchi, Hiroshi

Response to Comment PHA21-1

Construction durations for the Fully Underground LRT Alternative were shown in Table 4.18-2 of the Draft EIS/EIR and for the Locally Preferred Alternative in Table 4.18-1 of this Final EIS/EIR. The entire construction process would take four to five years, but the duration of construction in any one location in Little Tokyo would be less than four years. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in order to minimize the construction impacts of the project. As described in Chapter 2, Alternatives Considered, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Temporary intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. Cut and cover would be needed at the intersection of 1st and Alameda Streets in order to construct the underground junction.

PHA22

Responses to Comments from Fugetsu-Do Confectionery, Kito, Brian

Response to Comment PHA22-1

Metro has made refinements to the Locally Preferred Alternative in response to community input. The refinements would greatly reduce impacts to businesses. The refined alternative would not involve cut and cover construction on 2nd Street, and would minimize acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The majority of parking spaces and businesses on this block would not need to be acquired.

PHA23

Responses to Comments from Kerr, John

Response to Comment PHA23-1

Metro recognizes the importance of Little Tokyo and will continue to work with the community to minimize adverse impacts. Mitigation measures identified in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR are aimed at supporting businesses throughout the construction phase, and minimizing impacts to the pedestrian environment.

Response to Comment PHA23-2

Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative includes Long Beach-Pasadena (eventually Montclair) and East Los Angeles-Culver City (eventually Santa Monica) routes. However, the track configuration would allow Culver City-Pasadena and Long Beach-East Los Angeles train movements to occur when necessary. Metro operations staff has determined that operation of the North-South Line from Montclair to Long Beach is feasible.

PHA24

Responses to Comments from Gold Line Washington Alignment Advocacy Group, Howard, Les

Response to Comment PHA24-1

Thank you for your comment.

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

Public Hearing in the Matter of:)
)
REGIONAL CORRIDOR PROJECT)
REGIONAL CONNECTOR)
THE DRAFT EIS/EIR)
_____)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Monday, October 4, 2010

Reported by:

SICILY ORSTEAD
CSR No. 13523

Job No.:
B5745NCO

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

Public Hearing in the Matter of:)
)
REGIONAL CORRIDOR PROJECT)
REGIONAL CONNECTOR)
THE DRAFT EIS/EIR)
_____)

TRANSCRIPT OF PROCEEDINGS, taken at 100 West 1st Street, Los Angeles, California, commencing at 11:40 a.m. and concluding at 12:47 p.m. on Monday, October 4, 2010, reported by SICILY ORSTEAD, CSR No. 13523, a Certified Shorthand Reporter in and for the State of California, pursuant to Notice.

APPEARANCES:

METRO PRESENTER:	Ann Kerman
The INTERPRETERS:	
Spanish Interpreter	Juan Carlos Morales
Japanese Interpreter	Susie Isaacson
Korean Interpreter	Caroline Kim

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Los Angeles, California, Monday, October 4, 2010

11:40 a.m.

MS. KERMAN: So I'd like to welcome you to the public hearing for the Regional Connector the Draft EIS/EIR, and my name is Ann Kerman. I'm the constituent program manager with Metro on this project. And I will be facilitating this afternoons meeting, as well as acting as the hearing officer for the testimony that we hope each and every one of you will provide, during the next couple of hours.

The next thing I need to find out is, is there anyone here in need of translation. And if I could have my interpreters come up. I would like to have them mention this in the language. Carrisa, could you ask our interpreters to come up?

I'm impressed to see all of you here on this drizzly day here in L.A. How do we like this new building? It's a little warm, but I do hear the air condition is on. So bare with us. Juan Carlos, can you please make an announcement that we do have translation available.

Well, in addition to being in this beautiful facility, we have the honor of having Greg Fischer here with us, with Councilwoman Jan Perry the Council District 9. And Greg, if you wouldn't mind, we'd like to have you welcome

everybody to this new facility.

MR. FISCHER: Good morning. I welcome you here to this facility on behalf of Councilwoman Jan Perry who represents this District. Councilwoman will not be able to be here this morning. I apologize she's not here, but she wants to take the opportunity to thank all of you for coming. This is a long engaging process. It's important that your voice be heard because it is at this time that most of the decisions will be made going forward. Actually, some in the past of how these projects will be built, if it is to be built.

The Councilwoman has been very clear that this is a controversial project. There are people who are for and against this. Each of course has their own agenda. She is taking all of the interests that she would on any project in her District, and she is interested in hearing from you.

The project needs to be understanding in another context. The project will interrupt the infrastructure of Downtown, Civic Center, Little Tokyo, Financial District, for years and that's going to be a problem. Some of this area will not be accessible to anyone during some of the construction period. So it's important to see that as a contextual piece. It will inconvenience bus riders, motorists, people who use bicycles for transportation, pedestrians. And this is not to be a tracking project, but

it is a piece that has to be understood as we go forward. She is very interested that Little Tokyo, as one of the few remains of Japan Town, not be either unnecessarily inconvenienced nor overly disturbed by this process.

She's also interested that the Arts District of Alameda Street experience also as good a relationship with this project as it can. She is very interested in the fully underground alternative to this. Largely because it seems to be the one that the community supports, at least as far as the alternatives that are presented.

She's also interested in it as the project is going forward, looks like that particular stop will not as severely impact the intersection at 1st and Alameda Street. The community having just undergone an extensive inconvenience of rerouting the traffic on that street and having put it back, we've now had almost a years worth of very fine service from the Gold Line that has been well received. We don't really want to pull that section apart and have to redo it again.

The last piece that Councilwoman would like to make known is a small one. 1st Street bridge is closed westbound, and as it has been closed for several years. When that project reconstructing the bridge finishes, which should be hopefully in 2011, that will release full new line of automobiles to come across the bridge. That will also

impact the 1st and Alameda intersection. It will take time for people to get use to the fact that there will be all these cars using that intersection, with a whole new set of pedestrians who are using it as the Gold Line that stops at 1st and Alameda.

So Councilwoman wanted me to thank you for your interests, for your long-term interests, because this is a long-term process. And hopes to hear what you think about this project, as she will take it into consideration as she makes her own decision. Thank you.

MS. KERMAN: Thank you Greg, we appreciate you being here and thank Ms. Perry for her support. I also have a Korean translator. I'd like you to come up and also mention that translation is available in Korean. Please come up to the microphone.

Great. So, hopefully, anybody that needs translation has been connected with. And we will begin the meeting. So with that, I'd like to go into some of the formal processes that we are about to undertake because this is a formal public hearing on the Draft Environmental Documents to the Regional Connecter.

We have a legal obligation to make sure that we hear your comments on the Draft EIS/EIR, and we're here today to hear from you and want to give everyone a chance to speak. Because this is a public hearing, we will not be

answering your questions or engaging in dialogue on any of your comments. If you want to comment on the Draft EIS/EIR, you have several different opportunities to do that. You can fill out a comment sheet which is available at our front desk. You can also mail us a letter or E-mail us. And all public comments must be received by 5:00 o'clock p.m. on October 18th.

Now, as this is a formal NEPA, CEQA process, I now need to provide you with the following statement. So listen up everybody. The Regional Connecter Transit Corridor Study's Draft Environmental Impact Statement, Environmental Impact Report was released on September 3rd, 2010 along with the Notice of Availability and Notice of intent to hold public hearings. To comply with the National Environmental Policy Act, NEPA, and the California Environmental Quality Act CEQA, Section 15087.

The Federal Transit Administration, FTA, and the Los Angeles Metropolitan Transportation Authority, Metro, have prepared a draft Environmental Impact Statement and Environmental Impact Report Document. FTA is the lead agency for the purposes of NEPA. And METRO is the lead agency for the purposes of CEQA. And Notice of Availability and intent to hold public hearing was published in the Federal Register, State of California Clearinghouse, Los Angeles Times, La Opinion, and Necan Sun (phonetic)

and filed with Los Angeles County Clerk and the California State Clearinghouse.

The notices were published on September 3rd, 2010. Copies of the Draft Environmental Document are available for public review between September 3rd and October 18th, and are located in public libraries across Downtown and across the Region, and that list is available by visiting our website or checking with us directly.

In addition, electronic copies of the document were distributed by mail to participating agencies, listed owners of properties identified in the document, local elected officials, and additional interested stakeholders. We ran display ads about the public hearing in OurWeekly, Eastern Sun, Downtown News, Korea Time, Korea Daily, Blog Downtown, Japanese Daily, Repetition Co., and the Pacific Civic Center (phonetic).

Copies of the press release about the EIS/EIR was sent to a distribution of over 50 media organizations. The Draft EIS/EIR information about the hearings, is posted on Metro's website. Information about release of the Draft and the hearings was also printed in brochure forms and distributed widely on Metro busses and trains, as well as hand delivered at key locations. In addition, brokers were sent by U.S. mail to over 65 thousand contacts in the project study area.

The same information was also sent electronically to a distribution list of 1,725 individuals. All of this information is included in the Draft EIS/EIR, and all of this information is available on the website.

Affidavits of publication and copies of detailed mailings are available upon request. And now I would like to introduce you to our project manager. Her name is Dolores Roybal Saltarelli. Dolores will be on a short break soon to deliver another beautiful child into the world. And with that, I would like to introduce the deputy project manager Lora Cornejo. In a little while I'll introduce you to the rest of the project team.

With that, Dolores, I would like to bring you up and have you do your presentation. And after Dolores concludes, it will be time for you, our community, our stakeholders, to provide us with public testimony. Thank you.

MS. ROYBAL SALTARELLI: Good afternoon. Thank you very much for coming out today. The main purpose of this meeting is to hear your comments, so that we can document them and respond to them in the final.

I'm going to keep my presentation short because we want, again, to listen to your comments. And thank you very much for taking the time to come to today's hearing. With that I'll start the presentation.

The Regional Connecter is one of the seven projects that will be implemented by 2035. Purpose of the project is it will do several things in regards to improving our public transit and mobility within the Downtown Region, as well as the rest of the County. Looking at directly connecting the Metro Blue, Gold, and Expo Line. Improving rail travel time and reducing transfers by providing a one seat ride between Azusa and Long Beach and Culver City and East Los Angeles.

It will also increase high capacity transit service for the Downtown as well as the rest of the County. The need, we're looking at continued growth in the Downtown and the rest of the County. The transit system will be expanding and bringing more riders into the area, as well as looking at the existing multiple transfers that are required for local and regional trips.

As I mentioned earlier, we're connecting our light rail system through Downtown, connecting the Blue to the Expo as well as the Gold Line. Providing a one seat ride to connect the region traveling north, south, east to west.

Many of you have seen this development process before. We initiated this project in 2007 with an alternative analysis study. We looked at 36 alternatives in that process. Two were recommended to go forward in the Draft and we initiated the Drafts in January of 2009. If we continue with our current schedule, we're looking at having

the Regional Connecter in operation by 2019.

When we initiated this project in '07, we did not have any funding with the passes of Measure R. In November of 2008, this project was allocated a small fund in the Measure R Project Plan. We continued with the Draft. We then worked extensively with the various stakeholders.

We initiated a working group with the Little Tokyo folks, with their hard work and dedication, we were able to develop a third build alternative that you will see included in the Draft Environmental Document. The Board approved that in February. And we're looking -- we were able to meet our deadline of releasing the Draft in September.

Many of you have the Draft Environmental Document, we are looking at five alternatives. The no build, the transportation systems management. And three build alternatives. The at grade, the underground emphases alternative, and the fully underground. The no build is what you are looking at without the project being in place. For our purposes, you are looking at connecting 7th Street Metro to 1st and Alameda, approximately.

With the TSM alternative, we are looking at what you can do without building permanent infrastructure. And we are recommending two additional bus routes, one connecting upper Grand to lower Grand. And the other one connecting using 2nd and 3rd to close the gap between

7th and Metro and 1st and Alameda, Little Tokyo Arts District Station.

The at grade emphases alternative again, meets the same connection. This time using a light rail system connecting 7th Street Metro to approximately the existing Little Tokyo Arts District Station. What is unique about this alternative is about 47 percent of it, what you see in purple, is actually underground, because you are connecting an existing underground station at 7th Street Metro to an at grade station at Little Tokyo Arts District Station.

The underground emphasis alternative again, makes that same connection in our light rail system opening approximately two miles and our light rail system from 7th and Metro to 1st and Alameda. This time the alignment is about 94 percent underground with an at grade connection at 1st and Alameda.

This alternative as well as the at grade alternative has three stations. One at 5th and Flower, 2nd and Hope, and a station on 2nd Street whether it be at 2nd and Broadway or between Los Angeles and Main.

With the fully underground, that's exactly the same alignment as the underground emphasis alternative, leaving 7th and Metro underneath Flower Street, this time underneath 2nd Street. And instead of being at grade at 1st and Alameda, you're actually underground. This alignment has

four stations. One at 5th and Flower, 2nd and Hope, 2nd and Broadway, and now 2nd and Central.

This would also include two portals in order to connect to the existing Gold Line that's currently in operation. One will be between Alameda and Hewitt and one north of Temple.

Again, as I mentioned earlier, this public hearing is to listen to your comments. You have the opportunity to present them today verbally or you can send them to me written, whether it be E-mail or parcel post, etcetera. We also have a website that we are receiving comments from as well as an E-mail address.

Two important dates that you should be aware of is, we're going to be presenting this project to our Measure R Committee on October 21st at 9:00 a.m. And we'll also be going to the Board for their approval or acceptance of the Draft as well as it is being locally preferred alternative at it's meeting on October 28th at 9:30.

So with that, we would love to hear your comments. Thank you.

MS. KERMAN: Thank you, Dolores. And now this is your time and as we quickly set up our timer for comments, let me tell you how this is going to work. Many of you saw that we have a speaker card, and that's something that you could pick up at the registration desk or if you want to speak and

have not filled out one, raise your hand right now and we'll get you a speaker card.

I'm calling the people up in the in order that I received these cards. You'll have two minutes to speak and you'll be speaking to the microphone that's to your right. The timer as you see, is up on the screen. If you require translation, we will extend that to a four-minute period to allow for translation.

Now, as I mentioned that we're here to receive your comments. And each and every one of your comments will be addressed in the Final Environmental Document. We have a court reporter here that's capturing every word that you say, and you will see the transcript of that document in the final EIS/EIR.

In addition, all of these comments, whether they be written or verbal, will be addressed in the final EIS/EIR. So you have an option today of either speaking, and we will take your oral testimony, or you can put your comments in writing. If you want to be doubly sure, you can do both. And all comments will ultimately be communicated to our Metro board, as well as to the FTA, as they are the final arbiter of the decisions that come out at the final EIS/EIR.

When you're called to the microphone before you begin your statement, if you could please state your name clearly, and that would be for the record. And then you

will have the two minutes that I mentioned. If you have a prepared statement, if perhaps you run out of time, you may please give us that prepared statement and we will enter that into the document. And in order for your comments to be considered, as I mentioned before, October 18th is the deadline and I think we have that information up on the screen.

So at this point we will begin the public testimony and I will call up three people at a time, so that you can be standing in line ready to go.

Our first is Hillary Norton representing F.A.S.T. Followed by Roger Grace, followed by Vahn Bohigian.

PHB1

MS. NORTON: Good afternoon, ladies and gentlemen. My name is Hillary Norton and I'm the executive director of F.A.S.T., Fixing Angelenos Stuck in Traffic. And we are a nonprofit coalition of environmental educational business and transportation organization, specifically committed to short-term solutions to our current traffic crisis.

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We see the Regional Connector as a very important component of that, especially integrating each stop for the Regional Connector with mobility hubs, where you can have bike share, car share, and transit associated with general bus/etc. We adhere to this board to fully underground option.

However, we also want to make sure that we point

2

PHB1 cont'd

out that as much as possible to look at the 5th and Flower Station, to keep that station which we no has been in consideration and possibly in jeopardy, to look at alternatives, if you can, to make sure that that area is served. To please keep that station, and to look at the impact in all stations and in all parts of the construction on businesses and on transit itself.

2 cont'd

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We hope that as you construct this important Regional Connecter, you are not going to deter people from switching to transit by making things inconvenient, moving around. Metro has been wonderful about presenting these options and working with the Little Tokyo community about going underground rather than the impact to Alameda, and we thank you for that. And we thank you for your presentations you made to C.C.A. and to other organizations to make sure that we are fully informed. Thank you very much.

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MS. KERMAN: Thank you, Hillary. Next, it looks like Roger Grace, followed by Vahn Bobigian, followed by Jo-ann Grace.

PHB2

MR. GRACE: Thank you. My name is Roger Grace and I yield my time to Vahn Bobigian and Jo-ann Grace to the Honorable Robert Philibosian.

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MS. KERMAN: Did I hear that Robert Philibosian is taking your time?

PHB3

MR. BOBIGIAN: My name is Vahn Bobigian and I yield

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PHB3 cont'd 1 cont'd

PHB4 1

PHB5 1

my time to Robert Philibosian.

MS. GRACE: My name is Jo-ann Grace and I yield my time to Robert Philibosian.

MS. KERMAN: Okay. Robert Philibosian.

MR. PHILIBOSIAN: Thank you very much. I'm Robert Philibosian and I represent the Metropolitan News Enterprise. And the Metropolitan News Enterprise Property is being recommended for taking for a parking lot and construction center during the construction of this project.

The building is the Wilcox Building at 2nd and Spring and next to the it the Olender Building (phonetic). The proposed taking is based on factually unsound propositions. The major tenant is not as proposed in the report of restaurant. It is a newspaper company. There is a small coffee shop there, but the main tenant is a newspaper company.

Metropolitan News Company, Metropolitan News Enterprise goes back to 1901. Taking of these buildings owned by Jo-ann and Roger Grace would be ruinous to their wholly owned business in Metropolitan News Company and thus impair the continued existence of Metropolitan News Enterprise and the Metropolitan News Company and seven other California newspapers.

While a report contends there are 40 employees spread among the five businesses in the building,

PHB5 cont'd

Metropolitan News Company alone employs 47 persons whose jobs would be put in jeopardy. This doom and gloom assessment in contrast to what the report conveys as no meaningful potential adverse impact, is not the accurate facts.

In particular, it is utterly impractical to try to move the operation. There's a seven unit printing press in the basement and to move that press would cost $300,000. And it would probably be impossible to new EPA constrictions and finding another location. The company then would lose it's competitive advantage of being close to the warehouse -- or I'm sorry, the courthouse where it processes legal notices.

1 cont'd

Most significantly, a move would really cripple the company's ability to derive the revenues from it's legal advertising. This is because the moving of the press would take approximately a week and a newspaper must publish more often than that. So they would not be able to publish the newspaper, which would be financially ruinous to the company. And they would lose what they call a Grandfather Clause which entitles the company newspaper, the pre 1923 newspaper, to be printed outside the City in which it's published. The loss of that grandfather status would greatly diminish the newspaper's fair market value should a sale ever be contemplated. Further more, the report fails

PHB5
cont'd

to take into account the historical character of the Wilcox Building, which opened in 1996.

Now, we will be submitting a more detailed and lengthy report of all of this, which will fill in the blanks of some of the things that I am saying. But it is important to point out that there is no need to buy and destroy a cultural building and a historical building built in 1896, to make room for a parking lot in view of the fact that there are existing parking lots and vacant property in close proximity.

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cont'd

Mr. Bobigian, would you please point out the subject property with your pointer there. And in very close proximity there is a federal property at 2nd and Broadway, would you point that out. That is totally empty and would serve very adequately, more than adequately in the Metropolitan News Building for the staging area for this project. So it would not be necessary to remove or tear down any current commercially used properties.

That property is available. The Federal Government is not using it, and since this is partially a federally funded project, it would seem to make sense to use that as a alternative. There are several other alternatives we will go through quickly. And again, we will submit that in a booklet to staff and to the commission. At 2nd and Hill there's a parking lot -- these are all parking lots,

PHB5
cont'd

either parking lots or parking structures.

The next one is 2nd and Spring, and then also in the background should show the federal building or the federal property, I'm sorry. The federal property as well. And the next one is Main and 2nd. You can see these are all parking lots. And then the next one is 3rd and Main. The next one is Main between 2nd and 3rd.

Then we have 205 Broadway, South Broadway. Then we have 3rd and Main. And we have 3rd and Hill. 3rd and Spring, 2nd and Main, and 2nd and Spring.

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cont'd

Now, these are all parking lots or parking structures. They're not historical buildings. They are not commercial operating business. Yes, the parking lots are commercial businesses but there's no structures on most of these lots that would have to be removed. And in terms of putting people out of work, we're talking about 47 people at the Metropolitan New Enterprise, as contracts with the parking lot employees of probably two or three or four at the very most.

So this proposition today is in the report, the fatal part of this is that the space that would be rentable in the Metropolitan News building and adjacent building, Wilcox and Olender building, would cause a reputable injury to the owners. The spaces there that are rentable, would not be rentable. No one is going to go into a space that

PHB5 cont'd

they are going to have to vacate because --

1 cont'd

MS. KERMAN: Thank you. We look forward to receiving your prepared statement. Thank you.

MR. PHILIBOSIAN: Thank you.

MS. KERMAN: Next Kenji Suzuki, followed by Alan Havens, followed by Martin Berg.

PHB6

MR. SUZUKI: Thank you. My name is Kenji Suzuki. I have a restaurant in Little Tokyo, 337 East 1st Street. We've been there for about 38 years. Little Tokyo is very rich in history and culture. Most of us have been there. I was there since I was a little kid running around the sidewalk. I'm second generation owner. 38 years is a long time, but I'm a baby compared to the other businesses that have been around much longer. Some just a few years ago celebrated its 100th birthday in Little Tokyo.

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This project, if it goes through, goes right through the middle of Little Tokyo. Little Tokyo is not very big. It's only two blocks. You are talking about 1st and 2nd Street and you are talking about right down the middle.

I'm not against this project, but you do this, and I think it's been documented, that this type of construction a lot of people don't survive this type of construction. You're talking about taking away businesses that have been a part of Little Tokyo for many, many generations. It's a

PHB6 cont'd

very important part of Little Tokyo. The essence of Little Tokyo would be taken away. 1 cont'd

I hope that there will be alternatives rather than to go right through Little Tokyo. Some of the people that have actually approved this, and I got the chance to speak to some of them, they realize that the fully underground, what that image of fully underground, they were going to dig a whole in one end, dig under Little Tokyo and you come up the other end and nothing would happen to Little Tokyo. And that's not the case.

It's a cut and cover. It's a major operation. Little Tokyo will be devastated and a lot of the stores that's been there for many, many generations, won't be back. I don't know what's going to happen personally, but I'd like to see something happen. I don't want to stop this project but I'd like to see an alternative where you don't have to go right in the middle of Little Tokyo. So that's my speech. Thank you very much. 2

MS. KERMAN: Thank you, Mr. Suzuki. Next, Alan Havens followed by Martin Berg.

PHB7

MR. HAVENS: Hi my name is Alan Haven. I strongly support the main underground option which should not impact surface drafting at 1st and Alameda. 1

However, I do support maintaining one or two tracks of the existing line in case, you know, between now and 2019 enough traffic, people moving 2

PHB7 cont'd

from East Boyle Heights area and North Pasadena. I would continue to want to have this type of movement. That needed to change trains and route that needing the trains changing and route if it were. That's the main traffic, this is a minor a minor thing.

2 cont'd

Also I suggest that in case a multipurpose innovated building moves in North of Alameda -- I'm sorry, East of Alameda and North of 1st, at least have something up on the top to allow people to view East towards the Temple, towards the West towards the Power Tower (phonetic) and so on and so forth, and get a good view of what Little Tokyo looks like in all directions. Okay. That is it.

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MS. KERMAN: Thank you, Mr. Haven. Next, Martin Berg, followed by Bart Reed, followed by Joan Springhetti.

PHB8

MR. BERG: Thank you for the opportunity to speak. My name is Martin Berg. I live in the Huggins Building on 2nd Street, and I want to reiterate the concerns of my neighbors in Little Tokyo and the Metropolitan News Enterprise and those buildings.

I want to make sure that Metro and the neighborhood mean the same thing by environmental impact. These impacts of construction they are proposing are very dramatic in our neighborhood. And I want to make sure that they are being addressed and that these concerns that have been addressed by the Metropolitan News Enterprise and that those buildings

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PHB8 cont'd

are being addressed, and that they're not pushed off to the side as just the cost of a major construction project.

These are serious impacts on our neighborhood. We have already endured the construction of the LAPD and the LAPD motor pool parking lot. We don't need another parking lot in our neighborhood. We need care taken of our great historic structure and we need Metro to be partners in that, not fighting it. Thank you. 1 cont'd

MS. KERMAN: Thank you very much, Mr. Berg. Bart Reed, followed by Joan Springhetti, followed by Ellen Miyoshi.

PHB9

MR. REED: I'm Bart Reed, executive director of the transit coalition in Southern California based on profit dealing with transportation ethicacy. We fully support the underground option. 1

We saw the map when you came in and saw the future network of the light rail to Santa Monica, existing to Long Beach out to Azusa, and further east and into East Los Angeles, and further east towards Woodier. You have a network, and when you diminish one station out of the four, you diminish the network. Since the network connects 54 miles from Santa Monica to Azusa to the County Line. It connects Long Beach to the north.

So the important thing is to maintain the network. The moment you take away a station such as you 5th and Flower, you just diminish the connection activity to 2

PHB9 cont'd

Downtown, and people that may or may not make the decision of taking light rail would perhaps not take it because the station isn't there. So we fully support the findings and funds if we move to perhaps a 60 percent alternative on federal match instead of 50. Use Prop A and Prop C funds to make this work. But come together with the money to build a full project.

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This is 150-year long project that will remain as part of the fabric for multiple generations of the community and to get sense of functioning. It's important that we do it the right way. We don't have a chance later on to put in a missing station. For those who don't know, between Westlake and Downtown Los Angeles, we skip the station of a Red Line and that community is suffered as a result of no station. So we don't need to repeat some of the mistakes in the pass by skipping stations. And again, fully endorse the underground alternative. Thank you.

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MS. KERMAN: Thank you, Bart. Next, Joan Springhetti followed by Ellen Miyoshi, followed by Hiroshi Yamauchi.

PHB10

MS. SPRINGHETTI: Hello, I'm Joan Springhetti. I'm a residence of the Higgins Building, which is at the corner of 2nd and Main. I fully support the underground no build -- fully underground no build -- I'm sorry. The fully underground alternative. If not that, no build. I think the fully underground is the only one that respects the

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PHB10 cont'd

community and its safety. If indeed that is approved, I think it's critical how it is actually implemented and that speaks to the concerns that have been addressed here today by the Graces, and it's addressed to the Wilcox Building. 2

Those same issues would be shared -- the impact issues are shared by the residence and commercial businesses in the Higgins Building. And I'm sure all through Little Tokyo and elsewhere, for this to be a successful project, it's really critical that businesses and residences that have established and taken route Downtown, we all know how difficult that process has been to take hold and stay hold, that those interests must be respected and honored in the process. Thank you. 3

MS. KERMAN: Thank you, Joan Springhetti. And Ellen Miyoshi, followed by Hiroshi Yamauchi. And Hiroshi, if you can come down with your interpreter.

PHB11

MS. MIYOSHI: Hi, my name is Ellen Miyoshi. This is on a more smaller personal notice. My husband and I are recent renters at the Higgins. We have seriously been considering buying into the building, and above ground option building the Metro through 2nd Street would completely cancel that. 1

You know, we moved into the building because of the neighborhood, because of the history, and also for me the convenience of commuting up 2nd Street through the 2nd Street, to Glendale to Glendale Avenue to my job in Pasadena

PHB11
cont'd

City College. I don't take the 110 because I want to get to work on time. So anyway and so just to say that as new residences down here, we seriously support the total underground option.

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MS. KERMAN: Thank you, Ellen and welcome to the neighborhood. Hiroshi Yamauchi, followed by Arnold Sacks. And while Hiroshi is coming up to the microphone, I want to remind everybody that there's still plenty of time to fill out a speaker card. We'll be delighted to take a speaker card from you if you don't have one. Raise your hand, we'll get you one.

PHB12

MR. YAMAUCHI: Yes, hi. Good afternoon, everybody. My name is Hiroshi. I am a business owner on the 2nd Street between Central and L.A. Street, but I can speak English only a little, really like this. Now, I ask Ms. Susie to transcribe it to English.

From what I heard so far, everyone has mentioned fully underground is the way to go. From what I heard that everyone seems to have said, fully going underground is the way to go. That's what I thought I heard everyone said here on the stage. But the truth is, this construction, I understand, is going to take a four-year, and then during the construction, it's going to be a whole mess, the construction all over. Everything is clean and it appears to be very nice and all that if it is fully underground.

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PHB12 cont'd

Okay. Now, I heard it is going to take four years construction. Now, this is something that I found out just recently and, then, how are they going to do this construction with what they call cut and cover? In other words, a little bit cut and cover. Now, if that is the way to move forward. Then a 2nd Street is going to be closed, and I think possibly the 1st Street is going to be closed, also, during the construction. 1 cont'd

MS. KERMAN: Hiroshi, if you could give the translation now to your interpreter and we'll conclude your time.

MR. YAMAUCHI: Okay. Now, earlier, someone representing from Metropolitan News said Little Tokyo's entire business is going to be wiped out and the 400 businesses in there and, also, including the residence, and altogether 2,000 people, plus their family members. So when you have 2,000 people times 10 times -- total 2,000 people is going to be impacted.

I am so fearful that all of us have no place to go. And so I am very worried and concerned, just the same as someone from Metropolitan Newspaper said. 2

MS. KERMAN: Thank you very much.

MR. YAMAUCHI: One more.

MS. KERMAN: I'm going to give you one more because we did have some technical difficulty.

MR. YAMAUCHI: So please try to think about -- try to 3

PHB12 cont'd

think about the Red Line to use the Red Line, Gold Line, Red Line, the Blue Line, I think it's possible. So you know, if Metro has a budget to new construction, but they can use that same budget to modify on Red Line. Please, think about that. If it's possible, there's no impact on Little Tokyo business and Downtown business, Spring Street business is no impact. Also, we can create environmental program.

3 cont'd

MS. KERMAN: Thank you. Okay. Next, Arnold Sacks (phonetic), followed by Wilson Liu, followed by Jerard Wright.

PHB13

MR. SACKS: Thank you. Good morning. Arnold Sacks (phonetic). I'm glad that you have translation for people who speak Korean and I'm glad you have a translation to the people who speak Japanese. Can we get a translation in English as to why this Downtown Connecter has taken approximately 20 -- 30 years. Blue Line from Long Beach to 7th and Metro was continued through Pasadena that was the reason for the Blue Line construction authority that was created by the state legislation.

Why this gap has taken 30 years to fill. Why and how much in litigation will be developed because we have all these new people that have come in and moved into Downtown and expressed an interest because now they're part of the community. You need to get a translation on that. Now, it's a billion dollar project. What would it have cost if

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PHB13
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it would have been continued in a timely manner. You would think, okay, we'll build from Long Beach to 7th and Metro and then we'll build a second stage. Instead we build the Red Line.

If anyone can look at the history of Metro not just today, but go back and look at the map. You saw a map earlier of what it would look at in 2035. Look at a map like 1980, you'll see the Blue Line goes from Long Beach to Pasadena. The Red Line which is now a Purple Line would have gone to Santa Monica eastbound. It has been pieced mailed together all to the benefit of making some money. And the organizations that got up answer the question, why so long?

Why when the Metro got $640 million they gave to the Blue Line construction authority, why is it designated to the Gold Line construction? Follow the money. And you'll see the question mark. There's four supervisors that have been involved in the organizations of these buildings since the inception --

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MS. KERMAN: Thank you very much. Next, Wilson Liu, followed by Jerard Wright, followed by Tracey Chavira.

PHB14

MR. LIU: Good morning. This is a follow-up to our September 28th comment that we had two more additional comments. I represent the -- my name is Wilson Liu and I represent Little Tokyo Business Improvement District, as

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PHB14
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well as the Little Tokyo Business Association. One of the items as Little Tokyo Business Interruption Consortium the Consortium of Little Tokyo Business Association, the little Tokyo Business Improvement District, Chamber of Commerce of Southern California, and the Little Tokyo Community Counsel performed to work along with Metro Staff and any other governmental agency having jurisdiction, to develop policy regulations and procedures, to resolve issues arising from adverse business interruption during the course of construction of the Regional Connecter Project.

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The Little Tokyo Business Interruption Consortium shall be shared by the president of the respectfully organization listed. Any business interruption committee shall be formed -- shall not be limited to the supervision of a single Little Tokyo organization or granted exclusive power of oversight.

Little Tokyo has many organizations which are listed four, are considered a major organization represented the process of the business sector, nonprofit organization sector and a residential sector, to allow a single Little Tokyo organization to act as the sole and exclusive leadership of those would not be proper.

The Little Tokyo Business Interruption Consortium used the proper structure to work with Metro Staff in addressing the serious construction impact of the

PHB14 cont'd

Little Tokyo Community. 1 cont'd

The second item is the Little Tokyo Construction Mitigation Program. We encourage the establishment of the Little Tokyo Construction Mitigation Program for the purpose of compensating construction impact business interruption injuries, should Metro or any other government agency establish in litigation funding program for construction impact related business interruption injuries or other construction impact alters the business operations resulting in physical changes and -- 2

MS. KERMAN: Thank you, Mr. Liu. If you'd like to --

MR. LIU: I'd like to submit this, thank you so much.

MS. KERMAN: Wonderful. Thank you so much.

Jerard Wright, followed by Tracey Chavira, followed by Russell Brown.

PHB15

MR. WRIGHT: All right. Good afternoon. I'm Jerard Wright and I'm speaking for myself. I've been involved within this project in various forms for many, many years. I'm not going to give away how long. But in terms of right now, where we're at is a critical stage in terms of funding the project, because right now there is a projected close to $200 million short fall for the fully underground option, and that may require reduction of some stations. 1

I don't want to see the stations reduced. I think

PHB15 cont'd

every station is a vital one and a very important one. However, if there are opportunities where, you know, I've mentioned look for a 60 percent federal match. 1 cont'd

Look for unaligned Prop A and B funds for the non-subway portions, such as the pedestrian bridge. Such as the 1st Street widening that you need to put in the portal. Such as the new transition structure north of Temple. Just find creative and inventive ways to try to bridge the funding gaps because if we go to the FTA for a handout, the first thing they're going to ask us is how much more are we going to get in return. That's one thing. 2

The other component is, if we can't get that funding, let's look at ways of combining some stations into larger super stations. Such as the Bunker Hill off of 5th and Flower and multiple portal being a essential station that has multiple points of access, while still maintaining access, connectivity, community, and keeping the costs down or in hopes of keeping the cost down because if we can't find that funding gap, there's probably going to end up probably a at grade alternative. Which from many comments over the last three years, that's not the right option. 3

So I just want to find a way to find that funding gap, bridge that funding gap, so this project can go forward. Thank you very much. 4

MS. KERMAN: Thank you, Jerard. I've been also asked

to remind everyone that we have fact sheets out front, so don't forget to pick them up on the way out. And Tracey.

PHB16

MS. CHAVIRA: Good afternoon, Tracey Chavira Central City Association. Let me begin by acknowledging Metro Staff especially Ann and Dolores Roybal Saltarelli for keeping this process moving along steadily. Metro staff, the consultants, the Robert Group have been extremely responsive to our members and generous with their time. So thank you. 1

CCA supports the fully underground alternative, which will generate great benefits. We've expressed these before but just for the record. First it will be impervious to above ground accidents, making it the most reliable option for commuters. Second, it's inspected to govern the most transit riders. Third, it won't create street level visual clutter, which might interfere with revitalization parts of Downtown. Finally, the Regional Connecters scored high with federal funding criteria, making it one of the best proposals for that funding. 2

We also support the Flower and 5th Station and the Financial District. We've heard that the station might be eliminated due to a budget short fall, but we urge you to move forward with this station. And it is greatly important to the Financial District which that contributes greatly to Downtown and to the City's economic recovery. So we respectfully request that Metro improve the fully 3

PHB16
cont'd

underground alternative including the Flower and 5th Station. Thank you. 3 cont'd

MS. KERMAN: Thank you, Tracy. Next, Russell Brown, followed by Don Garza, followed by Yoshi Maruyama.

PHB17

MR. BROWN: Thank you. Russell Brown, executive director of the historic Downtown Theater. I'm also one of the trustees for bringing back Broadway. I want to thank you for the outreach. This has been a process that's been more than three years. I know well before Measure R you were working with the community groups and the neighborhood council. 1

All of organizations unanimously and fully support the fully underground project, and I want to really thank you for listening to the community as we work through a lot of the issues and especially the complications with Little Tokyo. Just to make a correction, the cut and cover is only used for stations. It's not used for the track line. So the gentleman who mentioned that was in correct in his interpretation of that. 2

We do not support the surface route, all you have to do is look at Washington Boulevard and see how unfriendly transit is. You would not only have that separating all the communities, and many of the concerns -- all of the concerns that Little Tokyo have are magnified a lot with the surface route. 3

PHB17
cont'd

You'd also have two stations that straddle City Hall. Something as simple as a lost backpack will shutdown the whole system for security reasons. The fully underground station, not only takes care of all of those and mitigates it gives you great opportunities for transit oriented development. 3 cont'd

The 5th and Flower Station is critical because 7th and Metro will be maxed out. Once you have both the Expo Line and the Blue Line coming into that station. The 5th and Flower Station also allows a connection with the 5th and Grand Streetcar. 4

The 2nd and Broadway Station is critical because you also have connections with the Streetcar, with the theaters, and also the Red Line Civic Center Station. 5

So thanks again for your outreach. Thanks for working with the community, and we enthusiastically support the fully underground program. 6

MS. KERMAN: Thank you, Russell. Don Garza, followed by Yoshi Maruyama.

PHB18

MR. GARZA: Yes, my name is Don Garza. I've been a residence of Downtown for the past, probably, 11 years now. So when people from Little Tokyo that have been there for a long time speak, I have a tendency to listen. And I'm in agreement. There should be not a mitigation, especially for the businesses because you see sort of things, whether they be underground or overground, they are going to have some 1

PHB18 cont'd

impact.

But I am in full support of underground. It's the way to go. It's the way it needs to be done. Connection needs to be made. 5th and Flower needs to be there. These connections are going to be very important, specifically because there are very many hotels around there that augment the L.A. Live Hotel. And you're going to start seeing lots and lots -- if not already, we have a lot of tourism and we have a lot of business.

This extension needs to happen tomorrow. It does not need to happen 10 years from now. It does not need to happen 15 years from now. We need to get our buddy, Antonio Villaraigosa, all you guys up there. Whether it be -- whoever the next mayor is going to be. Whether it be Jan Perry or even Russell Brown or anybody in this room. I don't care if it is this person in the front row.

Get up there to Washington DC to get this thing built. This is jobs. This is money. This is consultant money. This is GIR consultant money. This is just plain money that we need here that's going to help our community, especially Downtown and connect a whole region. Because when people come to L.A. they do not just want a Hollywood experience. They do not just want a Anaheim experience. They want a whole experience.

I got to tell you when you opened up that line to

1 cont'd

2

3

4

PHB18
cont'd

the Eastside, people were very excited. I use it now to go and enjoy my Eastside experience it's easier. I can even go to East Los Angeles College, I don't have ride on Cesar Chavez. So I am in support of fully underground along with the C.C.A., along with everybody that should be willing to want to have this thing fully underground.

4
cont'd

MS. KERMAN: Thank you, Don. Yoshi Maruyama followed by Christine Baisez.

PHB19

MR. MARUYAMA: My name is Yoshi Maruyama. I own Sbabu Shabu House Restaurant, and I know this project is very good at the beginning. But Plaza tenants, okay, we want to know the impact of this construction is awful. I can't imagine this, and I can't sleep sometimes because as an example City Hall has a little demonstration. They blocked a couple streets, our business down 30, 40 percent.

When they do lunch and dinner, I got a whole day. The customers won't come. They block the street. If this project happens, how long are they going to block the streets for this construction. Couple weeks, no couple years. Four, five years. It's real impact nobody tell you how the impact is. Nobody telling how they are going to do it. And who's going to take care of our businesses.

This is the papa and mama restaurant and other restaurants too, but nobody cares. You have to show how much damage it is going to be. Project is okay. I

1

PHB19
cont'd

understand them, this one. But for the underground 7th Street is definitely no, that's all. Thank you. 1 cont'd

MS. KERMAN: Thank you very much, Yoshi. Christine Baisez. And Christine is my last speaker card unless there are others. If you'd like to speak, raise your hand, we'll be happy to get you a speaker card.

PHB20

MS. BAISEZ: Hello, my name is Christine Baisez. I am your residence of the Higgins building (inaudible). And I wish no metro in the area. There is a need for a metro. I wish it could be fully underground. I go there with my daughter. We love to bike and ride and we love community of Japanese Town and it's not to be -- not to be hurt by this. Thank you. 1

MS. KERMAN: Thank you, Christine. Do I have any other individuals that have filled out speaker cards or would like to? Well, in the meantime, let me also let you know that we are here 15 more minutes till 1:00 o'clock, to take your comments.

I'd like to also introduce you to some additional Metro personnel, who are here today because they care about listening to what you have to say, and our executive director of countywide planning, Martha Welborn.

Martha, if you could stand up and let everybody know that you are with us today. Diego Cardoso, our Executive officer of planning. I saw Robin Laired (phonetic)

earlier. I saw Lynda Bybee, our executive officer of communications. We have our huge project team. We're all wearing these big name tags. We're certainly here to talk to you after our official hearing one on one, but we encourage you to stay tuned.

Up on the board you see how you can contact us if you feel that, even though you gave oral testimony today, it was not sufficient. Feel free to send us written comments. If you have other things that you want to say, you know, there are many ways to do it. E-mail us, send us a written letter. We don't text or Twitter officially, but you might be able to find us there.

On behalf of the entire project team, we would like to thank you for joining us at this official and final hearing for the Regional Connecter. We want to encourage you to attend our board meeting on October 28th. And prior to that, our committee meeting, the Measure R Committee on October 21st at 9:00 o'clock in the morning.

With that, I will conclude the public hearing, unless I hear additional people that want to speak. And again, thank you all for coming out during your lunch today in this rainy, drizzly day, but we appreciate all of you staying with us on this project. Thank you.

(Hearing concluded at 12:47 p.m.)

PHB1

Responses to Comments from Fixing Angelenos Stuck in Traffic, Norton, Hilary

Response to Comment PHB1-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. Bicycle racks would be part of station amenities and existing bus routes that operate at proposed station locations would be accommodated. Park and rides are not proposed as part of this project.

Response to Comment PHB1-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB1-3

Impacts associated with each alternative, including impacts associated with construction and proposed stations, were analyzed in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR. Please refer to Chapter 3, Transportation Impacts and Mitigation, Section 4.14, Economic and Fiscal Impacts, and Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR for construction-related impacts on transit and businesses.

Response to Comment PHB1-4

Thank you for your comment. The purpose of this project is to improve the region's public transit service and mobility by connecting the light rail service of the Metro Gold Line to the Metro Blue Line and the Metro Expo Line (currently under construction).

PHB2

Responses to Comments from Grace, Roger

Response to Comment PHB2-1

Comment acknowledged. Commenter yielded speaking time.

PHB3

Responses to Comments from Metropolitan News Enterprise, Bobigian, Vahn

Response to Comment PHB3-1

Comment acknowledged. Commenter yielded speaking time.

PHB4

Responses to Comments from Grace, Jo-Ann

Response to Comment PHB4-1

Comment acknowledged. Commenter yielded speaking time.

PHB5

Responses to Comments from Metropolitan News Enterprise, Philibosian, Robert

Response to Comment PHB5-1

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

PHB6

Responses to Comments from Suehiro Café, Inc., Suzuki, Kenji

Response to Comment PHB6-1

Metro values the uniqueness and age of businesses in Little Tokyo and will continue to work with the community to minimize adverse impacts. As described in Chapter 2, Alternatives Considered, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Temporary intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. No surface disruption or impacts to businesses on 2nd Street in Little Tokyo are anticipated as a result of the passage of the tunnel boring machine. These refinements would reduce impacts to businesses both on 2nd Street and throughout the community. Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to support the Little Tokyo business community throughout the construction phase of the project.

Response to Comment PHB6-2

Nearly three dozen alternatives were studied during the Alternatives Analysis phase of the project, some of which bypassed the Little Tokyo neighborhood. Through several stages of screening, based on community input and technical considerations, the Fully Underground LRT Alternative was designated the Locally Preferred Alternative. The Regional Connector would involve both cut and cover and tunnel boring machine construction. Much of the alignment in the Little Tokyo area would be constructed using the tunnel boring machine method, which would minimize surface impacts. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined based on Draft EIS/EIR comments to include less cut and cover, and to move the tunnel boring machine construction staging area farther from the center of Little Tokyo. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR with the goal of supporting businesses throughout the construction phase. This will include targeted marketing efforts and other in-kind assistance. It is Metro's goal to minimize the potential for business interruption.

PHB7

Responses to Comments from Havens, Alan

Response to Comment PHB7-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB7-2

The surface tracks connecting the Pasadena and East Los Angeles branches of the Metro Gold Line would no longer be in service once the Regional Connector opens, and may ultimately be removed. The majority of transit passengers riding the Metro Gold Line from East Los Angeles are destined for downtown Los Angeles and points westward. These passengers would benefit from seamless travel to westside destinations. Transit riders traveling from East Los Angeles to Pasadena (and in the future to Montclair) would be required to transfer at the new underground station in Little Tokyo. Ridership forecasting results show that the Regional Connector would have adequate capacity to accommodate the projected volumes of transferring passengers.

Response to Comment PHB7-3

The commenter recommends development of the parcel located at the northeast corner of 1st and Alameda Streets. Comment acknowledged. Development of this parcel is not a part of this project and no further response is required.

PHB8

Responses to Comments from Berg, Martin

Response to Comment PHB8-1

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

PHB9

Responses to Comments from The Transit Coalition, Reed, Bart

Response to Comment PHB9-1

Thank you for your comment. Support for an underground option is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB9-2

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB9-3

In response to the increased cost-effectiveness of the three-station Locally Preferred Alternative over the four-station Fully Underground LRT Alternative, Metro is requesting a 60 percent federal funding match. The Federal Transit Administration New Starts Cost-Effectiveness Index for the proposed project, as of the publication of the Draft EIS/EIR, was $13.68 (a "medium-high" rating). Proposition A and C funds are largely unusable for the fully underground Regional Connector due to the voter-approved Metropolitan Transportation Authority Reform and Accountability Act of 1998. Refer to Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives, of this Final EIS/EIR.

Response to Comment PHB9-4

An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB9-5

Thank you for your comment. Support for an underground alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHB10

Responses to Comments from Springhetti, Joan

Response to Comment PHB10-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB10-2

The Metro Board of Directors voted on October 28, 2010 to remove the Wilcox and Olender Buildings (APNs 5149-007-006 and 5149-007-005) from consideration as acquisitions for the Regional Connector project. Only a subsurface easement beneath APN 5149-007-006 would be required for construction of the Locally Preferred Alternative.

Response to Comment PHB10-3

Metro recognizes the importance of businesses and residences to the revival of the downtown Los Angeles community. Implementation of mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR would reduce the impacts of construction. It is Metro's goal to minimize impacts. Metro will work with the community throughout the project and incorporate community input into the construction process.

PHB11

Responses to Comments from Miyoshi, Ellen

Response to Comment PHB11-1

Opposition to the At-Grade Emphasis LRT Alternative and support for the Fully Underground LRT Alternative is noted. With the Regional Connector in place, the station at 2nd and Broadway would have direct train service to Pasadena. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHB12

Responses to Comments from Koraku Group, Inc., Yamauchi, Hiroshi

Response to Comment PHB12-1

Construction durations for the Fully Underground LRT Alternative were shown in Table 4.18-2 of the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections and for the Locally Preferred Alternative in Table 4.18-1 of this Final EIS/EIR. The entire construction process would take four to five years, but the duration of construction in any one location in Little Tokyo would be less than four years. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR in order to minimize the construction impacts of the project. As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. Temporary intermittent closures may still be needed, but these would be less frequent than with the non-refined alternative described in the Draft EIS/EIR. Cut and cover would be needed at the intersection of 1st and Alameda Streets in order to construct the underground junction.

Response to Comment PHB12-2

It is Metro's goal to minimize impacts to businesses in Little Tokyo. Even under the worst-case scenario studied in the Draft EIS/EIR, none of the analysis determined that all business in Little Tokyo would be eliminated. Metro has made refinements to the Locally Preferred Alternative to reduce impacts to businesses, and will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to ensure assistance is provided for affected businesses throughout the construction phase of the project. A worst-case scenario list of businesses that would be acquired was shown in Section 4.2.3.5 of the Draft EIS/EIR, and some of these businesses would no longer need to be acquired due to refinements made to the Locally Preferred Alternative.

Response to Comment PHB12-3

The Metro Red and Purple Lines use a different rail transit mode than the Metro Blue, Gold, and future Expo Lines. The tracks and station platforms are not compatible due to differences in train floor height, train width, and method of electricity conveyance. In order to accommodate the Metro Blue, Gold, and future Expo Line trains, the Regional Connector must have a new alignment separate from the Red/Purple Line tunnels.

PHB13

Responses to Comments from Sachs, Arnold

Response to Comment PHB13-1

Public hearings were conducted in English; therefore, English translators were not needed. Metro delayed implementation of a light rail connection between the Metro Blue Line and the Metro Gold Line due to funding constraints. Metro will continue working with downtown residents throughout the duration of the project. Cost estimates for earlier proposed light rail connector routes through the downtown area are not available at the same level of detail as the Locally Preferred Alternative. Metro fare revenues do not cover the full construction and operation expenses of the transit system, and Metro does not generate profit from transit operations. The Blue Line Construction Authority was tasked with construction of the Los Angeles-Pasadena light rail project, which was later named the Metro Gold Line.

PHB14

Responses to Comments from Little Tokyo Business Association and Little Tokyo Business Improvement District, Liu, Wilson

Response to Comment PHB14-1

Metro welcomes the opportunity to work with a Little Tokyo business consortium and all other affected stakeholders throughout the duration of the project. Metro will also work with the Regional Connector Community Leadership Council to serve all businesses affected by Regional Connector construction.

Response to Comment PHB14-2

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contains the confirmed mitigation measures intended to assist Little Tokyo businesses and minimize adverse impacts during the construction phase of the project. It is Metro's goal to minimize the potential for business interruption.

PHB15

Responses to Comments from Wright, Jerard

Response to Comment PHB15-1

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The deletion of the station improves the Federal Transit Administration New Starts Cost-Effectiveness Index, and makes the project more competitive to receive funding up to a 60 percent federal share. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB15-2

Metro is actively seeking ways to reduce the costs of the project, and is considering all available funding sources. Proposition A and C funds are largely unusable for the fully underground Regional Connector due to the voter-approved Metropolitan Transportation Authority Reform and Accountability Act of 1998.

Response to Comment PHB15-3

As a cost-cutting measure, the Metro Board of Directors voted on October 28, 2010 not to include the Flower/5th/4th Street station in the Locally Preferred Alternative. However, under the Locally Preferred Alternative, an enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The remaining Regional Connector stations are upwards of one-half mile apart, which is too great a distance for them to be combined.

Response to Comment PHB15-4

Metro will continue to explore options for reducing the cost of the project.

PHB16

Responses to Comments from Central City Association, Chavira, Tracey

Response to Comment PHB16-1

Thank you for your comment.

Response to Comment PHB16-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB16-3

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. Metro understands the importance of serving the Financial District and believes that the Locally Preferred Alternative still meets the purpose and need of the project despite the station deletion. Deletion of the Flower/5th/4th Street station would result in minimal ridership losses because most riders would use the 2nd/Hope Street station or 7th Street/Metro Center Station, which would service the Financial District. After the October 28, 2010 meeting, the Metro Board of Directors directed staff to meet with the Financial District stakeholders to discuss options for privately funding the Flower/5th/4th Street station, but no funding sources were identified. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

PHB17

Responses to Comments from Historic Downtown Theater, Brown, Russell

Response to Comment PHB17-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB17-2

The cut and cover construction method would be used at each of the proposed Regional Connector stations, and along some portions of the alignment between stations.

Response to Comment PHB17-3

Thank you for your comment. It is noted that the commenter supports the Fully Underground LRT Alternative and opposes the At-Grade Emphasis LRT Alternative. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB17-4

Support for the Flower/5th/4th Street station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. However, the design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB17-5

Support for the 2nd/Broadway station is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative, which includes a station at 2nd and Broadway.

Response to Comment PHB17-6

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHB18

Responses to Comments from Garza, Don

Response to Comment PHB18-1

Metro will implement the mitigation measures shown in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to minimize impacts to businesses.

Response to Comment PHB18-2

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

Response to Comment PHB18-3

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The deletion of the station was done in an effort to reduce the cost of the project while still meeting the project's purpose and need. An enhanced pedestrian walkway connecting the 4th/Flower Streets area to the existing 7th Street/Metro Center Station would be constructed on Flower Street to improve access to the Financial District. The design of the Locally Preferred Alternative would not preclude a station at 5th and Flower Streets from being built as a possible future, separate project.

Response to Comment PHB18-4

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

PHB19

Responses to Comments from Shabu Shabu House Restaurant, Maruyama, Yoshi

Response to Comment PHB19-1

As described in Chapter 2, Alternatives Considered, and Section 4.18, Construction Impacts, of this Final EIS/EIR, the Locally Preferred Alternative has been refined since publication of the Draft EIS/EIR. The refined alignment would not involve cut and cover construction on 2nd Street in Little Tokyo, thus eliminating the need for lengthy closures of the street and sidewalk. This reduces the potential disruption in Little Tokyo due to construction. Construction durations for the Fully Underground LRT Alternative were shown in Table 4.18-2 of the Draft EIS/EIR and for the Locally Preferred Alternative in Table 4.18-1 in this Final EIS/EIR. The entire construction process would take four to five years, but the duration of construction in any one location in Little Tokyo would be less than four years. Metro will implement the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR with the goal of supporting businesses throughout the construction phase.

PHB20

Responses to Comments from Baisez, Christine

Response to Comment PHB20-1

Thank you for your comment. Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

RESPONSES TO COMMENTS ON THE SUPPLEMENTAL EA/RECIRCULATED DRAFT EIR SECTIONS

Introduction

The Regional Connector Transit Corridor Project Supplemental Environmental Assessment/ Recirculated Sections of the Draft EIR (Supplemental EA/Recirculated Draft EIR Sections) was made available to identified stakeholders, agencies, and the general public for review and comment for a 45-day review period from July 22, 2011 through September 6, 2011.

This volume of this Final EIS/EIR contains copies of all written comments and provides written responses to all comments received on the Supplemental EA/Recirculated Draft EIR Sections. A total of 31 comment letters were received during the public review period. Overall, a total of 263 individual comments were received on the Regional Connector Transit Corridor Project Supplemental EA/Recirculated Draft EIR Sections.

The format for the responses to comments presents each comment letter bracketed into separate comments, followed by corresponding responses to each individual comment of that comment letter. The comment letters and responses are organized and grouped into the following categories based on the affiliation of the commenter as follows:

Letter ID Prefix	Description
R-AF	Federal Agency
R-AL	Local Agency
R-AS	State Agency
R-BU	Businesses and Business Groups
R-CN	Community Groups and Non-Profit Organizations
R-PC	Public Comment

To assist the reader's review and use of the responses to comments, two indices that provide the commenter name, affiliation, and comment letter identification designator (e.g., R-PC1) for each comment letter are provided below. The first index lists all the comment letters by comment letter identification designator and the second lists all of the comment letters alphabetically by commenter's last name.

Supplemental EA/Recirculated Draft EIR Sections
Index by Comment Letter Designator

Comment Letter	Affiliation	Last Name	First Name	Comment Page	Response Page
Federal Agencies					
R-AF1	U.S. Department of Homeland Security - FEMA	Blackburn	Gregor	F4-2	F4-4
R-AF2	U.S. Department of the Interior	Port	Patricia Sanderson	F4-5	F4-7
Local Agencies					
R-AL1	City of Los Angeles - Bureau of Engineering	Tran	Curtis	F4-9	F4-10
R-AL2	City of Los Angeles - Department of Transportation	Bok	Susan	F4-11	F4-12
R-AL3	City of Los Angeles - Department of Public Works, Bureau of Sanitation	Poosti	Ali	F4-13	F4-16
R-AL4	County of Los Angeles - Community and Senior Services	Donnelly	Roseann	F4-17	F4-18
State Agencies					
R-AS1	State of California Native American Heritage Commission	Singleton	Dave	F4-20	F4-25
R-AS2	State of California - Department of Transportation, District 7	Watson	Dianna	F4-26	F4-28
R-AS3	State of California - Public Utilities Commission	Gilbert	Daren	F4-29	F4-30
Businesses and Business Groups					
R-BU1	Green Bamboo	Hong	William	F4-32	F4-33
R-BU2	Hines	Shepherd	Colin	F4-34	F4-35
R-BU3	Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Los Angeles Times	Friess	K. Erik	F4-36	F4-42
R-BU4	Thomas Properties Group, Inc.	Ricci	Thomas S.	F4-45	F4-63

Comment Letter	Affiliation	Last Name	First Name	Comment Page	Response Page
R-BU5	Little Tokyo Business Association and Little Tokyo Business Improvement District; Little Tokyo Community Council	Liu; Okamoto	Wilson; Mike	F4-86	F4-87
R-BU6	DLA Piper LLP on behalf of Hines Interest Limited Partnership	Leaderman	Ryan M.	F4-89	F4-107
R-BU7	Latham & Watkins LLP on behalf of Japanese Village, LLC	Crockett	Robert D.	F4-125	F4-156
R-BU8	Downtown LA Arts District Business Improvement District	Lopez	Estela	F4-175	F4-179
R-BU9	Weisenhaus Architecture	Weisenhaus	Duane	F4-182	F4-186
R-BU10	Westin Hotels & Resorts	Czarcinski	Michael	F4-187	F4-189
Community Groups and Non-Profit Organizations					
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R-CN3	Community Connector Coalition	Broad; Kardan	Eli: Sel	F4-197	F4-203
R-CN4	Los Angeles Conservancy	Fine	Adrian Scott	F4-207	F4-212
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Supplemental EA/Recirculated Draft EIR Sections
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Broad; Kardan	Eli; Sel	R-CN3	Community Connector Coalition	F4-197	F4-203
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Last Name	First Name	Comment Letter	Affiliation	Comment Page	Response Page
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Responses to Federal Agency Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-AF1	U.S. Department of Homeland Security - FEMA	Blackburn	Gregor
R-AF2	U.S. Department of the Interior	Port	Patricia Sanderson

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

August 30, 2011

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Dear Ms. Saltarelli:

This is in response to your request for comments regarding the Regional Connector Transit Corridor Project Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County (Community Number 065043) and City (Community Number 060137) of Los Angeles, Maps revised September 26, 2008. Please note that the City of Los Angeles, Los Angeles County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

1

- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

1
cont'd

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The City of Los Angeles floodplain manager can be reached by calling Gary Moore, City Engineer, at (213) 485-4935. The Los Angeles County floodplain manager can be reached by calling George De La O, Senior Civil Engineer, at (626) 458-7155.

If you have any questions or concerns, please do not hesitate to call Cynthia McKenzie of the Mitigation staff at (510) 627-7190.

Sincerely,

for Gregor Blackburn

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:
Gary Moore, City Engineer, City of Los Angeles
George De La O, Senior Civil Engineer, Los Angeles County Public Works, Watershed Management Division
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources, Southern Region Office
Cynthia McKenzie, Senior Floodplanner, CFM, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

R-AF1

Responses to Comments from the U.S. Department of Homeland Security – FEMA, Blackburn, Gregor

Response to Comment R-AF1-1

Metro has reviewed the applicable Flood Insurance Rate Maps. No part of the proposed project would be located within a riverline floodplain, regulatory floodway, or coastal high hazard area. No project activities would change any existing special flood hazard area. This is documented in Section 4.10, Water Resources, of the Draft EIS/EIR and this Final EIS/EIR, and additional detail is provided in Appendix V, Water Resources Technical Memorandum. The above-referenced section and appendix of this EIS/EIR also include analysis based on local City of Los Angeles requirements.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94101

IN REPLY REFER TO:
ER# 10/741

Electronically Filed

1 September 2011

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
e-mail: roybald@metro.net

Mr. Ray Tellis, Team Leader
Los Angeles Metropolitan Office
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017
e-mail: ray.tellis@dot.gov

Subject: Federal Transit Administration (FTA) Draft Environmental Impact Report Supplemental Environmental Assessment/Recirculated Sections, Regional Corridor Transit Corridor Project, Los Angeles CA

Dear Ms. Saltarelli and Mr. Tellis:

The Department of the Interior has received and reviewed the subject document and has no comments to offer. 1

Thank you for the opportunity to review this project.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEPC

R-AF2

Responses to Comments from the U.S. Department of the Interior, Port, Patricia Sanderson

Response to Comment R-AF2-1

Comment noted.

Responses to Local Agency Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-AL1	City of Los Angeles - Bureau of Engineering	Tran	Curtis
R-AL2	City of Los Angeles - Department of Transportation	Bok	Susan
R-AL3	City of Los Angeles - Department of Public Works, Bureau of Sanitation	Poosti	Ali
R-AL4	County of Los Angeles - Community and Senior Services	Donnelly	Roseann

From: Curtis Tran [mailto:curtis.tran@lacity.org]
Sent: Tuesday, September 06, 2011 01:30 PM
To: Kerman, Ann
Cc: Hu, Kang <Kang.Hu@lacity.org>; Calvin Chow <calvin.chow@lacity.org>; Bok, Susan <Susan.Bok@lacity.org>; Wang, Allen <Allen.Wang@lacity.org>; Matthew masuda <Matthew.Masuda@lacity.org>; Sobalvarro, Ivania <ivania.sobalvarro@lacity.org>; Mohr, Laura <Laura.Mohr@aecom.com>; Ray.tellis@dot.gov <Ray.tellis@dot.gov>; Roybal, Dolores; Gonzalez, Fernando <Fernando.Gonzalez@lacity.org>; Cheung, David <David.Cheung@lacity.org>
Subject: Re: Metro Regional Connector Update

Hi Ann,

Here are the review comments from Bureau of Engineering:

1) For Article 2.3.6.2 Route Configuration, 5th paragraph, Is the City (CLA and LADOT) agrees to eliminate the north-south traffic along Hewitt Street and 1st Street Intersection? The Hewitt Street and 1st Street intersection was designed and constructed, during the Eastside LRT Project, to accommodate the north-south traffic along Hewitt Street for the future Mangrove property development. This elimination is not accepted. We need to discuss this ASAP. 1

2) For Article 4.18.2.5.1 Cut and Cover Construction, please contact Bureau of Sanitation for proper water (potable, groundwater, etc.) discharges into the City sewer and/or stormdrain systems. There will be a sewer service charge for discharging water into the City sewer system. Proper water treatment is needed before the water can be discharged into the City stormdrain system. 2

Thx.

On Thu, Sep 1, 2011 at 6:15 PM, Ann Kerman <kermana@metro.net> wrote:

Reminder: Supplemental EA/Recirculated Draft EIR Sections Available for Public Review

Metro is currently circulating the Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report (Supplemental EA/Recirculated Draft EIR Sections) presenting information on the refinements to the Locally Preferred Alternative (LPA) for the Regional Connector.

You are invited to review and comment on this document. The 45-day public review and comment period for the Supplemental EA/Recirculated Draft EIR Sections began on July 22, 2011 and will end September 6, 2011.

A copy of the Supplemental EA/Recirculated Draft EIR Sections is available at metro.net/regionalconnector and at public libraries in the study area. For a full listing of these libraries, please visit the project website at metro.net/regionalconnector.

You may submit your comments as follows:

• By e-mail to: regionalconnector@metro.net

• By US Mail to: Ms. Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012

• By going to our website at metro.net/regionalconnector and clicking on "Contact Us"

Many thanks for your ongoing interest in the Metro Regional Connector.

This message was sent to curtis.tran@lacity.org by:

Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza
Los Angeles, CA 90012
(213) 922-6000

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R-AL1

Responses to Comments from the City of Los Angeles – Bureau of Engineering, Tran, Curtis

Response to Comment R-AL1-1

Comment noted. This elimination of through north-south traffic movement at the intersection of 1st and Hewitt Streets was included in Sections 2.3.6.2 and impacts associated with the elimination of the through north-south traffic movement was discussed in Section 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The intersection is not projected to have a significant negative change in Level of Significance (LOS measured in seconds of delay) when compared to the No Build Alternative conditions. Therefore, no significant adverse impacts were identified. As indicated in Section 2.3.6.2 of the Draft EIS/EIR and this Final EIS/EIR, automobile access to the Mangrove property would continue to be available from Temple and 1st Streets. Metro has coordinated with the City of Los Angeles, including the Los Angeles Department of Transportation (LADOT), throughout the environmental and design process for this project. Metro will continue to coordinate with the City of Los Angeles, including LADOT, regarding intersection modifications throughout the project process.

Response to Comment R-AL1-2

Metro has been in coordination and will continue to coordinate with the Bureau of Sanitation, refer to comment letter R-AL3. Metro will obtain the required permits from the Bureau of Sanitation for discharges into the drainage and sewer systems as indicated in Section 4.22 of the Draft EIS/EIR and this Final EIS/EIR. As indicated in Section 4.10.3.5 of the Draft EIS/EIR and this Final EIS/EIR, there would be a potential need for dewatering if groundwater is encountered during construction activities. In order to comply with water discharge requirements, a dewatering permit would be obtained from the Los Angeles Regional Quality Control Board and proper water treatment would be performed before water is discharged, as indicated in Sections 4.10.3.3 and 4.10.3.5 of the Draft EIS/EIR and this Final EIS/EIR.

From: Susan Bok [mailto:susan.bok@lacity.org]
Sent: Tuesday, September 06, 2011 04:23 PM
To: Regional Connector
Cc: Kerman, Ann; Calvin Chow <calvin.chow@lacity.org>; Kang Hu <Kang.Hu@lacity.org>; Curtis Tran <curtis.tran@lacity.org>; Jesus Escamilla <jesus.escamilla@lacity.org>
Subject: Comments on Regional Connector Supplemental EA

Hi Ann,

LADOT acknowledges receipt of the **Supplemental EA** for the Regional Connector and has the following comments.

1. Section 2.3.6.2 - Mitigation measures will need to be developed for alternate access to the Mangrove development site if the Hewitt Street access driveway will be closed or limited as proposed. 1

2. Chapter 2, Page 24 (Revision from Metro) states: *"Permanent roadway and lane reconfigurations would also be needed around the proposed 2nd/Hope Street station and the proposed pedestrian walkway enhancement along Flower Street. At the 2nd /Hope Street station, the ramps between Flower and Hope Streets would be modified. All existing traffic movements would still be possible in this location under the LPA. Final lane configurations will be developed with LADOT."*) LADOT will continue to work with Metro to define a preferred roadway configuration for the 2nd/Hope Street intersection layout. 2

3. Chapter 2, Page 1 states: *An enhanced pedestrian walkway would be created along the west side of Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets.* LADOT would like to work with Metro to ensure that roadway capacity along Flower St. is not negatively impacted and that the proposed pedestrian walkway meets all applicable City standards. 3

thanks,
Susan

****

Calvin S. Chow
LADOT
(213) 972-8621

Reminder: Supplemental EA/Recirculated Draft EIR Sections Available for Public Review

Metro is currently circulating the Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report (Supplemental EA/Recirculated Draft EIR Sections) presenting information on the refinements to the Locally Preferred Alternative (LPA) for the Regional Connector.

You are invited to review and comment on this document. The 45-day public review and comment period for the Supplemental EA/Recirculated Draft EIR Sections began on July 22, 2011 and will end September 6, 2011.

A copy of the Supplemental EA/Recirculated Draft EIR Sections is available at metro.net/regionalconnector and at public libraries in the study area. For a full listing of these libraries, please visit the project website at metro.net/regionalconnector.

You may submit your comments as follows:

• By e-mail to: regionalconnector@metro.net

• By US Mail to: Ms. Dolores Roybal Saltarelli, Project Manager, Metro, 1 Gateway Plaza, MS 99-22-2, Los Angeles, CA 90012

• By going to our website at metro.net/regionalconnector and clicking on "Contact Us"

Many thanks for your ongoing interest in the Metro Regional Connector.

This message was sent to curtis.tran@lacity.org by:

Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza
Los Angeles, CA 90012
(213) 922-6000

--
Susan
Susan Bok, AICP
Supervising Transportation Planner
Transit Corridor Development
Los Angeles Department of Transportation
213-972-8623

R-AL2

Responses to Comments from the City of Los Angeles – Department of Transportation, Bok, Susan

Response to Comment R-AL2-1

As indicated in Section 2.3.6.2 of the Draft EIS/EIR and this Final EIS/EIR, access to the Mangrove property would continue to be available via Temple Street and the westbound lanes of 1st Street.

Response to Comment R-AL2-2

Metro looks forward to continuing working with the Los Angeles Department of Transportation (LADOT). Figure 2-12 of this Final EIS/EIR illustrates the proposed roadway configuration, which is discussed in Section 3.3.5.2.2 of this Final EIS/EIR.

Response to Comment R-AL2-3

Metro looks forward to continuing working with LADOT. The impacts of the lane reduction along Flower Street are examined in Section 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measures to address these impacts are included in Section 3.4 of the Draft EIS/EIR and have been incorporated into Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The pedestrian walkway would meet applicable state and federal standards, as discussed in mitigation measure number SS-8 in the Mitigation Monitoring and Reporting Program.

CITY OF LOS ANGELES
CALIFORNIA

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ASSISTANT DIRECTORS

WASTEWATER ENGINEERING SERVICES DIV.
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210 OR 342-6211

August 23, 2011

File: SC.CE.

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

Regional Connector Transit Corridor Project – Recirculated Draft EIR

This is in response to your letter requesting wastewater service information for the proposed project. The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) has conducted a preliminary study of the existing sewer lines and gauges located within the vicinity of the proposed project location.

The City of Los Angeles sewer system consists of primary sewers (16-inches and larger in diameter) and secondary sewers (less than 16-inches in diameter). The secondary sewers service the property laterals and feed into the primary sewer lines. The primary sewers constitute the trunk, interceptor, and outfall portions of the system. These sewers ultimately convey the wastewater to the Hyperion Treatment Plant which has sufficient capacity for current and future development. 1

The majority of sewer lines within the proposed project area consist of secondary lines. The secondary reaches run along W 7th St, S Hill St, E Cesar E Chavez Ave, E Commercial St, and S Alameda St. The primary sewer reaches run along Flower St, E Cesar E Chavez Ave. and Alameda St near the 7th St/Metro Center, Union Square, and the Little Tokyo Stations, respectively. Gauging within the project area show relatively low flows which indicates the existing sewer system might be able to accommodate future discharges related to this project. Figure 1 shows the existing sewer lines and gauging locations along the alignment of the proposed project.

Currently, the project description lacks sufficient detail for us to conduct a detailed wastewater capacity analysis. Should the project descriptions change or more details

R-AL3

related to the construction dewatering flows become available, please continue to send us information so that we may determine if a sewer assessment is required in the future. 1 cont'd

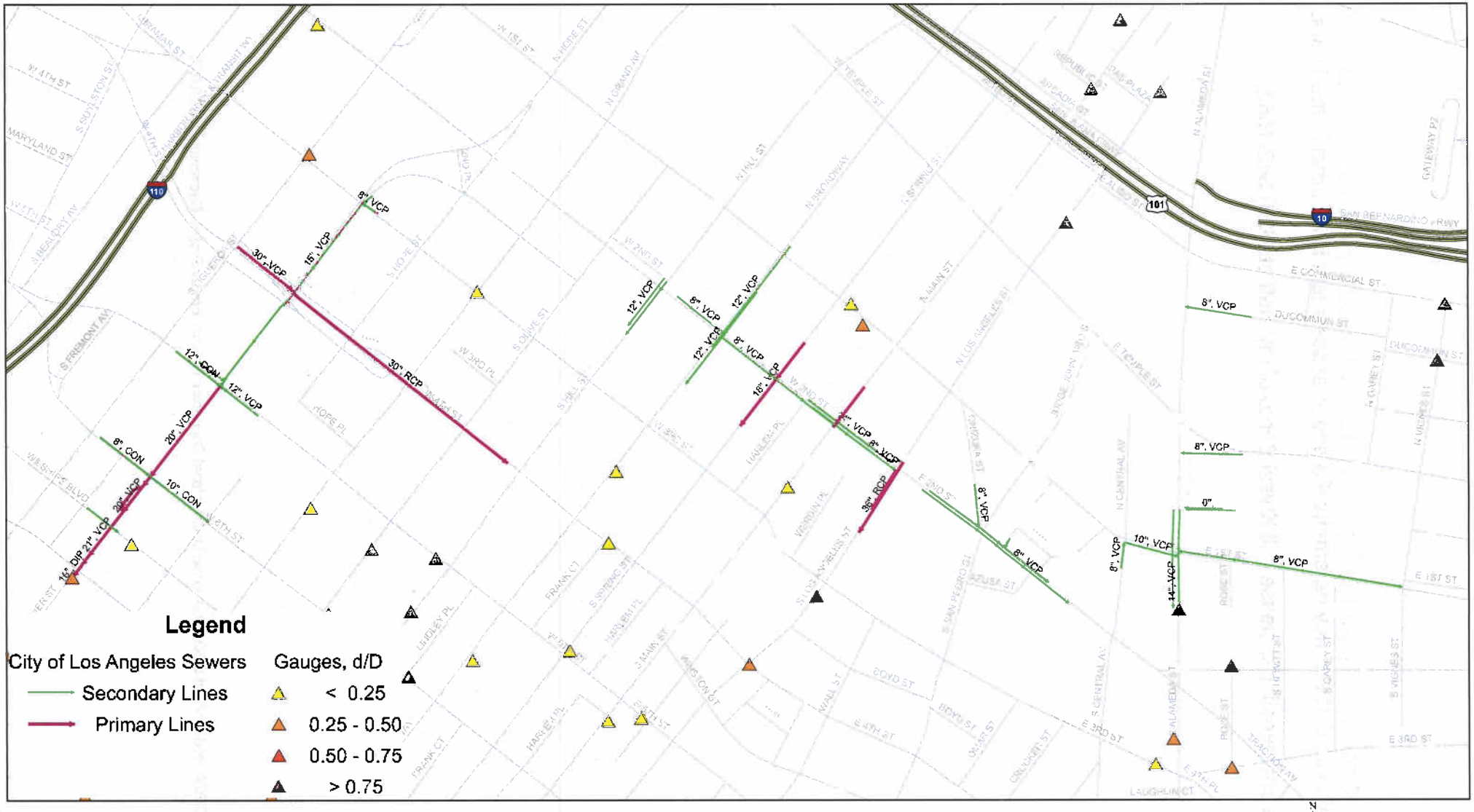
If you have any questions, please call Kwasi Berko of my staff at (323) 342-1562.

Sincerely,

Ali Poosti, Acting Division Manager
Wastewater Engineering Services Division
Bureau of Sanitation

Attachments:
Figure 1 – Sewer Map

cc: Kosta Kaporis, BOS
Daniel Hackney, BOS
Rowena Lau, BOS



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP

FIGURE 1
Regional Connector Transit Corridor Project
Sewer Map

F4-15

R-AL3

R-AL3

Responses to Comments from the City of Los Angeles – Department of Public Works, Bureau of Sanitation, Poosti, Ali

Response to Comment R-AL3-1

Thank you for the information regarding sewer lines in the project area. Metro would obtain the appropriate permits from the Bureau of Sanitation as described in Section 4.22 of the Draft EIS/EIR and this Final EIS/EIR. Metro will coordinate with the Bureau of Sanitation regarding construction wastewater disposal.

County of Los Angeles
COMMUNITY AND SENIOR SERVICES

3175 West Sixth Street • Los Angeles, CA 90020
Tel: 213-738-2600 • Fax 213- 487-0379

lacounty.gov

css.lacounty.gov

Gloria Molina
Mark Ridley-Thomas
Zev Yaroslavsky
Don Knabe
Michael D. Antonovich

"Enriching Lives Through Effective And Caring Service"

Cynthia D. Banks
Director

Otto Solórzano
Chief Deputy

September 2, 2011

Diego Cardoso, Executive Officer
Los Angeles County Metropolitan Transit Authority
One Gateway Plaza
Los Angeles, California 90012

Dear Mr. Cardoso,

Thank you for soliciting my department's input regarding the Regional Connector project. I am responding to you on behalf of our director, Cynthia Banks, to whom you sent the original request. While I can definitely see the benefits of implementing this project, it operates exclusively within the City of Los Angeles. As such, it would not be appropriate for us to provide an official endorsement, and instead I would defer our comments to the City of Los Angeles Department of Aging. 1

Again, your interest in our feedback on this ambitious project is greatly appreciated. If you have any questions, please contact me at (213) 738-4238 or rdonnelly@css.lacounty.gov.

Sincerely,

Roseann Donnelly/DK

Roseann Donnelly, Program Manager
Adult Protective Services Planning & Special Operations Division

RD:DK

c: Cynthia D. Banks
Otto Solórzano
Lorenza C. Sanchez

R-AL4

Responses to Comments from the County of Los Angeles – Community and Senior Services, Donnelly, Roseann

Response to Comment R-AL4-1

Comment noted.

Responses to State Agency Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-AS1	State of California Native American Heritage Commission	Singleton	Dave
R-AS2	State of California - Department of Transportation, District 7	Watson	Dianna
R-AS3	State of California - Public Utilities Commission	Gilbert	Daren

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

August 29, 2011

Ms. Delores Roybal Salterelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Re: SCH#2009031043; CEQA Notice of Completion; Recirculated draft Environmental Impact Report (REIR) for the **"Regional Connector Transit Corridor Project"** located from Montclair to Santa Monica; Los Angeles County, California.

Dear Ms. Roybal Salterelli:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were identified** within one-half mile of some of the 'areas of potential effect (APEs) based on the USGS coordinates provided. Contact the Native American on the attached list for further information. Note: the absence of recorded Native American cultural resources does not preclude their existence. 1

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway.

Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources. 1 cont'd

Furthermore, the NAHC is of the opinion that the current project remains under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.' 2

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity. 3

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'. 4

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects. 5

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

California Native American Contact List
Los Angeles County
August 29, 2011

San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

San Manuel Band of Mission Indians
Ann Brierty, Policy/Cultural Resources Departmen
26569 Community Center. Drive Serrano
Highland , CA 92346
(909) 864-8933, Ext 3250
abrierty@sanmanuel-nsn.gov
(909) 862-5152 Fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Bernie Acuna
1875 Century Pk East #1500 Gabrielino
Los Angeles , CA 90067
(619) 294-6660-work
(310) 428-5690 - cell
(310) 587-0170 - FAX
bacuna1@gabrieinotribe.org

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles , CA 90067 Gabrielino
lcandelaria1@gabrielinoTribe.org
626-676-1184- cell
(310) 587-0170 - FAX
760-904-6533-home

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2009031043; CEQA Notice of Completion; draft Recirculated Environmental Impact Report (REIR) for the Regional Connector Transit Corridor; located from Montclair to Santa Monica via downtown Los Angeles; Los Angeles County, California.

California Native American Contact List
Los Angeles County
August 29, 2011

Gabrieleno Band of Mission Indians
Andrew Salas, Chaairperson
P.O. Box 393 Gabrielino Tongva
Covina , CA 91723
(626) 926-4131
gabrilenoindians@yahoo.com

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2009031043; CEQA Notice of Completion; draft Recirculated Environmental Impact Report (REIR) for the Regional Connector Transit Corridor; located from Montclair to Santa Monica via downtown Los Angeles; Los Angeles County, California.

R-AS1

Responses to Comments from the State of California Native American Heritage Commission, Singleton, Dave

Response to Comment R-AS1-1

Thank you for the letter. The Supplemental EA/Recirculated Draft EIR Sections did not include information concerning archaeological/tribal resources or consultation with tribes as these resources would not be impacted beyond those impacts already described in the Draft EIS/EIR. The Draft EIS/EIR and this Final EIS/EIR document the early consultation with the individuals and groups that were previously identified by the Native American Heritage Commission (NAHC). As part of the Draft EIS/EIR and preparation of the project Memorandum of Agreement, consultation and coordination was conducted with the NAHC to identify Native American cultural resources in the project area and a list of appropriate Native American contacts for the project. Correspondence was also sent to the Native American tribes identified by the NAHC inviting comments on the project Memorandum of Agreement. In addition, as part of the EIS/EIR, notices were sent to the NAHC soliciting input on the project during the environmental review process. The record of these consultations is summarized in Section 4.12, Historic Resources, of the Draft EIS/EIR and this Final EIS/EIR and is described more specifically in Appendix Y, Cultural Resources - Archaeology (Updated). The Federal Transit Administration and Metro distributed the EIS/EIR, applicable Technical Memoranda, and the project Memorandum of Agreement to interested individuals and groups. No additional comments from interested tribal members and groups have been received to date. All of the cited relevant regulations and laws have been complied with as documented in this Final EIS/EIR including relevant appendices. Metro will continue to coordinate and consult with the NAHC, as appropriate.

Response to Comment R-AS1-2

Please refer to Response to Comment R-AS1-1, above.

Response to Comment R-AS1-3

Please refer to Response to Comment R-AS1-1, above.

Response to Comment R-AS1-4

Please refer to Response to Comment R-AS1-1, above.

Response to Comment R-AS1-5

Please refer to Response to Comment R-AS1-1, above.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, OFFICE OF REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

September 9, 2011

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Regional Connector Transit Corridor Project
IGR#110738/CS
Vic: LA-101-0.6, SCH# 2009031043

Dear Ms. Roybal Saltarelli

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above mentioned project. Based on the information received we have the following comments:

The proposed LRT system would provide direct service from Pasadena to Long Beach and from East Los Angeles to Santa Monica via the Regional Connector Transit Corridor subway. However, if the headways for each of the LRT lines were lengthened as part of the project, then this would result in reduced overall service to transit patrons. An alternative system would be to have a trunk line as originally envisioned, which would link Pasadena to Long Beach. The Gold Line to East Los Angeles and the Expo Line to Santa Monica would be stub lines. With a trunk line system, only the trunk line would use the Regional Connector Transit Corridor with existing or improved headways. The stub lines would also operate with existing headways but would require transfers at respective transit stations. 1

The Regional Connector Transit Corridor Project would directly link the 7th Street/Metro Center Station (Metro Blue Line terminus and Metro Expo Line Terminus) to the Metro Gold Line, near Little Tokyo/Arts District Station. The fully underground Light Rail Transit (LRT) alternative was designated as the Locally Preferred Alternative (LPA). 2

As a result of the construction tunnel boring activity, the excavation material would require transport to an off-site location. We request that construction-related truck trips on State highways be limited to off-peak commute hours. We also request that the contractor avoid bunching or platooning of truck trips on mainline freeways, on freeway on/off-ramps and at freeway ramp intersections. Transport of over-size or over-weight construction equipment on State highways will require a Caltrans Transportation Permit. 3

If you have any questions regarding these comments, you may contact Carl Shiigi, project coordinator at (213) 897-1726. Please refer to our internal record number 110738/CS.

Sincerely,

DIANNA WATSON
IGR/CEQA Program Manager
Caltrans, District 7

cc: Scott Morgan, State Clearinghouse

R-AS2

Responses to Comments from the State of California - Department of Transportation, District 7, Watson, Dianna

Response to Comment R-AS2-1

The proposed headways on the light rail system with the Regional Connector in place would be every five minutes on the North-South Line and every five minutes on the East-West Line, as shown in Table 2-1 of the Draft EIS/EIR and this Final EIS/EIR. This would match or improve the existing headways on the Metro Blue, Gold, and Expo Lines. One primary purpose of the Regional Connector is to make the transit system more convenient by reducing transfers. The North-South and East-West Lines proposed in Section 2.3.6.2 of the Draft EIS/EIR and this Final EIS/EIR would more effectively meet this goal than stub lines, and would still preserve or improve existing headways.

Response to Comment R-AS2-2

This information is correct.

Response to Comment R-AS2-3

As indicated in Section 3.4 of the Draft EIS/EIR, truck haul trips would be primarily scheduled along existing freight routes during off-peak hours. This has been incorporated into mitigation measure number AQ-15 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro will continue to coordinate with Caltrans throughout the design and construction process and will acquire appropriate permits for construction of the Locally Preferred Alternative, which may include a Caltrans Transportation Permit if over-size or over-weight vehicles travel on state highways during construction as indicated in Section 4.22 of this Final EIS/EIR. Once construction lay down areas are identified, haul routes will be finalized and submitted to Caltrans for review. The platooning of truck trips on mainline freeways, freeway on/off-ramps, and freeway ramp intersections would be avoided. Refer to Section 4.22 of this Final EIS/EIR regarding coordination and approvals related to Caltrans.

STATE OF CALIFORNIA EDMOND G. BROWN JR, *Governor*

PUBLIC UTILITIES COMMISSION
180 PROMENADE CIRCLE, SUITE 115
SACRAMENTO, CA 95834

September 7, 2011

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Supplemental EA/Recirculated Draft Environmental Impact Statement for the Regional Connector Transit Corridor Project

Dear Ms. Roybal Saltarelli:

Thank you for providing us with a copy of your Supplemental EA/Recirculated Draft Environmental Impact Statement (Supplemental EA/Recirculated Draft EIR Sections) for the Regional Connector Transit Corridor Project. The California Public Utilities Commission (CPUC or Commission) has been interacting with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the project since last year, most recently the CPUC had a meeting with the project's consultants on July 20th regarding the Regional Connector and grade crossings. 1

We do not have any additional written comments to those provided to your agency on October 20, 2010 on this project. 2

CPUC looks forward to continuing work with the Metro and your consultants in finalizing those items discussed at the July 20th meeting, processing the General Order 88-B for authorization to alter a couple of at-grade crossings and the completion of this important project.

Thank you very much for the opportunity to review and comment on your Supplemental EA/Recirculated Draft EIR Sections. Commission staff is available to meet with you and discuss our concerns. 3

We look forward to working with Metro on this project. Should you have any questions, please contact Jose Pereyra (213) 576 – 7083 or email at jfp@cpuc.ca.gov.

Sincerely,

Daren Gilbert, Manager
Rail Transit and Crossings Branch
Consumer Protection and Safety Division

R-AS3

Responses to Comments from the State of California Public Utilities Commission, Gilbert, Daren

Response to Comment R-AS3-1

Metro looks forward to continued coordination with the California Public Utilities Commission.

Response to Comment R-AS3-2

Responses to the prior written comments are included in Volume F-2 of this Final EIS/EIR as Responses to Comments AS3-1 through AS3-10.

Response to Comment R-AS3-3

Thank you for your comment. As discussed in Section 4.22 of this Final EIS/EIR, Metro will construct and operate the project according to the guidelines and oversight provided by the California Public Utilities Commission.

Responses to Businesses and Business Groups Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-BU1	Green Bamboo	Hong	William
R-BU2	Hines	Shepherd	Colin
R-BU3	Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Los Angeles Times	Friess	K. Erik
R-BU4	Thomas Properties Group, Inc.	Ricci	Thomas S.
R-BU5	Little Tokyo Business Association and Little Tokyo Business Improvement District; Little Tokyo Community Council	Liu; Okamoto	Wilson; Mike
R-BU6	DLA Piper LLP on behalf of Hines Interest Limited Partnership	Leaderman	Ryan M.
R-BU7	Latham & Watkins LLP on behalf of Japanese Village, LLC	Crockett	Robert D.
R-BU8	Downtown LA Arts District Business Improvement District	Lopez	Estela
R-BU9	Weisenhaus Architecture	Weisenhaus	Duane
R-BU10	Westin Hotels & Resorts	Czarcinski	Michael

From: Will Hong [mailto:willhong1981@gmail.com]
Sent: Thursday, August 04, 2011 10:16 PM
To: Regional Connector
Subject: Review - Supplemental EA/REcirculated Draft - Question

Dear Ms. Dolores Roybal Saltarelli:

My name is William Hong and an attorney here in Los Angeles. I'm also the son of one of the business owner "Green Bamboo" located at 136 S. Central Ave. Los Angeles (near Office Depot - parcel: 516101802). I was asked to take a look at the Supplemental Environmental Impact Draft that was online according to a notice that was sent by Metro.

Upon my initial review of the project (and as quite impressive it is) I did find that Metro is planning a "partial takings" of the land where the business is located. I also read that businesses will be "relocated." However, how exactly the relocation and/or mitigation will be completed is a bit vague for me. 1

Is it possible that I may meet with you to discuss exactly what the plans would entail regarding the businesses that are located on the above mentioned parcel? I would just like some clarification of the plans for the businesses. If it helps, we maintain a great relationship with the majority of the business owners that are currently operating in this parcel.

Thank you for your time and cooperation.

Best regards,

William Hong

Tel: 951.333.4644

R-BU1

Responses to Comments from Green Bamboo, Hong, William

Response to Comment R-BU1-1

For the Locally Preferred Alternative, some acquisitions are planned on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. These are outlined in the parcel table in Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The only businesses on this block that would be displaced are Señor Fish, the Spice Table, Weiland Brewery, and the adjacent parking lot. Green Bamboo is not part of these acquisitions, and would not be displaced or relocated. General information about relocation is provided in Section 4.2, Displacement and Relocation, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Relocation assistance plans would be developed based on the specific needs of each business and ongoing coordination between Metro and the business owners. Any displacement and relocation would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Since Green Bamboo would not be displaced, no relocation assistance would be necessary. Metro has discussed the project with a representative of Green Bamboo, and would be happy to schedule further meetings upon request. Metro shall develop a Construction Mitigation Program that includes protocol for community notification of construction activities including traffic control measures, schedule of activities, and duration of operations, with written communications to the community translated into appropriate languages.

Murthy

R-BU2

August 17, 2011

Mr. Arthur T. Leahy
Chief Executive Officer
Metropolitan Transportation Authority
One Gateway
25th Floor
Los Angeles, CA 90012

Dear Mr. Leahy:

Hines

We are the owners of Citigroup Center office building located at 444 South Flower Street on the northeast corner of Flower and 5th Streets in Downtown Los Angeles. I am writing this letter in regard to the upcoming construction of the Regional Connector Transit Corridor on Flower Street (the "Regional Connector") in Downtown Los Angeles and the impact of the construction to Citigroup Center.

As you may be aware, the most recent environmental impact report for the Regional Connector released July 22, 2011 suggests that the plaza area of Citigroup Center will be tagged with a "temporary construction easement" and be utilized as a staging area for construction of the Regional Connector. **This simply cannot happen, as the financial impact to Citigroup Center would be devastating!** We have recently spent over $6,000,000 to renovate the Plaza and upgrade elevators in order to assist with our effort in renewing approximately 650,000 rentable square feet of leases that are scheduled to expire in our building during 2012 and 2013. We hope to renew a majority of these tenants who view the newly renovated Plaza as a significant amenity of Citigroup Center. The construction of the Regional Connector occurring right outside of our front door will make the leasing effort challenging enough, and we certainly hope the Los Angeles County Metropolitan Transit Authority will be doing everything possible to minimize traffic delays on 5th and Flower Streets, but we cannot be expected to have the recently renovated Plaza area taken as a construction staging area as well. The taking of the Plaza could easily cost our project in excess of $100,000,000 in damages, including the time it will take to re-lease the space and the inherent added costs of replacing rather than renewing the existing tenants of Citigroup Center.

1

It seems to me that there are several alternative locations nearby that would not cause such economic hardship. I would appreciate hearing your thoughts with respect to eliminating this proposed "temporary construction easement". Please feel free to contact me at the number below.

Thank you very much.

Sincerely,

Colin P. Shepherd
Senior Vice President

444 South Flower Street, Suite 2100
Los Angeles, California 90071
P 213.629.5200
F 213.629.1423

R-BU2

Responses to Comments from the Hines, Shepherd, Colin

Response to Comment R-BU2-1

This proposed temporary construction easement was included in both the Supplemental EA/Recirculated Draft EIR Sections released on July 22, 2011, and the earlier Draft EIS/EIR released on September 3, 2010. As with all of the proposed easements and acquisitions described in these documents, Metro is working to minimize the amount of land needed. Metro analyzed all viable alternate locations for construction staging in the vicinity of Flower Street as part of the ongoing preliminary engineering process. As indicated in Section 4.2.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would provide compensation for the temporary construction easement consistent with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. No businesses would be displaced as a result of this easement, and access to businesses would be maintained at all times. No tenants would be required to leave. Given that Metro would provide compensation for the temporary construction easement, no businesses would be displaced as a result of this easement, and access to businesses would be maintained at all times, impacts to this parcel with respect to displacement and relocation would be less than significant and no adverse effect would occur. Metro shall develop a Construction Mitigation Program that includes protocol for community notification of construction activities including traffic control measures, schedule of activities, and duration of operations, with written communications to the community translated into appropriate languages. Recent renovations to the plaza are noted. Following construction of the Regional Connector, Metro would restore the plaza to its pre-construction condition. Metro would also ensure that any physical damage resulting from construction is repaired.

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
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E-mail: rfriess@allenmatkins.com
Direct Dial: 949 851 5478 File Number: 225957-00108/OC936629.02

VIA ELECTRONIC AND FIRST CLASS MAIL

August 31, 2011

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Re: Regional Connector Transit Corridor Project: Comments Concerning Metro's Supplemental EA/Recirculated Draft EIR

Dear Ms. Saltarelli:

This firm represents the Los Angeles Times. The Los Angeles Times owns property that will be directly impacted by the Regional Connector Transit Corridor Project as proposed by the Metropolitan Transportation Authority. While the Los Angeles Times has regularly and consistently supported the efforts of Metro to develop new transit facilities throughout the Los Angeles region, it has real concerns about the impacts the Connector Project, and in particular one of its proposed stations, will have on the Los Angeles Times' property and on its operations. Because of those concerns, the Los Angeles Times supplements its earlier (October 18, 2010) comments regarding Metro's Draft Environmental Impact Report/Draft Environmental Impact Statement with these comments regarding Metro's Supplemental Environmental Assessment/Recirculated Draft Environmental Impact Report. (A copy of the October 18, 2010, comment letter is enclosed.) 1

Specifically, the Los Angeles Times operates from the "Square," its historic home. The Square consists of the block surrounded by West Second Street, South Spring Street, West First Street, and South Broadway, plus the portion of the adjoining block located south of Second Street between Broadway and Spring Street. The Los Angeles Times has its employee parking structure on the adjoining block and has a surface parking area on the land between the parking structure and the operations buildings. Beneath the surface parking is a 15,000-gallon, underground fuel tank, which supplies the Los Angeles Times' emergency generators, which, in turn, provide the Los Angeles Times with the ability to publish even in an extended power outage, for instance, following a disaster. 2

The Los Angeles Times understands that Metro's preferred alternative places a subway station on the Los Angeles Times' properties located at 201 South Spring Street and 200 and 208 South Broadway. These are the properties where the Los Angeles Times has its surface parking and 15,000-gallon tank. Metro's taking of these properties would have the effect of cutting the Los Angeles Times' campus into unconnected pieces. Yet, Metro's environmental documents, including the Supplemental EA, nowhere address the impacts to the Los Angeles Times' operations of having the Square bisected nor do the documents address how this severing will impact future use of the overall campus. For example, nowhere in Chapter 4, which deals with displacements and relocations and which has been revised in the Supplemental EA, is the Los Angeles Times even mentioned. Instead, as far as can be told from the environmental documents, 201 South Spring Street and 200 and 208 South Broadway make up a stand-alone parking lot with no relationship to the Los Angeles Times' operations.

If Metro thoroughly evaluates the impacts of taking the Los Angeles Times' properties, the Los Angeles Times believes Metro will decide that another location for the subway station will make more environmental and economic sense. Because of this, the Los Angeles Times asks that Metro specifically evaluate the impact of taking these properties in its accurate context: the midst of the Los Angeles Times' operations. For example, the environmental documents should discuss that by retaining the surface parking in the center of its campus the Los Angeles Times' property has maximum flexibility for both interim use and long-term growth and development. Currently, for instance, the Los Angeles Times receives substantial operating revenues by leasing portions of its property for movie shoots. A big part of what makes its property competitive for these shoots is the availability of the surface parking to accommodate the large trucks and other equipment necessary for a movie shoot. If Metro removes that surface parking, this will drive changes to the Los Angeles Times' movie leasing business and likely drive changes in how the Los Angeles Times must configure and use the overall campus. In other words, Metro's takings are likely to drive changes in land use for the Los Angeles Times' entire campus. These are potential environmental impacts that Metro needs to thoroughly evaluate. 3

Other impacts that the Los Angeles Times raised in its previous comment letter, but which are nowhere addressed in Metro's supplemental environmental document, include the impacts of removing the 15,000-gallon tank needed to power the emergency backup generating equipment for the entire Square and the impact of employee circulation if the parking structure is separated from the operations buildings. 4 5

These substantial impacts to the Los Angeles Times' campus and operations contrast to the minimal impacts that would be associated with a subway station located elsewhere on Second Street, for example between Main Street and Los Angeles Street. That location would involve only a partial take of a portion of the affected property and a permanent underground easement for another portion. Displacement of existing uses would thus be minimal, and there would be no disruption of access to adjoining properties. Simply put, in order to properly weigh these alternative 6

locations, Metro's environmental documents need to completely analyze the impacts to the Los Angeles Times' property. 6 cont'd

Thank you for the opportunity to provide these comments on the Supplemental EA. Please contact me if you have any questions.

Very truly yours,

K. Erik Friess

KEF
Enclosure

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
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Patrick A. Perry
E-mail: pperry@allenmatkins.com
Direct Dial: 213.955.5504 File Number: 225957-00001/LA874990.01

Via Electronic and
First Class Mail

October 18, 2010

Ms. Dolores Roybal Saltarelli
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, California 90012

Re: Regional Connector Transit Corridor Project

Dear Ms. Saltarelli:

This firm represents the Tribune Company, owner and publisher of the Los Angeles Times, which occupies the property located on the block surrounded by West Second Street, South Spring Street, West First Street, and South Broadway (the "Tribune Property"). The Tribune Company also owns the property located south of Second Street between Broadway and Spring Street, which is currently used as a surface parking lot. The Los Angeles Times has regularly supported the efforts of the Metropolitan Transportation Authority ("Metro") to develop new transit facilities throughout the Los Angeles Region. Upon careful review of the Draft Environmental Impact Report/Draft Environmental Impact Statement ("DEIR/DEIS") for the Regional Connector Transit Corridor Project (the "Project"), the Tribune Company nevertheless has a number of concerns regarding potential impacts that the construction and operation of the Project may have with respect to the ongoing operations of the Los Angeles Times.

The proposed alignment of each of the light rail transit alternatives studied in the DEIR/DEIS is located along Second Street between Hope Street and Alameda Street and will therefore be immediately adjacent to the Tribune Property between Broadway and Spring Street. Under the At-Grade Emphasis LRT Alternative, trains would travel at grade along this portion of Second Street, which would be dedicated as a transit-only roadway providing only emergency vehicle access and local access to adjacent properties. Under the Underground Emphasis LRT Alternative, trains would travel underground below Second Street, but a station would be located either between Broadway and Spring Street or between Main Street and Los Angeles Street. Under the Fully Underground LRT Alternative, trains would similarly travel underground below Second Street, but there is no option to locate a station between Main Street and Los Angeles Street, and the proposed station would be located between Broadway and Spring Street, immediately adjacent to the Tribune Property.

Each of the three light rail transit alternatives analyzed in the DEIR/DEIS would adversely impact operations at the Tribune Property to varying degrees; however, the fewest adverse impacts would result from the Underground Emphasis LRT Alternative, which locates the proposed station on Second Street between Main Street and Los Angeles Street. The Tribune Company accordingly urges Metro to adopt the Underground Emphasis LRT Alternative with the proposed station to be located between Main Street and Los Angeles Street, or to adopt the Fully Underground LRT Alternative with the proposed station to be relocated to an alternate location.

The entrance into the main parking structure for the Tribune Property is located on Second Street. Two driveways into the surface parking lot located south of Second Street are also located on Second Street. A majority of the employees of the Los Angeles Times park in a parking facility south of Second Street and walk to the Tribune Property along Spring Street or Broadway. Construction of the Project will interfere with vehicular and pedestrian access to the Tribune Property under any of the Project Alternatives analyzed in the DEIR/DEIS.

Operation of the Project will also significantly interfere with pedestrian and vehicular access to the Tribune Property under the At-Grade Emphasis LRT Alternative, which proposes that Second Street be dedicated as a transit-only roadway with limited vehicular access. Vehicular restrictions along Second Street between Broadway and Spring Street will limit vehicular access to the parking structure and the surface parking lot that both have access from Second Street. Should this Alternative be implemented, it is imperative that full access be maintained to the Tribune Property during both construction and operation of the Project. Protection for pedestrians walking to and from the Tribune Property from south of Second Street along Broadway and Spring Street must also be maintained during both construction and operation of the Project should the At-Grade Emphasis LRT Alternative be implemented.

The impacts of the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative on the Tribune Property would be similar if a station were located on Second Street between Broadway and Spring Street. In addition to the adverse impacts on pedestrian and vehicular circulation associated with the construction of the At-Grade Emphasis LRT Alternative identified above, use of cut-and-cover techniques proposed in connection with the construction of the segment of the Project located between Broadway and Spring Street would completely disrupt all access to the Tribune Property and adjoining properties from Second Street during construction. Moreover, use of the sidewalks along Broadway and Spring Street both north and south of Second Street for construction staging will exacerbate adverse impacts on pedestrian safety and pedestrian access to the Tribune Property during construction.

In addition to adversely impacting access to the Tribune Property, development of the proposed station between Broadway and Spring Street will require the full take of the property located south of Second Street currently used by the Tribune Company for surface parking, as well as the full take of two adjoining properties located south of Second Street and east of Spring Street.

The Tribune Company derives parking and filming support revenues from its property located south of Spring Street and also maintains a 15,000 gallon underground fuel storage tank on the property to operate emergency backup generating equipment for the Tribune Property. Displacement of the fuel storage tank not only has the potential to disrupt operations, but few viable alternative locations exist for the relocation of the fuel storage tank. The DEIR/DEIS does not address the potential hazards associated with the risk of upset in connection with the displacement of the existing fuel storage tank or the potential cost or disruption to operations that would result from the displacement of the storage tank.

In contrast to the difficulties associated with constructing a station between Broadway and Spring Street, development of a station along Second Street between Main Street and Los Angeles Street would involve only a partial take of a portion of the affected property and a permanent underground easement for another portion. Displacement of existing uses would be minimal, and there would be no disruption of access to adjoining properties. If the construction of the proposed station between Main Street and Los Angeles Street is not feasible for other reasons, there are alternative locations for the proposed station along Second Street between Olive Street and Hill Street and between Hill Street and Broadway that would have less impact on surrounding uses. The DEIR/DEIS should therefore analyze additional alternatives for the location of the proposed station that would be less disruptive to existing businesses.

Thank you very much for the opportunity to provide these comments on the DEIR/DEIS. Please contact me if you have any questions or if I can provide further information with respect to this matter.

Very truly yours,

Patrick A. Perry

PAP

cc: Mr. Ray Tellis

R-BU3

Responses to Comments from Allen Matkins Leck Gamble Mallory & Natsis LLP on behalf of the Los Angeles Times, Friess, K. Erik

Response to Comment R-BU3-1

Comment acknowledged. Metro has continued meeting with the Los Angeles Times throughout the EIS/EIR process. Metro received the referenced October 18, 2010 comment letter and has included written responses numbered BU32-1 through BU32-6 in Volume F-2 of this Final EIS/EIR.

Response to Comment R-BU3-2

Thank you for providing this information. Metro is aware of the underground fuel tank beneath the surface parking lot, and its importance to the operations of the LA Times. Metro would relocate the tank in place during construction to allow it to continue operating, as shown in drawing A-102 in Appendix R-1 of the Supplemental EA/Recirculated Draft EIR Sections. No significant impacts or adverse effects resulting from this relocation are anticipated.

Response to Comment R-BU3-3

As shown in Table 4.2-4 (and referenced in Section 4.2.3.5) of the Draft EIS/EIR and Table 4.2-5 (and referenced in Section 4.2.3.5) of this Final EIS/EIR, Metro proposes to acquire the properties at 201 South Spring Street and 200 and 208 South Broadway (Assessor's Parcel Numbers 5149-008-032, 5149-008-031, and 5149-008-030 respectively) as part of the Locally Preferred Alternative. The Tribune Company is identified as the owner of these parcels in Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR, Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections, and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The impacts of these acquisitions, including inconvenience for users of the parking lot, were examined in more detail in Section 5.4.1.3 (and referenced in Section 5.5.1.3) of Appendix N, Displacement and Relocation Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, and determined not to be significant/adverse. Section 4.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated EIR Sections, and this Final EIS/EIR references Appendix N, Displacement and Relocation Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR for additional analysis of proposed acquisitions where significant impacts or adverse effects would not occur.

Metro is aware of the existing parking lot and the fuel tank, and its importance to the operations of the LA Times. Metro would relocate the tank in place during construction to allow it to continue operating, as shown in drawing A-102 in Appendix R-1 of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. No significant impacts or adverse effects resulting from this relocation are anticipated.

Metro proposes to convert the surface parking lot to a station entrance and plaza, which would enhance the pedestrian environment and allow easier traversal of the above-listed parcels than the existing fenced parking lot. This improved pedestrian space between the parking structure

and 2nd Street would enhance, rather than bisect, the connection between the Los Angeles Times' buildings.

As shown in Section 4.2.3 of the Draft EIS/EIR and Section 5.4.1.3 (and referenced in Section 5.5.1.3) of Appendix N, Displacement and Relocation Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, Metro has adequately evaluated and disclosed the impacts of acquiring these properties. After comparing these impacts with those of alternative station locations, Metro determined that the properties at 201 South Spring Street and 200 and 208 South Broadway would be the most environmentally and economically suitable location for the 2nd/Broadway station entrance and plaza. The interim use of the surface parking lot for movie shoots is noted. The property tax associated with parcels to be acquired and the potential for construction of the alternative to have substantial, adverse effects on businesses along the alignment was used to determine economic and fiscal impacts associated with the project. Refer to Section 4.14, Economic and Fiscal Impacts, of this Final EIS/EIR. Business compensation and assistance would be provided in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Alternate parking locations are available in the area, and the addition of a transit station to the area would likely cause some people to ride transit instead of driving, thus reducing the overall need for parking. No other land use changes on the Los Angeles Times' properties are proposed as part of the Regional Connector project and the conversion of the parking lot to transit use is not expected to change uses on any of the other Los Angeles Times parcels. Land use impacts are evaluated in Section 4.1, Land Use and Development, of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU3-4

Metro is aware of the fuel tank and its importance to the operations of the LA Times. Metro would relocate the tank in place during construction to allow it to continue operating, as shown in drawing A-102 in Appendix R-1 of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. No significant impacts or adverse effects resulting from this relocation are anticipated.

Response to Comment R-BU3-5

The parking structure has exits onto both Spring Street and Broadway, and there are no legal crosswalks on 2nd Street between Spring Street and Broadway. As indicated in Chapter 3, Transportation Impacts and Mitigation, of the Draft EIS/EIR and this Final EIS/EIR, unavoidable adverse effects under NEPA and significant and unavoidable impacts under CEQA would occur to pedestrian circulation during construction even with incorporation of mitigation. Nevertheless, once construction has been completed, pedestrian circulation would still be possible across the proposed station plaza because the plaza would be open to public access. The plaza would likely be more easily traversed than the existing fenced parking lot, thus enhancing the pedestrian connection between the parking structure and 2nd Street. This would represent an improvement to the pedestrian environment. Once the new station has opened, some Los Angeles Times employees may choose to ride transit to work instead of driving, thus eliminating their need to walk beyond the station entrance to the parking structure.

Response to Comment R-BU3-6

Metro has adequately analyzed the potential impacts to the Los Angeles Times' properties. Metro evaluated the potential station location on 2nd Street between Main and Los Angeles Streets as part of the Underground Emphasis LRT Alternative in the Draft EIS/EIR, but found that this location would offer poor connections to the shopping district and proposed downtown streetcar project on Broadway. The Main/Los Angeles location would also be closer to the proposed station in Little Tokyo, and would result in uneven station spacing along 2nd Street. As shown in Section 4.2.3 of the Draft EIS/EIR and this Final EIS/EIR and Section 5.4.1.3 (and referenced in Section 5.5.1.3) of Appendix N, Displacement and Relocation Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, there would be no significant impacts/adverse effects associated with the displacement of the existing parking lot at 201 South Spring Street and 200 and 208 South Broadway. There are several other privately-operated parking lots and structures in the vicinity of these locations. Although loss of the current parking lot may cause an inconvenience for users, it would not represent a significant impact or adverse effect and the Regional Connector would provide new non-automobile access to the area, which would partially offset the parking demand in the area. Access to adjoining properties would be maintained at all times during construction.

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September 1, 2011

VIA E-MAIL AND U.S. MAIL

Ms. Dolores Roybal Saltarelli
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Re: State Clearinghouse No. 2009031043
Los Angeles County Metropolitan Transportation Authority
Regional Connector Transit Corridor Project
Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report

Dear Ms. Roybal Saltarelli and Mr. Tellis:

Thomas Properties Group ("TPG") is the real property owner and property manager of the properties located at 515-555 South Flower Street, referred to as the "City National Plaza and Towers" in the Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report ("SEA/RSDEIR"), and 400 South Flower Street, referred to as the "J-2 Garage" (collectively, the "Adjacent Properties"). Both of the Adjacent Properties are immediately adjacent to the proposed locations of the Los Angeles County Metropolitan Transportation Authority ("LACMTA") Regional Connector Transit Corridor Project ("Regional Connector" or "Project").

LACMTA has solicited comments only on the revisions to the previously circulated Draft EIS/EIR included in the SEA/RSDEIR. However, it must also be recognized that the substantial revisions in the SEA/RSDEIR must be considered in context with the Draft EIS/EIR, if the impacts cannot be distinguished with a bright-line test. Consequently, pursuant to CEQA/NEPA,[1] the following comments are submitted on the Draft EIS/EIR and SEA/RSDEIR for consideration

1

[1] References to "CEQA" are to the California Environmental Quality Act, at California Public Resources Code, Sections 21000 et seq. References to the "CEQA Guidelines" are to Title 14 of the California Code of Regulations, Sections 15000 et seq. References to "NEPA" are to the federal National Environmental Policy Act, at Title 42 U.S.C. sections 4321 et seq.

TPG understands that the Regional Connector will be constructed, and that its path will follow Flower Street in immediate proximity to the Adjacent Properties. As a developer, owner, and property manager of predominantly sustainable, transit-oriented developments, TPG is an overall supporter of mass transit, and of the Regional Connector, specifically. However, TPG has a significant economic interest in ensuring that the construction impacts of the Regional Connector on emergency personnel and on the tenants, employees, patrons, and visitors of the Adjacent Properties are avoided or at least minimized to the greatest extent possible. 2

TPG understands that the Fully Underground LRT Alternative described in the Draft EIR/EIS has now been selected as the Locally Preferred Alternative ("LPA"). We also understand that the LPA has been revised to eliminate the station proposed for Flower/5th/4th Streets due to lack of funding. TPG asks that this station continue to be included in the Regional Connector and in future studies, and not be eliminated at this time. A station in this location would provide an important and needed connection at the center of the Financial District and adjacent to the Central Library. The area around 5th Street is the major hub of commercial and financial services in downtown Los Angeles and should be served by the Regional Connector for all transit lines. Having no stations between 2nd Street and 7th Street (a distance of ¾ of a mile) will reduce the convenience and hence revenue-generating abilities of the entire rail system. In addition, as we note below, the EIS/EIR should continue to include a full discussion of the environmental impacts of this station, since the SEA/RSDEIR acknowledges that it is a reasonably foreseeable future development. 3

The SEA/RSDEIR depicts a proposed extensive and intrusive Temporary Construction Easement on the west and east sides of Flower Street in front of the Adjacent Properties, and on 5th Street north of the City National Plaza and Towers, in Figure 2-15. Like the Draft EIS/EIR, the SEA/RSDEIR proposes to use the easement for construction staging.

TPG met with representatives from the LACMTA and AECOM on August 22, 2011 to discuss our concerns about the Temporary Construction Easement shown in the SEA/RSDEIR. At that meeting, LACMTA representatives assured TPG that the scope and purpose of the Temporary Construction Easement would be sharply curtailed and narrowly defined, compared to the drawings included in the SEA/RSDEIR, describing an easement that would only extend a few feet inside of the property line and would be only as deep onto our property off the property line as is necessary to install any required K-rails and vehicular and pedestrian ramps (as discussed below). At that meeting, LACMTA presented a revised set of drawings showing a proposed revised Temporary Construction Easement ("Potential Revised Temporary Construction Easement") across the Adjacent Properties. A set of these revised drawings was not left with us. We were told that the proposed revised plans are not final and have not been distributed to the public. 4

In our discussion, LACMTA representatives made it clear that the sole purposes of any Temporary Construction Easement over our Adjacent Properties, including the Proposed Revised Temporary Construction Easement, would be (i) to allow the contractor to install and remove K-rails and fences that are necessary to separate pedestrians from the street where work is being done, with such K-rails and fences to be located along our property line, immediately to the east of the existing retail escalator structures along our easterly property line on Flower Street, and (ii) to install and remove temporary pedestrian and driveway ramping, if any, that may be necessary to transition between the elevation of the construction cut and cover plates on Flower Street and the elevation of the existing driveways and sidewalks along Flower Street between Fourth and Sixth Streets.

4 cont'd

LACMTA representatives indicated that the cut and cover construction could be done using one of two different methods. One method would have the steel plates installed at existing street level (which no grade differential). The other method would have steel plates installed higher than existing street level, resulting in a grade differential that may be as much as 18 to 24 inches between the steel plates and the existing driveway and sidewalk elevations.

As expressed in the meeting, TPG has serious concerns about any grade differential between the sidewalks and the steel plates installed in the street, and specifically the height of the proposed grade differential. Any such grade differential will have serious impacts on safe and convenient access for vehicles into and out of the Adjacent Properties' driveways, and for pedestrians who access the Adjacent Properties from buses, taxis and shuttles in the drop off area on the west side of Flower Street in front of City National Plaza, from the mid-block cross-walk in front of City National Plaza, at each corner of the City National Plaza property, and on the east side of Flower Street in front of the J-2 Garage.

The size and safety of the temporary ramping that would be required to overcome as much as a 24 inch grade differential along Flower Street is of great concern to TPG. It is questionable whether such ramping would be safe for our visitors and tenants to navigate and whether it could comply with the Americans with Disabilities Act of 1990 (Title 42 U.S.C. §§ 12101 et seq.; "ADA") and other disabled access laws, and whether it can provide access for emergency vehicles. TPG also expressed our concerns about the impact of any grade differential on the use of the mid-block pedestrian cross-walk and the safety and efficiency of bus loading and unloading in the bus drop off area, with the resulting congestion that will result along Flower Street, past the City National Plaza and Towers underground garage entrance ramp, if buses are unable to efficiently drop off and pick up passengers. In particular, there does not appear to be sufficient area between the garage entrance ramp and the bus drop off area for efficient use.

5

We understand that LACMTA is speaking with LADOT about these and other traffic concerns that would arise from the cut and cover construction along Flower Street, including possible impairment of the sight lines for cars accessing and departing from the City National Plaza and Towers underground garage on the Flower Street ramps and the safety of pedestrians. LACMTA should discuss with LADOT the need for the Adjacent Properties to have continuous and uninterrupted ingress and egress for vehicles from and onto Flower Street and for pedestrians to have such access across the mid-block cross-walk and over our plazas. TPG has experienced severe congestion in the underground parking garage at City National Plaza when cars were unable to exit onto Flower Street in the past year due to one or more lanes of Flower Street being blocked south of the complex by road work, and may experience similar problems if there were serious congestion on Flower Street as a result of the temporary and permanent effects of the Project. Not only is such congestion an inconvenience to our tenants and visitors, it also creates serious operating and safety risks in the garage (with cars unable to move on the garage ramps, resulting in blocking of a key exit from the property). 6

In our August 22, 2011 meeting with LACMTA representatives, TPG emphasized that at all times pedestrians must have continuous and unimpeded access to and from our property across each corner on Flower Street, across the mid-block cross-walk, to and from the bus drop off area on Flower Street, to and from the 5th Street Pedestrian Bridge, and into and out of each of the retail escalators that run from our B Level Retail Shops and Restaurants to Flower Street. 7

TPG mentioned that we have been in communication with the City Battalion Fire Chief Michael Thomas regarding the need to protect the exit routes from each tower across our plaza areas and to safe zones at least 300 feet from the buildings. LACMTA construction cannot be allowed to impair or impede this safety requirement. LACMTA representatives assured our team that MTA understood and shared this goal of keeping access to our Adjacent Properties open and unimpeded. 8

LACMTA clarified at our August 22, 2011 meeting that the cut and cover construction could be done in two different ways. We understand from that meeting that the Project could be constructed with steel plates installed in Flower Street at existing grade level, so that there would be no separation or grade differential between the existing Flower Street and the steel plates and, therefore, no need for ramps for vehicles or pedestrians along the Adjacent Properties. TPG strongly prefers this method of cut and cover construction for the Project along the Adjacent Properties if the work is not done by tunnel boring. 9

TPG also mentioned in our August 22. 2011 meeting that our restaurants are open on evenings and weekends and that continuous access will be needed during those hours for vehicles to park for the restaurants. We also have a fitness club that operates 24 hours per day and restaurants on the B Level of the City National Plaza and Towers that operate during late hours. LACMTA representatives mentioned that work on the Project would be done on weekends and after normal business hours, but our restaurants and other businesses that operate 24 hours or after normal business hours will need special protection for access and noise abatement even during those hours. 10

As you know, City National Plaza is unique in that it has almost 200,000 square feet of underground retail and restaurant tenants and other users on B Level. This space is located adjacent to where the subway tunneling will be done under Flower Street. Mitigation steps should be taken to minimize noise and vibration during the Regional Connector work that could be heard or felt on the B Level. While other properties on Flower Street may not be as affected by subterranean work under Flower Street, our tenants on B Level could definitely be adversely impacted by such noise and vibration. 11

Additionally, based on the meeting, LACMTA is now considering relocating the pocket track away from Flower Street between 4th and 6th Streets, thereby reducing the tracks to two and narrowing the tunnels along the Adjacent Properties, which moves the tunnels farther away from the existing improvements. TPG agrees with this approach and asks that LACMTA limit the tracks under Flower Street to two and narrow the size of the tunnels between 4th and 6th Streets so that the work under Flower Street is moved as far as possible away from the underground structures under the Adjacent Properties. We may have additional concerns and comments if LACMTA decides to build a pocket track under Flower Street in the area of the Adjacent Properties. 12

Our comments concerning the impacts of the Project reflect our understanding that the scope and purpose of the proposed Potential Revised Temporary Construction Easement described in this letter, and the relocation of the pocket track, are consistent with LACMTA's intent. If LACTMA's intent is not as described in this letter, TPG requests that LACMTA immediately inform us, so we can discuss this further before the Final EIS/EIR s completed.

TPG has every confidence in the good faith of LACMTA's representations at our August 22, 2011 meeting regarding its current plans (i) to limit the scope and purpose of the Temporary Construction Easement to be consistent with the scope and limited purposes that were described for the Potential Revised Temporary Construction Easement presented at the meeting with LACMTA representatives on August 22, 2011, as described above, and (ii) to redesign the subway tunnels to have only two tracks along the Adjacent Properties, with no pocket track in that area. Even so, this letter contains our comments 13

on the SEA/RSDEIR and the Draft EIS/EIR (collectively, the "Circulated Documents"), as well as on the Potential Revised Temporary Construction Easement and the other issues raised at our August 22, 2011 meeting, in order to retain all of TPG's legal rights. 13 cont'd

In light of the proximity of, and potential impacts to, the Adjacent Properties, TPG requests the following be addressed with respect to the construction and operation of the Regional Connector, as more fully explained, below:

- The feasibility of constructing the Regional Connector by the tunnel boring method under Flower Street to minimize any surface impacts on Flower Street, 5th Street and 6th Street, which are all highly congested and provide critical circulation and access for thousands of workers, visitors and transit riders, as well as emergency personnel who need to access the Adjacent Properties. 14

- The adverse vehicular access and circulation impacts that would result to the Adjacent Properties during construction using the cut and cover construction technique, including, without limitation, any barriers or grade differentials created by work on Flower Street, 5th Street and 6th Street. 15

- The adverse impacts to pedestrians, many of whom are employees and visitors to the City National Plaza and Towers, that would result from the cut and cover construction activities, including, without limitation, any barriers or grade differentials created by the work on Flower Street, 5th Street and 6th Street. 16

- The adverse impacts to the retail and restaurant tenants in the City National Plaza and Towers from any interruption to access to that property during construction. 17

- The adverse impacts to downtown traffic flow due to the interference with the Flower Street stop for transit, shuttle and other modes of transportation between 4th and 6th Streets, including, without limitation, the size or ease of access to those stops. 18

- The adverse impacts that construction and tunneling under Flower Street could have on the B Level and the subterranean garage at the City National Plaza and Towers and the subterranean portion of the J-2 Garage. 19

- The potentially significant impacts that construction noise and vibration levels may have on TPG's tenants, including, without limitation, the subterranean B Level tenants. General mitigation measures have been identified in the Draft EIS/EIR; 20

however, no mitigation measure has been specifically identified in the SEA/RSDEIR despite TPG's prior comments to address the substantial change in ambient noise and vibration levels in the immediate vicinity of the Adjacent Properties. 20 cont'd

- The significant traffic impacts identified in the Draft EIS/EIR (decreased LOS), and potentially exacerbated by the revisions to the LPA described but not analyzed in the SEA/RSDEIR, that would result from permanently reducing the number of traffic lanes in the immediate vicinity of the Adjacent Properties on Flower Street. 21

The Draft EIS/EIR and the SEA/RSDEIR make the general and unsupported statement that access to the Adjacent Properties would be maintained at all times. To the contrary, the Temporary Construction Easement depicted in the SEA/RSDEIR would block access to the Adjacent Properties from Flower Street and 5th Street for both vehicles and pedestrians, which would create significant and unavoidable impacts on traffic, access and safety.

However, during the August 22, 2011 meeting with TPG, LACMTA expressed its intent that vehicular and pedestrian access to the Adjacent Properties will not be blocked along Flower Street, including the mid-block cross-walk, or 5th Street for any period during the business hours of City National Plaza and its businesses (which are generally from 6:00 am through midnight on business days and from 11:00 am through midnight on weekends, subject to the 24 hour fitness club and late restaurant hours of some tenants), and that the construction will not be allowed to cause any adverse impacts to the safety of TPG's tenants and visitors. We request that appropriate mitigation measures be addressed in consultation with TPG to assure that such vehicular and pedestrian access is assured. Any such blockage would potentially cause severe and unacceptable safety and hazards impacts, not to mention millions of dollars of economic damages, to TPG and our tenants. 22

TPG's concerns over the potential impacts to the Adjacent Properties from the Temporary Construction Easement described in the Draft EIS/EIR and the SEA/RSDEIR are heightened by the almost total lack of information in the Draft EIS/EIR and the SEA/RSDEIR regarding the purposes and use of the Temporary Construction Easement. CEQA, including, e.g., Sections 21001 through 21003.1, and Sections 15124 through 15126.6 of the CEQA Guidelines, requires that any facet of a project which has so many potential adverse impacts be clearly defined and that the environmental analysis include mitigation measures to address the significant impacts. The Draft EIS/EIR and SEA/RSDEIR, in contrast, do little more than provide a dotted-line representation of the extent of the Temporary Construction Easement and promise, without substantiation, that it will be made "as compatible as possible" to the Adjacent Properties. This general description falls far short of CEQA's requirements. There is no description of what activities will be conducted on the easement area, what sorts of equipment will be involved in 23

the use of the easement, whether there be any access through the easement or whether there will be barricades. (See, e.g., SEA/RSDEIR Chap. 4, §§ 4.2.3.5 et seq.) Further, the Circulated Documents do not indicate what will happen to the garage ingress and egress points, or the bus, shuttle and taxi and other car drop off areas, or the pedestrian overpass over 5th Street, or whether access will be provided to and from the J-2 Garage, which is a major source of tenant and visitor parking for the City National Plaza and Towers. The Draft EIS/EIR and the SEA/RSDEIR fail to provide this information, as well as what other mitigation measures could be included in the Project to address this myriad of impacts and what their effects would be.

23 cont'd

24

CEQA simply does not permit a project to brush off such significant considerations with a "we will deal with it when we get there" approach. (See, e.g., *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92 [When setting aside a city's promise to adopt a greenhouse gas reduction plan in the future to mitigate a project's significant impacts, the Court of Appeal noted that"[n]umerous cases illustrate that reliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking"]; *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 670 [EIR found defective for failing to analyze impacts, provide mitigation and analyze the impacts of mitigation; if "[t]he success or failure of mitigation efforts … may largely depend on management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR," the EIR is defective]..) The failure to identify the significant impacts of the Temporary Construction Easement, to provide feasible mitigation for such impacts, and to evaluate alternatives, renders the Draft EIS/EIR and SEA/RSDEIR fatally flawed. (See, e.g., *Sierra Club v. State Board of Forestry* (1994) 7 Cal.4th 1215, 1233 ["CEQA compels government first to identify the environmental effects of projects, and then to mitigate those adverse effects through the imposition of feasible mitigation measures or through the selection of feasible alternatives"]; *Mountain Lion Foundation v. Fish & Game Commission* (1997) 165 Cal.4th 105, 134 [CEQA contains a substantive mandate not to approve a project with significant environmental effects if there are feasible mitigation measures or alternatives that can substantially lessen or avoid those effects].)

25

As indicated above, TPG believes in the good faith of the LACMTA team at our August 22, 2011 discussion in delineating and explaining the true scope and purpose of the Potential Revised Temporary Construction Easement, which are more limited than as disclosed in the Circulated Documents. However, since all we can officially comment on are the Circulated Documents, TPG must go on record with our objections and concerns based on those documents.

26

1. Vehicular access to the Adjacent Properties.

The City National Plaza and Towers has three vehicular access points: one from 5th Street just west of Flower Street, one near the main bus stop south of 5th Street on the west side of Flower Street and a loading dock access ramp from 5th Street adjacent to the parking garage ramp. The egress from the underground parking structure to the surface includes a one-lane exit-only ramp on the north side of 6th Street, west of Flower Street, and a similar ramp exiting to Flower Street just north of 6th Street. Because both exit ramps angle onto one-way streets leading away from the City National Plaza and Towers (6th Street is restricted to eastbound traffic, and Flower Street is restricted to southbound traffic) neither exit (leaving aside other constraints) can be converted into suitable ingress points during construction. All of these ingress and egress points must be preserved at all times and cannot be impacted by the Temporary Construction Easement. Any interruption in access to the underground parking structure would severely impact the safety and convenience of the office and retail tenants, visitors, vendors, and customers at City National Plaza and Towers, and the safety of the structures, would result in significant economic impacts to both our tenants and to City National Plaza and Towers, and could result in the exercise of remedies by our tenants against TPG based on the inability to access and use the parking and the buildings. 27

The main vehicular access points from Flower Street to the J-2 Garage, a main supplemental source for tenant parking, would also be impacted by the Temporary Construction Easement on the east side of Flower Street between 4th and 5th Streets. Again, this access point to the J-2 Garage must be preserved and kept open at all times for use by the tenants, visitors and customers of the City National Plaza and Towers, which access is required by the applicable leases. The bulk of the parking for City National Plaza and Towers is accommodated at the J-2 Garage and it is as important to the operation of the property as our on-site underground parking structure. 28

2. Pedestrian access to the Adjacent Properties.

Tower Access. Due to security concerns, both of the City National Plaza office towers can only be accessed from the inward facing doors in front of the security desks. Neither the Temporary Construction Easement, nor the Potential Revised Temporary Construction Easement can interfere with pedestrian access across the plaza to the front doors at each tower. In addition, such access must be compliant with the ADA for impaired or disabled persons. There can be no obstructions or ramps that would not permit continued ready access for impaired or disabled pedestrians to the buildings in compliance with the ADA. Most of the pedestrians who visit the property access it from the east, crossing Flower Street at each corner and at the mid-block crosswalk. All of these access points must be kept open and readily accessible at all times for all pedestrians, in compliance with the ADA. 29

Access to Retail Tenants. According to Figure 2-15 in the SEA/RSDEIR, the exterior pedestrian access escalators to the underground retail area on B Level of the City National Plaza and Towers would be impacted by the Temporary Construction Easement. This retail area requires continuous access from the escalators at each end of the block along Flower Street in order for visitors and customers from the area to access the businesses on B Level. Any interference with such access would adversely affect the retail establishments in an already depressed economy, and limit the restaurant/food options for workers and visitors in the financial district. Direct access to this retail area is necessary at all times, which is not assured by the changes in the SEA/RSDEIR. 30

Access to J-2 Garage and beyond. The SEA/RSDEIR does not reveal how the Temporary Construction Easement will affect, if at all, the existing escalator and elevated pedestrian walkway, which crosses 5th Street between the City National Plaza and Towers and the Bonaventure Hotel complex. Figure 2-15 in the SEA/RSDEIR indicates that the escalator and walkway over 5th Street could be impacted. The elevated pedestrian accesses between J-2 Garage and the Bonaventure Hotel Complex and from the City National Plaza and Towers across 5th Street are critical to the safety of the pedestrians who move between these buildings and facilities, many of whom are tenants and visitors to the City National Plaza and Towers. 31

If the existing overpass between the Bonaventure Hotel Complex and the J-2 Garage is obstructed, the current access to properties east of Flower Street will be impaired. Currently, this overpass bears a significant amount of pedestrian traffic that is kept off the sidewalks and out of the cross-walks, resulting in both pedestrian and traffic benefits that would be lost during construction of the Regional Connector if the bridge and walkways are obstructed or impaired. The Draft EIS/EIR concluded that there were no significant problems with pedestrian traffic capacity in the area, but failed to appreciate the importance of the overpass network in creating that pedestrian flow.

3. Safety of the tenants, visitors, vendors and customers of the City National Plaza and Towers.

As TPG has indicated, pedestrian access to and from the City National Plaza and Towers from the east must be kept open at all times, and fire/life safety concerns dictate that the fire/emergency exits on the east sides of the office towers be unobstructed at all times. There can be no interference with fire access through the fire doors on the east side of the buildings. If those exits were ever blocked in connection with the Project, the safety of our tenants and visitors would be imperiled, with inadequate means of exiting during an emergency, and leaving disabled and infirm persons no means of exit. Given the thousands of people who occupy the City National Plaza and Towers, and the high state of panic that fires and other emergencies create, any interference with use of those exits and unimpeded access from the doors 32

across the plaza areas adjacent to each set of exit doors for evacuation purposes, and for emergency personnel access to the office towers, creates a significant and unsupportable safety hazard, and is a recipe for a major disaster. In addition, TPG is concerned that the Temporary Construction Easement, as described in the Draft EIS/EIR and the SEA/RSDEIR, and even as described in the meeting with LACMTA representatives, may impair access by fire department, ambulance and other medical and emergency services to the City National Plaza and Towers and subterranean levels by virtue of the construction activities on Flower Street, together with the existing grade separation between Figueroa Street and the plaza level. The Draft EIS/EIR and SEA/RSDEIR provide no information on how fire trucks and other emergency vehicles would reach the buildings if access from the east is impaired and only the limited western access is available. 32 cont'd 33

Moreover, as noted above, the Temporary Construction Easement could also impair the use of the exterior escalators between the street level and the retail tenants on the B level of the Towers, which would interfere with an important exit route from the retail area in the event of an emergency, and which is particularly important in view of the fact that this retail area sits two levels below the surface. 34

4. Bus, shuttle and other transit modes, affecting the entire downtown traffic flow.

The bus stops on Flower Street just south of 5th Street adjacent to the City National Plaza and Towers are the terminus or a main stop for a large number of bus lines in Los Angeles and surrounding areas, including the San Gabriel Valley, Long Beach, Santa Monica, and the San Fernando Valley, Santa Clarita, San Bernardino County and Orange County. They also handle considerable traffic from several DASH routes, including the A, B, and F lines. In addition, TPG provides shuttle service to Union Station, all local government and court buildings, Staples Center and other downtown destinations from the City National Plaza and Towers on Flower Street, and taxis and other cars use the cut-out along the west side of Flower Street between 5th and 6th Streets. These transportation lines and services are heavily utilized by employees, tenants, patrons, guests and visitors of City National Plaza and Towers. During rush hours, it is sometimes necessary for transit vehicles to queue or double-park at the bus stops because of the heavy bus traffic, which exceeds that of many other downtown locations. Therefore, it is important that this area remain open and accessible on Flower Street throughout the Project to allow staging of shuttles, taxis and passenger vehicles as they load passengers without blocking traffic lanes on Flower Street. The Temporary Construction Easement shown in the Circulated Documents could displace transit and other traffic flow, and create congestion on other downtown streets already severely congested, for a number of years. For the reasons we have described, these impacts are not acceptable and the bus stop area on Flower Street should remain open and functioning at all times. 35

5. The subterranean garages.

TPG is concerned about the width of the subterranean tunnel work along the Adjacent Properties shown on the Draft EIS/EIR and the SEA/RSDEIR. Based on the August 22, 2011 meeting, TPG understands that LACMTA is planning to relocate the pocket track away from the Adjacent Properties, so the tracks under Flower Street would be limited to two tracks. From this information, we understand that the tunneling work would remain further away from the foundations of the Adjacent Properties. This is an important development to TPG, since the two track design should keep the tunneling from severely physically impacting our subterranean structures. However, the SEA/RSDEIR fails to clarify how the impacts to the structures, lateral support, drainage, utilities, geotechnical and other factors affecting the underground levels of the Adjacent Properties will be avoided or mitigated during construction of the Project. 36

In addition to concerns regarding geotechnical matters, TPG also objects to any use of the Temporary Construction Easement or the Potential Revised Temporary Construction Easement for staging or other uses that could damage the subterranean structures below the easement area. Placement of equipment or construction materials within the easement area could cause immediate damage, certainly, but could also cause less obvious, long-term damage. In addition, use of the Temporary Construction Easement area or the Potential Revised Temporary Construction Easement area could result in vibration and other impacts to the garage structure, both at the City National Plaza and Towers and at the J-2 Garage. At the meeting with LACMTA, TPG was advised that no such uses of the Temporary Construction Easement or the Potential Revised Temporary Construction Easement were proposed or contemplated by LACMTA, but TPG needs assurance that the final easement proposed on the Adjacent Properties will not permit any such staging or other uses that would adversely affect the subterranean structure. TPG requests that appropriate mitigation measures be added to the Final EIS/EIR in coordination with TPG, to preclude any such uses of the final Temporary Construction Easement, however it is configured. 37

6. Construction noise and vibration impacts.

Although previously raised in TPG's October 2010 comment letter on the Draft EIS/EIR, the concerns regarding construction phase noise and vibration impacts on TPG's tenants have not been addressed. These impacts will no doubt result in claims being made by our tenants, and TPG will expect compensation from LACMTA, as discussed below. TPG requests that appropriate mitigation measures be adopted with respect to the Adjacent Properties in order to mitigate potential ground movement associated with the construction, including, without limitation, the cut and cover construction and tunneling. We request that measures similar to those described on Page 4.12-45 of the SEA/RSDEIR be adopted with respect to the work contemplated along the Adjacent Properties. 38

7. The SEA/RSDEIR fails to mitigate these severe impacts.

The Draft EIS/EIR clearly acknowledges the substantial impacts that the Temporary Construction Easement and the Project construction would cause, even though it provides no effective mitigation measures. The Draft EIS/EIR offers several conclusory mitigation measures, none of which provides any specifics, particularly with respect to the Adjacent Properties. For example, page 3-52 of the Draft EIS/EIR states that "Bus lines that would be affected by lane closures due to construction activities would continue to operate where feasible in the remaining traffic lanes." Unless the Temporary Construction Easements on both sides of Flower Street and on 5th Street in the vicinity of the existing bus stops are strictly limited in scope and purpose as described in the meeting with LACMTA representatives on August 22, 2011, and all due care and attention is given to assure that access is provided to these stops at all times, there may be no access to buses whatsoever in this area for the period that the Temporary Construction Easements are in effect. The Draft EIS/EIR further states that "Bus stops that would be affected by sidewalk construction would be temporarily relocated and construction activities would be phased to consider the maintenance of bus service and minimize disruption." For the same reasons, this statement is more of a goal than a feasible mitigation. CEQA, including, for example, Sections 21002 and 21003.1, and CEQA Guidelines Sections 15126 through 15126.4, require that all feasible mitigation measures be adopted to address significant impacts; deferral of analysis and determination of mitigation is not allowed. 39

Additionally, an EIR is required to analyze alternatives that could achieve the project's goals but mitigate significant adverse impacts. If there were any intent to use either the Temporary Construction Easement or the Potential Revised Temporary Construction Easement for staging or other purposes that would obstruct or impede vehicles or pedestrians, then we believe that LACMTA should consider the alternative of conducting all such activities on the Maguire Gardens, which would reduce a number of the significant impacts without creating as many impacts itself. The Maguire Gardens would not require extensive infrastructure demolition (except for one restaurant), would not cause substantial impacts to access and fire safety, and would more easily be reconstructed after the Temporary Construction Easement terminates. Operation budgets for the Maguire Gardens are provided by the City of Los Angeles and could be redirected during the easement period. Based on the meeting with LACMTA representatives on August 22, 2011, we understand that the Potential Revised Temporary Construction Easement on the Adjacent Properties will not be used in any manner that would obstruct access (other than the potential impairment from a grade differential discussed above), so that the need to consider an alternative location for the Temporary Construction Easement or Potential Revised Temporary Construction Easement may not be necessary. If our understanding is incorrect, or if LACMTA's plans change, then due consideration should be given to this alternative, regardless of whether the Maguire Gardens is considered a “park” and therefore not subject to the 40

same standards of review in terms of disruption by the Project. We noted in our meeting that it would be much more disruptive, and cause much more significant economic harm, to obstruct the Adjacent Properties than it would be to obstruct the Maguire Gardens. 40 cont'd

8. The SEA/RSDEIR does not acknowledge or analyze all of the operational impacts of the Regional Connector.

The SEA/RSDEIR makes material changes to the LPA, but fails to analyze the impacts of those changes. First, the previously planned Flower/5th/4th Street station has been eliminated, and a traction power substation is now included along Flower between 4th and 5th Streets (p. 2-2; see also p. 2-34); however, the SEA/RSDEIR makes clear that the Flower/5th/4th Street station could still be considered as a future project (p. 2-7). Since this station is a foreseeable consequence of the LPA, its impacts must be analyzed in conjunction with the impacts of the LPA with the other changes to the LPA identified in the SEA/RSDEIR. 41

As noted above, TPG strongly believes that the station at Flower/5th/4th Street is critical to the utility of the Regional Connector and fundamental to the usefulness of the subway system to serve the many thousands of visitors and employees located within the immediate vicinity of this location. The proposed cut and cover construction along Flower Street near the Adjacent Properties will cause our property significant inconvenience and disruption while not providing any of the benefits of the originally proposed station at Flower/5th/4th Street. TPG would accept the necessity of using cut and cover construction on Flower Street if LACTMA were building the station at Flower/4th/5th Street. However, TPG objects to use of the cut and cover construction in front of the Adjacent Properties if no such station is being constructed. If that station will not be provided, then TPG believes that LACMTA should use the tunnel boring machine to continue tunneling south under Flower Street past 6th Street, at which point a machine access point can be created, with cut and cover construction to continue south on Flower Street to the existing tracks adjacent to the 7th Street Metro Station. TPG believes that there is sufficient distance to allow for the necessary elevation changes from the 7th Street Metro level to the planned depth of the subway tunnels without using cut and cover methods in front of the Adjacent Properties. At the August 22, 2011 meeting, when the subject of using the tunnel boring machine was raised for the segment of Flower Street near our Adjacent Properties, the LACMTA representatives stated that existing tie-backs in the street bed would require higher costs to remove if the tunnel boring machine were used. TPG believes that the circulated studies have not adequately analyzed the alternative of using the tunnel boring machine for this segment of the work as compared to the costs and disruption of the cut and cover technique, especially in the context of the elimination of the station at Flower/5th/4th Streets. 42

Second, the LPA appears to include a pocket track, which could also serve as a crossover, located beneath Flower Street between 5th and 6th Streets, which the SEA/RSDEIR states would allow for a new possible future station at this location as a separate project (pp. 2-2, 2-34). Since this new station is a foreseeable consequence of the LPA, its impacts must be analyzed in conjunction with the impacts of the LPA with the other changes to the LPA identified in the SEA/RSDEIR. (See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 396 [an EIR must analyze a "project" defined to include not only the current project, but also future phases of, and other foreseeable consequences of, the initially approved project]; see also, CEQA § 21065 ["project" under CEQA is defined as "an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment"].) As discussed, TPG understands from the August 22, 2011 meeting that the location of the pocket track in this area is being reconsidered in the final plans, but that even with the relocation of the pocket track, a station could be constructed at Flower/5th/4th Streets. 43

Third, the SEA/RSDEIR states that an enhanced pedestrian walkway has been added to the LPA. However, the SEA/RSDEIR contains only a few sentences describing the walkway - about the length of the walkway – but includes no discussion or analysis of its construction, its construction and operational impacts, or even how it will be accessed, or any other details, *other than to indicate that it will require removing at least one traffic lane from the west side of Flower Street*, which is evidence of a significant impact in and of itself. Other details, such as access to and from the walkways, particularly for handicapped patrons, and other potential impacts are simply not discussed. Additionally, as first mentioned in the first bullet point on Page 2-1 of the SEA/RSDEIR, the reference to the west side of Flower Street is inconsistent with the enhanced pedestrian walkway on the east side of Flower Street, as shown on the Exhibit. Please correct this reference in the Final EIS/EIR to remove any confusion. 44

While TPG's clear preference is for the station to be built at Flower/5th/4th Streets, TPG is supportive of plans to improve pedestrian access from the vicinity of the Adjacent Properties to the 7th Street Metro Station if no station will be built on Flower Street. However, there is no question that this walkway will create significant impacts. To accommodate this enhanced walkway, one traffic lane would be removed from the east side of Flower Street between 4th and 6th Streets. The Draft EIS/EIR acknowledged that the removal of one traffic lane from the east side of Flower Street between 4th and 6th Streets needed for the now-eliminated station would result "in increased intersection congestion along this intersection of Flower Street" (p. 3-43). Despite the fact that the SEA/RSDEIR now removes the same traffic lane from the east side of Flower Street for a different purpose, it does not acknowledge any such significant impact. In fact, it states that it would be a future station at Flower/5th/4th Streets that would require eliminating one traffic lane from the east side of Flower Street in the future. It is unclear how a future station at 45

Flower/5th/4th Streets would impact the widened sidewalk that is being contemplated on the east side of Flower. We believe that the SEA/RSDEIR requires more clarity to avoid any implication that more than one of the existing lanes of Flower Street would be eliminated

45 cont'd

Again, CEQA, including Sections 21002 and 21003.1, and CEQA Guidelines Sections 15126 through 15126.4, require that an EIR identify all significant impacts and feasible mitigation measures to reduce those impacts to a less than significant level; deferred analysis and determination of mitigation is not allowed.

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Compensation

Under California eminent domain law, LACMTA is, of course, required to compensate TPG for the value of the final Temporary Construction Easement that may be taken and to pay severance damages for the impact of the taking on the remainder of the parcel, which would include the entire City National Plaza and Towers. The potential impacts on the tenants and visitors to the City National Plaza and Towers could be very substantial unless the scope and purpose of the Temporary Construction Easement are tightly restricted as described for the Potential Revised Temporary Construction Easement above. Use of the Temporary Construction Easement for anything other than preserving vehicular and pedestrian access and for separating pedestrians on the sidewalks from the street work by K-rails and fences along the specific areas of the property line that were discussed in the meeting with LACMTA would potentially disrupt the ability of tenants and visitors to use the stores, restaurants, offices and parking in City National Plaza and Towers, and the parking at J-2 Garage in a normal fashion, as a result of impaired access, noise and vibration from work that is contemplated immediately adjacent to the stores, restaurants and offices in City National Plaza and Towers.

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Any such disruption to our tenants will give rise to claims by those tenants that such disruption has caused them to incur damages. Moreover, prospective new tenants will likely consider several years of disruption and inconvenience to be a major impediment to entering into a lease at our property. Downtown office space is currently quite competitive and lessees have a wide range of choices. It is possible, even likely, that any disruptive work adjacent to or on City National Plaza and Towers will cause potential lessees to divert to other spaces in the area instead of leasing at the City National Plaza and Towers.

The impairment of TPG's existing leases and the loss of even one or two new leases could reasonably cause tens of millions of dollars in damages to TPG, all of which would be compensable as severance damages by the taking of the Temporary Construction Easement, if such easement permits any obstruction or impairment of access to the property by tenants or visitors. Such severance damages would add substantially to the cost of the Regional

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Connector Project, and unnecessarily so, since the impacts of any such disruptive uses of the Temporary Construction Easement in other areas would be significantly less. 49 cont'd

For all of these reasons, TPG respectfully requests that we be an active participant in the specific planning for use of the final Temporary Construction Easement along the Adjacent Properties as well as in the implementation of the mitigation measures associated with the actual work. We request that the general contractor for the Regional Connector be required to consult and coordinate with TPG with respect to all of the work done on and below Flower Street and 5th Street along the Adjacent Properties, so that TPG is assured that the necessary mitigation measures will actually be implemented during the work. As owner and property manager of two properties whose operations, employees, tenants, patrons, guests and visitors will be directly, and negatively, impacted by construction of any of the alternatives, and given the extreme reliance on the functionality of both 5th Street and Flower Street, TPG has a vested interest in minimizing the short term impacts of the construction. As indicated above, TPG expects to be intimately involved during the planning phases to ensure that LACMTA provides all feasible mitigation measures to reduce construction impacts and effects in the vicinity of the Adjacent Properties. 50

In summary:

- TPG requests that the Project be constructed using the tunnel boring technique along the Adjacent Properties, avoiding the surface impacts on the access to, and desirability of, the Adjacent Properties that would result from cut and cover construction. 51
- TPG requests that the proposed station at Flower/5th/4th Street be reinstated in the planning for the Project and be constructed as part of the Project, in which case TPG would accept the cut and cover construction in the area of the station. 52
- If cut and cover construction is used on Flower Street, the steel plates that cover the construction area should be installed at existing grade level to avoid any grade differential between existing sidewalk and Flower Street levels and the level of the construction area, so that vehicles and pedestrians have safe and unobstructed access to and from the Adjacent Properties. 53
- The noise and vibration from the construction under Flower Street should be mitigated by appropriate measures to minimize the impact on the tenants and visitors in our subterranean retail area. 54
- The potential harm to the Adjacent Properties from the tunneling and construction should be minimized by appropriate mitigation measures. 55

- The Temporary Construction Easement should be strictly limited to the area along the property line of the Adjacent Properties that is required for the installation of any necessary K-rails to protect pedestrians from the construction area. If cut and cover construction is used and the steel plates are installed at existing grade level, no ramping would be required at the mid-block crosswalk or at the bus stop and sidewalks. TPG is very concerned about the impact of any grade differential created by the construction and the resulting need for ramps at each garage ramp and pedestrian access point, which may cause safety issues and interfere with the access to and from the Adjacent Properties during all of the hours that our businesses are operating. 56

- The traffic impacts from the construction on Flower Street and the proposed reduction in the number of traffic lanes on Flower Street should be more carefully studied and mitigated. 57

- TPG should be consulted with in the design of the final mitigation measures and should be provided with updated plans for the Project that confirm both the limited scope of the Potential Revised Temporary Construction Easement as well as the relocation of the pocket track away from Flower Street. 58

Thank you for your consideration of our concerns and our requests. TPG looks forward to working with LACMTA for the long-term success of the Regional Connector Project. 59

Sincerely,

THOMAS PROPERTIES GROUP, INC.

Thomas S. Ricci
Executive Vice President

TSR/ct

cc: Martha Welborne, Los Angeles Metropolitan Transit Authority
Paul S. Rutter, Thomas Properties Group, Inc.
Ayahlushim Getachew, Thomas Properties Group, Inc.
Alix Wisner, Thomas Properties Group, Inc.

R-BU4

Responses to Comments from Thomas Properties Group, Inc., Ricci, Thomas S.

Response to Comment R-BU4-1

Thank you for the information regarding the properties. As written in the 2011 CEQA guidelines §15088.5(f)(2):

> *When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR.*

Also, per 23 CFR 771.130(b), an Environmental Assessment may be prepared to assess the impacts of changes, new information, or new circumstances and to ascertain the significance of any new impacts. Sections containing significant new information were recirculated as part of the Supplemental EA/Recirculated Draft EIR Sections. Sections that were not recirculated do not contain significant new information. Responses to comments from the Thomas Properties Group (TPG) on the Supplemental EA/Recirculated Draft EIR Sections below are provided in context with both the Supplemental EA/Recirculated Draft EIR Sections and the Draft EIS/EIR. Responses to Thomas Properties Group's comments received during the Draft EIS/EIR comment period (September 3, 2010 to October 18, 2010) are provided in Volume F-2 of this Final EIS/EIR as responses to comment letters BU30 and BU36.

Response to Comment R-BU4-2

Metro appreciates TPG's support of the Regional Connector project. The Locally Preferred Alternative alignment would run underneath Flower Street, adjacent to the referenced properties. It is Metro's goal to minimize construction impacts to the extent feasible. Metro has made refinements to the Locally Preferred Alternative since publication of the Draft EIS/EIR to minimize the construction impacts of the Regional Connector, as described in Chapter 2, Alternatives Considered, of this Final EIS/EIR. Metro would coordinate construction activities with emergency service personnel to ensure that emergency services and response times are not impacted, as indicated in Section 4.15.4.1 of the Draft EIS/EIR and Section 4.15.4.2 of this Final EIS/EIR. This coordination has been included as mitigation measure number CN-2 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-3

The Metro Board of Directors designated the Fully Underground LRT Alternative, without the Flower/5th/4th Street station, as the Locally Preferred Alternative on October 28, 2010. As indicated in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, the Locally Preferred Alternative would not preclude the

Flower/5th/4th Street station from being built as a separate future project. Neither the Draft EIS/EIR nor the Supplemental EA/Recirculated Draft EIR Sections identify the Flower/5th/4th Street station as a reasonably foreseeable future development. The Locally Preferred Alternative would be fully functional and would fully meet the purpose and need identified in Chapter 1 of the Draft EIS/EIR regardless of whether the Flower/5th/4th Street station is built, thus the ability to construct the Flower/5th/4th Street station does not affect the scope of the project. At this time, while the design of the Regional Connector system would allow construction of the station, no funding has been identified for such a station, and it is therefore not considered a reasonably foreseeable future phase of the Regional Connector. Metro understands the beneficial access and added convenience that a station at this location would provide. The Locally Preferred Alternative includes an enhanced pedestrian walkway that would improve connections to the existing 7th Street/Metro Center Station from the area around 5th and Flower Streets.

Response to Comment R-BU4-4

Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on Thomas Properties Group's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The reduced temporary construction easement would cover areas expected to be required for Americans with Disabilities Act (ADA)-compliant access from the sidewalk to the private property, and access from the roadway to the parking garage and driveways. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences.

Response to Comment R-BU4-5

A. Raised Deck. Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Concrete deck panels would be used for this activity. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street. Any decking configurations would be designed to safely accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks.

   Access to and from the bus stop, shuttle area, and mid-block pedestrian crossing would be accommodated in any decking configuration.

B. Garage Access. Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks. The temporary (during construction) roadway configurations will be reviewed with the Los Angeles Department of Transportation (LADOT) for compliance with roadway standards and designed to meet vehicle standards.

Access to and from the bus stop, shuttle area, and mid-block pedestrian crossing would be accommodated in any decking configuration.

Response to Comment R-BU4-6

The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards, including those pertaining to sight lines.

Access to and from the bus stop, shuttle area, and mid-block pedestrian crossing would be accommodated in any decking configuration.

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction.

As shown in mitigation measure number AQ-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), construction activity that affects traffic flow on the arterial system would be primarily limited to off-peak hours, thus minimizing the traffic congestion impacts on Flower Street during construction.

Response to Comment R-BU4-7

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes late-night businesses such as the 24-hour gym. Access to and from the buses, shuttles, 505 Flower retail escalators, and pedestrian bridges would be maintained throughout construction. As indicated in Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR, intermittent lane closures would be needed during construction. When a crosswalk is closed due to construction activities, pedestrians would be directed to nearby alternate crosswalks, as indicated in mitigation measure number TR-4 of the Mitigation Monitoring and Reporting Program (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-8

Metro would keep entrances and exits clear of obstructions, and would ensure that adequate exit routes and safe zones are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro would not allow construction activities to impede safe evacuation of the buildings at any time.

Response to Comment R-BU4-9

Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Concrete deck panels would

be used as a temporary deck for vehicles and pedestrians during cut and cover operations on Flower Street. Preference for deck panels to be installed at existing grade level is noted.

Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to safely accommodate pedestrians, the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections.

Response to Comment R-BU4-10

As stated in Section 3.4.1.2 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during their business operating hours throughout construction. This includes businesses with late hours and those that operate 24 hours per day. As stated in Section 4.7.3.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, construction would be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. The construction contractor would also use best management practices (BMPs) to reduce construction-related noise levels, such as temporary noise barriers, high performance mufflers, portable noise sheds, and other measures indicated in the Noise and Vibration section of the Mitigation Monitoring and Reporting Program (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-11

Some land use types are more sensitive to noise than others. For example, parks, churches, and residences are typically more noise-sensitive than industrial and commercial areas. The noise analysis contained in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR used the Federal Transit Administration noise impact criteria classification of sensitive land uses:

- Category 1: Buildings or parks where low noise is an essential element of their purpose (e.g., amphitheaters and concert pavilions)
- Category 2: Buildings where people normally sleep, including residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance
- Category 3: Institutional land uses with primarily daytime uses that depend on low noise as an important part of operations (e.g., schools, libraries, churches, theaters, and places of study)

The City National Plaza and Towers is an office land use, which is not considered a sensitive land use. The same applies for the property's restaurant and retail uses.

As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, consistency with the goals of applicable local ordinances and implementation of BMPs would ensure that noise and

vibration levels associated with construction of the Locally Preferred Alternative would not result in a significant adverse noise impact under CEQA or NEPA. Given that the Locally Preferred Alternative would not result in an adverse noise impact during construction, mitigation is not required. The alignment would be constructed beneath Flower Street in the vicinity of the City National Plaza and Towers using cut and cover construction. Cut and cover construction would involve large bulldozers and drill rigs as the main sources of construction vibration. As indicated in Section 4.7, Noise and Vibration, vibration impacts (including ground-borne noise) associated with large bulldozers and drill rigs would be less than significant under CEQA and not substantially adverse under NEPA. Nonetheless, mitigation measures were included in the Supplemental EA/Recirculated Draft EIR Sections which would further reduce annoyance to sensitive land uses caused by ground-borne vibration. Since designation of a Locally Preferred Alternative, mitigation measures have been refined and confirmed for the Locally Preferred Alternative, which are listed in Section 4.7, Noise and Vibration, of this Final EIS/EIR, based on input received during the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections public review periods. Mitigation measures for the Locally Preferred Alternative have been carried forward and included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-12

The proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The pocket track is being considered for relocation as a refinement to the Locally Preferred Alternative, however that determination has not been made at this time. Only locations that would not create new impacts beyond those disclosed in the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections are under consideration. Locations under consideration would minimize or avoid impacts, or otherwise would not create new impacts. The location will be confirmed during final design.

Response to Comment R-BU4-13

The proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The pocket track is being considered for relocation as a refinement to the Locally Preferred Alternative, however that determination has not been made at this time. Only locations that would not create new impacts beyond those disclosed in the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections are under consideration. Locations under consideration would minimize or avoid impacts, or otherwise would not create new impacts. The location will be confirmed during final design. The comments in the bulleted list are addressed individually in Responses to Comments R-BU4-14 through R-BU4-21, below.

Response to Comment R-BU4-14

Flower Street from 4th Street to the existing tracks just south of 6th Street is highly constrained with existing subsurface tie-backs from previous construction projects that interfere with

tunneling activity. Tunneling activities using a tunnel boring machine south of 4th Street are hindered as existing tie-backs are encountered. Each time a tie-back is encountered, tunneling would halt in order to allow the tie-back to be removed. This constraint renders tunnel boring machine construction not practicable in this area. Also, it would not be feasible to construct the proposed pocket track in this location using a TBM. This is indicated in Section 2.3.6.2 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU4-15

Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Metro will continue to review opportunities to reduce construction impacts and improve schedule. The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards. As part of the Metro Construction Community Relations program, Metro will meet with all business and property owners to confirm access need and to keep the community aware of construction activities prior to initiation. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to safely accommodate pedestrians, the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections.

As stated in Section 3.4.1.2 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during their business operating hours throughout construction. As shown in mitigation measure number AQ-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), construction activity that would affect traffic flow on the arterial system would be primarily limited to off-peak hours, thus minimizing the traffic congestion impacts on Flower Street during construction.

Response to Comment R-BU4-16

Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Metro will continue to review opportunities to reduce construction impacts and improve schedule. Access will be maintained. As part of the Metro Construction Community Relations program, Metro will meet with all business and property owners to confirm access need and to keep the community aware of construction activities prior to initiation. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to safely accommodate pedestrians, the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections. Impacts to pedestrian circulation during

construction, such as temporary sidewalk closures and changes to pedestrian flow, are discussed in Section 3.3.5.1.4 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU4-17

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction.

Response to Comment R-BU4-18

As discussed in Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR, temporary peak period lane closures would be minimal, and temporary off-peak lane closures would be intermittent, so as to minimize traffic circulation impacts during peak times. As included in mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), Metro would maintain traffic flow to the degree feasible. Mitigation measure number TR-9 would ensure that shuttle bus drop-off areas at City National Plaza would be provided throughout construction. Mitigation measure numbers TR-12 and TR-13 would ensure that Metro would maintain access to bus stops, minimize temporary bus stop closures, and ensure that any temporarily closed bus stops are relocated to a nearby location to minimize inconvenience. Similar candidate mitigation measures were also discussed in Sections 3.4.1.1 and 3.4.1.2 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and the Transportation Impacts section of the Mitigation Monitoring and Reporting Program (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-19

Metro does not anticipate construction-related damage to the building. As discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would conduct a pre-construction survey of all structures within 21 feet of anticipated vibration-producing construction activity to verify the building category (type of construction), structural condition, and to provide a baseline for monitoring of ground-borne vibration and the potential for ground-borne vibration to cause damage. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified sensitive structures. These mitigation measures were included in Sections 4.7.4.1 and 4.9.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 and 4.9.4.2.1 of this Final EIS/EIR, and are included as mitigation measure numbers NV-1 and GT-1 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). In the unlikely event that there is damage due to construction, Metro would ensure that any damage caused by construction is repaired to pre-construction survey condition.

Response to Comment R-BU4-20

Please refer to Response to Comment R-BU4-11, above. Section 4.7.5 of the Supplemental EA/Recirculated Draft EIR Sections specifically identified mitigation measures for the Locally Preferred Alternative. This section includes mitigation measures that would be implemented to

ensure to address the potential for noise and vibration impacts in the vicinity of the TPG properties. Since designation of a Locally Preferred Alternative, mitigation measures have been refined and confirmed for the Locally Preferred Alternative, which are listed in Section 4.7, Noise and Vibration, of this Final EIS/EIR, based on input received during the public review periods for the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections. Mitigation measures for the Locally Preferred Alternative have been carried forward and included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-21

Refinements made to the Locally Preferred Alternative would not create new significant traffic impacts under CEQA or adverse effects under NEPA, or exacerbate impacts beyond what is disclosed in the Draft EIS/EIR. The Draft EIS/EIR analyzed this permanent reduction in traffic lanes on Flower Street in Section 3.3.5.2.2. The same mitigation measures for this lane reduction identified in Section 3.4.2.2.4 of the Draft EIS/EIR have been included in Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure numbers TR-6, TR-7, and TR-8.

Response to Comment R-BU4-22

Mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) contains additional detail about how Metro will meet its commitment to maintain access to businesses (including those on the TPG property) during operating hours, including temporary driveways and signage.

Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. This reduced easement would cover less of the street frontage adjacent to the referenced properties. Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections. The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards.

The construction traffic impacts on Flower Street were adequately analyzed in Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measures to address construction traffic impacts were presented in Section 3.4.2.2.4 of the Draft EIS/EIR, and have been adopted in Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred

Alternative (Chapter 8) of this Final EIS/EIR. These mitigation measures would minimize traffic impacts during construction.

Metro would ensure that construction activities do not cause safety hazards. Candidate construction safety measures were included in Section 4.15.4.1 of the Draft EIS/EIR. These mitigation measures have been expanded and incorporated into Section 4.15.4.2.1 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Per the discussion with TPG at the referenced meeting, and as stated in Section 3.4.1.2 of the Draft EIS/EIR and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during their business operating hours throughout construction. This includes late night and 24-hour businesses.

Response to Comment R-BU4-23

The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR do not defer analysis or mitigation. The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR identify the proposed temporary construction easement in Section 4.2.3.5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR. In compliance with CEQA, all proposed activities to be performed on temporary construction easements corridor-wide are clearly defined in a bulleted list in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. These activities were included in the analysis performed in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. In addition to a mapped outline of the location of the proposed easement on within the parcel, Table 4.2-5 provides maximum square footage. Metro plans to use the reduced temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. Mitigation measures identified in Section 4.18.4 of the Draft EIS/EIR and refined and confirmed in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR indicate how Metro would reduce or avoid construction impacts.

Response to Comment R-BU4-24

Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks. The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards.

Mitigation measure number TR-9 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) would ensure that shuttle bus drop-off areas at City National Plaza would be provided throughout construction. Mitigation

measure numbers TR-12 and TR-13 would ensure that Metro would maintain access to bus stops, minimize temporary bus stop closures, and ensure that any temporarily closed bus stops are relocated to a nearby location to minimize inconvenience. Metro would also coordinate any temporary closures and relocations with other affected bus operators. Candidate mitigation measures similar to these final mitigation measures were also discussed in Sections 3.4.1.1 and 3.4.1.2 of the Draft EIS/EIR. Decking configurations used during construction would be designed to accommodate access to and from the bus stop, shuttle, and taxi drop-off areas. This is discussed in Section 4.18.2.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, which states that decking would allow the street to be open while construction activities occur underneath. No impacts to the pedestrian overpass over 5th Street are anticipated, since it would not be blocked or altered by construction activities.

As stated in Section 3.4.1.2 of the Draft EIS/EIR and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during their business operating hours throughout construction. This includes the office towers and garages.

Mitigation measures identified in Section 4.18.4 of the Draft EIS/EIR and refined and confirmed in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR indicate how Metro would reduce or avoid construction impacts.

Response to Comment R-BU4-25

The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR do not defer analysis or mitigation. The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR identify the proposed temporary construction easement in Section 4.2.3.5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR. In compliance with CEQA, all proposed activities to be performed on temporary construction easements corridor-wide are clearly defined in a bulleted list in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. These activities were included in the analysis performed in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. The Draft EIS/EIR and Final EIS/EIR fully disclose that reduction of access to properties along the proposed alignment would be a potential construction impact of the Locally Preferred Alternative in Section 4.3.3.5.

Feasible mitigation measures to address these impacts exist, were proposed as candidate measures in the Draft EIS/EIR, and have been committed to in this Final EIS/EIR. Mitigation measures to address the impacts of the activities to be performed on the temporary construction easements corridor-wide are identified in Section 4.18.4.3 of the Draft EIS/EIR and have been refined and confirmed as committed mitigation measures in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. Mitigation measures to address property and business access are proposed in Section 4.3.4 and 3.4.1.4 of the Draft EIS/EIR and have been refined and confirmed as

committed mitigation measures in Sections 3.4.2 and 4.3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure numbers TR-1, CN-1, CN-2, CN-3, CN-4, CN-5, CN-6, DR-4, and DR-5. Metro would ensure that any further refinements made to the Locally Preferred Alternative during the final design phase of the project do not create new significant impacts under CEQA or adverse effects under NEPA, or worsen impacts beyond what is disclosed in the EIS/EIR. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

Response to Comment R-BU4-26

The limitation of comments to the contents of the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections is noted.

Response to Comment R-BU4-27

Metro is aware of the vehicular access and egress points on the property. Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections. The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards.

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes both of the City National Plaza office towers. Metro would keep entrances and exits clear of obstructions, and would ensure that adequate exit routes and safe zones are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro would not allow construction activities to impede safe evacuation of the buildings or access for emergency personnel at any time.

It may not be possible to keep all vehicular entrances to garages open at all times during operating hours, but Metro would ensure that access is provided via other vehicular entrances during those times as part of its goal to maintain access to businesses. Metro would coordinate with garage owners to ensure safety and minimize inconvenience.

Response to Comment R-BU4-28

Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower

Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections. The temporary (during construction) roadway configurations will be reviewed with LADOT for compliance with roadway standards and designed to meet vehicle standards. As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This applies to parking garages, including those that operate 24-hours a day. It may not be possible to keep all vehicular entrances to garages open at all times during operating hours, but Metro would ensure that access is provided via other vehicular entrances during those times so that the garages can continue to operate. Metro would coordinate with garage owners to ensure safety and minimize inconvenience.

Response to Comment R-BU4-29

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes both of the City National Plaza office towers. Access would be ADA-compliant. Any decking configuration would be designed to accommodate the mid-block crosswalk on Flower Street between 5th and 6th Streets, as well as pedestrian crossings at intersections.

Response to Comment R-BU4-30

The Draft EIS/EIR and this Final EIS/EIR state that reduction of access to properties along the proposed alignment would be a potential construction impact of the Locally Preferred Alternative in Section 4.3.3.5. As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes access to B Level businesses. No restaurants or other businesses on the referenced property would be required to close as part of construction activities. No changes to this potential impact have occurred since its analysis in the Draft EIS/EIR, so it was not necessary to repeat this discussion in the Supplemental EA/Recirculated Draft EIR Sections.

Response to Comment R-BU4-31

The access to and from the pedestrian overpasses would thereby be maintained during construction through the use of temporary ramps and K-rail. Safe pedestrian access would be provided at all times. Transportation impacts during construction, including those to pedestrian circulation, are described in Section 3.3.5.1 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measures to address these impacts were included in Section 3.4.1 of the Draft EIS/EIR and have been incorporated into Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU4-32

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes both of the City National Plaza office towers. Metro would keep entrances and exits clear of obstructions, and would ensure that adequate exit routes and safe zones are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro would not allow construction activities to impede safe evacuation of the buildings or access for emergency personnel at any time.

Response to Comment R-BU4-33

Metro would coordinate construction activities with emergency service personnel to ensure that emergency services and response times are not impacted, as indicated in Section 4.15.4.1 of the Draft EIS/EIR. This coordination has been included as mitigation measure number CN-2 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro is aware of the difference in elevation between the plaza level and Figueroa Street and would not allow construction activities to impede access for emergency personnel at any time.

Response to Comment R-BU4-34

Metro is aware of the subterranean location of the B level retail area. Metro would keep entrances and exits clear of obstructions, and would ensure that adequate exit routes and safe zones are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro would not allow construction activities to impede safe evacuation of the retail area or access for emergency personnel at any time.

Response to Comment R-BU4-35

Metro does not allow its buses to double park at bus stops, or to park or stop illegally or unsafely. Potential traffic and transit impacts during construction were discussed in Sections 3.3.5.1.1 and 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measure number TR-9 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) would ensure that shuttle bus drop-off areas at City National Plaza would be provided throughout construction. Mitigation measure numbers TR-12 and TR-13 would ensure that Metro would maintain access to bus stops, minimize temporary bus stop closures, and ensure that any temporarily closed bus stops are relocated to a nearby location to minimize inconvenience. Metro would also coordinate any temporary closures and relocations with other affected bus operators. Similar candidate mitigation measures were also discussed in Sections 3.4.1.1 and 3.4.1.2 of the Draft EIS/EIR. Decking configurations used during construction would be designed to accommodate access to and from the bus stop, shuttle, and taxi drop-off areas.

Response to Comment R-BU4-36

The pocket track is being considered for relocation as a refinement to the Locally Preferred Alternative; however, that determination has not been made at this time. Only locations that would not create new impacts beyond those disclosed in the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections are under consideration. Locations under consideration would minimize or avoid impacts, or otherwise would not create new impacts. The location will be confirmed during final design. If the pocket track is relocated, the width of the tunnel may not change in order to not preclude construction a 5th and Flower Station in the future. Drainage and utility lines would be protected in place or relocated prior to construction in conjunction with mitigation measure numbers CN-11 and GT-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. No damage to adjacent structures is anticipated. As discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would conduct a pre-construction survey of all structures within 21 feet of anticipated vibration-producing construction activity to verify the building category (type of construction), structural condition, and to provide a baseline for monitoring construction effects. This mitigation pertains to both geotechnical and vibration impacts. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified sensitive structures. These mitigation measures were included in Sections 4.7.4.1 and 4.9.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 and 4.9.4.2.1 of this Final EIS/EIR, and are included as mitigation measure numbers NV-1 and GT-1 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). In the unlikely event that there is damage due to construction, Metro would ensure that any damage caused by construction is repaired to pre-construction survey condition.

Response to Comment R-BU4-37

Metro does not anticipate that the proposed construction staging activities would cause damage to the subterranean structures. As discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would conduct a pre-construction survey of all structures within 21 feet of anticipated vibration-producing construction activity to verify the building category (type of construction), structural condition, and to provide a baseline for monitoring construction effects. This mitigation pertains to both geotechnical and vibration impacts. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified sensitive structures. These mitigation measures were included in Sections 4.7.4.1 and 4.9.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 and 4.9.4.2.1 of this Final EIS/EIR, and are included as mitigation measure numbers NV-1 and GT-1 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). In the unlikely event that there is damage due to construction, Metro would ensure that any damage caused by construction is repaired to pre-construction survey condition.

Response to Comment R-BU4-38

Please refer to Response to Comment R-BU4-11, above, and responses to comment letter BU36 in Volume F-2 of this Final EIS/EIR.

The referenced mitigation measures from Section 4.12.1, Cultural Resources – Built Environment, were repeated from Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials. These mitigation measures will be used during construction of the Locally Preferred Alternative to limit ground movement along the entire alignment, not just adjacent to historic resources. Since publication of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, mitigation measures to limit ground movement have been refined and confirmed for the Locally Preferred Alternative, as indicated in Section 4.9.4.2, of this Final EIS/EIR. With implementation of mitigation, impacts associated with ground movement would be reduced to less than significant under CEQA and not substantially adverse under NEPA.

Response to Comment R-BU4-39

Neither the Draft EIS/EIR nor this Final EIS/EIR defers analysis or mitigation. Detailed construction mitigation measures were identified in Section 4.18.4.3 of the Draft EIS/EIR, and have been refined and confirmed to Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. These mitigation measures are adequately specific to address the potential impacts at the referenced properties during construction. The referenced mitigation measures from the Draft EIS/EIR have been included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure numbers TR-12 and TR-13. Metro would fulfill its commitment to these mitigation measures by staggering construction activities so as to maintain bus access. Not all construction activities would occur simultaneously. Temporary re-routing of bus service would be necessary, as discussed in Section 3.3.5.1.1 of the Draft EIS/EIR and this Final EIS/EIR. Temporary alternate stops would be established in accordance with mitigation measure numbers TR-12 and TR-13, and all parts of the project area would have continuous access to bus service during construction via the alternate stops. As a result of refinements made since publication of the Supplemental EA/Recirculated Draft EIR Sections, the temporary construction easements at APNs 5151-023-400 and 5151-018-017 have been reduced in size, as shown in Table 4.2-5 and the parcel data table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. This would allow more curb space for bus stop use along Flower Street during construction. As a key operator of bus service in the area, Metro has determined that the construction mitigation measures pertaining to bus service are feasible, and has committed to their implementation in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU4-40

Based on the analysis presented in the Draft EIS/EIR, Metro believes that the Locally Preferred Alternative is the least impactful build alternative. Consistent with Metro's continuing goal to minimize construction impacts, Metro has refined the Locally Preferred Alternative since publication of the Draft EIS/EIR to reduce cut and cover construction, reduce acquisitions of private property, and further minimize construction impacts, as discussed in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final

EIS/EIR. Chapter 2 also shows other alternatives studied, each with a unique construction scenario on Flower Street. As a result of refinements made since publication of the Supplemental EA/Recirculated Draft EIR Sections, the temporary construction easements at APNs 5151-023-400 and 5151-018-017 have been reduced in size, as shown in Table 4.2-5 and the parcel data table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. This includes the referenced properties.

As discussed in Chapter 5, Section 4(f) Evaluation, of the Draft EIS/EIR and this Final EIS/EIR, Maguire Gardens is a public park space. Since the Regional Connector would be partially funded by the United States Department of Transportation, it is subject to the federal USDOT Act of 1966. Section 4(f) of this act prohibits use of public parks for transportation projects, unless no feasible and prudent avoidance alternative exists. Based on the findings of the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections, there are no constraints that would render temporary construction easements across the identified portions of APNs 5151-023-400 and 5151-018-017 not feasible and prudent. As such, the USDOT Act of 1966 would not allow the use of Maguire Gardens as part of the Regional Connector project. Metro has included mitigation measures in the Mitigation Monitoring and Reporting Program to minimize and avoid construction impacts associated with temporary construction easements, as noted in the responses to comments above.

Response to Comment R-BU4-41

The Metro Board of Directors designated the Fully Underground LRT Alternative, without the Flower/5th/4th Street station, as the Locally Preferred Alternative on October 28, 2010. However, the impacts of a station at this location were analyzed in the Draft EIS/EIR as part of the Fully Underground LRT Alternative and the Underground Emphasis LRT Alternative. As indicated in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, the Locally Preferred Alternative would not preclude the Flower/5th/4th Street station from being built as a separate future project. Neither the Draft EIS/EIR nor the Supplemental EA/Recirculated Draft EIR Sections identify the Flower/5th/4th Street station as a reasonably foreseeable future development. The Locally Preferred Alternative would be fully functional and would fully meet the purpose and need identified in Chapter 1 of the Draft EIS/EIR regardless of whether the Flower/5th/4th Street station is built. A separate NEPA/CEQA process would be completed as necessary should a future separate Flower/5th/4th Street station project be undertaken.

The proposed Flower/5th/4th Street station would have included a traction power substation (TPSS) in an ancillary room. Construction of the TPSS would not preclude a station from being built in this location as a separate future project. TPSS construction would be consistent with the description of cut and cover construction in Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU4-42

Support for the Flower/5th/4th Street station is noted. As indicated in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, the Locally Preferred Alternative would not preclude the Flower/5th/4th Street station from being built as a separate future project. Flower Street from 4th Street to the existing light rail tunnel just south of 6th Street is highly constrained with existing subsurface tie-backs from previous construction projects that would interfere with tunneling activity. Tunneling activities south of 4th Street presents additional issues of removing tie-backs as well as retrieving the tunnel boring machine from under Flower Street at 6th Street which is the narrower part of Flower Street. Tunneling activities using a tunnel boring machine south of 4th Street would not be practicable due to the need to remove tie-backs ahead of the tunnel boring machine. As such, cut and cover construction, as identified in Figure 2-13 of the Draft EIS/EIR and Figure 2-16 of this Final EIS/EIR, is continuing to be pursued in this location. Using tunnel boring machine construction would also create some challenges on the ability of not precluding a 5th and Flower station as the alignment would be changed from a box structure to separate bored tunnels.

Response to Comment R-BU4-43

The referenced language in the introduction to Chapter 2, Alternatives Considered, and in Section 2.3.6.2 has been clarified since publication of the Supplemental EA/Recirculated Draft EIR Sections. The pocket track beneath Flower Street between 5th and 6th Streets would not preclude a possible future station from being constructed beneath Flower Street between 4th and 5th Streets as a separate project. Neither the Draft EIS/EIR nor the Supplemental EA/Recirculated Draft EIR Sections identify the Flower/5th/4th Street station as a reasonably foreseeable future development. The Locally Preferred Alternative would be fully functional and would fully meet the purpose and need identified in Chapter 1 of the Draft EIS/EIR regardless of whether the Flower/5th/4th Street station is built. A separate NEPA/CEQA process would be completed as necessary should a future separate Flower/5th/4th Street station project be undertaken.

Response to Comment R-BU4-44

This language has been corrected in Chapter 2, Alternatives Considered, of this Final EIS/EIR. The traffic lane would be removed from the east side of Flower Street, as shown in Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and this Final EIS/EIR, Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections, and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The proposed walkway would include a widened sidewalk, landscaping, and potentially additional pedestrian and bicycle facilities. The walkway would be similar in character to the previously proposed Flower/5th/4th Street station entrance, and would occupy the same location. The impacts and mitigation measures associated with lane removal for the station entrance would be the same for the walkway. The Draft EIS/EIR and this Final EIS/EIR analyzed this permanent lane reduction on Flower Street in Section 3.3.5.2.2. The same mitigation measures for this lane reduction identified in Section 3.4.2.2.4 of the Draft EIS/EIR have been included in Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure numbers TR-6, TR-7, and TR-8. All Regional Connector facilities would comply with the ADA, as discussed in Section 4.15.4.2 of the Draft EIS/EIR. This commitment has also been included in

Section 4.15.4.2.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure number SS-8.

Response to Comment R-BU4-45

Impacts of the enhanced pedestrian walkway and the associated lane removal would be the same as those analyzed in Section 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The same mitigation measures for this lane reduction identified in Section 3.4.2.2.4 of the Draft EIS/EIR have been included in Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR as mitigation measure numbers TR-6, TR-7, and TR-8. No significant new information has been added to Chapter 3, Transportation Impacts and Mitigation, since publication of the Draft EIS/EIR; therefore, it was not included in the Supplemental EA/Recirculated Draft EIR Sections. As it did in the Draft EIS/EIR, Chapter 3 continues to acknowledge the significant impact under CEQA and adverse effect under NEPA of removing a traffic lane from Flower Street for the Regional Connector in this Final EIS/EIR in Section 3.3.5.2.2. If the Flower/5th/4th Street station is built as a separate future project, the entrance could fit within the enhanced pedestrian walkway with no further lane removals required. The Supplemental EA/Recirculated Draft EIR Sections does not say that further lane removal would be required to accommodate a separate future Flower/5th/4th Street station project.

Response to Comment R-BU4-46

The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR do not defer analysis or mitigation. Please see Responses to Comments R-BU4-41 through R-BU4-45, above.

Response to Comment R-BU4-47

Since the Regional Connector would be partially funded by the United States Department of Transportation, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) would apply instead of the California Relocation Act, as discussed in Section 4.2.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. Metro would compensate TPG for the temporary construction easements in accordance with the Uniform Act.

In compliance with CEQA, all proposed activities to be performed on temporary construction easements corridor-wide are clearly defined in a bulleted list in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. These activities were included in the analysis performed in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. Mitigation measures to address the impacts of the activities to be performed on the temporary construction easements corridor-wide are identified in Section 4.18.4.3 of the Draft EIS/EIR and have been refined and confirmed as committed mitigation measures in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU4-48

The temporary construction easement identified in the revised right of way plan would be used to preserve vehicular and pedestrian access and for separating pedestrians on the sidewalks from the street work by K-rails and fences.

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. In compliance with CEQA, all proposed activities to be performed on temporary construction easements corridor-wide are clearly defined in a bulleted list in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. These activities were included in the analysis performed in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. In addition to a mapped outline of the location of the proposed easement on within the parcel, Table 4.2-5 provides maximum square footage. Metro plans to use the reduced temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians on the sidewalks from street work by K-rail and fences. Mitigation measures identified in Section 4.18.4 of the Draft EIS/EIR and refined and confirmed in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR indicate how Metro would reduce or avoid construction impacts.

Response to Comment R-BU4-49

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. It is Metro's goal to minimize disruption and inconvenience stemming from construction activities. Refinements to the Locally Preferred Alternative have reduced the size of the proposed temporary construction easement on TPG's property to 3,960 square feet, as shown in Table 4.2-5 and the parcel data table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. It is unlikely that this type of temporary activity on the easement, intended to preserve safe pedestrian access to the property, would cause substantial disruption. Mitigation measures to address the impacts of the activities to be performed on the temporary construction easements corridor-wide are identified in Section 4.18.4.3 of the Draft EIS/EIR and have been refined and confirmed as committed mitigation measures in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Construction staging areas have been identified on portions of both of the non-park plazas in the vicinity of 5th and Flower Streets (APNs 5151-023-400 and 5151-018-017), as shown in Table 4.2-5 and the parcel data table in Appendix R-1, Locally Preferred Alternative Drawings, of the

Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR, and Table 4.2-5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and this Final EIS/EIR. All other properties along the alignment in the vicinity of 5th and Flower Streets are occupied by aboveground structures or precluded from use by Section 4(f) of the USDOT Act of 1966, thus rendering them unsuitable for temporary construction easements.

Response to Comment R-BU4-50

Metro will continue its ongoing coordination with TPG throughout the planning, design, and construction phases of the project, and will involve the construction contractor as needed to ensure effective implementation of the mitigation measures in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro recognizes the importance of Flower and 5th Streets to the operation of TPG's properties. It is Metro's goal to minimize construction impacts, as demonstrated by the extent of measures included in the Mitigation Monitoring and Reporting Program, which include adequate mitigation measures to reduce or avoid significant environmental impacts under CEQA and adverse effects under NEPA. As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction.

Response to Comment R-BU4-51

Flower Street from 4th Street to the existing light rail tunnel just south of 6th Street is highly constrained with existing subsurface tie-backs from previous construction projects that would interfere with tunneling activity. Tunneling activities using a tunnel boring machine south of 4th Street would not be practicable due to the need to remove tie-backs ahead of the tunnel boring machine. Tunnel boring would also preclude a future Flower/5th/4th Street station due to the separate bored tunnels instead of a box structure.

As such, cut and cover construction, as identified in Figure 2-13 of the Draft EIS/EIR and Figure 2-16 of this Final EIS/EIR, is continuing to be pursued in this location. As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction.

Response to Comment R-BU4-52

The Metro Board of Directors designated the Fully Underground LRT Alternative, without the Flower/5th/4th Street station, as the Locally Preferred Alternative on October 28, 2010. As indicated in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, the Locally Preferred Alternative would not preclude the Flower/5th/4th Street station from being built as a separate future project. As noted in Response to Comment R-BU4-51 above, tunnel boring machine construction would not be practicable due to the presence of tie-backs in the area. This segment of the alignment is identified for cut and cover construction in Figure 2-13 of the Draft EIS/EIR, Figure 2-14 of the Supplemental EA/Recirculated Draft EIR Sections, and Figure 2-16 of this Final EIS/EIR. As shown in Figure 2-

14 of the Supplemental EA/Recirculated Draft EIR Sections and Figure 2-16 of this Final EIS/EIR, Metro has reduced the amount of cut and cover construction required on Flower Street since publication of the Draft EIS/EIR. Cut and cover would no longer be needed between 3rd and 4th Streets.

Response to Comment R-BU4-53

Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Concrete deck panels would be used as a temporary deck for vehicles and pedestrians during cut and cover operations on Flower Street. Preference for deck panels to be installed at existing grade level is noted.

Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to safely accommodate pedestrians, the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections.

Response to Comment R-BU4-54

Please refer to Response to Comment R-BU4-11, above.

Response to Comment R-BU4-55

As shown in Figure 2-14 of the Supplemental EA/Recirculated Draft EIR Sections and Figure 2-16 of this Final EIS/EIR, the Locally Preferred Alternative would not involve tunneling adjacent to the referenced TPG properties. These segments of the alignment would be constructed using cut and cover construction. Metro does not anticipate that the proposed construction would cause damage to adjacent structures. As discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would conduct a pre-construction survey of all structures within 21 feet of anticipated vibration-producing construction activity to verify the building category (type of construction), structural condition, and to provide a baseline for monitoring construction effects. This mitigation pertains to both geotechnical and vibration impacts. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified sensitive structures. These mitigation measures were included in Sections 4.7.4.1 and 4.9.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 and 4.9.4.2.1 of this Final EIS/EIR, and are included as mitigation measure numbers NV-1 and GT-1 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Detailed construction mitigation measures are also identified in Section 4.18.4.3 of the Draft EIS/EIR, and have been refined and confirmed in Section 4.18.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. In the unlikely event that there is damage due to construction, Metro would ensure that any damage caused by construction is repaired to pre-construction survey condition.

Response to Comment R-BU4-56

Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. In compliance with CEQA, all proposed activities to be performed on temporary construction easements corridor-wide are clearly defined in a bulleted list in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. These activities were included in the analysis performed in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. Concrete deck panels would be used as a temporary deck for vehicles and pedestrians during cut and cover operations on Flower Street. Preference for deck panels to be installed at existing grade level is noted.

Any decking configurations would require construction of ADA-compliant ramps and accesses as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Any decking configurations would be designed to safely accommodate pedestrians, the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks as indicated in the same sections.

Response to Comment R-BU4-57

The construction traffic impacts on Flower Street were adequately analyzed in Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR. The permanent reduction of traffic lanes on Flower Street is also adequately analyzed in Section 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR. Since no significant new information regarding these impacts resulted from refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR, no repetition of this discussion was required in the Supplemental EA/Recirculated Draft EIR Sections. Traffic circulation analysis was performed using the methodology presented in Section 3.1.2 of the Draft EIS/EIR and this Final EIS/EIR. As indicated in Section 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR, significant increases in delay would occur at one intersection during the AM peak hour, and three intersections during the PM peak hour. Sufficient feasible mitigation measures are included in the Draft EIS/EIR to reduce these impacts below the level of significance except at one intersection during the AM peak hour. As shown in Figure 3-16 of the Draft EIS/EIR and this Final EIS/EIR, the 4th and Flower Streets intersection would continue to experience a significant decrease in performance after mitigation during the AM peak hour. Mitigation measures to address both construction and operation traffic impacts are presented in Sections 3.4.1.2 and 3.4.2.2.4 of the Draft EIS/EIR, and have been refined and confirmed in Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU4-58

Metro will coordinate with the community, including TPG, regarding construction activities through the Regional Connector Community Leadership Council, as provided in mitigation measure numbers CN-4 and CN-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). It is Metro's goal to provide timely information to stakeholders.

Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed temporary construction easement on TPG's property has been reduced, consistent with Metro's continuing goal to minimize construction impacts and the use of private property. This reduction is reflected in Table 4.2-5 and the parcel impacts table in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The proposed activities to be performed on temporary construction easements corridor-wide are discussed in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. Metro plans to use the temporary construction easement on TPG property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences.

Response to Comment R-BU4-59

Thank you. Metro also looks forward to continued coordination with TPG throughout the project process.

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August 29, 2011

Mr. Diego Cardoso
Executive Officer, Countywide Planning and Development
METRO
One Gateway Plaza
Los Angeles, CA 90017

Dear Mr. Cardoso:

On behalf of the Little Tokyo Community Council, Little Tokyo Business Association and the Little Tokyo Business Improvement District, we take this opportunity to reiterate in writing priority and outstanding concerns of the Little Tokyo community related to the Regional Connector transit project, and to ensure inclusion of our concerns as public commentary. 1

The refined alignment does not fully mitigate impacts of four years of construction to small independent businesses and community/cultural institutions that define the cultural character of Little Tokyo. Loss of business and patronage due to perceived or real accessibility into the Little Tokyo area will negatively impact these entities that operate within modest margins of profitability or depend upon patronage and donations. 2

We have identified key areas previously and are dismayed that they were not specifically addressed in the environmental document: Community Marketing, a Business Interruption Fund, a Community Valet Parking System and a Community Shuttle Bus Service System. We note that the Environmental Assessment and final environmental documents do not address anything beyond the draft environmental documents in this and other areas of concern to our business entities and non-profit community organizations. We are prepared to provide specifics for the Community Marketing, Business Interruption Fund, the Community Valet Parking System and the Community Shuttle Bus Service System in order to support implementation. 3

The structure and responsibilities of the Regional Connector Community Resource Council (RCCRC) were also unaddressed in the environmental document. Previous timeline had announced formation of the Council in early summer 2011. 4

We are anxious to move forward the marketing, business interruption fund, and parking/shuttle bus projects, as well as the formation of the RCCRC, and look forward to discussing all these matters with you in the near future. 5

Sincerely,

Chair
Little Tokyo Community Council

President
Little Tokyo Business Association
Little Tokyo Business Improvement District

R-BU5

Responses to Comments from the Little Tokyo Business Association and Little Tokyo Business Improvement District; Little Tokyo Community Council, Liu, Wilson; Okamoto, Mike

Response to Comment R-BU5-1

Metro appreciates this input from the Little Tokyo Community Council and the Little Tokyo Business Improvement District. Responses to the identified concerns are provided in Responses to Comments R-BU5-2 through R-BU5-5 below.

Response to Comment R-BU5-2

Metro recognizes the importance of small independent businesses and community/cultural institutions in Little Tokyo. Metro has developed the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) with input from the Little Tokyo Working Group, Little Tokyo Community Council, and Little Tokyo Business Improvement District. Metro and the Federal Transit Administration (FTA) are fully committed to all mitigation measures in the Mitigation Monitoring and Reporting Program. The Mitigation Monitoring and Reporting Program includes measures to address and minimize loss of business and patronage, and to maintain access to businesses at all times during operating hours. These mitigation measures, developed with input from the community, would reduce the impacts below the level of significance under CEQA and to a not substantially adverse level under NEPA.

Response to Comment R-BU5-3

These concerns are addressed in the Environmental Justice section, Section 4.17 of the Draft EIS/EIR and this Final EIS/EIR. It should be noted that the Environmental Justice section was not included in the Supplemental EA/Recirculated Draft EIR Sections because it contains no significant new information beyond what was included in the Draft EIS/EIR. The Mitigation Monitoring and Reporting Program in this Final EIS/EIR incorporates the specific mitigation measures for the Locally Preferred Alternative that address the issues raised in this comment, such as alternative parking services and targeted marketing services. Both Section 4.17 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) are included in this Final EIS/EIR and contain the specific mitigation measures to address these issues. Metro looks forward to continued coordination with the Little Tokyo community regarding the implementation of the Mitigation Monitoring and Reporting Program mitigation measures.

Response to Comment R-BU5-4

The Regional Connector Community Leadership Council (RCCLC) formation is included in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) as mitigation measure number CN-6. Metro will establish the RCCLC following FTA's issuance of a Record of Decision.

Response to Comment R-BU5-5

Metro looks forward to continued coordination with the Little Tokyo community regarding the implementation of the Mitigation Monitoring and Reporting Program mitigation measures. This coordination, including formation of the RCCLC and further discussions regarding implementation of mitigation measures, would occur following FTA's issuance of a Record of Decision.

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Your File No. SCH # 2009031043
Our File No. 231259-000013

September 2, 2011

Via FedEx

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Los Angeles County Metropolitan Transportation Authority ("Metro")
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Los Angeles, CA 90012
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Re: Comments on the Regional Connector Transit Corridor Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Statement/Environmental Impact Report and the Regional Connector Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Roybal Saltarelli:

This office represents Hines Interest Limited Partnership, the owner (the "Owner") of Citigroup Center, the 48-story skyscraper located at 444 S. Flower Street, Los Angeles, California 90017 (the "Property"). On behalf of the Owner, this letter constitutes comments on the *Regional Connector Transit Corridor Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Statement/Environmental Impact Report* ("Draft EIR") as well as the *Regional Connector Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report* ("Original DEIR") (collectively, the "DEIR"). 1

The Property is immediately adjacent to the proposed Regional Connector light rail transit ("LRT") line (the "Project"). The Project and all of the construction alternatives include a construction staging area that would destroy the Property's street-level open air plaza (the "Plaza") during the multi-year construction timeline of 2014 to 2019. See Original DEIR p. 4-362, Draft EIR p. 4.7-12.

The Owner supports improved access and traffic conditions in the area that may eventually occur with the implementation of the Project, but cannot support Metro's proposed take and destruction of the Plaza and replacement of it for several years with construction noise, fumes, increased air pollution, vibration, and other hazards associated with potentially contaminated soil removal and blocked emergency ingress and egress into the Property, none of which has been adequately analyzed or mitigated in the DEIR. While the Owner appreciates the commitments Metro staff made to dramatically 2 3

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reduce the size of the temporary construction easement and construction staging area on or adjacent to the Property (the "Revised Construction Design") at the August 22, 2011 meeting,[1] placing a construction staging area in the two easterly lanes of Flower Street adjacent to the Plaza, while substantially better than the destruction of the Plaza described in the DEIR, will still have significant and unavoidable environmental impacts that have not been adequately analyzed or mitigated.[2] As such, because it is uncertain whether the Revised Construction Design and additional mitigation measures will become part of the Project, the Owner has no choice but to comment on the Revised Construction Design and the Project analyzed and described in the DEIR that would cause significant new construction traffic, noise, air, and aesthetic impacts, among others.

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The approval process for the Project must comply with the California Environmental Quality Act ("CEQA") which requires an applicant not only to disclose environmental impacts to the public, but also to mitigate the significant impacts and consider alternatives that can reduce or eliminate the significant environmental impacts. As a general matter, in several areas critically important to the Owner, Project impacts have not been adequately analyzed or mitigated in the DEIR. In fact, the negative environmental impacts would be significantly more severe than disclosed in the DEIR.

Consequently, unless Metro irrevocably commits to the Revised Construction Design presented at the August 22, 2011 meeting and agrees to additional enforceable mitigation measures to reduce the construction noise, vibration, air quality and hazard impacts, the Owner requests recirculation of the Draft EIR pursuant to Section 15088.5 of the California Code of Regulations ("CCR") because not only has the public been deprived of a meaningful opportunity to comment on the Project's impacts, it is impossible for the public and decision makers to understand the true environmental impacts of the Project.

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1. Legal Inadequacies

Pursuant to Public Resources Code Section 21177(a) which allows public comment on the Project prior to the close of the public hearing, the following is a list of the most significant DEIR legal inadequacies.

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[1] The meeting between the Metro and the Owner occurred to address Project impacts on the Property. Meeting attendees included Ginny-Marie Brideau, Ann Kerman, John S. Prizner, Jr., Dolores M. Roybal Saltarelli, Martha Welborne, Tracey Chavira, Leia Jensen, Jim Bonham, Diego Cardoso, and Girish Roy.
[2] See the attached "Construction Area Plan Structure Cut and Cover" Site Plan depicting the reduced Temporary Construction Easement and reduced Construction Staging Area that was presented at the 8/22/11 meeting.

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a. Noise Analysis Inadequate

The Project would create substantial temporary or periodic increases in ambient noise levels in the vicinity of the Property above levels existing without the Project. See CEQA Guidelines Appendix G Section XII(d). There is inadequate analysis of these significant environmental impacts. 7

i. The Draft EIR Does Not Adequately Analyze The Noise Impacts Of Construction

The Draft EIR states that construction noise impacts on the Property would be less than significant, even though a construction staging area would be located on the Property or immediately in front of the Property. See Draft EIR p. 10-18. There would be no setback separating the construction staging area and noise and vibration generating activities from the building entrance, offices and restaurants located on the Property. According to p. 2-36 of the Draft EIR, "construction staging areas are locations needed for: equipment storage; construction materials delivery and storage; equipment assembly; materials production; dewatering activities; access roads; construction worker parking; temporary trailer offices; demolition staging; removal of excavated materials; other related activities during the construction period." Thus, these noise and vibration generating activities must be assumed to occur immediately adjacent to the sensitive receptors at the building entrance, offices and restaurants on the Property, whether for the construction staging area on the Property or for the construction staging area proposed in the Revised Construction Design. The analysis in the DEIR only examined noise impacts at 50 feet from the noise source when in fact the impact will occur much closer than analyzed. Draft EIR pp. 4.7-15, 4.7-23 and 4.7-31. With no separation among the noise generating activities of bulldozers, dewatering, and other construction activities and the sensitive receptors both on the Property and across the street at the Bonaventure hotel, the noise impacts have not been adequately disclosed, analyzed and/or mitigated. For example, bulldozers would create 85 dBA of noise at 50 feet from the noise source. Draft EIR p. 4.7-15. As the construction staging area is on the Plaza or in the Flower Street right-of-way pursuant to the Revised Construction Design, bulldozers and other construction equipment would operate much closer than 50 feet to sensitive uses on the Property. Noise impacts will not only be worse than analyzed; when multiple pieces of construction equipment are operated together, they will greatly exceed the thresholds of significance (even though the DEIR does not appear to have analyzed the construction noise impact of multiple pieces of equipment operating simultaneously). In addition, increased noise from 8

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construction haul trucks does not appear to have been analyzed. Thus, new significant and unavoidable impacts may occur. 8 cont'd

Because the extent of the significant impacts has been greatly underestimated, substantial evidence does not support the conclusion that "consistency with the goals of the applicable local ordinances and implementation of best management practices would ensure that noise and vibration levels associated with construction of the Locally Preferred Alternative ("LPA") would not result in a significant impact." Draft EIR p. 10-18. As described later in this letter, it will be impossible for the Project to be consistent with the Los Angeles Municipal Code ("LAMC") regarding noise generating activities. If a Project with a construction schedule lasting five years, affecting thousands of sensitive receptors along a 1.9 mile route with massive excavation does not have a significant construction noise impact, then it would be highly unlikely that any Project would ever have a significant construction noise impact. Because this significant noise impact was not disclosed, nor was there any analysis as to how the mitigation proposed would reduce impacts to less-than-significant, CEQA requires revision and recirculation of the EIR. See CEQA Guidelines Appendix G Section XII(a). 9

ii. City of Los Angeles Significance Thresholds and the LAMC

The DEIR does not place any standard on the acceptable noise limit in the City of Los Angeles. The Draft EIR states that "neither CEQA nor the City of Los Angeles provides quantitative thresholds for a substantial noise impact..." Draft EIR p. 4.7-7. To the contrary, the *LA CEQA Thresholds Guide* states that a project would normally have a significant impact on noise levels from construction if:

> "Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday."

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These are existing significance thresholds for construction noise in the City of Los Angeles, and it is difficult to understand why Metro has not utilized these City of Los Angeles CEQA thresholds when the Project is in the center of the City. There is no justification for why Appendix G of the State CEQA

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Guidelines and the *LA City CEQA Thresholds* were not followed for noise or other environmental thresholds. There are likely to also be other significant environmental impacts that have not been disclosed or analyzed. The *LA CEQA Thresholds Guide* should be followed because the Project is within the City of Los Angeles, a responsible agency. It must approve a number of discretionary entitlements to allow the Project, such as a haul route and street vacations. If these thresholds were followed, there would be a number of new significant construction noise environmental impacts because construction activities would last more than one day and would exceed ambient exterior noise levels by 10 dBA or more at a noise sensitive use (such as the Plaza and the Bonaventure hotel); construction activities would last more than 10 days in a three month period and would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; and construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use after 9 p.m. on weekdays and during the weekend prohibited hours. See *LA CEQA Thresholds Guide* p. I.1-3. DEIR Appendix FF ("Construction Impacts") lists these thresholds of significance for noise impacts and it is unclear why the body of the DEIR ignores the analysis of these thresholds.

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In addition, the City of Los Angeles has standards both in the LAMC as well as the General Plan specifying when noise is clearly unacceptable, and these are omitted from the DEIR. The LAMC states that "it is hereby declared to be the policy of the City to prohibit unnecessary, excessive and annoying noise from all sources subject to its police power. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interests shall be systematically proscribed." See LAMC Section 111.00. The high noise level of construction as it relates to the Property and the Plaza, lasting several years, will be excessive and annoying and therefore prohibited by the LAMC. And since the noise levels in the DEIR underestimate the noise levels that will be heard by sensitive receptors (people will be much closer to noise sources than analyzed in the DEIR), the significant impacts will be much worse than analyzed. The EIR fails to disclose this significant impact.

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iii. Noise and Vibration Attenuation Mitigation Measures Are Inadequate

While the Draft EIR states that "construction would be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code," there is nothing to indicate that compliance with goals would make the significant construction noise impacts less than significant. Draft EIR p. 4.7-15. It would be impossible for construction to occur in compliance with LAMC Sec. 41.40(a)'s preclusion of work

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between 9 p.m. and 7 a.m. (Draft EIR p. 4.7-30) since the Draft EIR on p. 4.18.2-6 states that "based on experience with the cut and cover construction of the two underground stations on the Metro Gold Line Eastside Extension, after the shoring system was in place, decking installation occurred in only several weekends with non-stop activity from Friday at 5:00 PM to Monday morning at 6:00 AM with community and local agency approval. Similar progressive staging could be performed for the Regional Connector project..." This internal inconsistency demonstrates that the mitigation measure cannot mitigate the impact, rendering this a new significant and unavoidable impact. Other mitigation measures discussed in the DEIR do not indicate how construction noise levels are brought to a level that is less-than-significant. While Best Management Practices ("BMPs") are welcome, there is no indication in the Draft EIR how these BMPs would reduce the impact to less-than-significant. *Id.* Merely stating that a mitigation measure reduces the impact to less-than-significant is insufficient when there is no substantial evidence to support the claim that the mitigation measure will reduce the impact to less-than-significant. Punting the analysis on the applicable level of noise makes it impossible for the public to know whether there is a significant impact or how much of a noise reduction is necessary to reduce the impact to less-than-significant. Even if one were to actually believe that these vague measures would be enforceable and implemented, it is uncertain how much these measures would reduce noise heard by sensitive receptors and how they would attenuate noise to a less-than-significant level, especially considering that the construction staging areas will produce noise generating activities much closer to people than assumed in the EIR, including those across the street at the Bonaventure hotel.

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Claiming that there would be a Worksite Traffic Control Plan and a Construction Mitigation Program without providing any details as to how the significant and unavoidable environmental impacts would be reduced, or providing standards for reducing the significant environmental impacts (Original DEIR p. 3-55) does not satisfy CEQA's minimum legal requirements. This constitutes deferred analysis that does not meet the minimum requirements of *Sacramento Old City Association v. City Council* (1991) 229 Cal.App.3d 1011 and *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603. The existing construction mitigation measures are unenforceable and infeasible as they include language such as "to the extent practical," or "when feasible" without a binding obligation to mitigate. Original DEIR p. 3-55 and Draft EIR p. 4.7-21 to 22. If a mitigation measure turns out to not be practical or infeasible, it does not satisfy its legal obligation to mitigate a significant environmental impact.

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Consequently, the vibration mitigation measures on p. 4.7-21 of the Draft EIR should remove the words "where feasible." If it is not feasible, it is not legally adequate mitigation. 13 cont'd

The construction noise mitigation measures on p. 4.7-42 need to be required whether or not there is a noise complaint. It is difficult to understand why a noise complaint should trigger monitoring and the implementation of mitigation measures to reduce significant impacts. CEQA does not make it the responsibility of the Owner and other members of the public to ensure that the Project does not violate the law. Since the worst case (and most probable likelihood) is that noise will exceed FTA (and City) thresholds, the mitigation measures on Draft EIR p. 4.7-42 cannot contain any complaint contingency to trigger their applicability. 14

At the very least, additional mitigation measures should be added requiring (1) a sound barrier wall at ground level around the perimeter of the construction staging areas around/adjacent to the Property such that it attenuates noise to a minimum of 20 dBA; and (2) where health and safety are not compromised, additional temporary sound walls to be used in conjunction with noise intensive construction equipment that has limited mobility while in use (i.e. jackhammers, compressors, etc.). These sound barriers and other noise attenuation features must be aesthetically pleasing. Further, to reduce noise impacts at the Property, there should be a break in heavy noise-generating construction activities during the lunch hour. Construction activity that generates a significant amount of noise should be scheduled for weekends, evenings and early mornings. 15

iv. Construction Vibration Impacts Are Significant

The Project involves a construction staging area on the Plaza adjacent to restaurants, the Property's skyscraper, and/or in the right of way in front of the Property. While the Property involves a reinforced steel structure and is within the FTA Vibration Damage Criteria I category, vibration damage may occur if a large bulldozer or caisson drilling occurs within eight feet of the Property's buildings. Draft EIR p. 4.7-7. The DEIR failed to analyze impacts of multiple vibration causing events occurring simultaneously. If equipment operates simultaneously there would need to be a greater separation between the construction equipment and vibration-sensitive uses on the Property since there would be greater impacts than analyzed. As this standard is based on *damage* to a building, the Draft EIR does not make any sense when it says that bulldozer use near buildings would remain infrequent and therefore, a vibration impact based on damage to a building would be less than significant. Damage may 16

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occur with infrequent events (and in any event, the DEIR does not provide a mitigation measure reducing the frequency of use of vibration-causing equipment in close proximity to buildings affected by the Project). According to the Draft EIR, the threshold is based on the vibration that may cause damage without specifying any frequency of events or simultaneous construction activities. *Id.* Thus, whether or not vibration events are infrequent, there may still be damage to the Property as a result of the proposed construction staging area, and this was not disclosed in the DEIR. In addition, with regard to the threshold regarding general assessment of vibration impacts (i.e., vibration annoyance) that depends on frequency of events, while the standard is listed on p.4.7-6 of the Draft EIR, there is no analysis as to whether the general assessment (i.e. annoyance) threshold would be exceeded for construction. There is no analysis of (1) the maximum amount of vibration that would occur or its frequency; (2) why there would be "a 10 dBA reduction in vibration for coupling to building foundation loss"; and (3) why this would result in a less than significant impact. Draft EIR p. 4.7-17. Consequently, due to all of the construction staging activities that would occur on the Property or nearby that would be annoying to sensitive receptors on the Property, and no mitigation measures or other Project features committing Metro to not use vibration-causing machinery within a distance that may cause damage to the Property's buildings, there may be new significant vibration impacts that have not been disclosed.

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b. Air Pollution Analysis Inadequate

i. Hazards Analysis Necessary

The DEIR states that soil removal may involve contaminated soil and "testing of materials would be required prior to transportation." Draft EIR p. 4.18.2-4. It is unknown whether the soil is contaminated with harmful pollutants and whether the excavation, storage, removal and hauling of these unknown contaminants, as well as the air-borne exposure of these contaminants through dewatering will pose a threat to sensitive receptors immediately adjacent to the construction staging and cut and cover areas. CEQA does not allow this deferral of analysis and mitigation. If there is contamination, what will be the hazard posed to the thousands of people who are daily on the Property, let alone adjacent to other proposed construction staging areas and cut and cover construction areas? While the DEIR analyzes Localized Significance Thresholds ("LST"), Original DEIR p. 4-75, for example, it has not analyzed the health risks of the potentially hazardous soil and water that would be brought into close proximity to thousands of people daily. A Health Risk Assessment is absolutely mandatory not just to analyze

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construction equipment emissions, but also emissions associated with the removal of potentially hazardous soil and water, considering the high volume of people who would be exposed on a daily basis, for years, to excavation and removal. Appendix FF to the original DEIR claims that the Construction Health Risk Assessments demonstrate a less than significant impact (pp. 79 and 93), however, Tables 5-8 and 5-11 appear to show thresholds exceeded. If the threshold of significance is exceeded, there would be a significant impact. At the very least, the DEIR needs to redo the Health Risk Assessment to better explain why there is no significant impact, if that is the case, once it takes into account the potentially hazardous materials present in the soil and groundwater. Mitigation measures are also required to address the excavation, storage and removal of potentially contaminated soil. Merely indicating that hazardous materials will be removed to certain landfills does not protect the public prior to the disposal of that hazardous waste to appropriate landfills, and especially if the excavated hazardous waste is stored in the Plaza or adjacent to the Property. Draft EIR p. 4.18.2-4. The EIR fails to adequately analyze and mitigate the potential impacts from air-borne hazards associated with the construction of the Project.

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(a) Inadequate Analysis Of Release Or Transport Of Hazardous Materials

Original DEIR p. 4-139 states that "indirect impacts could occur from the accidental release of hazardous materials during the transport of soil or other media contaminated with hazardous materials to a disposal facility located away from the project area during construction." CEQA Guidelines Appendix G Sections VIII(b), and (c) require analysis of whether the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and whether the Project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of a school, respectively. But there was no analysis of the very real impact that may result from the excavation and transport of hazardous materials from the Project site, including construction staging areas, or whether schools are located within 0.25 miles of the Project's hazardous materials. While Original DEIR p. 4-145 lists a requirement for a Contaminated Soil/Groundwater Management Plan in case hazardous materials are found within the Project site, it impermissibly defers analysis. As the construction staging area is on the Plaza, information regarding the "procedures for the proper handling, storage, transport, and disposal of contaminated soil and/or groundwater, in consultation with regulatory

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agencies" cannot be deferred until some future time. Original DEIR p. 4-145. The Owner and the public have a right to know now whether hazardous materials will be stored on the Property and what steps will be taken to preserve public health. Similarly, while the Worker Health and Safety Plan listed on p. 4-145 of the Original DEIR is a step in the right direction to protect construction contractors from hazards, it does nothing to protect members of the public from hazards occurring mere feet away from the construction areas. Further, stating that "specific precautions to protect workers and the public from exposure to toxic gases would be required, and specialized excavation methods would be needed to prevent explosion," does not satisfy even minimum legal standards for mitigation. It is absolutely uncertain as to what these standards are or how they mitigate significant hazardous impacts. Deferring any meaningful analysis of those prevention steps and deferring analysis of the potential harms to be faced by the public by the accidental release of hazardous materials does not comply with CEQA's requirements to inform the public and mitigate significant impacts.

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ii. The LST Analysis Is Also Legally Faulty

According to Original DEIR the LST analysis assumes construction activity at 25 meters to the nearest sensitive resource. The cut and cover construction and the construction staging areas presented in the DEIR and the Revised Construction Design involve excavation and storage of potentially hazardous materials, such as the soil, much closer to sensitive receptors than the 25 meters analyzed. Thus, the LST impacts will likely be much worse than analyzed and the conclusion that "with implementation of mitigation, localized emissions from construction activities would be less than significant..." is not supported by substantial evidence. Original DEIR p. 4-82.

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iii. Ventilation Shafts

There is also no information regarding the air quality impacts associated with the ventilation shafts and the air borne pollutants that may be expelled from the Project, including Aerially-Deposited Lead ("ADL") and other pollutants. If there are ventilation shafts proposed on or adjacent to the Property, more analysis is necessary. To the extent that there are significant impacts, they need to be mitigated to a level less than significant. There is simply an absence of analysis and the community needs to know the risk to sensitive receptors in relation to air pollution and hazards directly coming from the Project.

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iv. Odors

Especially if the soil and groundwater contain petroleum products and other chemicals, there may be significant odors associated with the massive amounts of excavation and removal that would occur on or adjacent to the Property. Odors from the excavation may cause significant impacts at the Plaza and outdoor uses at the Property, and CEQA Guidelines Appendix G Section III(e) requires analysis of these impacts affecting a substantial number of people. Similar to odors caused by construction, excavation and construction may unleash a wave of rats and other vermin onto Downtown streets. Rats and other vermin, aside from creating a nuisance, may present a hazard to the public that needs to be analyzed and mitigated. The DEIR also lacks this analysis. 24

c. Traffic Impacts Inadequately Analyzed

i. Flower and Fifth Streets

The DEIR analyzed the permanent removal of one lane of Flower Street adjacent to the Property; however, it did not analyze the removal of two lanes of traffic on Flower Street for the construction staging area proposed at the August 22, 2011 meeting. As the construction is scheduled to last up to five years, there may be a significant traffic impact that was not analyzed with the removal of two lanes of traffic along Flower Street adjacent to the Property. Not only will the level of service on Flower Street be degraded, motorists exiting the Property's parking garage on 5th Street will find it more difficult to exit the parking garage due to the various closure of lanes on Flower Street, additional haul and construction worker trucks, construction, and construction staging on or adjacent to the Property. This will cause unacceptable queuing inside the Property's parking garage as well as increase difficulty for motorists exiting the garage who are trying to get into the left lane of Fifth Street in order to turn left onto Flower Street so as to access the Harbor Freeway carpool lane south of Downtown. Combined with the anticipated construction and operation of the Stadium ("Farmers Field"), there will be a new significant or substantially worse significant impact that was not disclosed in the DEIR. 25

ii. Additional Traffic Mitigation Measures Are Required

Excavation for the cut and cover will require 20-30 haul trucks per day according to the DEIR. Since the haul trucks may idle outside the construction staging areas, they should be limited to off-peak 26

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hours to reduce impacts on Flower Street, Fifth Street and the freeways that the trucks may use (i.e., 110, 101, 10 and 5). These haul trucks should not idle, travel in platoons or park in front of the Property. 26 cont'd

d. Inadequate Range Of Alternatives

All of the construction Project alternatives include the same underground cross-over section of track north of 5th Street adjacent to the Property. Draft EIR p. 2-25. This design feature requires cut and cover and precludes the use of a Tunnel Boring Machine ("TBM") at this location even though a TBM has much fewer construction impacts. Further, the use of a TBM would remove the need for construction staging areas on the Property or in front of the Property on Flower Street. Whether the use of a TBM is characterized as a mitigation measure or alternative, it is not clear why the cross-over section cannot occur farther to the northeast of the Property, especially where the Project tracks come to grade since it will reduce many of the noise and air quality significant impacts to this vibrant part of Downtown. Failure to analyze alternatives to this location of the cross-over component is a failure to mitigate and/or provide a reasonable range of alternatives and also a failure to mitigate construction impacts that would occur on or in front of the Property. 27

e. Cumulative Impacts

During the time that the lead agency took to revise portions of the DEIR to address "... changes in the project or environmental setting as well as additional data or other information ... that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement"[3] it should have also revisited its cumulative impacts analysis to include the construction and operation of Farmers Field (which will occur at the same time as the construction and eventual operation of the Project) since both, along with other related projects, will create significant traffic, access, circulation, noise, and air quality cumulative impacts. The Project will make a cumulatively considerable contribution to these impacts that will, for instance, completely gridlock Flower and 5th Streets during construction. The Farmers Field proposal presents new information, and since the Project's construction timeline would likely overlap with the construction and operation of Farmers Field, there are likely to be new significant environmental impacts that have not been analyzed or mitigated in the DEIR. Especially since various portions of the EIR were recirculated, it is 28

[3] Draft EIR p. 2.

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inconceivable why this important related project was not taken into account in the DEIR. Considering that Flower Street is the closest southbound arterial to Figueroa leading from Bunker Hill to South Park and the Farmers Field area, more mitigation is necessary to avoid construction gridlock and massive detours in Downtown; it would be reasonable to require coordination with the construction of the Farmers Field; coordination of haul routes; and additional flagmen and traffic personnel on days with heavy construction trips, road closures, and game days/events. None of these measures, including responsibility, fair share allocations, enforceability and payment for costs to mitigate is included in the DEIR as CEQA requires. In addition, the cumulative impacts of the 755 S. Figueroa Street project have not been taken into account. Taken together, the cumulative environmental impacts of the Project will be much worse than analyzed.[4] 28 cont'd

f. Emergency Access/Egress

The Project proposes to take away the Plaza and this could have a harmful impact on emergency ingress/egress for the Property. There is no analysis in the DEIR of whether construction of the Project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as required by CEQA Guidelines Appendix G Section VIII(g). 29

g. Uncertain Project Description

Metro proposes to temporarily take the Property's Plaza, a small portion of it, or the area in front of the Project for a construction staging area. Inexplicably, the At-grade LRT Alternative and Underground Emphasis LRT Alternative would require 13,325 sf of the Plaza (Draft EIR p. 4.2-5 and 4.2-9) while the Locally Preferred Alternative would require a take of 10,233 square feet of the Plaza (Draft EIR p. 4.2-17). There is no explanation of the reasons for the different takings and the different impacts that may result, such as for noise and vibration. 30

The Revised Construction Design is not in the DEIR. While the Revised Construction Design is preferable to the unacceptable taking of the Plaza for a construction staging area, using Flower Street in front of the Plaza as a construction staging area will create vibration, noise and air quality emissions, as well as aesthetic impacts that have not been analyzed in the DEIR. Certainly, there are other portions along the proposed Project route where there would be more appropriate construction staging areas without the pedestrian traffic, vehicular traffic, sensitive hotel uses, commerce and other activities. 31

[4] Operational traffic is also faulty because it does not include the related projects of 755 S. Figueroa and Farmers Field. There may be additional significantly impacted intersections.

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Farther to the north along Flower Street are areas that are less dense, active, and have more open space so that construction impacts would be reduced significantly merely by moving the construction staging area away from the Plaza or the front of the Property. 31 cont'd

Metro has not made it known whether the Revised Construction Design is a new alternative, a variation of an alternative, or a new component of the Project since it appears nowhere in the DEIR. "An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." See *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185 at 192. It is uncertain where the construction impacts would occur and the DEIR does not analyze the worst-case construction impacts for the areas within the proposed temporary construction easements and staging areas, including the placement of a construction staging area within Flower Street adjacent to the Plaza. 32

h. Aesthetics: Full Visual Impact Not Shown

The Project Description and Noise Section do not adequately describe or show the visual impact of the construction barriers and noise attenuation features. Placement of construction worker parking, trailers and equipment on the Plaza, even temporarily, will create a new significant aesthetic impact. Nor is it clear how the operational design would be integrated with the adjacent properties or impact them. CEQA Guidelines Appendix G Section I(c) requires analysis and disclosure if the Project will degrade the existing visual character or quality of the site and its surroundings, and the Project Description does not give enough information about the appearance of the Project to satisfy this requirement. 33

2. Ownership Issues Of Concern

While the Owner's issues of concerns are woven throughout this letter with the legal inadequacies, these are the Owner's most important issues regarding the Project: 34

i. Protecting The Project's Plaza From Being Used As A Construction Easement

The Plaza is a focal point for the Property. It provides the main entrance to the building from Flower and Fifth Streets. It also is an area where tenants, workers and the public have lunch, meet people and generally activate the surrounding streetscape. The temporary construction easement proposed by the LPA and other alternatives would not only destroy this vibrant atmosphere, it would create many significant and unavoidable environmental impacts. Although Metro introduced a more 35

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attractive alternative plan, it has not been published yet or approved. The Owner strongly prefers not to have any construction staging area on or adjacent to the Property. If a construction staging area is necessary near the Property, the Revised Construction Design, with the same additional modifications, is much more acceptable. One modification that should be made is the removal of the stairwell temporary construction easement identified in the Revised Construction Design. It is simply not needed as there is no ADA access to the stairwell, and an easement to allow ADA access to an ADA inaccessible stairwell is not necessary. 35 cont'd

ii. Reasonable Range of Alternatives

As stated earlier in this letter, a reasonable range of alternatives has not been examined. One alternative not considered is an alternative construction staging area on Flower Street, north of 4th Street, or on 4th Street, under the 4th Street bridges. There, pedestrian traffic and urban density diminish greatly so that the environmental impacts of construction staging would be experienced by a considerably lower number of people. 36

iii. Flush Deck on Flower and 5th Streets

At the August 22, 2011 Revised Construction Design meeting, Metro staff introduced a raised deck elevation along the Flower Street right-of-way. The Owner strongly prefers decking flush with the street level to avoid ramping so as to avoid damage to cars entering the Property's parking garage, and more importantly, to avoid hazards to pedestrians crossing Flower and 5th Streets. 37

iv. Garage Ingress/Egress Congestion

The Property's sole vehicular entrance is located on Flower Street and it is already difficult to identify without construction barricades in front of it. Due to the inconveniences created by construction, including detours, dust, noise and roadway closures, the Property will likely experience a decline in cars parking in the garage and a commensurate drop in parking revenue. Metro must compensate the Owner for this loss, as well as any loss in tenancy as a result of five years of construction on or adjacent to the Property. 38 Further, with construction on Flower Street (and 5th Street at its intersection with Flower Street), there will be significant congestion and delay during the multi-year construction timeline. Cars exiting the Property's parking garage already face a difficult exit and queuing, especially when the Harbor Freeway is congested since this backs up traffic on Fifth Street. Additional congestion on Flower Street 39

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and Fifth Street will make egress more difficult and measures are required to minimize this significant impact. The Owner is also very concerned regarding the ramp to the new street level deck; more information needs to be provided to understand how the ramping system will work to ensure the protection of people and property. Please also see comments in Section 2.c.ii of this letter. 39 cont'd

v. Other Comments

All construction staging areas, fencing and barriers must be aesthetically pleasing and well maintained. Noise, as addressed earlier in this letter, must be minimized. The Owner prefers that more noise intensive construction activities occur during off-peak hours, such as during the early morning, nights, and on weekends, to minimize disruption to tenants and visitors on the Property. Since so many tenants and members of the public enjoy eating lunch outside in the Plaza, the Owner requests that loud construction activities be scheduled outside of the lunch hour. Last, while the construction schedule anticipates construction commencing in 2014, the Owner requests that construction not begin until that date, at the earliest. 40

3. Conclusion

The Owner is supportive of Metro's efforts with regard to the operational characteristics of the Project; however, construction impacts require additional analysis and legally adequate mitigation measures. The construction design proposed in the DEIR and the Reduced Construction Design would both have several significant and unavoidable environmental impacts that have not been analyzed or mitigated. The Revised Construction Design is the strong preference because it would likely avoid some of the significant environmental impacts and it would also cost Los Angeles County taxpayers considerably less than the more environmentally harmful options proposed in the DEIR. CEQA requires that the full environmental impacts of the Project be disclosed, analyzed and mitigated. 41

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We sincerely hope that Metro adequately addresses the modifications and concerns described in this letter. Without changes and additional enforceable and feasible mitigation measures, the Owner has no choice but to vigorously defend its Plaza and Property from the unwarranted proposed taking and the significant environmental impacts described in the DEIR.

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cont'd

Very truly yours,

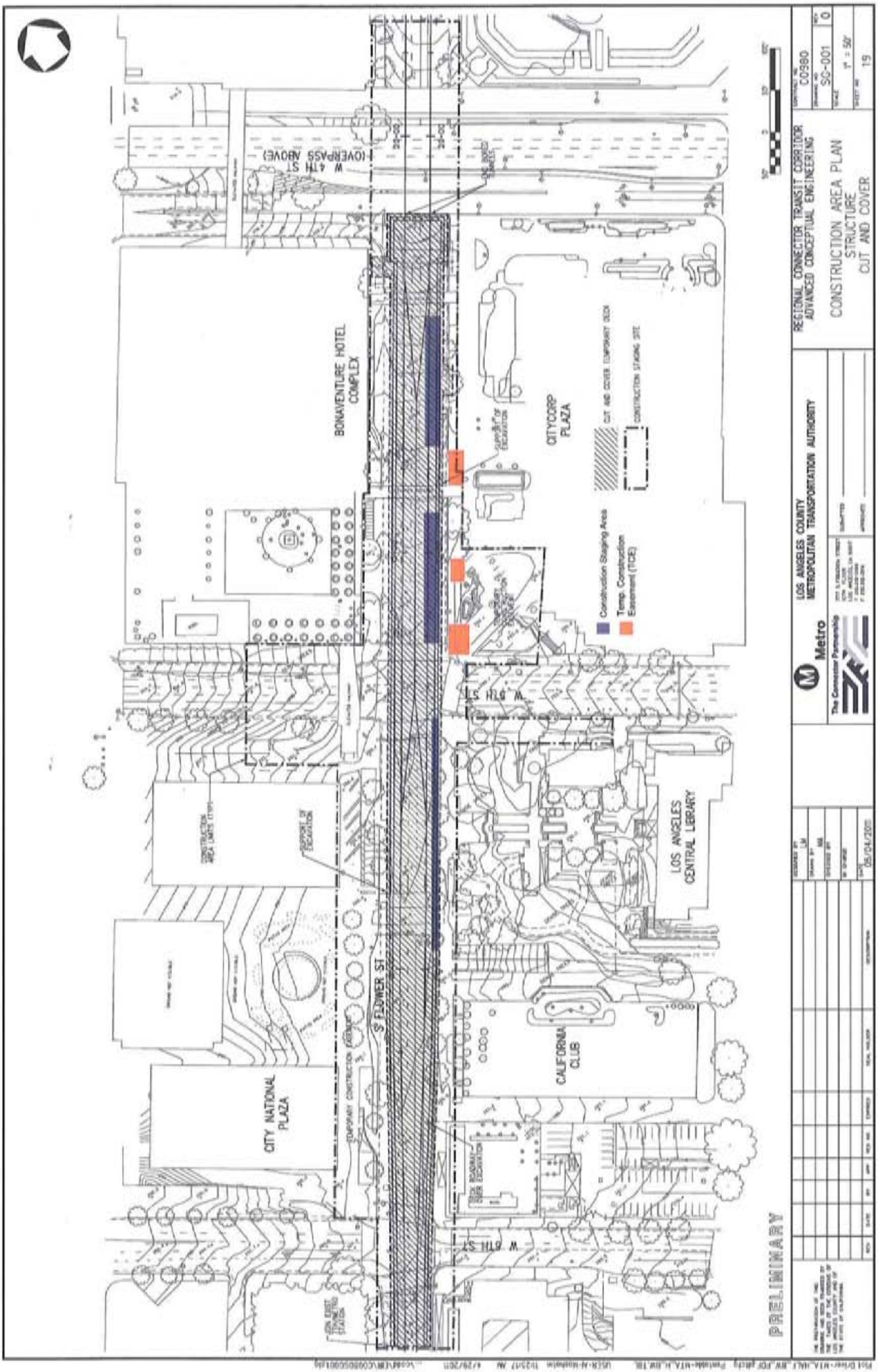
DLA Piper LLP (US)
Ryan M. Leaderman, Esq.

Admitted to practice in California

cc: Colin Shepherd
Jim Bonham
Leia Jensen
Linda Bozung, Esq.

Attachment: "Construction Area Plan Structure Cut and Cover" Site Plan

WEST\224389016.4


W 4TH ST
(OVERPASS ABOVE)
BONAVENTURE HOTEL COMPLEX
CITYCORP PLAZA
Construction Staging Area
Temp. Construction Easement (TCE)
CUT AND COVER TEMPORARY DECK
CONSTRUCTION STAGING SITE
W 5TH ST
LOS ANGELES CENTRAL LIBRARY
S FLOWER ST
CALIFORNIA CLUB
CITY NATIONAL PLAZA
W 6TH ST
PRELIMINARY
Metro
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADVANCED CONCEPTUAL ENGINEERING
CONSTRUCTION AREA PLAN
STRUCTURE
CUT AND COVER
C0980
SG-001
1" = 50'
19
05/04/2015

R-BU6

Responses to Comments from DLA Piper LLP on behalf of Hines Interest Limited Partnership, Leaderman, Ryan M.

Response to Comment R-BU6-1

Representation of Hines Interest Limited Partnership is noted. The public comment period for the Draft EIS/EIR was from September 3, 2010 to October 18, 2010. As written in the 2011 CEQA guidelines §15088.5(f)(2):

> *When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR.*

Metro accordingly requested that comments on the Supplemental EA/Recirculated Draft EIR Sections be limited to the recirculated content in the introduction, under the "Supplemental EA/Recirculated Draft EIR Sections Review Process" heading. However, responses to comments from DLA Piper LLP on the Supplemental EA/Recirculated Draft EIR Sections below are provided in the context of both the Supplemental EA/Recirculated Draft EIR Sections and the Draft EIS/EIR.

The Locally Preferred Alternative would not destroy the open air plaza. Only part of the plaza would be used, as shown in Table 4.2-5 and Appendix 1, Updated Locally Preferred Alternative Drawings, of this Final EIS/EIR. Metro plans to use the temporary construction easement on the property to preserve vehicle and pedestrian access throughout the duration of cut and cover activities on the adjacent portion of Flower Street (24 to 48 months, as indicated in Table 4.18-1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR), and to separate pedestrians from street work with K-rail and fences. It is unlikely that this type of temporary activity on the easement, intended to preserve safe pedestrian access to the property, would cause substantial disruption. The entire plaza would be restored to its pre-construction condition upon completion of construction activities.

Response to Comment R-BU6-2

The Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections propose a temporary construction easement across parcel APN 5151-018-017 as shown in Table 4.2-5 and the parcel data table in Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections. Due to refinements made to the Locally Preferred Alternative to reduce impacts since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of this proposed easement has been reduced from 10,233 square feet to 1,019 square feet, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative

Drawings, of this Final EIS/EIR. The proposed activities to be performed on temporary construction easements corridor-wide are discussed in Sections 2.4.1 and 4.18.2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. Metro plans to use the temporary construction easement on Hines property to preserve vehicle and pedestrian access, and to separate pedestrians from street work with K-rail and fences. Construction impacts and mitigation measures are identified in Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, including noise, air quality, vibration, hazardous materials, and safety. Additional detail is provided in the preceding sections of Chapter 4, Environmental Analysis, Consequences, and Mitigation, and in the document appendices. Following construction, the plaza would be restored to its pre-construction condition. Metro would ensure that any damage caused by construction is repaired. Metro would keep entrances and exits clear of obstructions, and would ensure that adequate emergency ingress and egress routes are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU6-3

Impacts associated with construction activities that would occur along Flower Street have been adequately analyzed in the EIS/EIR. Mitigation measures have been identified to reduce significant impacts under CEQA and adverse effects under NEPA to the maximum extent feasible. As indicated in Chapter 3, Transportation Impacts and Mitigation, of this Final EIS/EIR, construction-related impacts to traffic, transit, bicycle, and pedestrian circulation would remain significant, adverse, and unavoidable after mitigation. As discussed during the August 22, 2011 meeting, the size of the proposed easement across parcel APN 5151-018-017 has been reduced from 10,233 square feet to 1,019 square feet, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

Response to Comment R-BU6-4

Since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed easement across parcel APN 5151-018-017 has been reduced from 10,233 square feet to 1,019 square feet, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. None of the refinements made since publication of the Draft EIS/EIR would introduce new or increased traffic, air quality, or visual/aesthetic impacts. Noise impacts are described in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, but would be no worse at the Hines property than those analyzed in Section 4.7, Noise and Vibration, of the Draft EIS/EIR. Mitigation measures that will be implemented for the Locally Preferred Alternative are listed in the Mitigation Monitoring and Reporting Program, Chapter 8, of this Final EIS/EIR.

Response to Comment R-BU6-5

The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR have been prepared in compliance with NEPA and CEQA. These documents disclose environmental impacts and include adequate feasible measures to reduce or avoid significant impacts under CEQA and adverse effects under NEPA. Multiple build alternatives have been studied, as shown in Chapter 2, Alternatives Considered, of the Draft EIS/EIR and the

Supplemental EA/Recirculated Draft EIR Sections. Metro has identified the Locally Preferred Alternative as the environmentally superior alternative based on the analysis in the EIS/EIR, as noted in Section 2.6.3 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

The Supplemental EA/Recirculated Draft EIR Sections was prepared to formalize refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR, and to analyze how impacts would differ from those included in the Draft EIS/EIR. After mitigation, no new significant impacts under CEQA or adverse effects under NEPA would occur. Some adverse impacts are reduced by the refinements. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, Metro has made further refinements to the Locally Preferred Alternative that would reduce impacts, including reduction of the size of the proposed temporary construction easement across parcel APN 5151-018-017, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. A larger easement across the parcel was previously identified in Table 4.2-5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR, and in Table 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections. The Draft EIS/EIR was circulated for public review from September 3, 2010 to October 18, 2010, and the Supplemental EA/Recirculated Draft EIR Sections was circulated for public review from July 22, 2011 to September 6, 2011, thus granting the public an opportunity to comment on all of the project's impacts pursuant to CEQA Guidelines §15087, 15088, and 15088.5.

This Final EIS/EIR incorporates the public comments received on the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections along with responses, and presents the final mitigation measures for the Locally Preferred Alternative in the Mitigation Monitoring and Reporting Program (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU6-6

Items in the list are addressed individually in the responses below.

Response to Comment R-BU6-7

As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, consistency with the goals of the applicable local ordinances and implementation of best management practices (BMPs), would ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses as classified by the Federal Transit Administration (FTA). An adequate noise analysis was prepared for the proposed project. Updates to the noise and vibration analysis were included in Section 4.7 of the Supplemental EA/Recirculated Draft EIR Sections to address refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR, but no significant change in noise and vibration impacts to the referenced property resulted from these refinements.

Response to Comment R-BU6-8

As indicated in Section 4.7, Noise and Vibration, of the EIS/EIR, the following construction activities would have the most potential for construction-related noise and vibration impacts and were analyzed in the EIS/EIR: cut and cover construction of a tunnel at Flower Street; cut and

cover construction of the approach to the proposed 2nd/Hope Street station and cut and cover or sequential excavation method (SEM) construction of the station itself; construction of the proposed 2nd Street/Broadway station; construction of the proposed 1st/Central Avenue station; and tunnel boring machine tunneling beneath 2nd and Flower Streets and the insertion site northeast of the 1st and Alameda Streets intersection.

As indicated in Chapter 2, Alternatives Considered, of the Draft EIS/EIR, construction staging areas are locations needed for: equipment storage, construction materials delivery and storage, equipment assembly, materials production, dewatering activities, access roads, construction worker parking, temporary trailer offices, demolition staging, removal of excavated materials, and other related activities during the construction period. Actual construction would not occur in the construction staging areas. As indicated above, activities that would occur in the construction staging areas would be staging and storage, except at the Mangrove property where construction staging activities would involve removal of soil from tunneling operations. However, this activity at the Mangrove property would occur at a distance of 50 feet or greater from a sensitive receptor. Activities that would occur within the construction staging areas would not generate noise in excess of FTA construction noise criteria. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, reductions were made to the size of proposed temporary construction easements along Flower Street. Refer to Appendix 1, Locally Preferred Alternative Drawings, in Volume F-5 of this Final EIS/EIR.

In the vicinity of the CityCorp Plaza, cut and cover construction would occur along Flower Street, south of 4th Street, primarily within the road travel way. Temporary concrete decking would be placed over the cut immediately following the first part of excavation to allow traffic to pass above. After the concrete decking is in place, construction along Flower Street in the vicinity of the CityCorp Plaza would occur underground and would be covered by concrete decking. Therefore, the distance of 50 feet used in the noise analysis is appropriate.

As indicated in Section 4.7, Noise and Vibration, of this Final EIS/EIR, Typical types of BMPs the contractor will use to ensure construction-related noise levels do not exceed FTA construction noise criteria include, but are not limited to, the following:

- Placement of temporary noise barriers around the construction site;
- Placement of localized barriers around specific items of equipment or smaller areas;
- Use of alternative back-up alarms/warning procedures;
- Higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Therefore, noise barriers would be placed around the construction staging areas. A formal construction mitigation plan will be prepared for this project, which shall prohibit noise levels generated during construction from exceeding the FTA construction noise criteria. This could include prohibiting simultaneous operation of major pieces of construction equipment if

simultaneous operation exceeds FTA construction noise criteria. This has been incorporated as mitigation to avoid significant construction noise impacts under CEQA and adverse effects under NEPA.

Noise generated from haul trucks would not result in a significant noise impact under CEQA or adverse effect under NEPA. Haul trucks would operate on the roadways designated as haul routes for the project. It takes a doubling of traffic to result in a 3 dBA (noticeable noise increase to the human ear) increase in noise (USDOT 2006). The number of haul trucks that would be added during construction of the Locally Preferred Alternative would not result in a doubling of traffic along the roadways designated as haul routes, therefore, would not result in a noticeable increase in roadway noise.

Response to Comment R-BU6-9

Noise and vibration impacts associated with construction of the Locally Preferred Alternative were adequately analyzed in accordance with NEPA and CEQA in Section 4.7, Noise and Vibration, Appendix S, Noise and Vibration Technical Memorandum, and Appendix 2, Updated Locally Preferred Alternative Noise and Vibration Analysis, of this Final EIS/EIR. The discussion of construction-related noise impacts has been clarified in Section 4.7, Noise and Vibration, of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria and impacts would be less than significant under CEQA and not substantially adverse under NEPA. Consistency with the goals of the applicable local ordinances and implementation of BMPs, would also ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses. In addition, implementation of BMPs would also attenuate noise levels generated by construction equipment shown in Table 4.7-8 of this Final EIS/EIR. As indicated in Section 4.7.3.5 of this Final EIS/EIR, significant adverse vibration impacts under CEQA and NEPA associated with construction of the Locally Preferred Alternative could occur. Mitigation measures have been identified in Section 4.7, Noise and Vibration, and Chapter 8, the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, which would reduce vibration impacts to less than significant under CEQA and not substantially adverse under NEPA. Refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR for more detail regarding noise and vibration impacts associated with construction of the project.

As part of the project, Metro would require the construction contractor to be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. The code states that engaging in construction, repair, or excavation work, with any construction device, or job-site delivery of construction materials without a Police Commission-issued Variance or Permit would constitute a violation:

- Between the hours of 9:00 p.m. and 7:00 a.m.
- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, or at any time on any Sunday.
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

The threshold used, not the impacts of a previous project, determines whether or not construction of a project would result in a noise impact. Per CEQA Guidelines, each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. Since the lead agencies are Metro and the FTA, this analysis applies FTA criteria to determine the threshold for significance for noise and vibration impacts.

Response to Comment R-BU6-10

Metro and FTA, as the lead agencies for the Regional Connector project, are not required to use the *L.A. CEQA Thresholds Guide* when determining impacts associated with this project. Per CEQA Guidelines, each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. Since the FTA is one of the lead agencies for this project with adopted thresholds of significance, the noise and vibration analysis applied FTA criteria to determine the threshold for significance for noise and vibration impacts. The discussion regarding the threshold that was used to analyze construction noise impacts has been clarified in Section 4.7.3 of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria identified in Section 4.7.3 and impacts would be less than significant under CEQA and not substantially adverse under NEPA.

Response to Comment R-BU6-11

Please refer to Response to Comment R-BU6-9, above. Article 1 of Chapter XI, Noise Regulation of the Los Angeles Municipal Code, identifies general provisions of the noise regulation. Article 2 of the Los Angeles Municipal Code identifies noise regulations for special noise sources. As stated Section 112.03, Construction Noise, of the Los Angeles Municipal Code, "Noise due to construction or repair work shall be regulated as provided by Section 41.40 of this Code." As indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, construction would be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. Consistency with local land use plans and polices is discussed in Section 4.1, Land Use and Development, of this Final EIS/EIR.

Response to Comment R-BU6-12

Please refer to Responses to Comments R-BU6-8 and R-BU6-9, above. The discussion of construction-related noise impacts has been clarified in Section 4.7, Noise and Vibration, of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria identified in Section 4.7.3 and impacts would be less than significant under CEQA and not substantially adverse under NEPA. Noise impacts associated with construction of the Locally Preferred Alternative were determined not to be significant or substantially adverse and mitigation was not required. Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, indicated that consistency with the goals of the applicable local ordinances and implementation of BMPs, would ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses.

Metro would require the construction contractor to be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code. Regarding the discussion in Section 4.18, Construction Impacts, of cut and cover construction on the Metro Gold Line Eastside Extension, the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR indicated that similar progressive staging could be performed for the Regional Connector project and that schedules would be developed in coordination with the affected communities. The abovementioned discussion in Section 4.18 indicates that similar progressive staging could be performed for the project; not that similar progressive staging will be performed for the project. If similar progressive staging is pursued later, it would be done at the request of the affected city and/or community in order to shorten the duration of construction in the area and, thus, the duration of noise generated during construction. The statement in Section 4.18, Construction Impacts, does not change the conclusions in Section 4.7, Noise and Vibration.

Response to Comment R-BU6-13

As discussed in Section 4.3.4 of the Draft EIS/EIR, the Worksite Traffic Control Plan is specific to ensuring the availability of detours for traffic and pedestrian circulation during construction. The construction-related need for these detours and their potential impact has already been analyzed in Sections 3.3.5.1.2 and 3.3.5.1.4 of the Draft EIS/EIR and this Final EIS/EIR. This mitigation measure has been incorporated into Section 4.3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. As written in these sections, the measure includes specific features such as crossing guards and other temporary traffic controls in the vicinity of construction sites, haul routes, and other construction areas. The Worksite Traffic Control Plan and the Construction Mitigation Plan would incorporate the construction mitigation measures already identified in compliance with CEQA in Section 4.18, Construction Impacts, of the Draft EIS/EIR and committed to in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) together with community and Los Angeles Department of Transportation (LADOT) input. These measures would reduce construction impacts. Ongoing coordination with LADOT and the community would be needed to address the dynamic conditions and access needs in the community.

"Where feasible" and "to the extent practical" have been removed from this mitigation language. Restriping is not feasible at all locations (such as near fire hydrants and other restricted parking areas), and restriping would be performed in locations that are not precluded by such constraints. Mitigation measures in Sections 4.5.4.1 and 4.7.4.1 of the Draft EIS/EIR indicate that the construction contractor would be required to meet noise and air quality performance criteria (such as up-to-date engine emissions levels). These mitigation measures have been expanded and incorporated into Sections 4.5.4.2 and 4.7.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Under any scenario, sufficient feasible modifications would exist to allow the contractor to meet the performance criteria (South Coast Air Quality Management District standards for off-road emissions and FTA noise and vibration criteria) specified in mitigation measure numbers AQ-1, NV-1, NV-2, and NV-13 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Multiple types of equipment modification are listed as possible ways the construction contractor can meet the regulations. Regardless of

which of these modifications are implemented, these standards would be met. Selection of modifications would be performed prior to beginning construction.

Response to Comment R-BU6-14

Noise generated during construction of the Locally Preferred Alternative is not expected to result in a significant impact under CEQA or adverse effect under NEPA and mitigation is not required. The discussion of construction-related noise impacts has been clarified in Section 4.7, Noise and Vibration, of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria identified in Section 4.7.3 and impacts would be less than significant under CEQA and not substantially adverse under NEPA. As indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, consistency with the goals of the applicable local ordinances and implementation of BMPs, would ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses. Noise generated during construction of the Locally Preferred Alternative is not expected to exceed FTA's construction noise criteria. The purpose of mitigation measure number NV-13, as identified in Section 4.7.4.2 of this Final EIS/EIR, is to ensure FTA's construction noise criterion is not exceeded and to ensure that Metro is responsive to any noise complaints the public has during construction of the project. This mitigation measure demonstrates Metro's commitment to avoiding noise impacts associated with construction of the project. The filing of a noise complaint does not automatically indicate that FTA's construction noise criteria has been exceeded. However, this procedure is included to ensure the community that Metro is committed to open communication and responsiveness in implementing the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative included in Chapter 8 of this Final EIS/EIR.

Response to Comment R-BU6-15

As indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, noise generated during construction of the Locally Preferred Alternative would not result in a significant impact under CEQA or adverse effect under NEPA and mitigation is not required. The discussion of construction-related noise impacts has been clarified in Section 4.7, Noise and Vibration, of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria identified in Section 4.7.3 and impacts would be less than significant under CEQA and not substantially adverse under NEPA. As part of the project, the construction contractor would use BMPs to ensure that noise generated during construction would not exceed the FTA construction noise criteria. Typical types of BMPs the contractor can use include, but are not limited to, the following:

- Placement of temporary noise barriers around the construction site;
- Placement of localized barriers around specific items of equipment or smaller areas;
- Use of alternative back-up alarms/warning procedures;

- Higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Metro will work with businesses to minimize the use of aboveground construction equipment that are major sources noise during the lunch hour. To reduce community and neighborhood impacts, mitigation measure number CN-6 requires Metro to develop a construction mitigation plan with community input to directly address specific construction impacts in the project area. Metro shall establish and receive input from the Regional Connector Community Leadership Council (RCCLC) in developing the construction mitigation plan. The RCCLC shall consist of representatives from all parts of the alignment area. Metro shall work with the RCCLC in developing the outreach plan. In addition, mitigation measure number CN-7 requires that barriers be erected around construction areas. As part of this mitigation measure barriers shall be enhanced with culturally-relevant artwork, attractive design features, and advertisements for parking locations and businesses where possible. Signage shall also identify that businesses are open during construction. Community input shall be sought in determining artwork and design features. Refer to the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative included in Chapter 8 of this Final EIS/EIR for a list of mitigation measures that shall be implemented as part of the Locally Preferred Alternative.

Response to Comment R-BU6-16

The comment incorrectly summarizes vibration impacts identified in Section 4.7, Noise and Vibration, of the Draft EIS/EIR. FTA's criteria for minimum safe distances between construction equipment and buildings were used to determine the potential for construction-activity-induced vibration to damage buildings. FTA's criteria are based on the types of construction equipment and the category/physical composition of a building, not the frequency of the event. Refer to Table 4.7-4 and 4.7-5 of the Draft EIS/EIR and this Final EIS/EIR. Section 4.7, Noise and Vibration, of the Draft EIS/EIR indicated that sensitive or historic buildings within 21 feet of construction activities (involving large bulldozers and drill rigs) for all the LRT alternatives may be susceptible to vibration damage. The discussion of the potential for construction-activity-induced vibration to damage buildings has been clarified since publication of the Draft EIS/EIR. Please refer to Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

With regard to the physical structure of the building, construction-related vibration impacts to sensitive buildings (Category I, II, III, IV buildings as defined in Table 4.7-4 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR) and historic buildings located within 21 feet of the anticipated vibration-producing construction activity could be significant under CEQA and adverse under NEPA. As part of mitigation for the Locally Preferred Alternative, a pre-construction survey of all structures within 21 feet of the anticipated vibration-producing construction activity would be conducted to verify the building category, structural condition, and to provide a baseline for monitoring of ground-borne vibration and the potential for ground-borne vibration to cause damage. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified historic and sensitive

structures. With implementation of mitigation measures identified in Section 4.7.4.2.1 of this Final EIS/EIR, construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity would not be adverse.

Response to Comment R-BU6-17

The discussion of human annoyance caused by vibration from construction activities has been revised since publication of the Draft EIS/EIR. Since publication of the Draft EIS/EIR, additional noise and vibration studies were performed (Appendix 2, Updated Locally Preferred Alternative Noise and Vibration Analysis, of this Final EIS/EIR) to analyze refinements of the alignment in areas near sensitive land uses. Please refer to Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. The analysis of potential ground-borne vibration and ground-borne noise impacts to sensitive land uses during construction determined the level and frequency of vibration that would occur. Construction of the Locally Preferred Alternative would result in significant adverse ground-borne vibration and ground-borne noise impacts under NEPA and CEQA. With implementation of mitigation, ground-borne vibration and ground-borne noise impacts would be reduced to less than significant under CEQA and not substantially adverse under NEPA. Mitigation measures, such as maintaining distances greater than those provided in Table 4.7-5 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR to avoid potential construction-related vibration impacts and sequencing construction activities that produce vibration, such as demolition, excavation, earthmoving, and ground impacting so that the vibration sources do not operate simultaneously, have been included as mitigation since publication of the Draft EIS/EIR. Refer to Section 4.7.4.2 of this Final EIS/EIR for a complete list of mitigation measures for the Locally Preferred Alternative.

FTA's Transit Noise and Vibration Impact Assessment manual identifies adjustment factors for generalized predictions of ground-borne vibration and noise. One of those adjustment factors is a reduction in vibration for coupling to building foundation loss. The level of reduction is dependent on the structure of the building. The general rule is the heavier the building construction, the greater the coupling loss. Given that the majority of the buildings in the project area are medium to high-rise buildings, the buildings were assumed to be relatively heavy and a 10 dBA reduction in vibration was assumed.

Response to Comment R-BU6-18

Soil testing has been performed as part of the project development and preliminary engineering process. However, it is not possible to test all soil along the Locally Preferred Alternative alignment prior to construction. Contaminated soil and groundwater may be encountered during construction, as indicated in Sections 4.9.3.5.2 and 4.10.3.5 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measures to safely monitor and handle contaminated groundwater and soil were included in Sections 4.9.4 and 4.10.4 of the Draft EIS/EIR, and have been incorporated into Sections 4.9.4.2 and 4.10.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. These mitigation measures would ensure that contamination does not spread or pose hazards to nearby people or properties.

A Health Risk Assessment is included in Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR. In both Tables 5-8 and 5-11 of Appendix FF, Construction Impacts Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the highest application screening index shown is 4.44E-01 (scientific E notation for 0.444), which is well below the threshold of 1.0. This is consistent with the findings of no significant impact under CEQA or adverse effect under NEPA on pages 79 and 93, as well as the findings of the Health Risk Assessment in Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU6-19

Mitigation measures to address the excavation, storage, and removal of potentially contaminated soil are presented in Section 4.9.4.1 of the Draft EIS/EIR. These measures have been expanded in Section 4.9.4.2.1 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. In addition, Metro will comply with all applicable regulation in Section 4.9.1 of the Draft EIS/EIR and this Final EIS/EIR regarding the safe handling of contaminated soil, including the California Hazardous Waste Control Law and the Federal Occupational Safety and Health Act among others listed. Metro will not expose the public to hazardous materials.

Response to Comment R-BU6-20

The possibility for the accidental release of hazardous materials is analyzed in Sections 4.9.3.3.2 and 4.9.3.5.2 of the Draft EIS/EIR and this Final EIS/EIR. More detailed analysis is provided in Appendix U, Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, of the Draft EIS/EIR. Measures to mitigate these impacts below the level of significance are provided in Section 4.9.4.1 of the Draft EIS/EIR. These mitigation measures were incorporated into Section 4.9.4.2.1 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The EIS/EIR adequately discloses to the public the steps that will be taken to preserve public health. The contents of the Contaminated Soil/Groundwater Management Plan are summarized in Section 4.9.4.1 of the Draft EIS/EIR. With implementation of such a plan containing these procedures, Section 4.9.3.5.2 of both the Draft EIS/EIR and this Final EIS/EIR conclude that impacts of accidental release of hazardous materials would be less than significant under CEQA and not substantially adverse under NEPA.

Response to Comment R-BU6-21

Portions of the Health Risk Assessment are summarized in multiple parts of Chapter 4, Environmental Analysis, Consequences, and Mitigation, to support environmental impact analysis. The full Health Risk Assessment is provided in greater detail in Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR. The Health Risk Assessment in Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, would protect both construction workers and the public from hazards. The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR do not defer analysis. The mitigation measures in Section 4.9.4.1 of the Draft EIS/EIR calling for specific precautions to protect workers and the public from exposure to toxic gases, and specialized excavation methods to prevent explosion is supported by other mitigation measures in the same section, such as testing for subsurface gases, consistency with City of Los

Angeles Methane Standards, implementation of BMPs for the handling of hazardous materials, and other mitigation measures carried forward into Section 4.9.4.2.1 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU6-22

As indicated in Section 3.1.2.2 of Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, the Localized Significance Thresholds (LSTs) are adjusted based on the size of the construction area. The 25 meter assumption (approximately 82 feet) is a conservative estimate based on the size and location of the proposed construction areas shown in Table 4.2-5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. This assumption represents the smallest distance provided for LST analysis by the South Coast Air Quality Management District. No change in results occurs at distances shorter than 25 meters. Virtually all construction activities would occur more than 25 meters from buildings. Some of these proposed construction areas are now smaller and farther from buildings, including the proposed temporary construction easement on parcel APN 5151-018-017, due to refinements made since publication of the Supplemental EA/Recirculated Draft EIR Sections. Activities that would occur within 25 meters of surrounding buildings mostly consist of construction staging, but some in-street cut and cover construction would also occur. Construction activities are described in Section 4.18.2 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and Final EIS/EIR. As noted in Section 3.1.2.2 of Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR, even if a pollutant happened to exceed an LST, a significant impact/adverse effect would be avoided through mitigation. These mitigation measures are included in Section 4.5.4 of the Draft EIS/EIR and in Section 4.5.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU6-23

Operational emissions of the Locally Preferred Alternative are examined in Section 4.5.3.4.1 of the Draft EIS/EIR, and represent an improvement over the No Build Alternative. Electric trains do not emit aerially-deposited lead or other airborne pollutants. These types of pollutants are generated by vehicles that use diesel or leaded fuels, not electric vehicles such as light rail trains. As a result, the ventilation shafts would not emit significant adverse levels of airborne pollutants. Construction-related air quality impacts are discussed in Section 4.5.3.3 of the Draft EIS/EIR and this Final EIS/EIR, and mitigation measures are proposed in Section 4.5.4 of the Draft EIS/EIR. These mitigation measures have been expanded and incorporated into Section 4.5.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Further, more detailed analysis is provided in Appendix Q, Air Quality Impacts and Health Risk Assessment Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU6-24

Mitigation measures to safely monitor and handle contaminated groundwater and soil and prevent public exposure were included in Sections 4.9.4 and 4.10.4 of the Draft EIS/EIR, and

have been incorporated into Sections 4.9.4.2 and 4.10.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. These mitigation measures would ensure that contamination does not spread or pose hazards to nearby people or properties. The mitigation measures in Section 4.9.4.1 of the Draft EIS/EIR also call for specific precautions to protect workers and the public from exposure to toxic gases. This would curtail public exposure to any odors stemming from contaminated soil and groundwater. Excavation and tunnel boring activities are unlikely to disturb substantial amounts of vermin, especially to the extent that a public health hazard would occur.

Response to Comment R-BU6-25

Section 3.3.5.1.2 of the Draft EIS/EIR and this Final EIS/EIR states that construction would require temporary lane closures on Flower Street, which would temporarily reduce roadway capacity and modify existing traffic patterns. The Draft EIS/EIR does not specify that only one lane of Flower Street would be closed. Temporary closure of multiple lanes would be needed. Section 3.4 of the Draft EIS/EIR identifies mitigation measures to address the impacts of these temporary closures during construction, and these mitigation measures have been incorporated into Section 3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro would maintain access to the parking garage via existing or temporary driveways during business hours, as stated in mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program. Detours would be provided when necessary to maintain access to Flower and 5th Streets. As stated in mitigation measure number AQ-22, detour routes would be designed so that traffic does not idle for extended periods of time. It is Metro's goal to schedule haul truck trips at times when they would be the least disruptive to the community, as stated in mitigation measure number TR-2 in the Mitigation Monitoring and Reporting Program. The proposed downtown stadium is currently undergoing conceptual planning. It was not proposed at the time the Draft EIS/EIR was prepared, so the analysis assumes the current land uses for this site. The status of the stadium proposal is still preliminary. The conceptual planning is still ongoing, and no official proposal has been made. A reasonably foreseeable project is "any future project where the applicant has devoted significant time and financial resources to prepare for any regulatory review should be considered as probable future projects for the purposes of cumulative impact." (Gray v. County of Madera (2008)). The stadium had not met these criteria when the analysis in this EIS/EIR was performed, and has not yet begun preparations for regulatory review. Should this change, Metro would coordinate Regional Connector construction activities with the construction and operation of the stadium in order to minimize impacts. Even if the stadium was reasonably foreseeable, it would not change the impact determinations in this EIS/EIR.

Response to Comment R-BU6-26

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) contains mitigation measures to address these concerns. Mitigation measure number AQ-13 would prohibit heavy-duty trucks from idling for more than five minutes, both on-site and off-site. Metro would also employ California Air Resources Board anti-idling requirements during construction. Mitigation measure number TR-2 states that Metro will attempt to schedule truck trips at times that are least disruption to the community. Similarly, mitigation measure number AQ-15 states that Metro will attempt to limit construction

activity that affects traffic flow to off-peak hours. It is Metro's goal to minimize the impacts of haul trips during construction.

Response to Comment R-BU6-27

The No Build and TSM Alternatives would not involve light rail construction, including cross-overs. Metro analyzed multiple alternate crossover locations in the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections. The At-Grade Emphasis LRT Alternative would not have a crossover along its Flower Street route, as shown in Section 2.3.4.2 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and this Final EIS/EIR. The Underground Emphasis LRT Alternative would have an underground crossover partially underneath and to the north of 4th Street, not adjacent to the referenced property, as shown in Section 2.3.5.2 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and this Final EIS/EIR. The Locally Preferred Alternative would include a pocket track which could be used as a crossover between 5th and 4th Streets adjacent to the referenced property, but this would not change the impacts of the cut and cover construction proposed for this segment of the alignment in Figure 2-13 of the Draft EIS/EIR and Figure 2-16 of this Final EIS/EIR. Section 2.3.6.2 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR lists multiple possible locations for crossovers, and states that not all of them will necessarily be pursued. The potential impacts associated with all of the possible locations are analyzed in the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Flower Street from 4th Street to the existing light rail tunnel just south of 6th Street is highly constrained with existing subsurface tie-backs from previous construction projects that would interfere with tunneling activity. Tunneling activities using a tunnel boring machine south of 4th Street would not be practicable due to the need to remove tie-backs ahead of the tunnel boring machine. As such, cut and cover construction, as identified in Figure 2-13 of the Draft EIS/EIR and Figure 2-16 of this Final EIS/EIR, is continuing to be pursued in this location.

Response to Comment R-BU6-28

It should be noted that the cited text from the Supplemental EA/Recirculated Draft EIR Sections is a direct quotation of CEQA Guidelines §15088.5 regarding recirculation of EIRs. Section 4.19, Cumulative Impacts, of the Draft EIS/EIR and this Final EIS/EIR lists planned future projects within the project area. The proposed downtown stadium is currently undergoing conceptual planning. It was not proposed at the time the Draft EIS/EIR was prepared, so the analysis assumes the current land uses for this site. The status of the stadium proposal is still preliminary. The conceptual planning is still ongoing, and no official proposal has been made. A reasonably foreseeable project is "any future project where the applicant has devoted significant time and financial resources to prepare for any regulatory review should be considered as probable future projects for the purposes of cumulative impact." (Gray v. County of Madera (2008)). The stadium had not met these criteria when the analysis in this EIS/EIR was performed, and has not yet begun preparations for regulatory review. Should this change, Metro would coordinate Regional Connector construction activities with the construction and operation of the stadium in order to minimize impacts. This would apply to any nearby construction project entitled after completion of the EIS/EIR. Even if the stadium was reasonably foreseeable, it would not change the impact determinations in this EIS/EIR. Traffic management and construction mitigation is identified in Section 4.3.4 of the Draft EIS/EIR to

minimize disruption and limit construction activities during special events. This mitigation has been incorporated into Section 4.3.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The ongoing project at 755 South Figueroa Street is a renovation of existing retail space, which does not involve an expansion or change of land use, which is a criteria used to compile Table 4.19-1 of the Draft EIS/EIR and this Final EIS/EIR. It is scheduled to be completed prior to the commencement of Regional Connector construction. The cumulative operational impacts of the renovation are not anticipated to differ substantially from those of the existing shopping center. However, the shopping center has been added to both Table 4.19-1 and Figure 4.19-1.

Response to Comment R-BU6-29

The Draft EIS/EIR identified a temporary construction easement across the referenced plaza during construction, after which the plaza would be returned to its pre-construction condition. This easement is shown in Table 4.2-5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and Table 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections. Due to refinements made to the Locally Preferred Alternative since publication of the Supplemental EA/Recirculated Draft EIR Sections, the size of the proposed easement has been reduced, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Metro would keep entrances and exits clear of obstructions, and would ensure that adequate emergency ingress and egress routes are maintained at all times during construction, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and mitigation measure number SS-15 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). The Regional Connector would not interfere with an adopted emergency response plan or emergency evacuation plan, as analyzed in Section 4.15, Safety and Security, of the Draft EIS/EIR and this Final EIS/EIR. Section 4.15.1 of the Draft EIS/EIR and this Final EIS/EIR notes this CEQA guideline as part of the regulatory framework for analysis. Additional details about this analysis are provided in Appendix CC, Safety and Security Technical Memorandum, of the Draft EIS/EIR.

Response to Comment R-BU6-30

A 13,325 square foot easement is identified for all three alternatives in the parcel data tables in Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR. It is Metro's goal to minimize the use of private property. Consistent with this goal, refinements made since publication of the Draft EIS/EIR resulted in a reduction in the size of the proposed easement, to 10,233, as shown in Figure 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Since the Metro Board of Directors designated the Fully Underground LRT Alternative as the Locally Preferred Alternative on October 28, 2010, these project refinements have been focused solely on the Locally Preferred Alternative. Later refinements made to the Locally Preferred Alternative since publication of the Supplemental EA/Recirculated Draft EIR Sections reduced the size of the proposed easement to 1,019 square feet, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. This further reduces the potential construction impacts of this easement below those identified in Section 4.18.3.4 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU6-31

The reduced size of the construction staging area across parcel APN 5151-018-017 is reflected in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR as a refinement made since publication of the Supplemental EA/Recirculated Draft EIR Sections. This represents the minimum amount of off-street space needed in this location to provide adequate staging and access for excavation activities in the vicinity of 5th and Flower Streets. A construction staging area has been identified on a portion of the other open plaza in this area (APN 5151-023-400), as shown in Table 4.2-5 and the parcel data table in Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR, and Table 4.2-5 and Appendix II, Conceptual Drawings for Build Alternatives Analyzed in the Draft EIS/EIR, of the Draft EIS/EIR and this Final EIS/EIR. This easement has also been reduced since publication of the Supplemental EA/Recirculated Draft EIR Sections. All other properties along the alignment in the vicinity of 5th and Flower Streets are occupied by aboveground structures or precluded from use by Section 4(f) of the USDOT Act of 1966, thus rendering them unsuitable for temporary construction easements. Construction staging is also proposed farther north along Flower Street in the vicinity of 2nd/Hope Station, in addition to the two easements at 5th and Flower Streets.

Response to Comment R-BU6-32

The reduced construction easement has been incorporated as part of the Locally Preferred Alternative, as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. This is a smaller easement with fewer impacts than the one identified in the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections. The Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections analyzed the worst-case construction easement scenario, and these impacts have been reduced due to refinements made to the Locally Preferred Alternative since their publication.

Response to Comment R-BU6-33

Visual and aesthetic impacts associated with construction of the Regional Connector project are discussed in Section 4.4, Visual and Aesthetic Impacts, of the Draft EIS/EIR and this Final EIS/EIR and were analyzed in accordance with NEPA and CEQA guidelines. No significant visual and aesthetic impacts would occur for the Locally Preferred Alternative.

Response to Comment R-BU6-34

The comments in this list are addressed individually in the responses below.

Response to Comment R-BU6-35

The 1,019 square foot easement adjacent to Flower Street would still allow the plaza to function as a meeting place and lunch area as described in the comment. The size of the easement has been reduced since publication of the Supplemental EA/Recirculated Draft EIR Sections, where a 10,233 square foot easement was proposed. The reduced easement has been incorporated into the Locally Preferred Alternative as shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Owner preference not to have a construction staging area on or adjacent to the property is noted. It is Metro's goal to minimize construction impacts

and the use of public property, and the reduction in size of the proposed easement is a step in that direction. The recommendation to remove the stairwell from the temporary construction easement is noted. Metro would ensure that adequate Americans with Disabilities Act (ADA) access is provided.

Response to Comment R-BU6-36

Please see Response to Comment R-BU6-27 for information regarding the range of alternatives studied, and how they differ in the area adjacent to the owner's property. As shown in Figure 2-14 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections (Figure 2-16 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR), the Flower Street alignment from 4th Street northward would be constructed by tunnel boring machine so as to minimize the extent of cut and cover construction. Construction staging areas from 4th Street northward would not allow the necessary access to the Flower Street cut and cover excavation areas. As such, temporary construction easements south of 4th Street, in the vicinity of the 5th and Flower intersection are needed.

Response to Comment R-BU6-37

Decking of the construction area is a necessary component of cut and cover construction to maintain vehicular and pedestrian access throughout construction. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks. Any decking configurations would require construction of ADA-compliant ramps and accesses, as well as modifications to vehicular access points to the garages and driveway along Flower Street, as indicated in Section 4.15.4.2.1 of this Final EIS/EIR and Section 4.18.2.5.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. As part of mitigation for pedestrian circulation impacts during construction, safe pedestrian detours with handrails, fences, K-rail, canopies, and walkways shall be provided as needed. Refer to Section 3.4.2 and Chapter 8 of this Final EIS/EIR for mitigation measures identified to reduce construction-related impacts, to the extent feasible, to traffic, transit, bicycle, and pedestrian circulation.

Preference for flush decking is noted. Decking configurations will be determined during the final design phase of the project, based on cost, schedule, and construction activity phasing considerations.

Response to Comment R-BU6-38

As stated in Section 3.4.1.4 of the Draft EIS/EIR, Section 3.4.2 of this Final EIS/EIR, and mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), access to businesses would be maintained during business operating hours throughout construction. Request for compensation is noted, but no businesses would lose access, including the parking garage. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 provides compensation for takings and easements, as well as relocation for any displaced businesses and residents. No displacements, takings, or easements would occur on the referenced property; therefore, the Uniform Act would not apply. Both automobile and pedestrian access would be maintained. As indicated in mitigation measure numbers CN-1 and CN-7 in the Mitigation

Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), signage shall be provided should detours be needed in the vicinity of the garage.

Response to Comment R-BU6-39

Traffic impacts associated with construction of the Regional Connector project are discussed in Chapter 3, Transportation Impacts and Mitigation, of this Final EIS/EIR. As indicated in Chapter 3, construction-related impacts to traffic, transit, bicycle, and pedestrian circulation would be significant and adverse. Mitigation measures, such as maintenance of traffic flow, maintenance of access to adjacent businesses and residences via existing or temporary driveways, and development of Worksite Traffic Control Plans, have been identified to reduce construction-related impacts. However, even with implementation of mitigation, construction-related impacts to traffic, transit, bicycle, and pedestrian circulation would remain significant, adverse, and unavoidable.

Any temporary roadway configurations needed during construction will be reviewed in coordination with LADOT for compliance with roadway standards and will be designed to meet vehicle standards, which would ensure the protection of people and property. Any decking configurations would be designed to accommodate the undercarriage and overhead clearances of vehicles using the driveways, garages, and loading docks. Metro would coordinate with garage owners to minimize inconvenience and queuing as a result of construction activities.

Response to Comment R-BU6-40

Mitigation measure number CN-7 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) states that barriers would be enhanced with culturally-relevant artwork, attractive design features, and advertisements for parking locations and businesses where possible. Mitigation measure number AQ-15 states that Metro will attempt to limit construction activity that affects traffic flow to off-peak hours. Daytime construction activities will be necessary to minimize noticeable vibration at nighttime as indicated in mitigation measure number NV-7. The request to begin construction no earlier than 2014 is noted.

Response to Comment R-BU6-41

Metro appreciates the owner's support. Construction impacts and mitigation are adequately analyzed in the Section 4.18, Construction Impacts, of the Draft EIS/EIR and this Final EIS/EIR, as indicated in the preceding responses to comments above. All significant impacts and adverse effects of the project have been analyzed and disclosed, and adequate mitigation measures to address these impacts have been incorporated into the project in accordance with NEPA and CEQA. As shown in Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR, the proposed temporary construction easement across parcel APN 5151-018-017 has been reduced in size since publication of the Supplemental EA/Recirculated Draft EIR Sections. All comments in this letter are adequately addressed in the responses above.

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September 6, 2011

VIA EMAIL AND FEDEX

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Re: Regional Connector Transit Corridor Project – Supplemental Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Roybal Saltarelli and Mr. Tellis:

We are writing on behalf of our client, Japanese Village, LLC, regarding the Supplemental Environmental Assessment/Recirculated Draft Environmental Impact Report (RDEIR) for the Regional Connector Transit Corridor Project (Project) published on July 22, 2011. Metro published this document after substantial changes were made to the Project's alignment after the Draft EIS/EIR's original publication in 2010, including a new impact to Japanese Village Plaza by proposing to tunnel under its buildings. Though our client and Metro staff spent several months in an effort to identify the impacts of this new route on our client's property, Metro advised in June that it was unable to provide detailed information to Japanese Village Plaza about the depth and location of the proposed tunnel. Accordingly, as detailed in our letter dated July 1, 2011, to Mr. Ronald Stamm, which is attached as Attachment C, recirculation was required under CEQA and NEPA because Metro's changes to the alignment after the Draft EIS/EIR was published eliminated the public's opportunity to comment on these changes, which would violate both NEPA and CEQA. In an apparent attempt to correct this deficiency, Metro has now revised select sections of the Draft EIS/EIR, and republished them as a RDEIR. Despite Metro's effort to cure these deficiencies, this environmental review process continues to be permeated with errors and deficiencies under both NEPA and CEQA, and does not respond to or resolve the points raised in our July 1, 2011, letter, which is incorporated herein by this reference.

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While Japanese Village continues to have concerns about the RDEIR's evaluation of impacts to Japanese Village Plaza and the surrounding Little Tokyo community, Japanese Village Plaza's ownership continues to be a strong supporter of safe and reliable public transit that is compatible with the surrounding community. Japanese Village also appreciates Metro's outreach efforts in the Little Tokyo community to explore alternatives and mitigation measures for the impacts identified through its environmental review. It is essential, however, that the environmental review process be correct and accurate for the project to move forward. 1 cont'd

One key error is that the RDEIR incorrectly defines the impacts to Japanese Village Plaza as an easement, as opposed to a partial take of the property. While Metro anticipates tunneling under large portions of Japanese Village Plaza, it will be doing so at a much shallower depth than anywhere else along the alignment outside of a public right-of-way. As the alignment passes under Japanese Village Plaza it will be between only approximately 20 and 25 feet below grade, and only 13 to 15 feet below its existing foundations. In comparison, when the tunnel passes beneath the Broad Museum, it will be over 50 feet below grade. The consequence of this is to restrict substantially the future development options at Japanese Village Plaza. These impacts are not addressed in the RDEIR. Also, as set forth in the letter from GeoDesign Inc. (Attachment C) developing such a shallow tunnel under Japanese Plaza's existing multi-story parking garage presents unique impacts to the existing structures that are not adequately addressed. 2

In summary, and as set forth in detail in Attachment B, neither the Draft EIS/EIR nor the RDEIR adequately: (1) describe the Project so that it can be understood by the reader; (2) present the full scope of impacts from Metro's massive building campaign and piecemeal the project's impacts; (3) describe potential mitigation measures that would reduce the Project's significant impacts; or (4) analyze the Project's significant environmental impacts. The public deserves a complete and comprehensible description of the Project and its alternatives, an accurate analysis of the environmental impacts involved, and proposed mitigation to fully address the Project's significant impacts. 3

We appreciate your consideration of these issues. Please do not hesitate to contact me should you wish to discuss these matters further at (213) 485-1234.

Very truly yours,

Robert D. Crockett
of LATHAM & WATKINS LLP

cc: Ms. Martha Welbourne
Mr. Calvin Hollis
Ms. Velma Marshall
Mr. Robin Blair
Mr. Ronald Stamm
Mr. Ray Sosa

Ms. Laura Cornejo
Mr. David Singelyn
Sara Vogt-Lowell, Esq.
Lucinda Starrett, Esq.
Benjamin J. Hanelin, Esq.

Attachment A

ATTACHMENT A

The RDEIR Still Fails To Provide A Proper Project Description

The RDEIR's project description remains fundamentally flawed because it provides a range of development options that misleads the public and obscures the Project's actual environmental impacts from meaningful review. For an environmental document to evaluate the environmental ramifications of a project adequately, it must first provide an accurate description of the project itself. "[A]n accurate stable and finite project description is the sine qua non of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) Furthermore "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity." (*Silveira v. Las Gallinas Valley Sanitary District* (1997) 54 Cal.App.4th 980, 990 (citation omitted).)

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While extensive detail in a project description is not always necessary, CEQA mandates that an EIR describe a proposed project with sufficient detail and accuracy to permit informed decision making. (See CEQA Guidelines, § 15124.) Thus, where a project description is inaccurate or misleading, a CEQA document's analysis of significant environmental impacts is rendered inherently unreliable. As discussed below, the DEIR fails to meet this basic standard.

Here, the RDEIR provides a complicated set of distinct "alternatives" and explains that any one of these options could be the ultimate Project approved. (RDEIR at 2-8 to 2-35.) However, there appears to be no legitimate reason why, at this point, Metro could not have designated the "Fully Underground LRT Alternative" as the Project being proposed. The RDEIR admits that "[o]n October 28, 2010, the Metro Board of Directors concurred with staff's recommendation to designate the Fully Underground LRT Alternative as the [Locally Preferred Alternative]." (RDEIR at 2-29.) Despite this designation occurring almost one year ago, the "Fully Underground LRT Alternative" is buried as the fifth option presented in the RDEIR's "Alternatives Considered" section. This requires the reader to wade through the document's discussions of four completely different "alternatives" that Metro appears to have no intention of approving.

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This confusion is compounded by the complete lack of a defined project area in the Draft EIS/EIR. As we noted previously, the Draft EIS/EIR lacks a "precise location and boundaries" map and lacks a "general description of the project's technical characteristics." (Cal. Admin. Code, tit. 14, § 15124.) Chapter 2, Alternatives Considered, attempts this with a series of figures, but the complete lack of a single project and focus on the development of alternatives results in failure. For example, Figure 2-1 contains a map that combines three apparent alternative alignments. Figure 2-3 portrays the TSM Alternative,[1] Figure 2-8 the At-Grade Emphasis LRT Alternative, Figure 2-9 the Underground Emphasis LRT Alternative, Figure 2-10 the Fully Underground LRT Alternative, with variations of these at Figures 2-12, and 2-13. The technical appendices to the Draft EIS/EIR, which are not included in the RDEIR, make no

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[1] The TSM is merely a Transportation Systems Management Alternative, which proposes only the construction of bus stops. (Draft EIS/EIR, App. FF, at 15.)

attempt to state a preferred project, much less describe the June 2011 Proposal. (Draft EIS/EIR Technical Appendix II, foldout: "Regional Connector Transit Corridor Draft Conceptual Plans and Profiles: December 18, 2009.")

6 cont'd

Thus, there is not a single route described as the project from which alternatives may be judged. CEQA requires that an EIR identify feasible alternatives that could avoid or substantially lessen the project's significant environmental impacts. (Pub. Res. Code, §§ 21002, 21002.1, subd. (a), 21100, subd. (b)(4).) The Draft EIS/EIR here impermissibly skips the project definition although Metro, as "the lead agency plays a pivotal role in defining the scope of environmental review, lending its expertise in areas within its particular domain, and in ultimately recommending the most environmentally sound alternative." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) Rather than define a proposed project, from which many key CEQA and NEPA obligations then build upon, the agency has delayed this to a later point in time. (*See* Draft EIS/EIR, at 2-1 ["Depending on which alternative is selected…"].) By defining a range of alternatives only, and not a precise project, Metro has also violated CEQA's and NEPA's respective goals of an informed public. (Pub. Res. Code, § 21003(b) [EIRs should be organized and written in a manner that will make them "meaningful and useful to decision-makers and to the public."]; *Berkeley Keep Jets Over the Bay Committee v. Bd. of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355 ["A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision making and informed public participation."]; (40 C.F.R. §§1502.4, subd. (a), 1502.10 [an EIS must "properly define[]" the proposed project and provide a "clear presentation of the alternatives including the proposed action."]; *id.* § 1502.8. [an EIS . . . must . . . "be written [. . .] so that decisionmakers and the public can readily understand [it]."].)

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Metro does not satisfy CEQA's requirement for "precise location and boundaries" of a project by providing location and boundaries for three to five alternatives. One cannot measure an alternative's strengths and weaknesses without a project description or a defined project. "[A]n accurate stable and finite project description is the sine qua non of an informative and legally sufficient EIR." (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 ("*San Joaquin Raptor II*") (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) Furthermore "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity." (*Silveira v. Las Gallinas Valley Sanitary District* (1997) 54 Cal.App.4th 980, 990 (citation omitted).) Under NEPA, the "EIS process should serve both to alert the public of what the agency intends to do and give the public enough information to be able to participate intelligently in the EIS process." (*California v. Block* (9th Cir. 1982) 690 F.2d 753, 772.) Thus, an EIS must "properly define[]" (40 C.F.R. §1502.4(a)) the proposed project and provide a "clear presentation of the alternatives including the proposed action." (*Id.*, § 1502.10.)

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The RDEIR resembles the problems presented in *County of Inyo v. City of Los Angeles*. The project there was defined merely as an increase in water pumping rates from subsurface water in Owens Valley. The EIR, however, discussed far broader concepts, such as canal work, a conservation program, reduction of stockwater and reservoir operations. (71 Cal.App.3d, at 190.)

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> A curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative) and weigh other alternatives in the balance. An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.

(*Id*., at 192-93.) In *County of Inyo*, the "incessant shifts among different project descriptions do vitiate the City's EIR process as a vehicle for intelligent public participation." (*Id*., at 197.) "The defined project and not some different project must be the EIR's bona fide subject." (*Id.*, at 199.) "Because the Final EIR['s . . .] list of alternatives is not tied to a reasonably conceived or consistently viewed project, the Los Angeles EIR does not comply with CEQA's demand for meaningful alternatives." (*Id*., at 203.) Here, too, the document's failure to define a project has utterly frustrated the public's ability to participate in the environmental review process.

9 cont'd

There Is No Environmentally Superior Alternative Identified

The RDEIR again fails to identify an environmentally superior alternative – one of CEQA's most basic requirements. CEQA requires an EIR to identify and discuss feasible alternatives to a proposed project. (Pub. Res. Code, §§ 21002, 21002.1(a), 21061, 21100(b)(4).) Of the alternatives considered, the CEQA Guidelines require that an EIR identify the "environmentally superior alternative," which assists decision makers in considering a project approval. (See Cal. Admin. Code, tit. 14, §§ 15126.6(a), (e)(2).)

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As before, for those sections of the Draft EIS/EIR that have been recirculated, the RDEIR only describes the alternatives considered, but it does not identify an environmentally superior alternative that would minimize the Regional Connector's significant environmental effects. (*See* RDEIR at 2-1 to 2-50.) In one instance (Displacement and Relocation), there is a table that allows the reader to compare the impacts across the five alternatives. (RDEIR at 4.2-5.) However, this type of comparison is never repeated, and the reader is left to sort through hundreds of pages to figure out which alternative has fewer impacts in any given impact area. Under CEQA, a proper analysis of alternatives is essential to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. (Pub. Res. Code, § 21002; Cal. Admin. Code, tit. 14, §§ 15002(a)(3), 15021(a)(2).)

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Ultimately, the RDEIR concludes that "[b]ased on the results of the technical analysis Draft EIR Sections, the LPA, as refined, is the environmentally superior alternative." (RDEIR at 2.6.3) However, this is simply a naked conclusion; there is no discussion as to how this conclusion was reached. The RDEIR's and Draft EIS/EIR's failure to disclose an environmentally superior alternative is prejudicial and violates CEQA.

The Project Continues To Be Piecemealed

No effort has been made in the RDEIR to analyze the full impact of the Project despite its own identification of the need to relocate numerous buildings and structures and future development opportunities on property that Metro is acquiring for construction purposes. The RDEIR fails to identify or analyze these potential impacts. (*See* RDEIR at 4.2-26 ["Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure, or necessary for access would be included in Metro Joint Development Program for possible development. Any development shall be environmentally and separately cleared from this project and shall undergo its own community input process."], 4.2-17 to 4.2-25. [discussing partial and full takes, which would require relocation of existing businesses].) This is improper under both NEPA and CEQA, and it is not enough that these projects, which will only occur because of the Regional Connector, will undergo separate environmental review. 12

Under NEPA, connected actions must be considered together in the same EIS. (40 C.F.R. § 1508.25; *Thomas v. Peterson* (9th Cir. 1985) 753 F.2d 754, 758-9.) Connected actions are those that (1) "[a]utomatically trigger" other actions potentially requiring EISs; (2) "cannot or will not proceed unless other actions are taken previously or simultaneously;" or (3) are "interdependent parts of a larger action and depend on the larger action for their justification." (40 C.F.R. §1508.25.) Courts apply an "independent utility" test under NEPA to "determine whether multiple actions are so connected as to mandate consideration in a single EIS." (*Great Basin Mine Watch v. Hankins* (9th Cir. 2006) 456 F.3d 955, 969.) Similarly, under CEQA a public agency "may not divide a single project into smaller individual projects to avoid its responsibility to consider the environmental impacts of the project as a whole." (*Sierra Club v. West Side Irrigation Dist.* (2005) 128 Cal.App.4th 690, 698.) An accurate EIR must ensure that "environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences." (*Bozung v. Local Agency Formation Comm'n of Ventura County* (1975) 13 Cal.3d 263, 283-84.) Accordingly, "an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) *it is a reasonably foreseeable consequence of the initial project*; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.) 13

The redevelopment of property not required to operate the Regional Connector is a connected action under NEPA and a "reasonably foreseeable consequence of" the Project under CEQA. But for Metro's acquisition of these sites for the Regional Connector, there would be no property to contribute to the "Metro Joint Development Program for possible development." (Draft EIS/EIR, at 4-28.) Similarly, because Metro recognizes now that certain property it is acquiring for the Regional Connector will not be necessary for its operation and it intends to contribute it to its development program, it is reasonably foreseeable that these properties will be developed by Metro. Impacts from this development should have been included in the Draft EIS/EIR and, now, in the RDEIR. 14

The RDEIS Does Not Accurately Analyze Impacts To Or Around Japanese Village Plaza

Noise and Vibration Impacts Are Improperly Addressed. Construction is estimated to last for up to four years at the 1st/Central Avenue Station. (RDEIR at 4.7-31 [Table 4.7-15].) Yet, the RDEIR concludes that construction noise and vibration impacts would be less than significant at Japanese Village Plaza as a result of compliance with local ordinances and implementation of vague BMP, such as portable noise sheds, or temporary noise barriers. (RDEIR at 4.7-40.) 15

However, this conclusion appears to be based on incorrect assumptions regarding the proximity of construction to Japanese Village Plaza generally, and its parking garage specifically. The report prepared by Wilson, Ihrig & Associates assumes that "none of the buildings [at Japanese Village Plaza] fall within the applicable screening distances for cut and cover construction, and thus there would be no vibration impacts from cut and cover construction." (March 15, 2011, Memo. at 4.) Figure 2-18, however, shows cut and cover construction occurring within only a feet at most of the Japanese Village Plaza property line and its multi-story garage. Even a cursory review shows that this is far closer than the more than 15 feet assumed in the Wilson, Ihrig & Associates' March 15, 2011, Memorandum. Independent expert analysis shows that the projected levels of vibration expected at Japanese Village Plaza's garage "approaches and/or exceeds the potentially damaging threshold specified in Table 4.7-4." (*See* Attachment B at 4.) Vibration impacts will surely be much greater at the very short distance shown in the RDEIR. This analysis, therefore, must be redone, and the actual significance of impacts determined. 16

The Wilson, Ihrig & Associates March 15, 2011, Memorandum also predicts that the tunnel boring machine activities would "exceed the annoyance criteria" for vibrations. (March 15, 2011, Memo. at 5.) This is a far more liberal determination than that of an independent expert, who finds that the vibration will exceed annoyance, and exceeds the potentially damaging threshold. (*See* Attachment B at 4.) Yet the mitigation measures proposed in the Wilson, Ihrig & Associates March 15, 2011, Memorandum do not relate to damage to buildings; they are intended only to mollify an impacted occupant. (March 15, 2011, Memo. at 5.) Given the significant risks posed to building integrity, these mitigation measures are not sufficient to reduce this potential impact to below significant levels. (*See* Attachment B at 4-5.) 17

The RDEIR Does Not Address New Significant Impacts To Geotechnical Hazards, Subsidence, Or Traffic. The RDEIR concedes that there could be new impacts as a result of the realignment changes, but does not analyze the potential for new impacts to geotechnical hazards, subsidence, or traffic. The purpose of recirculation is to give the public and public agencies an opportunity to evaluate the Project's new alignment and new potential impacts, and the validity of the conclusions that Metro has drawn. *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 121. The RDEIR's failure to evaluate, let alone identify, the potential for new impacts as a result of the alignment changes is clear error. 18

For example, Section 4.9 of the Draft EIS/EIR states:

> [T]he project area would be susceptible to the potential spread of

> contaminated groundwater and release of subsurface oilfield gases. Also, the Fully Underground LRT Alternative would require more property acquisition and demolition of existing structures, which could heighten the risk of potential release of asbestos fibers and lead-based paint particles.

(Draft EIS/EIR, § 4.9.3.5.2 [Hazardous Materials].) The RDEIR does not address this impact even though the Draft EIS/EIR designates at least one property within the block under which the alignment will now pass as a "Property of Concern" with respect to "Known or Suspected Hazardous Materials in Soil and/or Groundwater within 0.25 Miles of Proposed Alignments." (See Draft EIS/EIR, at 4-136 [Figure 4.9-3].) 18 cont'd

The Draft EIS/EIR also concludes that:

> "The proposed tunneling would have the potential for adverse impacts related to ground settlement and differential settlement immediately above the alignments as well as adjacent structures including the historical buildings. <u>In general, settlement is greatest at the ground surface directly above the alignment and decreases away from the centerline.</u>"

(Draft EIS/EIR, § 5.5.1 [Appendix U, Geotechnical, Subsurface and Seismic Hazards] [underline added].) While admitting that subsidence impacts are site-specific, the RDEIR does not contain even an initial review of the Project's potential to cause significant impacts from ground settlement under the new Project alignment.

Lastly, the RDEIR fails to analyze changed and potentially increased construction impacts on traffic, parking and transportation was based on the new alignment that would cross Central Avenue mid-block. The Draft EIS/EIR's analysis of construction impacts in general, and on traffic, parking, and transportation specifically, was all based on an abandoned alignment. Shifting the alignment to the north in this heavily developed area will create new significant impacts not previously analyzed. The RDEIR does not address this. 19

Traffic and parking impact analysis continue to be deficient, too. The RDEIR states that "the Regional Connector would provide new non-auto access to the area, and partially offset the parking demand in the area. However, some cumulative impacts would still remain, though they would not be significant." (RDEIR at 4.2-24.) The RDEIR provides no explanation for this conclusion nor does it identify what cumulative parking impacts would remain. Similarly, the underlying assumptions are absent: (1) what does "partially" mean; (2) what is the profile of the new Metro user who will no longer drive to the Little Tokyo area; and (3) how was this profile, assuming that there even is one, determined? The RDEIR is silent. Similarly, "[t]he LPA would have significant direct and cumulative impacts with respect to displacement and relocation. However, these impacts could be reduced or avoided through mitigation." (*Id.*, at 4.2-26.) The RDEIR's vague reference to a reduction does not tell the reader whether significant impacts will remain. This is important because Metro can only move forward with a project that will have significant impacts where there are no feasible measures that would reduce them to less than 20 21

significant. (Pub. Resources Code, § 15121(a), (15126.4(a) [EIR must describe all feasible mitigation measures to reduce a project's significant impacts].) The RDEIR fails to disclose this important information. 21 cont'd

The RDEIR Does Not Adequately Analyze Land Use Impacts. The RDEIR notes that the number of full property acquisitions would be reduced from 16 to 9 while the number of permanent underground easements has increased from 6 identified in the Draft EIR to a now proposed 26. (RDEIR at 4.2-1.) This magnifies what would appear to be a scheme to shift significantly public construction costs through the use of insidious easements on private property. The RDEIR provides no individual or cumulative analysis of the impact of these 26 permanent easements. This information must be made public before the Metro Board considers a Final EIR. 22

Mitigation Continues To Be Deferred In The RDEIR

A Draft EIS/EIR's fundamental purpose to identify how significant impacts can be mitigated or avoided. (Pub. Res. Code, §§ 21002.1, subd. (a), 21061.) In defining mitigation measures, they must be defined with sufficient specificity for the public and the decision makers to weigh their efficacy. Mitigation measures are legally inadequate when they are so undefined that their effectiveness cannot be gauged. (*San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 79.) Accordingly, deferring the formulation of mitigation measures to the future, and after the project is built, is improper. "Impermissible deferral of mitigation measures occurs when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR." *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 915.) Despite CEQA's directives, the Draft EIS/EIR impermissibly defers mitigation. 23

The RDEIR concludes that the full take of property in Little Tokyo would result in a significant adverse effect with respect to displacement and relocation. (RDEIR at 4/2-26.) Rather than determine the scope of this impact now, Metro proposes mitigating it through a study. "Prior to construction, Metro shall conduct a parking needs assessment in Little Tokyo." (RDEIR at 4.2-27.) Metro exacerbates this issue by then relying on the unfettered discretion and later studies and "work[ing] with the City of Los Angeles to develop a parking mitigation program…." Deferring this mitigation to the unfettered discretion of a lead agency official is inadequate and "does no more than require a report to be prepared and followed, or allow approval by a county department without setting any standards." (*Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 794.)

The RDEIR completely fails to analyze the impacts of displacing parking lots that currently meet demand for the local business community, a deficiency also contained in the Draft EIS/EIR. (*See, e.g.*, Draft EIS/EIR, App. L, at 34, 41 [discussing on-street parking only].) For example, the proposed Little Tokyo station across the street from Japanese Village Plaza currently contains a busy surface parking lot together with local businesses. The RDEIR only considers the parking impacts on surface streets and not the long term impacts of displacing existing lots. Analyzing only impacts to on-street parking, the analysis seems to presume that 24

not a single rider will arrive by car and, therefore, impacts to off-street parking need not be analyzed. The RDEIR, however, does not disclose the basis for this conclusion. Moreover, the impacts during the lengthy construction period on surrounding existing lots like that of Japanese Village Plaza are not properly analyzed or mitigated in the RDEIR. 24 cont'd

Parking impacts will also be exacerbated by obstructions to off-street parking that Metro does not take. The RDEIR proposes inadequate mitigation to address this: "Metro shall not hinder access to other public parking lots during construction." (RDEIR at 4.2-27.) What does "not hinder access" mean? To mitigate parking impacts, Metro must commit now to maintaining access to all existing off-street parking garages not used for construction during their normal hours of operation. The mitigation measure should read: "Metro shall maintain access to all public and private parking lots during construction during the parking lot's normal hours of operation." 25

To address geotechnical risks created by Metro's massive tunneling machines and subterranean construction, "[a] vibration monitoring plan shall be developed during Final Design to ensure appropriate measures are taken to avoid any damage to sensitive or historic buildings due to construction-induced vibration." (RDEIR at 4.7-41.) The Draft EIS/EIR had stated that "[d]esign criteria would be established during final design that require the construction contractor to limit movement to less than an acceptable threshold value as a performance standard. (Draft EIS/EIR, at 4-144, 4-352.) Now, Metro appears to have abandoned its attempt to develop "design criteria," and now will rely on a later-developed plan to avoid damaging sensitive buildings. Deferring the development of this plan to a later date and without design criteria out of the public eye is not enough. Metro should identify a performance standard now. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).) Deferring this plan's development to a later date violates CEQA's disclosure requirements. (*See San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 670.) 26

Metro also proposes to provide advance notice to Japanese Village Plaza regarding tunneling schedules, but this does nothing to mitigate the actual vibrations that occupants would feel, or minimize the risk of damage. (*See* RDEIR at 4.7-44.) Further, as stated above, because the assumptions underlying Metro's vibration impact analysis appear to be incorrect, mitigation measures need to be adopted to reduce the potential for structural damage to Japanese Village Plaza buildings. 27

We request that Japanese Village Plaza be provided with the same mitigation measures that have been adopted for the Walt Disney Concert Hall due to the fact that certain of Japanese Village Plaza's buildings are only separated from the Project's tunnel by approximately 20 feet. Metro's plan to "conduct engineering studies during the Preliminary Engineering," should be replaced with a mitigation requiring Metro to "implement resiliently supported fasteners, isolated slab track, or other appropriate measures as needed to eliminate impacts and to reduce GBN below FTA annoyance criteria." (*Ibid.*) 28

The RDEIR also does nothing to define further Metro's measures that would "[d]escribe and define tunnel construction monitoring requirements" to mitigate settlement. (Draft EIS/EIR, 29

App. U, at 53-55.) Mitigation measures for methane gas are also not improved in the RDEIR and remain inadequate. (*Ibid.*) 29 cont'd

The Complete Draft EIS/EIR Must Be Recirculated To Cure Its Defects

To cure the significant defects in the Draft EIS/EIR and RDEIR discussed above, the *entire* Draft EIS/EIR DEIR must be revised to describe accurately the proposed Project and to analyze appropriately its environmental impacts. CEQA requires that a revised draft EIR be recirculated "[w]hen significant new information is added to an [EIR]" following public review and comment on an earlier draft. (Pub. Res. Code § 21092.1.) The public must be provided with an opportunity to review significant new information that is added to a draft EIR in order "to test, assess and evaluate the data and make an informed judgment as to the validity of the conclusions to be drawn therefrom." (*Sutter Sensible Planning, Inc. v. Bd. of Supervisors* (1981) 122 Cal.App.3d 813, 822.) 30

The RDEIR and Draft EIS/EIR suffer from numerous inadequacies, and Metro will need to incorporate significant new information in its environmental assessment of the Project in order to analyze adequately the Project's environmental impacts, and to identify alternatives and mitigation measures that are capable of alleviating those impacts. NEPA and CEQA require that this significant new information be presented to the public in the form of recirculated draft EIS/EIR so that the public has a meaningful opportunity to review and comment on the new information. (See *Laurel Heights Improvement Ass'n v. Regents of University of California* (1993) 6 Cal.4th 1112, 1130.)

Attachment B

GEODESIGN INC

September 6, 2011

Japanese Village Plaza
c/o Latham & Watkins, LLP
355 South Grand Avenue
Los Angeles, CA 90071-1560

Attention: Mr. Benjamin Hanelin

Geotechnical Consultation
Supplemental Environmental Assessment/
Recirculated Draft Environmental Impact Report
Los Angeles County Metropolitan Transportation Authority
Proposed Regional Connector Project
Los Angeles, California
GeoDesign Project: JapaneseVP-1-02

INTRODUCTION

This letter summarizes our comments regarding the Los Angeles County Metropolitan Transportation Authority (METRO) document titled *Regional Connector Transit Corridor Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report,* dated July 22, 2011, (EIR) and geotechnical information presented in the design geotechnical report titled *Regional Connector Transit Corridor Geotechnical Report,* dated October 4, 2010.

The Regional Connector Transit Corridor Locally Preferred Alternative (LPA) requires tunneling beneath the Japanese Village Plaza site. The LPA also includes the construction of the Little Tokyo Station, which will be constructed roughly between the west property line of Central Avenue and southeast intersection of Temple and Alameda Streets and immediately to the east of the Japanese Village Plaza site.

Based on our review of the EIR and other documentation, the impacts of the LPA to the Japanese Village Plaza site are not fully evaluated and the basis of the evaluations are not consistent with the site conditions that will be present during construction.

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BACKGROUND

PROPOSED REGIONAL CONNECTOR AND EXISTING DEVELOPMENT

The proposed tunnel boring operation and construction of the Little Tokyo Station will impact buildings at the Japanese Village Plaza site directly. The buildings at the Japanese Village Plaza site include a reinforced concrete parking structure and low-rise office and retail buildings, which are of wood-frame and plaster construction.

The existing parking structure contains a partial subterranean level and it is estimated that the lowest bottom of foundation level is approximately 12 feet below the adjacent ground surface level.

The LPA tunnel will pass directly beneath the existing parking structure. Based on information presented on METRO drawing (un-numbered) titled "TRACK ALIGNMENT PLAN AND PROFILE STATION 68 + 00 TO 92 + 00," the crown of the tunnel will be approximately 25 to 27 feet below the existing surface level beneath the existing parking structure. 32

This will result in a minimum clear vertical distance of approximately 13 to 15 feet from the bottom of the existing foundation to the crown of the tunneling operation.

Figure 2-18 titled "Mangrove Property Construction Area" indicates that the Little Tokyo Station construction may be within 10 feet of the existing Japanese Village Plaza parking structure and that the shoring for the station on the west side of Central Avenue will pass within the zone of influence of the Japanese Village Plaza parking structure foundations.

FUTURE DEVELOPMENT AT JAPANESE VILLAGE PLAZA

The crown elevation of the proposed LPA tunnel and METRO setback requirements would limit the subterranean development at the current site of the Japanese Village Plaza parking structure to one level. 33

The presence of the tunnel will limit the ability to build subterranean parking levels and add significant challenges to future development at Japanese Village Plaza.

GEODESIGN COMMENTS ON EIR AND GEOTECHNCIAL REPORT

Below are general comments on the geotechnical-related aspects of the LPA as they relate to the Japanese Village Plaza based on the information presented in the EIR. 34

FAULT RUPTURE

While the Japanese Village Plaza site is not within a State-designated surface fault rupture hazard zone, a portion of the proposed alignment, north of Station 85+00 and east of Alameda Street, may be within a zone of potential vertical deformation that could result in offsets of the tunnel segments.

SUBSIDENCE

Subsidence above tunnels will occur during tunneling operations. Provisions to minimize and mitigate subsidence are presented in Section 4.18.2.7 of the EIR. These methods include shoring, bracing, various grouting methods, and underpinning. Each may be a suitable method of support or increased stability at the Japanese Village Plaza site.

It is our understanding that METRO has not provided its estimate of subsidence above the tunnel at the Japanese Village Plaza. Similarly, it is our understanding that METRO has not provided a specific plan to minimize subsidence, monitor subsidence, and mitigate the potential for excessive subsidence during and post-construction at the Japanese Village Plaza.

The proximity of the Japanese Village Plaza parking structure to the proposed crown of the tunnel, approximately 13 to 15 feet, make this information particularly relevant.

35

HAZARDOUS GAS

The Japanese Village Plaza site is located in a City of Los Angeles-designated methane hazard zone. Methane gas seepage is possible at the site and the presence of the tunnel beneath the site presents a massive conduit for gas, in theory.

Section 4.18.2.6.3 of the EIR indicates general requirements for ventilation; however, it does not specifically indicate that ventilation is intended to mitigate the potential for methane or other harmful gases.

Methane mitigation measures should be identified by METRO.

36

DEWATERING

The EIR does not indicate that dewatering will be required for the tunneling beneath the Japanese Village Plaza site or construction of the Little Tokyo Station.

However, METRO should provide plans for dewatering, if planned between Stations 74+00 and 81+00.

37

EXCAVATION AND TUNNELING OBSTRUCTIONS

The only known subterranean features at the Japanese Village Plaza site are the foundation components of the existing structures, and these structures are generally at grade or slightly below grade. On-site utilities should be identified to evaluate the potential impact of the tunneling activities.

38

IMPACT FROM NOISE AND VIBRATION

EIR Section 4.7, Noise and Vibration outlines the conditions that will exist during the construction phase and also during the operation of the proposed Regional Connector. EIR Appendix R-2, Updated Locally Preferred Alternative Noise and Vibration Analysis presents the Wilson Ihrig & Associates *Noise and Vibration – Task 6.1.4.4 – Impacts at Little Tokyo Preliminary Results* dated July 12, 2011.

39

Our review of Sections 4.7 and Appendix R-2 analyzed the LPA, which requires tunneling directly below the Japanese Village Plaza property. Our review is limited to vibration that could result in damage to buildings and general construction considerations.

Vibration standards are presented in Table 4.7-4 of Section 4.7 based on the Federal Transit Administration's (FTA) guidelines, which are summarized in Table 12-3 of the *FTA Noise and Vibration Impact Assessment Manual*, May 2006 (FTA-VA-90-1003-06) based on building type and category.

We reviewed the referenced standards and compared these standards with other published information, including California Department of Transportation guidelines. The standards and thresholds referenced in the EIR for damage to buildings from vibrations are reasonable and in general accordance with Federal and State standards.

Table 4.7-5 of Section 4.7 presents the minimum calculated "safe" distances from various types of construction equipment and/or activities and subsequently a "minimum safe distance" of 21 feet was determined for all anticipated construction activities and/or operational uses.

39 cont'd

The July 12, 2011 Wilson Ihrig & Associates letter summarizes the methodology used to compute the safe distances. Table 2 of the July 12, 2011 letter titled "Construction Building Damage Effects" concludes that adverse impacts due to construction vibration will not be present at the Japanese Village Plaza site.

However, the proposed Little Tokyo Station appears to be within approximately 10 feet of the existing Japanese Village Plaza parking structure, and the tunnel boring machine operation will pass within approximately 13 to 15 feet of the Japanese Village Plaza parking structure foundations.

In each case, specific analysis regarding construction- and operational-related vibrations should be provided. For instance, our preliminary calculations indicate various equipment operating at a distance of 10 feet from the parking structure could result in vibrations on the order of 0.3 inch per second for loaded trucks to in excess of 0.8 inch per second for vibratory compactors. Each level of vibration approaches and/or exceeds the potentially damaging threshold specified in Table 4.7-4.

METRO should perform construction vibration monitoring at the Japanese Village Plaza site and implement mitigation measures as necessary and as planned for other sensitive locations.

CONSTRUCTION IMPACTS

EIR Section 4.18 summarizes the general construction activities and anticipated impact. As discussed above, the most significant construction activities identified that will impact the Japanese Village Plaza include tunnel boring machine operations beneath the Japanese Village Plaza and cut-and-cover construction of the Little Tokyo Station. Utility relocation may also impact portions of the Japanese Village Plaza site.

40

Subsidence tolerances are not provided above the tunnel boring machine operation, and monitoring and/or mitigation plans have not been discussed for the Japanese Village Plaza site. Similarly, pre-treatment, such as soil improvement by grouting methods, which is common in Los Angeles for tunneling projects similar to the LPA, is not specifically discussed for Japanese Village Plaza. 40 cont'd

Access to and use of the Japanese Village Plaza site facilities will be required in order to implement the necessary precautions and monitoring, and these activities will be on-going during the tunnel boring machine operations. 41

Cut-and-cover or other methods used for the excavation and construction of the Little Tokyo Station will require relatively deep excavations and temporary shoring to support those excavations. Based on our review of the available information, the west end of the excavation, along the west side of Central Avenue, will extend below the zone of influence of the Japanese Village Plaza parking structure foundations. 42

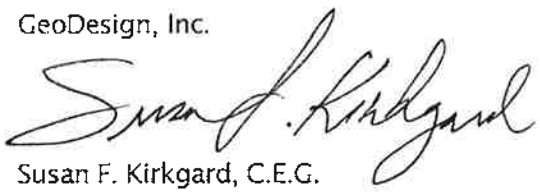
Provisions to provide adequate support for the parking structure foundations will be required.

The nature of the temporary shoring system is not specified in the EIR; if tieback shoring is utilized, tiebacks would extend beneath the Japanese Village Plaza site.

Tolerances, including minimum deflection, for the planned temporary shoring should be provided along with the planned method of shoring. Calculations should be provided to demonstrate that the influence of the existing foundations was properly considered in the design of the shoring system. 43

Sincerely,

GeoDesign, Inc.



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Associate Geologist

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Principal Engineer

CJZ:kt
Six copies submitted
Document ID: JapaneseVP-1-02-090611-geol.doc
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Attachment C

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July 1, 2011

VIA EMAIL AND FEDEX

Ronald Stamm, Esq.
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Re: Regional Connector Transit Corridor Project – Route Change Impacting Japanese Village Plaza

Dear Ron:

We appreciate your recent meeting with us, along with other members of the Metro team, so that our client, Japanese Village, LLC, could understand better the impacts created by the Regional Connector's proposed change in alignment to tunnel under our client's property. As you know, that alignment was not studied in the project's Draft EIR/EIS and Metro has determined they cannot provide detailed information to our client about the depth and location of the new proposed tunnel alignment. Because impacts were not studied in the Draft EIR, our client has retained expert engineers to provide information, but they have advised they cannot provide analysis of the impacts without the necessary information from Metro. 44

While we appreciate the provision of information from similar projects on Metro's Eastside Extension, and Metro's efforts to try to respond to Japanese Village's concerns over the redesigned and unstudied alignment, without adequate details our client cannot support the proposed alignment change. As we have advised your team in detail, Japanese Village has just completed a multimillion dollar reinvestment. The location of the proposed tunnel under the parking garage would preclude the future expansion and improvements previously targeted for that area.

We now understand that Metro has determined it is unable to provide detailed information on impacts created by the project change and is moving ahead with the new project alignment without recirculating further CEQA or NEPA review for public comment. As discussed with you, our client believes that Metro's decision not to conduct further environmental review on the proposed route change is not consistent with both these statutes' respective goals of public disclosure and informed decision making. 45

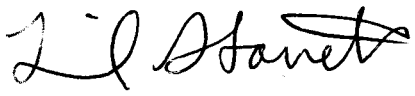
As Japanese Village's ownership has made clear, it supports public transit that furthers the interests of Little Tokyo and its businesses and residents. However, as set forth in

Attachment A, Japanese Village has significant concerns over impacts on its property created by the revised project that have not been analyzed or made available for public comment under either CEQA or NEPA. This analysis should take place now and be made available to the public and the decision makers before this route change is made as part of the Regional Connector project.

45
cont'd

We appreciate your consideration of these issues. Please do not hesitate to contact me should you wish to discuss these matters further at (213) 891-7905.

Very truly yours,



Lucinda Starrett
of LATHAM & WATKINS LLP

cc: Ms. Martha Welbourne
Mr. Calvin Hollis
Ms. Velma Marshall
Mr. Robin Blair
Mr. Ray Tellis
Mr. Ray Sosa
Ms. Dolores Roybal Saltarelli
Ms. Laura Cornejo
Mr. David Singelyn
Ms. Sara Vogt-Lowell
Mr. Robert D. Crockett
Mr. Benjamin J. Hanelin

ATTACHMENT A

First indicated in a small post on Metro's blog in January 2011, it was only in June of this year that that Metro provided any detail on its plan to under the heavily developed block bounded by 1st Street, San Pedro Street, 2nd Street, and Central Avenue (the "June 2011 Proposal"). This June 2011 Proposal was certainly not the original project, nor was it one of the Draft EIS/EIR's alternatives. The June 2011 Proposal was not analyzed at all, and the Draft EIS/EIR needs to be revised and recirculated for reasons described below. 46

The reason Japanese Village, LLC had not previously commented upon the Draft EIS/EIR when it was out for public circulation is that the Regional Connector tunnel did not appear to run under Japanese Village property until the June 2011 Proposal.

The Draft EIS/EIR Fails to Set Forth a Proper Project Description

Cal. Admin Code, tit. 14, § 15124 provides:

> The description of the project shall contain the following information . . .
>
> (a) The **precise location and boundaries of the proposed project** shall be shown on a detailed map, preferably topographic. The location of the project shall be shown on a detailed map, preferably topographic.
>
> (c) A general description of **the project's technical, economic, and environmental characteristics**, considering the principal engineering proposals if any and supporting public service facilities. (CEQA Guidelines, § 15124 [emphasis added].)

47

The Draft EIS/EIR lacks a "precise location and boundaries" map and lacks a "general description of the project's technical characteristics."

Section 1.6.2 of the Draft EIS/EIR attempts a textual project description by saying that "[b]y 2035, the Metro rail system is proposed to be expanded to the north and east with extensions to the Gold Line and to the west with extensions to the Purple and Expo Lines and the addition of the Crenshaw Line." Figure 1-1, Project Area, shows the existing locations for the Metro Gold Line, Metro Red and Purple Lines, Metro Blue and Expo Lines, but nowhere is there either a map or a textual description to explain how the project will connect these existing lines. 48

Figure 1-2, "Existing and Proposed Metro Rail Lines in 2035," rather than being a "precise location" map shows the "Regional Connector" in only vague terms, with an apparent scale of one inch to two miles. A reader cannot read Figure 1-2 to determine how the Regional Connector will connect existing lines, in terms of streets, buildings and properties affected. 49

The first time the reader gains an understanding of possible routes is in Chapter 2, Alternatives Considered. Figure 2-1 contains a map that combines three apparent alternative 50

alignments. Figure 2-3 portrays the TSM Alternative,[1] Figure 2-9 the At-Grade Emphasis LRT Alternative, Figure 2-9 the Underground Emphasis LRT Alternative, Figure 2-10 the Fully Underground LRT Alternative, with variations of these at Figures 2-11, 2.12, and 2-13. 50 cont'd

The technical appendices make no attempt to state a preferred project, much less describe the June 2011 Proposal. (Technical Appendix II, foldout: "Regional Connector Transit Corridor Draft Conceptual Plans and Profiles: December 18, 2009.") 51

Thus, there is not a single route described as the project from which alternatives may be judged. CEQA requires that an EIR identify feasible alternatives that could avoid or substantially lessen the project's significant environmental impacts. (Pub. Res. Code, §§ 21002, 21002.1, subd. (a), 21100, subd. (b)(4).) The Draft EIS/EIR here skips the project definition. 52

A project proponent does not satisfy CEQA's requirement for "precise location and boundaries" by providing location and boundaries for three to five alternatives. Exactly how does one measure an alternative's strengths and weaknesses without a project description? "[A]n accurate stable and finite project description is the sine qua non of an informative and legally sufficient EIR." (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 (*"San Joaquin Raptor II"*) (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) Furthermore "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity." (*Silveira v. Las Gallinas Valley Sanitary District* (1997) 54 Cal.App.4th 980, 990 (citation omitted).) Under NEPA, the "EIS process should serve both to alert the public of what the agency intends to do and give the public enough information to be able to participate intelligently in the EIS process." (*California v. Block* (9th Cir. 1982) 690 F.2d 753, 772.) Thus, an EIS must "properly define[]" (40 C.F.R. §1502.4(a)) the proposed project and provide a "clear presentation of the alternatives including the proposed action." (*Id.*, § 1502.10.) 53

The Regional Connection's Draft EIS/EIR resembles the problems presented in *County of Inyo v. City of Los Angeles*. The project there was defined merely as an increase in water pumping rates from subsurface water in Owens Valley. The EIR, however, discussed far broader concepts, such as canal work, a conservation program, reduction of stockwater and reservoir operations. (71 Cal.App.3d, at 190.)

> A curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative) and weigh other alternatives in the balance. An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.

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[1] The TSM is merely a Transportation Systems Management Alternative, which proposes only the construction of bus stops. (Draft EIS/EIR, App. FF, at 15.) 50 cont'd

(*Id.*, at 192-93.) In *County of Inyo,* the "incessant shifts among different project descriptions do vitiate the City's EIR process as a vehicle for intelligent public participation." (*Id.*, at 197.) "The defined project and not some different project must be the EIR's bona fide subject." (*Id.*, at 199.) "Because the Final EIR['s . . .] list of alternatives is not tied to a reasonably conceived or consistently viewed project, the Los Angeles EIR does not comply with CEQA's demand for meaningful alternatives." (*Id.*, at 203.)

53 cont'd

The Regional Connector Draft EIS/EIR leads with the Transportation Systems Management Alternative, which proposes only the construction of bus stops. (Draft EIS/EIR, App. FF, at 15.) But the June 2011 Proposal selects much more, and selects nothing studied in the Draft EIS/EIR.[2]

The DRAFT EIS/EIR Has Not Studied the Impacted Area Around Japanese Village

For the very reason there was no adequate project description, the Draft EIS/EIR has failed to assess project impacts upon the Japanese Village. The Draft EIS/EIR analyzes the project's impacts in the following categories: Displacement and Relocation of Existing Uses, Community and Neighborhood Impacts, Visual and Aesthetic Impacts, Climate Change, Noise and Vibration, Ecosystems/Biological Resources, Geotechnical/Subsurface/Seismic/Hazardous Materials, Water Resources, Energy, Historic – Built Environment, Historic – Archaeology, Parklands and Other Community Facilities, Economic and Fiscal Impacts, Safety and Security, and Growth-Inducing Impacts. The Draft EIS/EIR admits that many of these potentially significant impacts are site specific, yet the agency is poised to move ahead with a final EIS/EIR without analyzing or giving the public the opportunity to comment on the June 2011 Proposal. A *post hoc* review done to determine these impacts is exactly what CEQA and NEPA are designed to prevent.

54

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[2] Further, Metro, as "the lead agency plays a pivotal role in defining the scope of environmental review, lending its expertise in areas within its particular domain, and in ultimately recommending the most environmentally sound alternative." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) Rather than define a proposed project, from which many key CEQA and NEPA obligations then build upon, the agency has abdicated this role to a later point in time. (*See* Draft EIS/EIR, at 2-1 ["Depending on which alternative is selected…"].) By defining a range of alternatives only, and not a precise project, Metro has also violated CEQA's and NEPA's respective goals of an informed public. (Pub. Res. Code, § 21003(b) [EIRs should be organized and written in a manner that will make them "meaningful and useful to decision-makers and to the public."]; *Berkeley Keep Jets Over the Bay Committee v. Bd. of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355 ["A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision making and informed public participation."]; (40 C.F.R. §§1502.4, subd. (a), 1502.10 [an EIS must "properly define[]" the proposed project and provide a "clear presentation of the alternatives including the proposed action."]; *id.* § 1502.8. [an EIS . . . must . . . "be written [. . .] so that decisionmakers and the public can readily understand [it]."].)

53 cont'd

In evaluating land use impacts, the Draft EIS/EIR concludes that: "To construct the Underground Emphasis LRT Alternative, partial takings of 11 parcels, full takings of 10 parcels, permanent easements across 4 parcels, and temporary easements across 8 parcels would be needed for the construction of LRT facilities." (Draft EIS/EIR, at 4-16; *see* Table 4.2-4 [enumerating impacts parcels and identifying extent of potential take]; *see also id.*, at 4-24 (examining significant adverse impacts from dislocation and relocation from the Fully [underground LRT Alternative].) Because no alternative of underground alignment analyzed in the Draft EIS/EIR passes under the June 2011 Proposal, the document contains no analysis of the potentially significant displacement and relocation impacts relating to this proposal. Any displacement or relocation would constitute a new significant impact requiring the Draft EIS/EIR's recirculation. 55

Noise and vibration impacts are highly localized. The Draft EIS/EIR analyzes noise and vibration impacts at specific locations along the proposed routes and alternatives, but because the Draft EIS/EIR does not analyze an alternative that passes along the June 2011 Proposal's alignment, potentially significant noise and vibration impacts to this block were not analyzed. These potentially significant impacts should be analyzed now and made available for public review. 56

Section 4.9 of the Draft EIS/EIR analyzes Geotechnical/Subsurface/Seismic/Hazardous Materials impacts on a site specific basis as well.

> [T]he project area would be susceptible to the potential spread of contaminated groundwater and release of subsurface oilfield gases. Also, the Fully Underground LRT Alternative would require more property acquisition and demolition of existing structures, which could heighten the risk of potential release of asbestos fibers and lead-based paint particles.

(Draft EIS/EIR, § 4.9.3.5.2 [Hazardous Materials].) 57

Since no alternative was proposed to pass under the June 2011 Proposal, no analysis was conducted of the project's potential to increase significantly this environmental impact. This analysis is especially important here because the Draft EIS/EIR designates at least one property within the block under which the alignment will now pass as a "Property of Concern" with respect to "Known or Suspected Hazardous Materials in Soil and/or Groundwater within 0.25 Miles of Proposed Alignments." (See Draft EIS/EIR, at 4-136 [Figure 4.9-3].) Additional environmental analysis of the site-specific hazardous and geotechnical impacts to this area are required, and the results of these analysis must be circulated for public review and comment before any final action is taken on the Project.

The Draft EIS/EIR also concludes that:

> "The proposed tunneling would have the potential for adverse impacts related to ground settlement and differential settlement immediately above the alignments as well as adjacent structures 58

> including the historical buildings. In general, settlement is greatest at the ground surface directly above the alignment and decreases away from the centerline."

(Draft EIS/EIR, § 5.5.1 [Appendix U, Geotechnical, Subsurface and Seismic Hazards] [underline added].) 58 cont'd

The Draft EIR/EIS admits that these subsidence impacts are site-specific, yet Metro has not completed even an initial review of the Project's potential to cause significant impacts from ground settlement within the June 2011 Proposal. Review must be done now to determine whether there are any additional significant impacts and to define mitigation measures to address them. In fact, geotechnical analysis along the entire length of the proposed route is only now occurring, when it should have taken place before the Draft EIS/EIR was published and been a part of the project description and description of the environment.

The Draft EIS/EIR's analysis of construction impacts on traffic, parking and transportation was based on an alignment that utilized the right-of-way along Second Street, and did not cross Central Avenue mid-block. The Draft EIS/EIR's analysis of construction impacts in general, and on traffic, parking, and transportation specifically, was all based on this old alignment. Shifting the alignment to the north in this heavily developed area may create different or new significant impacts not previously analyzed. The Draft EIS/EIR should be revised and recirculated so that these impacts can be publicly reviewed and commented on. 59

Historic resources are also potentially significantly impacted by this alignment change. Figure 4.12-7 indicates that there are at least four existing structures under which the June 2011 Proposal may pass that were built before 1968. Impacts to these resources from increased vibration as a result of tunneling directly under these structures has not been analyzed. These potentially significant impacts must be considered now, and presented to the public for review and comment in a recirculated Draft EIS/EIR 60

There Is No Environmentally Superior Alternative Identified

The failure to provide a project description led to the Draft EIS/EIR's failure to identify an environmentally superior alternative – one of CEQA's most basic requirements. CEQA requires an EIR to identify and discuss feasible alternatives to a proposed project. (Pub. Res. Code, §§ 21002, 21002.1(a), 21061, 21100(b)(4).) Of the alternatives considered, the CEQA Guidelines require that an EIR identify the "environmentally superior alternative," which assists decision makers in considering a project approval. (See Cal. Admin. Code, tit. 14, §§ 15126.6(a), (e)(2).) 61

Here, the Draft EIS/EIR only describes the alternatives considered, but it does not identify an environmentally superior alternative that would minimize the Regional Connector's significant environmental effects. (*See* Draft EIS/EIR, pp. 2-1 to 2-17.) Under CEQA, a proper analysis of alternatives is essential to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. (Pub. Res. Code, § 21002; Cal. Admin. Code, tit. 14, §§ 15002(a)(3), 15021(a)(2).) The Draft EIS/EIR's failure to

disclose an environmentally superior alternative is prejudicial, and the Draft EIS/EIR should be recirculated so that the public has an opportunity to comment on an identified project that Metro concludes is the environmentally superior alternative for meeting the project goals and needs defined in the Draft EIS/EIR. 61 cont'd

The Draft EIS/EIR Lacks A Proper Baseline

Under CEQA, "[a]n EIR must focus on impacts to the existing environment, not hypothetical situations." (*Sunnyvale W. Neighborhood Ass'n v. City of Sunnyvale* (2010) 190 Cal.App.4th 1351, 1373; *see also Environmental Planning & Information Council* v. *County of El Dorado* (1982) 131 Cal.App.3d 350, 352–355; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 955.) "It is only against this baseline that any significant environmental effects can be determined. (CEQA Guidelines, §§ 15125, 15126.2, subd. (a).)" (*Id.*, at 952.) "[U]sing hypothetical allowable conditions as the baseline results in 'illusory' comparisons that 'can only mislead the public as to the reality of the impacts and subvert full consideration of the actual environmental impacts,' a result at direct odds with CEQA's intent." (*Communities for a Better Env. v. S. Coast Air Quality Management District* (2010) 48 Cal.4th 31, 322.) 62

Here, while the air quality impacts analysis acknowledges that CEQA requires determining a project's significance based on "existing conditions at the time the project NOP was published," it eschews this analysis for one that compares "the difference between a project alternative (2035) and the 2009 Baseline **adjusted for regional growth that would occur by 2035**." (Draft EIS/EIR, App. Q, at 17 [emphasis added].) This "adjusted baseline" violates CEQA because it does not focus on "impacts to the existing environment," but rather "hypothetical [future] situations." (*Sunnyvale*, 190 Cal.App.4th, at 1373.)

The Draft EIS/EIR's analysis of traffic impacts suffers from the same defect – failure to analyze the significance of the Project's impact against existing conditions. To assess the "project's" traffic impacts, the Draft EIS/EIR assumes a set of future conditions based on "forecasts…developed for the horizon year of 2035" and compares the "project" against these future conditions to measure the significance of impacts. (Draft EIS/EIR, App. L, at 15.) Although existing conditions were discussed in the Draft EIS/EIR, the Draft EIS/EIR never compared the "project's" impacts against these existing physical conditions. (*See, e.g.*, *id.*, at 58-70 [analyzing impacts against future, hypothetical 2035 traffic conditions].)

In *Sunnyvale*, the court rejected this exact methodology. There, the EIR used hypothetical future traffic network and volumes used by planning agencies as its "baseline" to evaluate the roadway project's traffic and related impacts. (*Id.*, 190 Cal.App.4th, at 1379 [using "projected conditions in the year 2020, more than a decade after approval, as the 'baseline' against which to assess the traffic and related impacts of the proposed project."].) The court held that this violated CEQA, because "a straightforward assessment of the impacts produced by the project alone on the existing environment is the foundational information of an EIR." (*Id.*, at 1382.) The agency's failure was a prejudicial abuse of discretion because "[e]valuation of the [] project under those projected worse traffic conditions of the future obscures the existence and severity of adverse impacts that would be attributable solely to the project under the existing 63

conditions..." (*Id.*, at 1388.) Here, too, Metro's decision to analyze what the traffic impacts might be in 2035 and long after the "project," whatever it is, is built is similarly an abuse of discretion. 63 cont'd

Mitigation Has Been Deferred

The Draft EIS/EIR's fundamental purpose to identify how significant impacts can be mitigated or avoided.[3] (Pub. Res. Code, §§ 21002.1, subd. (a), 21061.) In defining mitigation measures, they must be defined with sufficient specificity for the public and the decision makers to weigh their efficacy. Mitigation measures are legally inadequate when they are so undefined that their effectiveness cannot be gauged. (*San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 79.) Accordingly, deferring the formulation of mitigation measures to the future, and after the project is built, is improper. "Impermissible deferral of mitigation measures occurs when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR." *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 915.) Despite CEQA's directives, the Draft EIS/EIR impermissibly defers mitigation. 64

The Draft EIS/EIR concludes that the full take of property in Little Tokyo would result in a significant adverse effect with respect to environmental justice. (*See generally* Draft EIS/EIR, § 4.17; *id.*, at 4-23.) Rather than determine the scope of this impact now, Metro proposes mitigating it through a study. "Prior to construction, Metro would conduct a parking analysis of the Little Tokyo area to determine parking capacity and if temporary or permanent displacement of parking would affect this capacity" and "would consider replacing displaced parking." (*Id.*, at 4-30, 4-308.) This violates CEQA because instead of analyzing the impact and committing to specific action to mitigate it now, Metro is relying on the unfettered discretion of its employee to determine whether capacity is "affected," and then leaves it up to the same staff to "consider 65

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[3] Note that the Draft EIS/EIR also defers actual analysis of impacts. For example, rather than determine what the electro-magnetic field impacts will be now, the Draft EIS/EIR states that studies will be done later to determine what these impacts are. (*See* Draft EIS/EIR, at 4-147 ("Although potential impacts related to very weak EMFs that would be created by the build alternatives would not be anticipated, additional evaluation of sensitive receptors, including residences, schools, hospitals, day care facilities, and convalescent homes within 100 feet of the proposed alignments, would be warranted. Projected EMF levels produced by the LRT would be compared with International Radiation Protection Association guidelines. If these guidelines are exceeded, mitigation would be implemented to ground or block EMFs or modify the LRT power requirements.") This violates both CEQA and NEPA. Under NEPA, an EIS must provide a "full and fair discussion" of a project's significant environmental impacts by compiling and analyzing all relevant data. (40 C.F.R. §§1500.1, 1502.1; *Sierra Club v. U.S. Forest Service* (9th Cir. 1988), 843 F.2d 1190, 1195.) CEQA requires that an EIR identify and analyze potentially significant environmental impacts. (*See* Cal. Admin. Code, tit. 14, § 15126.2, subd. (a).) 64 cont'd

replacing" it.[4] Deferring this mitigation to the unfettered discretion of a lead agency official is inadequate and "does no more than require a report to be prepared and followed, or allow approval by a county department without setting any standards." (*Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 794.) 65 cont'd

Similarly, to address geotechnical risks created by Metro's massive tunneling machines and subterranean construction, "[d]esign criteria would be established during final design that require the construction contractor to limit movement to less than an acceptable threshold value as a performance standard. (Draft EIS/EIR, at 4-144, 4-352.) Deferring the development of design criteria to a later date is not enough. Rather than identify a performance standard that could be achieved in various ways, which is permissible under CEQA (CEQA Guidelines, § 15126.4, subd. (a)(1)(B)), Metro has improperly deferred its development. Metro has provided no reason why this criteria could not be developed now, and its failure to do violates CEQA's disclosure requirements. (*See San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 670.) Metro's measures that would "[d]escribe and define tunnel construction monitoring requirements" to mitigate settlement, and mitigation measures for methane gas are also improperly deferred and not satisfactorily described. (Draft EIS/EIR, App. U, at 53-55.) 66

The Project Has Been Piecemealed

Despite identifying the need to relocate numerous buildings and structures as a result of any one of the discussed alternatives and future development opportunities on property that Metro is acquiring for construction purposes, Metro has not analyzed the impacts of these projects together with the impacts from the Regional Connector. (*See* Draft EIS/EIR, at 4-28 ["Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure, or necessary for access would be included in Metro Joint Development Program for possible development. A development would be environmentally and separately cleared from this project and would undergo its own community input process."], 4-12 to 4-30 [discussing partial and full takes, which would require relocation of existing businesses].) This is improper under both NEPA and CEQA, and it is not enough that these projects, which will only occur because of the Regional Connector, will undergo separate environmental review. 67

Under NEPA, connected actions must be considered together in the same EIS. (40 C.F.R. § 1508.25; *Thomas v. Peterson* (9th Cir. 1985) 753 F.2d 754, 758-9.) Connected actions are those that (1) "[a]utomatically trigger" other actions potentially requiring EISs; (2) "cannot or will not proceed unless other actions are taken previously or simultaneously;" or (3) are "interdependent parts of a larger action and depend on the larger action for their justification." (40 C.F.R. §1508.25.) Courts apply an "independent utility" test under NEPA to "determine whether multiple actions are so connected as to mandate consideration in a single EIS." (*Great* 68

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[4] The Draft EIS/EIR also fails because it does not analyze impacts of eliminating off-street parking. (*See, e.g.,* Draft EIS/EIR, App. L, at 34, 41 [discussing on-street parking only].) Analyzing only impacts to on-street parking, the analysis seems to presume that not a single rider will arrive by car and, therefore, impacts to off-street parking need not be analyzed. The Draft EIS/EIR, however, does not disclose the basis for this conclusion. 65 cont'd

Basin Mine Watch v. Hankins (9th Cir. 2006) 456 F.3d 955, 969.) Similarly, under CEQA a public agency "may not divide a single project into smaller individual projects to avoid its responsibility to consider the environmental impacts of the project as a whole." (*Sierra Club v. West Side Irrigation Dist.* (2005) 128 Cal.App.4th 690, 698.) An accurate EIR must ensure that "environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences." (*Bozung v. Local Agency Formation Comm'n of Ventura County* (1975) 13 Cal.3d 263, 283-84.) Accordingly, "an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) *it is a reasonably foreseeable consequence of the initial project*; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.)

68 cont'd

The redevelopment of property not required to operate the Regional Connector is a connected action under NEPA and a "reasonably foreseeable consequence of" the Regional Connector under CEQA. But for Metro's acquisition of these sites for the Regional Connector, there would be no property to contribute to the "Metro Joint Development Program for possible development." (Draft EIS/EIR, at 4-28.) Similarly, because Metro recognizes now that certain property it is acquiring for the Regional Connector will not be necessary for its operation and it intends to contribute it to its development program, it is reasonably foreseeable that these properties will be developed by Metro. Impacts from this development should have been included in the Draft EIS/EIR, and because it was not the Draft EIS/EIR should be revised and recirculated now so that it presents an accurate picture of the project's impacts to the public and decisionmakers.[5]

69

The Draft EIS/EIR Must Be Recirculated

70

For all the foregoing reasons, the Draft EIS/EIR must be repaired and recirculated.

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[5] Metro further disguises the Regional Connector's impacts by failing to complete a programmatic EIS/EIR for its aggressive rail expansion. Under CEQA, a program EIR is required when individual projects together comprise a single project, or an individual project is to be implemented in multiple phases. (CEQA Guidelines, § 15165.) Similarly, NEPA requires s programmatic EIS be prepared whenever "proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." (40 C.F.R. § 1502.4, subd. (a); *see City of Tenakee Springs v. Clough* (9th Cir. 1990) 915 F.2d 1308, 1312-13; *see also LaFlamme v. Fed. Energy Regulatory Comm.* (9th Cir. 1988) 852 F.2d 389, 401-02 (9th Cir. 1988) (holding that a cumulative impacts analysis was insufficient where the agency had examined single projects in isolation because there were several foreseeable similar projects in a geographical region that added to the cumulative impacts).

69 cont'd

R-BU7

Responses to Comments from Latham & Watkins LLP on behalf of Japanese Village, LLC, Crockett, Robert D.

Response to Comment R-BU7-1

Impacts to the Japanese Village Plaza associated with the proposed Regional Connector project were thoroughly analyzed and disclosed in the Supplemental EA/Recirculated Draft EIR Sections. As Metro indicated to the commenter in June 2011, information regarding the depth and location of the tunnel was adequate to analyze impacts for purposes of the Supplemental EA/Recirculated Draft EIR Sections. Additional detail regarding project design that will be developed as the design is finalized will reflect the level of impacts disclosed in the Supplemental EA/Recirculated Draft EIR Sections. Metro's environmental review process has been thorough and detailed resulting in a full disclosure of impacts and is in compliance with both CEQA and NEPA. In accordance with CEQA and NEPA, each alternative's potential to result in short- and long-term, direct, indirect, and cumulative impacts on the environment, as well as economic and environmental justice impacts, was evaluated in Chapter 3 through 5 of the EIS/EIR. Please refer to Responses to Comments R-BU7-2 through R-BU7-70, which include supporting information from the EIS/EIR, to specific comments raised in this letter. Metro is committed to address financial property-related issues important to individual property owners as project implementation, including acquisition of easements, proceeds. Refer to Responses to Comments R-BU7-44 and R-BU7-45, below, for responses to commenter's referenced "Attachment C".

Response to Comment R-BU7-2

The Supplemental EA/Recirculated Draft EIR Sections thoroughly addressed all potential impacts in compliance with CEQA and NEPA. A property easement from the Japanese Village Plaza would be required in order to construct the tunnel as part of the Locally Preferred Alternative. Impacts on the Japanese Village Plaza, such as ground-borne noise generated during construction and operation, were appropriately identified and disclosed in the Supplemental EA/Recirculated Draft EIR Sections. There would be no partial take of the Japanese Village Plaza property under the Locally Preferred Alternative and the existing parking and retail structures on the parcels would remain in place. As indicated in Section 4.2, Displacement and Relocation, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, subsurface easements would not result in significant impacts/adverse effects because they do not involve displacement or acquisition of surface area. Displacement impacts were analyzed in accordance with CEQA and NEPA, which require analysis of the project's potential to displace housing, people, or businesses. A reasonably foreseeable project is one where the applicant has devoted significant time and financial resources to prepare for any regulatory review (Gray v. County of Madera 2008). Future development beneath the Japanese Village Plaza parcel, that would require use of the area indicated for the subsurface easement to accommodate the Locally Preferred Alternative, is currently not reasonably foreseeable. The subsurface easement would not preclude future development beneath the entire parcel; only future underground development within the area of the easement would be precluded. In addition, the subsurface easement would not preclude any aboveground future development on the parcel. Metro would provide compensation for the easement in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act)

as indicated in mitigation measure number DR-8 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Issues related to the valuation/cost of the easement would be negotiated with the property owner by Metro during project implementation.

Response to Comment R-BU7-3

The Locally Preferred Alternative was thoroughly and clearly described in the Supplemental EA/Recirculated Draft EIR Sections (see responses below). Potential impacts associated with the project were adequately and clearly analyzed and disclosed in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation of the Draft EIS/EIR and this Final EIS/EIR, and the sections included in the Supplemental EA/Recirculated Draft EIR Sections. No piecemeal approach has been taken. All components of the project have been described and analyzed in the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. Refinements to the Locally Preferred Alternative since publication of the Draft EIS/EIR have been described and analyzed in the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Significant impacts and adverse effects were adequately analyzed and mitigation measures to reduce significant impacts/adverse effects to the maximum extent feasible were identified in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Analysis, Consequences, and Mitigation of the Draft EIS/EIR and this Final EIS/EIR, and the sections included in the Supplemental EA/Recirculated Draft EIR Sections (see below for specific responses). The Draft EIS/EIR identified candidate mitigation measures for each alternative where significant impacts/adverse effects would occur. Appropriate candidate mitigation measures identified in the Draft EIS/EIR have been refined and confirmed in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Please refer to Responses to Comments R-BU7-31 through R-BU7-43, below, for responses to commenter's referenced "Attachment B".

Response to Comment R-BU7-4

A range of alternatives were equally described and evaluated in the EIS/EIR, as required under NEPA (40 CFR 1502.14), as well as the Federal Transit Administration (FTA) NEPA implementing regulations (23 CFR 771.105(b), 771.123(c) and 771.125(a)). The approach of including alternatives at an equal level of review, as required by NEPA, does not violate CEQA because the description of each alternative and evaluation of potential impacts associated with each alternative meet CEQA requirements. The following alternatives were evaluated in the EIS/EIR for potential environmental, economic, and social impacts: No Build Alternative, TSM Alternative, At-Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, and the Fully Underground Light Rail Transit (LRT) Alternative. The description of alternatives is provided in Section 2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. Section 2.3.6 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR includes an accurate, stable, finite, and clear description of the Locally Preferred Alternative (the proposed project). The Locally Preferred Alternative alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street.

Tracks would then proceed east underneath the 2nd Street Tunnel and 2nd Street to just west of Central Avenue. At 2nd Street and the pedestrian signal to the Japanese Village Plaza, the tracks would continue underground heading northeast under the Japanese Village Plaza and 1st and Alameda Streets. To the east and north of the rail junction beneath 1st and Alameda Streets, tracks would rise to the surface through two new portals in order to connect to the existing Metro Gold Line. The portals would be located on the northeast corner of 1st and Temple Streets, and in the median of 1st Street between Alameda and Garey Streets.

Sufficient detail was provided in the description of all the alternatives, including the Locally Preferred Alternative, in order to adequately evaluate the potential environmental, economic, and social impacts associated with each alternative.

Response to Comment R-BU7-5

Please refer to Response to Comment R-BU7-4, above. The approach of including alternatives at an equal level of review, as required by NEPA, does not violate CEQA because the description of each alternative and evaluation of potential impacts associated with each alternative meet CEQA requirements and CEQA does not preclude this type of analysis. The beginning of Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR discusses the designation of the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative and refinements since publication of the Draft EIS/EIR, and refers the reader to Section 2.3.6 for further description of the Locally Preferred Alternative. The Locally Preferred Alternative is clearly and definitively identified as the proposed project in the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU7-6

The description of the Locally Preferred Alternative in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR meets the requirements of Section 15124 of the CEQA Guidelines.

- The "precise location and boundaries of the proposed project are shown on a detailed map." (CEQA Guidelines, § 15124, subd. (a).) The various figures in Chapter 2 adequately depict the proposed project location.

- "The location of the project shall also appear on a regional map." (CEQA Guidelines, § 15124, subd. (a).) The regional maps in Chapter 1, Purpose and Need, satisfy this requirement.

- "A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities." (CEQA Guidelines, § 15124, subd. (c).) The description of the project in Chapter 2 clearly address this requirement.

- "A statement of the objectives sought by the proposed project." (CEQA Guidelines, § 15124, subd. (b).) The goals and objectives are set forth in Chapter 1, Purpose and Need.

- The following are included in Section 2.6, Environmental Process, and Section 4.22, Anticipated Permits and Approvals, of this Final EIS/EIR: A statement briefly describing the intended uses of the EIR." (CEQA Guidelines, § 15124, subd. (d).) This statement shall include:

  - A list of the agencies that are expected to use the EIR in their decision-making, and

  - A list of permits and other approvals required to implement the project.

  - A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.

  - And, "if a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur." (CEQA Guidelines, § 15124, subds. (d)(1) and (2).)

Response to Comment R-BU7-7

Please refer to Response to Comment R-BU7-4, above. A range of alternatives were equally described and evaluated in the EIS/EIR. Each alternative is described in Section 2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. As indicated in the beginning of Chapter 2, Alternatives Considered, and Section 2.3.6 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, the Metro Board of Directors voted on October 28, 2010, to designate the Fully Underground LRT Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative. The Locally Preferred Alternative is described in Section 2.3.6 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU7-8

Please refer to Response to Comment R-BU7-4 and R-BU7-5, above.

Response to Comment R-BU7-9

The project's purpose is clearly described in Chapter 1 (closing an approximately two mile gap in the LRT system). Project alternatives consisting of different alignments and approaches to meeting the project purpose are clearly expressed in Chapter 2, Alternatives Considered. Evaluation of a range of alternatives is required under NEPA (40 CFR 1502.14), as well as FTA NEPA implementing regulations (23 CFR 771.105(b), 771.123(c) and 771.125(a)). The description of alternatives is provided in Section 2.3 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. The public has repeatedly complimented Metro on the clarity and thoroughness of the environmental review process (see comments on the Draft EIS/EIR from diverse community members in Volumes F-2 and F-3 of this Final EIS/EIR). In addition, Metro has been working closely with communities in the project area since the outset of the Alternatives Analysis process in October 2007. Metro staff have performed extensive outreach measures, as documented in Chapter 7, Public and Agency Outreach, of the Draft EIS/EIR and this Final EIS/EIR, including numerous public meetings,

Japanese and Korean language interpretations, and door-to-door visits with business owners to provide information about the project and gather input. Advertisements regarding scoping meetings and community updates were printed in local newspapers, including Japanese language publications.

Response to Comment R-BU7-10

The Supplemental EA/Recirculated Draft EIR Sections identified an environmentally superior alternative in Chapter 2, Section 2.6.3, page 2-49. This Final EIS/EIR also identifies the Locally Preferred Alternative as the environmentally superior alternative in Section 2.6.3.

Response to Comment R-BU7-11

Please refer to Response to Comment R-BU7-10, above. Pursuant to NEPA (23 CFR 771.130 (c), Section 21029.1 of the Public Resources Code, and CEQA Guidelines Section 15088.5, only sections containing significant new information were recirculated as part of the Supplemental EA/Recirculated Draft EIR Sections. Sections that did not contain significant new information were not recirculated. Significant new information was not contained in the Executive Summary or Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives, which provide a summary comparison of alternatives. Impacts of the alternatives were compared in the Draft EIS/EIR and this Final EIS/EIR in the Executive Summary, in each environmental discipline section in Chapters 3 and 4, and Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives. Tables, which summarize each alternative's impact to each environmental discipline, are also provided throughout Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR to allow the reader to visually compare impacts associated with each alternative.

The environmentally superior alternative, which is the Locally Preferred Alternative, was discussed in Section 2.6.3 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. A summary comparison of alternatives is provided in Table ES-1 and Section 6.6 of Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives, in the Draft EIS/EIR and this Final EIS/EIR. Based on the results of the technical analysis of all the alternatives as reported in this Final EIS/EIR, the Locally Preferred Alternative, as refined, is the environmentally superior alternative.

Response to Comment R-BU7-12

The Draft and Final EIS/EIR included a full and complete analysis and disclosure of all project impacts. All impacts, including cumulative impacts that can reasonably be foreseen and predicted, were analyzed and disclosed for each environmental discipline in Chapters 3 and 4. The cumulative impact analysis took into account past, present, and probable future projects within the project area that are expected to be under construction or in operation during the same time frames as the proposed project. The past, present, and probable future projects that were considered are listed in Section 4.19, Cumulative Impacts, of the Draft EIS/EIR and this Final EIS/EIR. Cumulative impacts and related mitigation measures for each of the resource areas that would occur with implementation of the alternatives are described in Chapters 3 and 4 of the Draft EIS/EIR and this Final EIS/EIR. A summary of the significant and unavoidable cumulative adverse effects/impacts for each alternative, as discussed in Chapters 3 and 4, is provided in Section 4.19, Cumulative Impacts, of the Draft EIS/EIR and this Final EIS/EIR.

Major rail capital investments can support possible future development. This is one reason to make such capital investments. However such development cannot occur without appropriate zoning and land use regulations, and a supportive real estate market including financing. There is no way to predict or guarantee that such developments will occur. If they do occur, they will be subject to environmental and planning review regardless and independent of the proposed rail investment. It would be unreasonable and unfounded to speculate as to the nature and potential impacts of surrounding development that could occur with or without the proposed Regional Connector Project. All property acquired as a partial take or full take would be for permanent transit use, such as station plazas, entrances, and portals. No surplus property would be left after construction. The Regional Connector project has independent utility, and the scope of the Locally Preferred Alternative is not affected by potential future redevelopment. The project has been properly analyzed in this EIS/EIR.

Response to Comment R-BU7-13

As has been proven in the case of numerous cities, including Los Angeles, investment in a rail project in no way guarantees or induces any form of development. The rail investment can support development that might otherwise occur; however, such development requires separate private investment, planning and zoning support that are unrelated to the Regional Connector project. Therefore, it would be highly speculative and inaccurate to assume and analyze any specific external projects in this EIS/EIR beyond citing that the Regional Connector could support rather than hinder appropriate development. The Regional Connector project has independent utility, and the scope of the Locally Preferred Alternative is not affected by potential future redevelopment.

Response to Comment R-BU7-14

Metro has absolutely no basis to conclude or assume that property not needed after construction will revert to anything other than existing parking or commercial uses for which it is designated and zoned. Assuming any other development would be completely speculative. Ultimate development would occur or not occur regardless of the Regional Connector project. Therefore, there is no analysis appropriate to include that has not already been presented in the EIS/EIR.

Response to Comment R-BU7-15

FTA criteria used to determine noise and vibration impacts are not based on the duration of construction. The criteria are based on the level of noise and vibration that would be generated during construction and the type of land use that would be affected. The discussion of construction-related noise impacts has been clarified in Section 4.7, Noise and Vibration, of this Final EIS/EIR. As indicated in Section 4.7 and Table 4.7-15 of this Final EIS/EIR, estimated construction noise levels would not exceed FTA construction noise criteria and impacts would not be adverse under NEPA and would be less than significant under CEQA. Consistency with the goals of the applicable local ordinances and implementation of best management practices (BMPs) is to ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses as classified by the FTA. Section 4.7, Noise and Vibration, of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR determined that sensitive or historic buildings within 21 feet of construction activities (involving large

bulldozers and drill rigs) for all the LRT alternatives may be susceptible to vibration damage and impacts would be significant/adverse prior to implementation of mitigation. Mitigation measures were identified in Section 4.7, Noise and Vibration, of the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections to reduce impacts associated with potential vibration damage to not adverse. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, mitigation measures have been refined and the discussion of the potential for construction-activity-induced vibration to damage buildings has been clarified. Please refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR.

The analysis of the potential for construction-activity-induced vibration to damage the structure of buildings used FTA's minimum safe distances identified for Category IV buildings of 0.12 inch/sec peak particle velocity (PPV) in Table 4.7-5. Given that equipment such as large bulldozers and drill rigs would be the main source of construction vibration that could have the potential to cause vibration damage, sensitive buildings (Category I, II, III, IV buildings as defined in Table 4.7-4 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR) or historic buildings within 21 feet of construction may be susceptible to vibration damage and impacts would be adverse/significant. As part of mitigation for the Locally Preferred Alternative, a pre-construction survey of all structures within 21 feet of the anticipated vibration-producing construction activity would be conducted to verify the building category, structural condition, and to provide a baseline for monitoring of ground-borne vibration and the potential for ground-borne vibration to cause damage. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified historic and sensitive structures. With implementation of mitigation measures identified in Section 4.7.4.2.1, construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity would not be adverse. Refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR for a more detailed discussion of vibration impacts associated with the Regional Connector project.

Response to Comment R-BU7-16

Please refer to Response to Comment R-BU7-15, above. FTA guidelines suggest minimum safe distances between construction equipment and buildings based on the types of construction equipment and the category of a building (physical structure of the building). Buildings are categorized with regard to susceptibility to vibration damage, with Category I buildings being the least susceptible and Category IV buildings being the most susceptible. The Wilson, Ihrig, and Associates March 15, 2011 Memorandum determined the minimum safe distance based on the category of each building in the vicinity of cut and cover construction in Little Tokyo. Regardless of the distance used in the Wilson, Ihrig, and Associates March 15, 2011 Memorandum, the analysis in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR is a more conservative analysis as it used the most sensitive building category (Category IV) to determine the minimum safe distance between construction equipment and buildings and the impact findings identified in Section 4.7, Noise and Vibration, are correct. Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR determined that any sensitive building (Category I, II, III, IV buildings as defined in Table 4.7-4 of the EIS/EIR) or historic building within 21 feet of

construction may be susceptible to vibration damage, which would include the Japanese Village Plaza parking structure. With implementation of mitigation identified in Section 4.7.4.2.1 of this Final EIS/EIR, construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity would not be adverse.

Response to Comment R-BU7-17

Please refer to Responses to Comments R-BU7-15 and R-BU7-16, above. Mitigation measures were identified in Section 4.7.5 of the Supplemental EA/Recirculated Draft EIR Sections, which would reduce construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity to not adverse. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, specificity has been added to these mitigation measures for the Locally Preferred Alternative, which are identified in Section 4.7.4.2 of this Final EIS/EIR.

Response to Comment R-BU7-18

Metro does not anticipate subsidence that could cause adverse effects under NEPA or significant impacts under CEQA. The potential for subsidence was identified in Sections 4.9.3.4 and 4.9.3.5 of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measures to avoid subsidence were identified in Section 4.9.4.1 of the Draft EIS/EIR. These mitigation measures have been incorporated into Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The potential subsidence has not changed due to refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR. The 300 block of East 2nd Street is identified in Figure 4.9-3 as a property of concern due to potential for soil contamination due to prior land uses, not subsidence risk, as indicated in Table 4-5 of Appendix U, Geotechnical/Subsurface/Seismic/ Hazardous Materials Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR. Mitigation measure to address contaminated soil, if encountered during excavation, are also included in Section 4.9.4.1 of the Draft EIS/EIR and Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. No unusual potential for subsidence beyond what is described in Sections 4.9.3.5 and 4.9.3.5 of the Draft EIS/EIR was found to exist on this property. Section 4.9 of the Draft EIS/EIR and this Final EIS/EIR adequately discloses all potential adverse effects/significant impacts related to geotechnical, subsurface, seismic hazards, and hazardous materials.

The sentences immediately following the quoted text from Appendix U, Geotechnical/Subsurface/ Seismic/Hazardous Materials Technical Memorandum, of the Draft EIS/EIR and this Final EIS/EIR discuss mitigation measures that would reduce the potential impacts to not adverse under NEPA and to a less than significant level under CEQA. These mitigation measures have been refined and confirmed in Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU7-19

The refined Locally Preferred Alternative alignment would actually have the same or fewer impacts on traffic, parking, and transportation compared to the Fully Underground LRT Alternative alignment identified in the Draft EIS/EIR. The purpose of the refinements described

in the Supplemental EA/Recirculated Draft EIR Sections was to reduce impacts as is clearly stated. Therefore, all potentially adverse effects/significant impacts were properly and completely analyzed and disclosed in the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections.

Response to Comment R-BU7-20

The Regional Connector would provide new non-automobile access to the area, and partially offset the parking demand in the area. If people can access the area via the Regional Connector, they would be less likely to use automobiles to access the area. As indicated in Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives, of this Final EIS/EIR, the Locally Preferred Alternative is expected to generate 17,700 new daily system-wide linked trips, which was estimated through the Metro travel forecasting model. The new non-automobile access to the area would not be available until the project is complete. Therefore, mitigation such as the provision of 200 self-parking spaces on the Mangrove property, which would be capable of holding 300 cars if supplemental parking services (such as valet) are implemented; development of an advanced parking reservation system; and coordination with the Los Angeles Department of Transportation (LADOT) to open city parking lots for short-term use on evenings and weekends during construction in the vicinity of Little Tokyo shall be implemented to offset the parking spaces lost during construction of the Locally Preferred Alternative. The discussion of off-street parking impacts in Section 4.2, Displacements and Relocation, has been clarified since publication of the Supplemental EA/Recirculated Draft EIR Sections. As indicated in Section 4.2, Displacements and Relocation, of this Final EIS/EIR, the Locally Preferred Alternative would not result in a considerable contribution to a cumulative impact with implementation of mitigation measures.

Response to Comment R-BU7-21

The Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR do specifically analyze and quantify impacts on parking. Specific mitigation measures are proposed for the parking impacts associated with construction in Sections 3.4 and 4.2.4 of the Draft EIS/EIR and Section 4.2.5 of the Supplemental EA/Recirculated Draft EIR Sections. Final mitigation measures for parking impacts associated with the Locally Preferred Alternative are provided in Sections 3.4.2 and 4.2.4.2 of this Final EIS/EIR. Operation-related parking impacts are not adverse/significant. This is clearly supported by the analysis in Chapters 3 and 4. Conclusions are provided in Sections 3.3.5.1.3, 3.3.5.2.3, and 4.2.3.5 of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-BU7-22

The acquisition of underground easements would have no adverse land use impacts because the underground easements would not change existing land uses. Please refer to Response to Comment R-BU7-2, above. Metro would provide compensation for easements in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) as indicated in mitigation measure number DR-8 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Please refer to Section 4.2.3.5 of this Final EIS/EIR for analysis of displacement and relocation consequences associated with the Locally Preferred Alternative, including underground

easements. Issues related to the value of the easements to private property owners will be addressed and resolved through Metro's easement acquisition process.

Response to Comment R-BU7-23

There is no deferral of impacts analysis or mitigation identification. This Final EIS/EIR identifies and commits to specific mitigation measures for parking loss where appropriate (refer to Chapter 8, Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative).

Response to Comment R-BU7-24

On-street parking impacts were analyzed in Chapter 3, Transportation Impacts and Mitigation, with on-street parking impacts associated with the Locally Preferred Alternative analyzed in Sections 3.3.5.1.3 and 3.3.5.2.3 of the Draft EIS/EIR and this Final EIS/EIR. Off-street parking impacts, which included potential impacts to parking lots, were analyzed in Section 4.2, Displacements and Relocation, in the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR with off-street parking impacts associated with the Locally Preferred Alternative analyzed in Section 4.2.3.5 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Sections 3.4.2 and 4.2.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR contain specific committed mitigation measures for on- and off-street parking impacts.

Response to Comment R-BU7-25

The current wording of the mitigation measure has the same meaning as the proposed wording, "Metro shall maintain access...." The proposed language does not differ substantially from the language provided. Therefore, there has been no change in the mitigation measure's wording or intent.

Response to Comment R-BU7-26

This mitigation measure referenced in the comment letter from Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections, was identified (along with the other mitigation measures in the section) to address construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity, not geotechnical risks. The second mitigation measure referenced in the comment letter has been refined since publication of the Draft EIS/EIR and more information regarding threshold values has now been provided. Please refer to Section 4.9.4.2, mitigation measure number GT-1, of this Final EIS/EIR.

Response to Comment R-BU7-27

Section 4.7.5 of the Supplemental EA/Recirculated Draft EIR Sections identified general construction mitigation measures and stated that the general construction mitigation measures, in combination with the mitigation measure involving advance notification and coordination to affected property owners regarding schedules for tunneling and other activities prior to the commencement of those activities, would mitigate adverse ground-borne vibration and ground-borne noise impacts to the Japanese Village Plaza and the other specified land uses. The general construction mitigation measures are identified in Section 4.7.4.2 and Chapter 8 of this Final EIS/EIR as NV-3 through NV-12.

Please refer to Responses to Comments R-BU7-15 and R-BU7-17, above, regarding analysis of the potential for construction-activity-induced vibration to damage the structure of buildings and mitigation to reduce potential impacts.

Response to Comment R-BU7-28

Assuming that the comment is referring to mitigation identified to reduce ground-borne noise impacts associated with operation of the Locally Preferred Alternative, mitigation identified in Section 4.7.5 of the Supplemental EA/Recirculated Draft EIR Sections stated that Metro shall conduct engineering studies during preliminary engineering to verify initial estimates of ground-borne noise and shall implement high compliance resilient fasteners or other appropriate measures as needed to eliminate impacts and reduce ground-borne noise below FTA annoyance criteria. FTA thresholds, used for determining ground-borne vibration and ground-borne noise impacts, are based on land use type. Given that the Japanese Village Plaza and Walt Disney Concert Hall are two different types of land uses, FTA criteria used for determining ground-borne vibration and ground-borne noise impacts to the Walt Disney Concert Hall was more stringent than the criteria used for the Japanese Village Plaza because the Walt Disney Concert Hall is a more sensitive land use. Therefore, the mitigation measures for the Walt Disney Concert Hall were not necessary to reduce ground-borne noise impacts below FTA criteria used for the Japanese Village Plaza. Implementation of high compliance resilient fasteners or other appropriate measures was included in the Supplemental EA/Recirculated Draft EIR Sections as part of the mitigation measure to reduce ground-borne noise impacts associated with operation of the Locally Preferred Alternative to the Japanese Village Plaza. No further mitigation is required. Refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR for a more detailed analysis of ground-borne noise impacts. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, specificity has been added to the mitigation measures for the Locally Preferred Alternative which are identified in Section 4.7.4.2 of this Final EIS/EIR.

Response to Comment R-BU7-29

Metro and FTA find that both monitoring and mitigation for methane are adequate and appropriate mitigation measures. Measures to limit ground movement are location-specific, and rely partly on building surveys which must be performed immediately before the start of construction in order to document a true baseline condition of the buildings. The mitigation measure has been expanded in Section 4.9.4.2 of this Final EIS/EIR and incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) as mitigation measure number GT-1. The expanded mitigation measure cites quantitative thresholds that will be used as performance criteria, in addition to the qualitative performance standard already established in the Draft EIS/EIR. Settlement and methane mitigation measures from Appendix U, Geotechnical/Subsurface/ Seismic/Hazardous Materials Technical Memorandum, of the Draft EIS/EIR have also been expanded with additional specificity and standards in Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU7-30

Please refer to Responses to Comments R-BU7-1 through R-BU7-29, above for responses to specific comments raised in this letter on the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections. Subsequent to publication of the Draft EIS/EIR, the Locally Preferred

Alternative alignment was modified to reduce impacts. The relevant and appropriate sections of the Draft EIS/EIR were re-circulated in the Supplemental EA/Recirculated Draft EIR Sections to share the refined alignment with the public and to disclose any potential new or different impacts. The commenter and others had ample opportunity to comment on the Supplemental EA/Recirculated Draft EIR Sections during the 45-day review period. Since publication of the Supplemental EA/Recirculated Draft EIR Sections, significant new information, which would initiate recirculation per CEQA Guidelines §15088.5(a) and NEPA (23 CFR 771.130 (c)), has not been added to the EIS/EIR. Following circulation of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, and consideration of all comments received, Metro and FTA have prepared this Final EIS/EIR. This report includes and addresses all of the comments received during the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections public comment periods.

Response to Comment R-BU7-31

Comments in this comment letter are addressed individually in the responses below. Potential impacts to the Japanese Village Plaza site are adequately evaluated in the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections as indicated in the following responses.

Response to Comment R-BU7-32

Metro is aware of the buildings at the Japanese Village Plaza site. Impacts and mitigation pertaining to the proposed alignment beneath Japanese Village Plaza are discussed in the sections of Chapter 4 in the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Approximate measurements are noted. Plans and profile drawings are provided to scale in Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

Response to Comment R-BU7-33

Metro would acquire a subsurface easement beneath the parking garage, as indicated in Table 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. The acquired area would be permanently limited to use for light rail transit tunnels. Metro would provide compensation for the easement in compliance with the Uniform Act as indicated in mitigation measure number DR-8 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). This mitigation measure was also included in Section 4.2.4 of the Supplemental EA/Recirculated Draft EIR Sections. Metro would not acquire any other Japanese Village Plaza property outside of the acquisitions identified in Table 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Areas not acquired would remain available to the Japanese Village Plaza for subterranean use.

Response to Comment R-BU7-34

The tunnel alignment is not located within a state-designated surface fault rupture zone and no known active fault capable of causing surface rupture crosses the proposed tunnel alignment. The preliminary engineering team's expert studied fault rapture zones and no faults along the

Locally Preferred Alternative alignment were identified. The commenter indicates that "a zone of potential vertical deformation" exists north of Station 85+00; however, the mechanism for vertical deformation is not identified in the comment letter. It is not clear how GeoDesign came to the statement about the source of potential vertical deformation discussed in the comment letter. Metro's design team looks forward to ongoing coordination and communication with property owners during the final design process.

Response to Comment R-BU7-35

Maximum potential settlements have been evaluated based on our knowledge of the building/structure foundations in the Japanese Village Plaza and actual ground loss due to tunneling operations. Measures to mitigate potential foundation movements include real-time Multipoint Borehole Extensometer (MPBX) monitoring, specific building/structure monitoring, compensation grouting, and the use of a closed-face pressurized tunnel boring machines. As tunnel excavation advances, real time MPBX data (ahead of the excavation) will provide ground movement at depth. Tunnel boring machine operations will be continually monitored and adjusted to maintain acceptable settlement levels. In addition, preparation for compensation grouting has been included in the measures to mitigate potential settlement.

Response to Comment R-BU7-36

Portions of the proposed alignment are located within a Methane Buffer Zone delineated by the City of Los Angeles, and a "Gassy" condition will be utilized as an assumption for the tunnel design. Mitigation measures will be implemented accordingly in the final tunnel design, which mitigate the risk of exposure to methane and other harmful gasses. Gas monitoring wells have been installed along the Locally Preferred Alternative alignment as a part of the investigation program to collect additional information. Methane mitigation measures from Appendix U, Geotechnical/Subsurface/ Seismic/Hazardous Materials Technical Memorandum, of the Draft EIS/EIR have also been expanded with additional specificity and standards in Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU7-37

Sections 4.10.3.4 and 4.10.3.5 of the Draft EIS/EIR indicate that dewatering will be needed where groundwater is encountered, and that groundwater would likely be encountered during excavation activities. This would include the excavation activities proposed beneath the Japanese Village Plaza. Dewatering methods are identified in Sections 4.10.3.4 and 4.10.3.5 of the Draft EIS/EIR, and mitigation measures to ensure adverse effects under NEPA and significant impacts under CEQA related to dewatering do not occur are identified in Sections 4.10.4 of the Draft EIS/EIR. These mitigation measures have been incorporated into Section 4.10.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU7-38

All known underground obstructions, including known utilities, will be identified on the drawings for the Design/Build Contractor. The location and size of the known obstructions will be coordinated with the tunnel design and construction staging. Potential impacts to the known foundations and utilities due to the tunneling operation will be evaluated pre-construction.

Where required, known obstructions may be removed; known building or structure foundations are protected; and known utilities may be protected, or temporarily or permanently relocated. Instrumentation and monitoring of all known impacted foundation/building and major utility movements will be monitored during the tunneling construction. Refer to Section 4.19, Construction Impacts, of this Final EIS/EIR for further information.

Response to Comment R-BU7-39

Please refer to Responses to Comments R-BU7-15 and R-BU7-16, above. The analysis of the potential for construction-related vibration to damage the structure of buildings used a minimum safe distances of 21 feet. The methodology used to determine the safe distance is discussed in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Operation of a tunnel boring machine could generate up to 0.055 inches per second PPV at a distance of 33 feet. Since the Japanese Village Plaza parking garage is a reinforced concrete structure (Category I, 0.5 in/sec PPV), operation of the tunnel boring machine would potentially exceed the Category I FTA criterion at a distance of six feet from a building. Since the Japanese Village Plaza parking structure is located beyond this distance, vibration damage from tunnel boring machine operations would not occur and mitigation measures would not be required for tunnel boring machine operation as indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

As indicated in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, construction of the project would not involve impact or sonic pile driving (pre-auguring would be used for installation of the soldier piles instead) or large vibratory rollers. Therefore, equipment such as large bulldozers and drill rigs would be the main source of construction vibration that could have the potential to cause vibration damage. Based on the FTA's minimum safe distances identified for Category IV buildings of 0.12 inch/sec PPV in Table 4.7-5, the minimum safe distance between construction activities (involving large bulldozers and drill rigs) and buildings would be 21 feet. Therefore, construction-related vibration impacts to sensitive buildings (Category I, II, III, IV buildings as defined in Table 4.7-4 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR) and historic buildings located within 21 feet of the anticipated vibration-producing construction activity, which includes the Category I Japanese Village Plaza parking structure, would be adverse/significant. Mitigation measures to reduce this impact to not adverse, such as geotechnical and vibration monitoring, and pre-post-construction survey, were identified in the Supplemental EA/Recirculated Draft EIR Sections and are included in Section 4.7.4.2 and Chapter 8 of this Final EIS/EIR.

Vibration generated during LRT operation would be far less than vibration generated during construction. The Category I criterion of 0.5 inches per second PPV for construction vibration is approximately 102 VdB. As outlined in the July 13, 2011 memorandum, the expected maximum ground-borne vibration level at Hikari Lofts is 72VdB without vibration control measures. The operational vibration at the Japanese Village Plaza parking structure is expected to be of a similar magnitude and no building damage effects are expected.

Response to Comment R-BU7-40

Please refer to Response to Comment R-BU7-35, above. A significant engineering effort is devoted to ensure proper protection of buildings, utilities and safety of personnel within the Japanese Village Plaza during construction activities. As indicated in Section 4.9.4.2, as part of mitigation, ground improvement such as grouting or other methods shall be required to fill voids where appropriate and offset potential settlement when excess material has been removed during excavation. A special report entitled "Building and Adjacent Structure Protection Report" is being developed to address the construction impacts disclosed in the EIS/EIR and to apply the specific mitigation measures identified in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to protect buildings during construction. The report will be completed during final design, prior to construction. The report, once completed, will be available through Metro's Records Management Center by request.

Response to Comment R-BU7-41

The selected Design/Build Contractor will request entry to specific Japanese Village Plaza site facilities to implement the "Instrumentation and Monitoring Program". The program will be developed to ensure "real-time" monitoring is being evaluated during the tunneling operation to mitigate any potential impacts.

Response to Comment R-BU7-42

The Japanese Village Plaza parking structure will be protected from impacts due to the cut and cover construction of the station and the tunnel boring machine(s) which crown approximately 15 feet below the foundation structure. The depth of the foundation structure was confirmed by the excavation of a small test pit in the public right-of-way adjacent to the parking structure. Specific details from the test pit will be provided to assist the Design/Build Contractor to develop the final design to monitor and protect the structure during tunneling and open cut activities. Coordination and communication with the property owner will be ongoing throughout the design and construction process.

Response to Comment R-BU7-43

The Design/Build Contractor has several choices of support of excavation consistent with the allowable adjacent ground movements generated due to the excavation and will be responsible for the final design. The preliminary engineering drawings provide a suggested method of support of excavation that will meet the expected allowable ground movement. Tie-backs are suggested in specific areas of public property; however, no temporary easements have been anticipated to allow the use of tie-backs in other areas. Typically, for the deep main station box shoring system cross-bracing is proposed to minimize ground movement.

Response to Comment R-BU7-44

Please refer to Response to Comment R-BU7-1, above.

Response to Comment R-BU7-45

Please see responses above.

Response to Comment R-BU7-46

The alignment of the Locally Preferred Alternative traveling beneath the Japanese Village Plaza was described in Chapter 2, Alternatives Considered and analyzed in Chapters 3 and 4 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU7-47

Please refer to Response to Comment R-BU7-6, above.

Response to Comment R-BU7-48

These are clearly indicated in Figures 2-1 through 2-3 and 2-8 through 2-10 in Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

Response to Comment R-BU7-49

Chapter 2, Alternatives Considered, of the EIS/EIR contains both general regional maps showing the context of the Regional Connector project, and specific maps showing the project location including the alignment. Refer to Figures 2-1 through 2-3, 2-8 through 2-10, 2-37, and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR.

Response to Comment R-BU7-50

The EIS/EIR properly shows all alternatives on a map consistent with CEQA and NEPA.

Response to Comment R-BU7-51

The purpose of the technical appendices is not to designate a preferred alternative but to thoroughly analyze the EIS/EIR alternatives in similar detail so that impacts may be compared as required by CEQA and NEPA.

Response to Comment R-BU7-52

The EIS/EIR does compare the alternatives, including the Locally Preferred Alternative, throughout the analysis. The comparison is summarized in the Executive Summary and in Chapter 6, Cost and Performance Considerations and Summary Comparison of Alternatives.

Response to Comment R-BU7-53

The Draft EIS/EIR and this Final EIS/EIR contain a thorough and precise description of the project, the Locally Preferred Alternative, using both text and graphics. Refer to Section 2.3.6, Figures 2-1 2-10, and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR for a description of the Locally Preferred Alternative. The Locally Preferred Alternative designated by the board is the Fully Underground LRT Alternative; this is clearly stated in the beginning of Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU7-54

The Supplemental EA/Recirculated Draft EIR Sections does analyze and disclose the impacts of the refined Locally Preferred Alternative on all relevant properties including the Japanese Village Plaza. For example, potential for noise and vibration impacts to the Japanese Village Plaza were

analyzed in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR.

Response to Comment R-BU7-55

The refined Locally Preferred Alternative described in the Supplemental EA/Recirculated Draft EIR Sections would reduce the impacts of displacements and relocations as is indicated in Section 4.2, Displacement and Relocation, of the Supplemental EA/Recirculated Draft EIR Sections. This analysis is also contained in Section 4.2, Displacement and Relocation, of this Final EIS/EIR.

Response to Comment R-BU7-56

Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections includes supplementary noise analysis at relevant locations. This analysis is also included in Section 4.7, Noise and Vibration, of this Final EIS/EIR.

Response to Comment R-BU7-57

Please refer to Response to Comment R-BU7-18, above.

Response to Comment R-BU7-58

Please refer to Response to Comment R-BU7-18, above.

Response to Comment R-BU7-59

Relevant differences in construction impacts are analyzed and disclosed in Chapters 3 and 4, and summarized in Section 4.18, Construction Impacts, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. The refinements to the Locally Preferred Alternative analyzed and disclosed in the Supplemental EA/Recirculated Draft EIR Sections result in reduced construction impacts.

Response to Comment R-BU7-60

Section 4.12.1, Built Environment, of the Supplemental EA/Recirculated Draft EIR Sections includes additional analysis of historic resources affected by the refinements to the Locally Preferred Alternative. This analysis is also included in Section 4.12.1, Built Environment, of this Final EIS/EIR.

Response to Comment R-BU7-61

Please refer to Response to Comment R-BU7-10, above.

Response to Comment R-BU7-62

Chapter 10, Comparison of Project Against Existing Conditions, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR analyzes environmental impacts using a year 2010 baseline per the *Sunnyvale West Neighborhood Assn, et al v. City of Sunnyvale City Council* court ruling. A modified baseline was prepared for this analysis, using only the portions of the rail system that were open in 2010. Analysis in the chapter revealed that transportation and cumulative impacts would be less in the year 2010 scenario than in 2035, and all other impacts would be similar or identical. The mitigation measures identified to address CEQA

impacts in Chapters 3, 4, and 8 of the EIS/EIR would be sufficient for the year 2010 impacts to achieve the same CEQA determinations as year 2035. No unique impacts would occur under the year 2010 scenario, and no additional mitigation measures would be required.

Response to Comment R-BU7-63

Please refer to Response to Comment R-BU7-62, above.

Response to Comment R-BU7-64

Please refer to Responses to Comments R-BU7-23 through R-BU7-25, above.

There is no deferred analysis of impacts. The analysis and research indicate that there would be no adverse effect under NEPA and no significant impact under CEQA from electromagnetic fields (EMFs) as is clearly stated (with references). Monitoring was offered at sensitive locations to ensure that no unanticipated impacts have occurred and to reassure concerned citizens of Metro's sensitivity to their concerns. Nonetheless, since publication of the Draft EIS/EIR, Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials has been updated. The mitigation measure for monitoring EMFs is no longer needed for the Locally Preferred Alternative based on the updated hazardous materials analysis for the Locally Preferred Alternative. Refer to Section 4.9.3.5.2 of this Final EIS/EIR for more information.

Response to Comment R-BU7-65

Mitigation is not deferred. The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative, Chapter 8, and Section 4.17.4.3 of this Final EIS/EIR, includes specific mitigation measures to address this impact such as; the provision of 200 self-parking spaces on the Mangrove property, which would be capable of holding 300 cars if supplemental parking services (such as valet) are implemented; development of an advanced parking reservation system; and coordination with LADOT to open city parking lots for short-term use on evenings and weekends during construction in the vicinity of Little Tokyo. The parking study is simply proposed to establish a baseline and to help confirm that the specific mitigation measures are effective.

Response to Comment R-BU7-66

The EIS/EIR does not defer analysis of mitigation measures. As discussed in the introductory portion of Section 4.9.4.1 of the Draft EIS/EIR, a qualitative performance standard of preventing damage to buildings has been identified. Measures to limit ground movement are location-specific, and rely partly on building surveys which must be performed immediately before the start of construction in order to document a true baseline condition of the buildings. The mitigation measure has been expanded in the Section 4.9.4.2 of this Final EIS/EIR and incorporated into the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR) as mitigation measure number GT-1. The expanded mitigation measure cites quantitative thresholds that will be used as performance criteria, in addition to the qualitative performance standard already established in the Draft EIS/EIR. Settlement and methane mitigation measures from Appendix U, Geotechnical/Subsurface/ Seismic/Hazardous Materials Technical Memorandum, of the Draft EIS/EIR have also been expanded with additional specificity and standards in Section 4.9.4.2 and the Mitigation

Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU7-67

Please refer to Response to Comment R-BU7-12, above.

Response to Comment R-BU7-68

Please refer to Response to Comment R-BU7-12, above. Determining any impacts related to relocation and/or redevelopment of the properties necessary for construction would be speculative. The Regional Connector project has independent utility. The relocation and redevelopment does not affect the scope of the Regional Connector project.

Response to Comment R-BU7-69

Please refer to Responses to Comments R-BU7-68 and R-BU7-12, above. Each Metro rail project has independent utility. Each is a separate project which stands alone regardless of whether other projects are implemented.

Response to Comment R-BU7-70

This Final EIS/EIR, which consists of the Draft EIS/EIR (revised to reflect refinements to the Locally Preferred Alternative), the Supplemental EA/Recirculated Draft EIR Sections, and all comments received on the two documents, as well as responses to such comments, is complete and adequate pursuant to both CEQA and NEPA. No revisions or recirculation are required.

DOWNTOWN LA
ARTS DISTRICT
BUSINESS IMPROVEMENT DISTRICT

September 6, 2011

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Arthur T. Leahy
Chief Executive Officer
Metro
One Gateway Plaza
Los Angeles, CA 90012-2952

Dear Mr. Leahy:

The Arts District Business Improvement District (ADBID) respectfully submits this letter with our comments on the Regional Connector Project Draft EIS/EIR.

BACKGROUND

The ADBID represents 200 property owners and 400 businesses employing 5,300 individuals in the eastern portion of Downtown Los Angeles. In 2006, these property owners voted in favor of a property tax assessment in order to provide a higher level of services than the City can provide. Through this commitment to neighborhood betterment, the Arts District BID was formed.*

The BID provides maintenance, security, marketing and economic development advocacy to its members spanning 53 blocks bounded roughly by the 101 Freeway, Alameda St., Seventh St., and the Los Angeles River. The Arts District is a vibrant and evolving community comprising arts, industry and innovation, and which is presently capturing its rightful place as Downtown's most exciting community.

ARTS DISTRICT BUSINESS IMPROVEMENT DISTRICT (ADBID) COMMENTS REGIONAL CONNECTOR PROJECT DRAFT EIS/EIR

1

OUR POSITION

The AD BID supports the Fully Underground LRT Alternative for the following reasons:

- Only the Fully Underground LRT creates a new station at 2nd/Central that has the ability to provide Arts District stakeholders with the full benefits of the Regional Connector project. In the At Grade Emphasis and Underground Emphasis Alternatives, the existing Little Tokyo/Arts District Gold Line Station would remain, and would only provide direct access to the Regional Connector's north-south route. Patrons from the Arts District would either still need to transfer to access the east-west route, or would need to walk (on average) a half mile to the proposed

* The ADBID recently renewed for another five year term by a 70% affirmative majority. Beginning in January 2011, the ADBID will slightly expand its boundaries increasing its stakeholders to 743.

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2nd and Broadway station or the 2nd and Los Angeles station, whichever is selected, to travel east and west. Either solution would defeat the primary goal of the Regional Connector project (increased utilization as a result of reduced transfers and trip times) for the Arts District community.

- The Fully Underground LRT has fewer and less severe construction impacts on Alameda than the other alternatives. This will result in far fewer traffic and economic impacts for Arts District residents, commercial and industrial businesses. Alameda is a major arterial – a literal lifeline for the Arts District as well as the adjoining industrial areas of Downtown. Negative impacts to Alameda equal direct costs to area businesses. 1 cont'd

- No at-grade train operations would pass through the two intersections of 1st and Alameda Streets and Alameda and Temple Streets.

- Existing bus service in the area will see the fewest impacts and disruptions under this alternative. Bus service is critical for many of the industrial employees in the area.

- The long-term impacts to Arts District intersections are significantly less with the Fully Underground Alternative.

CONCERNS & REQUESTED MITIGATIONS

Parking

To the extent that the various alternatives require the permanent and/or temporary removal of parking on 2nd Street in Little Tokyo, the ADBID is concerned that displaced/overflow parking will end up in the Arts District. The Arts District shares a border with and lies immediately to the east of the area most impacted by reduced parking. The area's parking is mix of metered and unmetered spaces, but is already heavily utilized 24 hours/day.

The "At Grade Emphasis LRT" would have the worst possible impact -- permanently displacing 24 parking and loading spaces on 2nd Street due to the permanent closure of the eastbound parking lane (Figure 3-6.) It would temporarily displace 52 parking spaces and 6 loading zones on 2nd Street and another 13 parking and loading spaces on Alameda (Table 3-10.) The "Fully Underground LRT" will have temporary impacts, but relatively minor long-term impacts to parking. 2

The ADBID would request that the area's potential for displaced/overflow parking impacts be acknowledged as well in each of the alternatives. There are several places in the DEIS/DEIR where it says that the various alternatives "would result in an adverse [parking] impact only in the Little Tokyo community portion of the alignment." Little Tokyo parking is fully utilized and we see no opportunity for it to increase its parking capacity in the short term. While no parking spaces are being removed in the Arts District, it is the neighborhood immediately adjacent to the majority of the temporary and permanently displaced parking spaces, and is the area most likely for displaced visitors to seek on-street parking.

Removal of Signalized Intersection at 1st & Hewitt Streets

One of our major remaining concerns with our preferred Fully Underground LRT Alternative is the observation that the signalized intersection at 1st and Hewitt Streets would be removed, eliminating the ability to cross 1st Street at that location. While it is our understanding that this is necessary to allow the creation of a portal connecting the existing Eastside Gold Line with the new 2nd/Central station, we are very concerned about pedestrian impacts. If this signal is removed, there will be no ability for a pedestrian to cross 1st Street anywhere between Alameda and Vignes Streets. This 3

signal is the *only* legal crossing point between Alameda and Vignes. The distance from one signalized intersection/pedestrian crossing (Alameda to Vignes) will then be one quarter of a mile (approximately 1300 feet/4 blocks.)

The ADBID has significant safety concerns that pedestrians might choose to cross the tracks illegally rather than walk several blocks out of the way. In addition, the lack of crossing further severs the northernmost portion of the Arts District from the heart of the district, and also weakens the connectivity between the Arts District and Little Tokyo's northeasternmost uses. We believe that a lack of pedestrian connections could irreparably harm the future redevelopment of the portion of the Arts District that lies north of 1st Street. 3 cont'd

The ADBID would request, therefore, that Metro consider the feasibility of adding a pedestrian bridge in this area in order to mitigate the adverse impacts of eliminating the signalized intersection and crosswalk at Hewitt. Specifically, we would ask that this potential mitigation be added to those already listed in Section 3.4.2.2.4 of the EIR/EIS.

Request for Involvement in Construction Planning and Notification of Project Impacts

The ADBID's other major concern are the impacts associated with construction of the Regional Connector. The ADBID would like to be involved in future discussions related to the project's Construction Mitigation Program and Worksite Traffic Control Plans, as well as the final haul route decisions that will be made in the preliminary engineering phase. 4

The ADBID would ask Metro to take note that there are a number of residential and live/work buildings in the Alameda/1st/Vignes/2nd Sts. Area that may be impacted by nighttime construction and nighttime haul routes, especially the proposed staging area at 1st/Alameda. The ADBID requests that the appropriate construction documents and haul route maps show the location of all residential buildings and other 24-hour uses. 5

The ADBID also requests priority notification from Metro and/or its contractor(s) when construction impacts will occur. The ADBID has the ability to disseminate closure and other information quickly to a majority of residents, businesses and property owners in the immediate area. This will undoubtedly help reduce the number of questions and complaints likely to be fielded by Metro and its contractor(s.) 6

Lastly, the Draft EIS/EIR notes "most construction along the rest of the alignment would take place during the nighttime and weekend hours" and "haul trips would take place during off-peak hours when there is excess capacity on the roadway network" and "driveway access for residences would be maintained at all times...driveway access to business would be maintained for normal business operating hours (Sections 3.3.3.1.2 and 3.4.1.2)." Please note that the majority of the area's industrial businesses do not keep normal business operating hours. Most industrial businesses begin operations between midnight and 6 AM, and some operate 24 hours/day. The involvement of the ADBID at the planning stage, combined with advance notification, is desperately needed to avoid adverse economic impacts on local businesses. 7

Miscellaneous Comments

- The AD BID requests that Metro improve lighting, sidewalks and other public ROW elements in order to provide safer and more attractive pedestrian and bicycle connections between the Arts District and the 2nd and Central station. Improved connections are most needed at 1st, 2nd and 3rd/Traction. 8
- The AD BID supports the inclusion of bicycle racks/lockers and would ask that Metro examine the feasibility of adding bike sharing systems to its Downtown rail stations. 9
- While the AD BID supports the Fully Underground LRT Alternative (which would not require an underpass on Alameda), if Metro selects an alternative that includes the construction of an underpass on Alameda, the AD BID would like to be included in these 10

discussions and decisions, as the impacts to area stakeholders will be significant, especially to the industrial businesses located on both sides of Alameda. As noted in the Draft EIS/EIR, traffic congestion and delays on Alameda are likely to impact Central Avenue, another major arterial primarily serving the industrial community represented by the Downtown Industrial District BID, which is also administered by the Central City East Association. 10 cont'd

- Just as the existing Eastside Gold Line station at First and Alameda acknowledges both the Arts District and Little Tokyo, it is our hope that the new Second and Central Station will likewise acknowledge the two communities that it will serve. 11

CONCLUSION

We thank you for your consideration and attention to our concerns, and appreciate staff's recommendation to select the Fully Underground LRT Alternative. We hope that the Metro Board of Directors will agree. 12

Sincerely,

ESTELA LOPEZ
Executive Director

R-BU8

Responses to Comments from Downtown LA Arts District Business Improvement District, Lopez, Estela

Response to Comment R-BU8-1

Thank you for this information about the Downtown LA Arts District Business Improvement District (ADBID). Support for the Fully Underground LRT Alternative is noted. The Metro Board of Directors voted on October 28, 2011 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. As noted in the introduction to Chapter 2, Alternatives Considered, of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR, refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR involve repositioning the 2nd/Central Avenue station on the same block, moving it closer to the intersection of 1st Street and Central Avenue. Despite the repositioning, it would still be located on the same block and serve the same communities. The station would still have direct access to the proposed North-South and East-West Lines.

Metro understands the importance of Alameda Street to the Arts District and adjoining industrial areas. It is also Metro's goal to minimize impacts to bus service and traffic flow as a result of the Regional Connector project. The Fully Underground LRT Alternative was developed, in part, with the goal of reducing construction impacts on Alameda Street. No regular at-grade train service is planned through the intersections of 1st and Alameda or Alameda and Temple Streets. Some movement of trains through these intersections may still be needed on an infrequent basis.

Response to Comment R-BU8-2

The Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), includes mitigation measures to address construction-related parking reductions in Little Tokyo. Among them, Metro would provide 200 self-parking spaces on the Mangrove property, which would be capable of holding 300 cars if supplemental parking services (such as valet) are implemented. This mitigation to address parking impacts in Little Tokyo would also mitigate the potential for spillover parking into adjacent neighborhoods including the Arts District.

The At-Grade Emphasis LRT Alternative was not designated as the Locally Preferred Alternative for the Regional Connector project. The Metro Board of Directors voted on October 28, 2011 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Fully Underground LRT Alternative was developed with a primary goal of reducing construction-related disruption, including parking displacement, in Little Tokyo. Metro is focusing its efforts on refining the Locally Preferred Alternative to further reduce impacts, rather than attempting to refine the non-Locally Preferred Alternative alternatives which would have greater overall impacts.

Response to Comment R-BU8-3

This elimination of through north-south traffic movement at the intersection of 1st and Hewitt Streets was included in Sections 2.3.6.2 and 3.3.5.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The portal would be surrounded on three sides by safety barriers such as fencing that would

deter illegal pedestrian crossings. There are no streets between Alameda and Vignes Streets that continue north beyond 1st Street, so it is unclear how the elimination of the north-south pedestrian crossing at 1st and Hewitt Streets would impede access to the area north of 1st Street from the central portion of the Arts District. Pedestrians must currently walk to Alameda or Vignes Streets to access this area, and this would not change as a result of the Regional Connector.

Metro has received input from the Little Tokyo community opposing pedestrian bridges in the vicinity of 1st and Alameda Streets. As explained above, such a bridge is not warranted by the Regional Connector project.

Response to Comment R-BU8-4

Metro looks forward to continued coordination with ADBID. Haul routes would be confirmed with community input, and haul trips would be scheduled at times that minimize disruption, per mitigation measure numbers TR-2 and EJ-21 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU8-5

Metro is aware of these residential buildings, and has analyzed the potential noise impacts on all sensitive receptors close to the proposed alignment and construction areas in Section 4.7, Noise and Vibration, of the Supplemental EA/Recirculated Draft EIR Sections. Noise mitigation measures in the Supplemental EA/Recirculated Draft EIR Sections have been incorporated into Section 4.7.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR.

Response to Comment R-BU8-6

Metro will coordinate with the community, including ADBID, regarding construction activities through the Regional Connector Community Leadership Council (RCCLC), as provided in mitigation measure numbers CN-4 and CN-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). It is Metro's goal to provide timely information to the community.

Response to Comment R-BU8-7

The operating hours of the Arts District industrial businesses is noted. Metro's commitment to maintain access to businesses during their operating hours is provided in mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro will continue meeting with ADBID to coordinate planning and construction activities. It is Metro's goal to minimize impacts to businesses.

Response to Comment R-BU8-8

As shown in mitigation measure number CN-8 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), Metro would implement an "Arts District Path" and would invite community and Southern California Institute of Architecture participation in its design. The path would include sidewalk enhancements, way finding, appropriate lighting, and crosswalk improvements.

Response to Comment R-BU8-9

Bicycle facilities would be incorporated into station designs where feasible per Metro's design criteria. Metro will continue to examine ways to enhance connections between bicycles and transit.

Response to Comment R-BU8-10

The Metro Board of Directors voted on October 28, 2011 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative. The Locally Preferred Alternative does not include an underpass on Alameda Street. Metro will coordinate with the community, including ADBID, regarding construction activities through the RCCLC, as provided in mitigation measure numbers CN-4 and CN-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU8-11

It is Metro's goal to have the 1st/Central Avenue station incorporate the identities of both Little Tokyo and the Arts District through design in consultation with the communities and through the implementation of mitigation measure numbers CN-8 and CN-9 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU8-12

Thank you for your comment. The Metro Board of Directors voted on October 28, 2011 to designate the Fully Underground LRT Alternative as the Locally Preferred Alternative.

WA WEISENHAUSARCHITECTURE

Ms. Dolores Roybal Saltarelli
Project Manager, Metro
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

September 6, 2011

RE: Metro Public Comment
Future 5th & Flower Station - Preclusion avoidance

Ms. Roybal Saltarelli,

This letter is in response to the Regional Connector Supplemental FEIS/R released on July 22, 2011.

As you know, the much needed 5th & Flower Station was deleted on October 2010 as a quick mitigation measure to cost overruns, in order to meet a critical funding deadline. However, considering the multi-century lifetime of the Regional Connector, in would be imperative to allow for the re-insertion of the station at a future date in order to serve LA County's location of highest employment density.

Thank you for responding to the community's transit needs by allowing such receptivity to a future 5th & Flower Station. Per S-DEIS/R, Chapter 2.0, page 2-1: "However, the project design would not preclude construction of a station at this location as a future, separate project. Also, per S-DEIS/R, Chapter 2.0, page 2-2: "A pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. This would allow for a possible future station at this location to be constructed as a separate project."

However, there are two design items indicated in the Supplemental DEIS/R that <u>would</u> preclude a future 5th & Flower Station: 1

1. <u>The location of a substation between 5th & 4th Streets.</u> Per DEIS/R, Chapter 2.0, page 2-2: A traction power substation (TPSS) would be located along Flower Street between 5th and 4th Streets in the deleted Flower/5th/4th Street station location"

2. <u>A sloped grade between 5th & 4th & Streets.</u> Per DEIS/R, Appendix R-1, Engineering drawing C-102, an 0.88% grade is indicated, in lieu of the 0.00% grade indicated on the DEIS/R drawings released in August 2010.

Please forward these design items to Metro staff for correction. Thank you. I've included a portion of Chapter 2.0 and Appendix R-1 for reference. I look forward to the completion of the Regional Connector, but also to the 5th & Flower Station, whether concurrent with the Regional Connector or at a later date.

Sincerely yours,

Duane B. Weisenhaus, AIA, LEED AP
President/CEO
Weisenhaus Architecture

Cc: Ann Kerman, Metro; Hilary Norton, FAST; Bart Reed, Transit Coalition

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Metro

Chapter 2 ALTERNATIVES CONSIDERED

This chapter discusses how the alternatives studied in the Draft EIS/EIR were developed. All of the proposed build alternatives meet the purpose and need outlined in Chapter 1 of the Draft EIS/EIR.

This chapter includes a detailed discussion of the alternatives identified for additional study and alternatives that were analyzed and subsequently eliminated from consideration. These alternative analyses were performed in compliance with the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and all applicable associated guidance.

The Regional Connector Transit Corridor Project Draft EIS/EIR was made available to identified stakeholders, agencies, and the general public for review and comment for a 45-day review period from September 3, 2010 through October 18, 2010. On October 28, 2010, the Metro Board of Directors voted to designate the Fully Underground Light Rail Transit (LRT) Alternative without the Flower/5th/4th Street station as the Locally Preferred Alternative (LPA). However, the project design would not preclude construction of a station at this location as a future, separate project. This chapter has been updated since publication of the Draft EIS/EIR based on refinements to the LPA, which were undertaken in order to reduce impacts. A vertical line in the margin is used to show where revisions have occurred to this chapter since publication of the Draft EIS/EIR.

Based on comments received on the Draft EIS/EIR and input received from community meetings, the following refinements, which are described in further detail in Section 2.3.6 and Section 4.18.2, Construction Impacts - Affected Environment, herein below, were made to the LPA to reduce or avoid previously identified impacts:

- An enhanced pedestrian walkway would be created along the west side of Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets.
- At 2nd Street and the pedestrian signal to the Japanese Village Plaza (JVP), the tracks would continue underground heading northeast under the plaza and 1st and Alameda Streets.
- The proposed Little Tokyo/Arts District underground station, 1st/Central Avenue station (previously called 2nd/Central Avenue station), would be partially located within Central Avenue and the northern half of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street.
- The Tunnel Boring Machine (TBM) would be inserted at the property northeast of 1st and Alameda Streets, the Mangrove property (formerly known as the Nikkei development), and transported underground to Central Avenue, where it would begin excavating westward (refer to Section 4.18.2, Construction Impacts- Affected Environment, herein below for more detail).
- Tunnel boring activities from the new insertion site would proceed farther down Flower Street to 4th Street instead of ending at the proposed 2nd/Hope Street station (refer to Section 4.18.2, Construction Impacts- Affected Environment, herein below for more detail).

- Cut and cover on 2nd Street in Little Tokyo would not be required, which would result in less cut and cover overall during construction (refer to Section 4.18.2, Construction Impacts- Affected Environment, herein below for more detail).

- Relocation of the 2nd Street storm drain would not be required in Little Tokyo (refer to Section 4.18.2, Construction Impacts - Affected Environment, herein below for more detail).

Would preclude a future 5th/Flower Station

The following refinements were made to the LPA to improve project design:

- A pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. This would allow for a possible future station at this location to be constructed as a separate project.

- Crossovers could be located north and east of the proposed rail junction: in the tunnel beneath the Mangrove property, and beneath 1st Street just east of the intersection of 1st and Alameda Streets.

- A traction power substation (TPSS) facility would be located along Flower Street between 5th and 4th Streets in the deleted Flower/5th/4th Street station location.

- Antennas may be used as part of the LRT communication system. Antennas would not be visible from any historic resource and would not intrude on the visual quality of the surrounding neighborhood (refer to Section 2.3.3.7 herein below for more information).

In addition to modifications associated with refinements to the LPA described above, there have been modifications and corrections to this chapter in response to comments received on the Draft EIS/EIR.

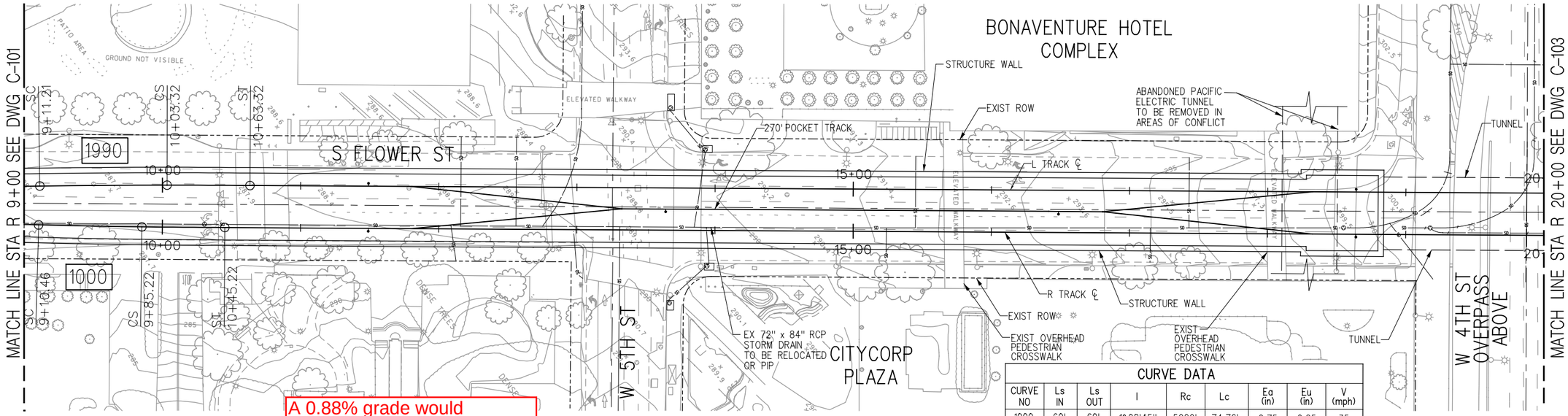
The LPA would involve construction and operation of a 1.9 mile LRT connector that would link the Metro Blue Line, Metro Gold Line, and future Metro Expo Line into a single consolidated system. All proposed build alternatives would begin underground at the existing Metro Blue Line (and future Metro Expo Line) platform at 7th Street/Metro Center Station and extend in a northeastern direction to a new junction with the Metro Gold Line near Alameda Street. Figure 2-1 shows the LRT routes and stations that were identified for study in the EIS/EIR.

2.1 Background and Planning Context

The Regional Connector Transit Corridor alternatives presented in the Draft EIS/EIR build on prior planning studies and projects from the past two decades. In particular, the early studies from 1988 to 1993 focused on extending the Metro Blue Line (light rail line) to Pasadena. The Metro Blue Line currently extends from downtown Los Angeles to Long Beach. This project was later constructed as the Metro Gold Line from Union Station to Pasadena, with the connection to the Metro Blue Line at 7th Street/Metro Center Station deferred to a later time. The Metro Expo Line (light rail line), which will extend from downtown West Los Angeles to Santa Monica, was not included in those studies, as it was not yet in the planning stages.

In addition, the Eastside Extension portion of the Metro Gold Line (light rail line), which extends from downtown Los Angeles to East Los Angeles, was initially approved as an extension of the Metro Red Line (a heavy rail subway system). The Metro Red Line currently extends from downtown Los Angeles to North Hollywood. The proposed extension to East Los Angeles was later re-scoped to the currently operating Metro Gold Line to East Los Angeles light rail system.

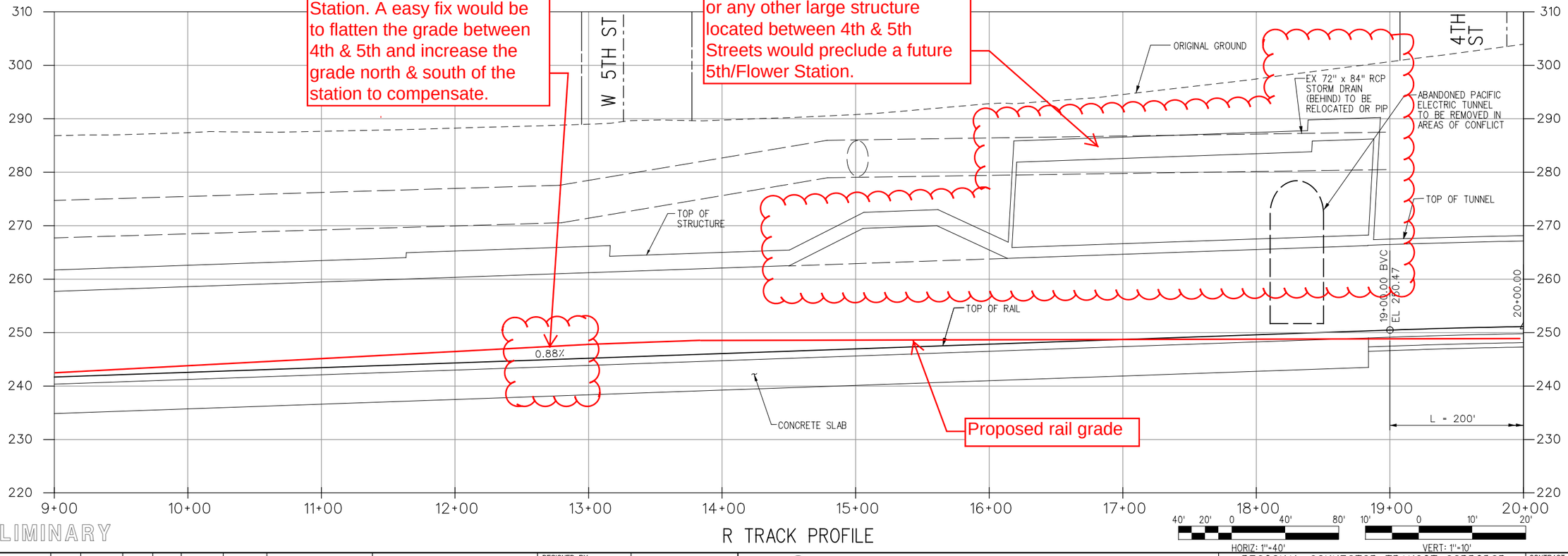
R-BU9



CURVE DATA								
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Eq (in)	Eu (in)	V (mph)
1000	60'	60'	1° 08'45"	5000'	74.76'	0.75	0.25	35
1990	60'	60'	0° 52'46"	6000'	92.10'	0.75	0.25	35

A 0.88% grade would preclude a future 5th/Flower Station. A easy fix would be to flatten the grade between 4th & 5th and increase the grade north & south of the station to compensate.

A traction power station (TPSS) or any other large structure located between 4th & 5th Streets would preclude a future 5th/Flower Station.



PRELIMINARY

R TRACK PROFILE

THE PREPARATION OF THIS DRAWING HAS BEEN FINANCED BY THE TAXES OF THE CITIZENS OF LOS ANGELES COUNTY AND OF THE STATE OF CALIFORNIA.

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY JS
DRAWN BY MA
CHECKED BY
IN CHARGE
DATE 05/04/2011

Metro
The Connector Partnership
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
777 S. FIGUEROA STREET
10TH FLOOR
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T 213.312-3100
F 213.312-3114

SUBMITTED
APPROVED

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADVANCED CONCEPTUAL ENGINEERING

TRACK ALIGNMENT
PLAN AND PROFILE
STA R 9+00 TO STA R 20+00

CONTRACT NO C0980
DRAWING NO C-102 REV 0
SCALE HORZ: 1" = 40'
VERT: 1" = 10'
SHEET NO 5 F4-185

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R-BU9

Responses to Comments from Weisenhaus Architecture, Weisenhaus, Duane

Response to Comment R-BU9-1

The Metro Board of Directors voted on October 28, 2010 to designate the Fully Underground LRT Alternative, without the Flower/5th/4th Street station, as the Locally Preferred Alternative. The Flower/5th/4th Street station was excluded from the Regional Connector project as a means of lowering costs. The Locally Preferred Alternative would be constructed so as not to preclude addition of a Flower/5th/4th Street station at a later time as a separate future project.

- The now deleted 5th and Flower station site developed during the Draft EIS/EIR included a traction power substation (TPSS) and the area needed for a TPSS site. Although the station has been deleted, the TPSS can still be located at the site/space it had been previously identified for without encroaching into the area that was previously identified in the Draft EIS/EIR for the 5th and Flower station. Therefore, the TPSS would not preclude the building of the 5th and Flower Station in the future because adequate space underground would still be available.

- Metro's design criteria for maximum slopes at station platforms is one percent. The slope identified is less than one percent; therefore, the slope grade between 5th and 4th Street is suitable for a station in the future.

September 2, 2011

Mr. Art Leahy
c/o Ms. Dolores Roybal Saltarelli
Project Manager
Metro
1 Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012

Dear Mr. Leahy,

On September 1, 2011, some of the members of The Westin Bonaventure Hotel and Suites' Executive Team met with Metro representatives regarding the Regional Connector Transit Corridor preliminary construction plan. The Metro representatives presented the tunneling plan from Second Street that would continue to Fourth Street on Flower Street. Metro explained that the plan from Fourth Street down Flower to Seventh Street would be done using a "cut and cover method". We also reviewed plans that would set "Construction Work Areas" in two lanes from Fourth Street to Sixth Street on the West side of Flower Street directly in front of the Hotel. 1

This letter is written per the request of the Metro representatives. It explains our objections from an operational standpoint. Please be advised that we will retain legal counsel to analyze the situation from a legal perspective and will revert back to you upon completion of that analysis.

We vehemently oppose the staging of construction work in front of The Westin Bonaventure Hotel. Moreover, any construction work related to the Regional Connector must be carefully planned and implemented to prevent damage to the Hotel and disturbance of our guests. The plan as explained to us at our meeting fails to do this. The Hotel has on average 569,000 guests sleeping in our rooms annually. Out of that total, over 150,000 guests sleep during the hours of proposed construction. These guests are pilots and air crews with airlines who have contracted with us. We have very specific contract language with these guests that guarantee a distraction free environment. The planned work could possibly cause us to lose millions of dollars in business, something we cannot sit back and let happen, especially considering that there are other areas along Flower Street that may be used for construction staging and construction work areas. 2

The Westin Bonaventure Hotel experienced loud noise disturbing our guests resulting in financial loss and shifting in our building during minor excavation and construction on the corner of Fifth and Flower Streets in 2010. The size and scope of the Metro Project dwarfs the prior project. Therefore, Metro must ensure that this project in no way affects the structure of the building and the safety of our guests. To that end, we request that a preconstruction survey be completed by an independent engineering firm and that surveys be completed monthly during construction so as to guarantee that the excavation and construction do not affect the structural integrity of The Westin Bonaventure Hotel. 3

the westin bonaventure hotel and suites
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WESTIN
HOTELS & RESORTS

The Regional Connector Project must also maintain 24-hours per day and 7-days per week the exact same decibel levels that exist today. Construction scheduling for work from Third Street to Sixth Street on Flower Street must be reviewed and approved by The Westin Bonaventure Hotel. Scheduling also must be flexible on short notice due to the short term booking window for both rooms and meeting/catering business at The Westin Bonaventure Hotel. The 2-week and 3-month "look ahead" needs to be modified to daily, two week and three month planning. 4

Noise and vibration monitoring equipment must be installed on all four sides of The Westin Bonaventure Hotel. If noise or vibration exceeds existing decibel levels, construction must stop immediately. 5

Metro must provide business interruption and perceived business interruption coverage for this project. The possibility of loss of existing contracted business must be prevented. Metro must present a plan acceptable to us that addresses our concerns and mitigates our losses. 6

In closing, let me reiterate that we are opposed to the existing preliminary plan and we request that Metro address all concerns in this letter. 7

Sincerely

Michael Czarcinski
Managing Director

MC:ss

c: leahya@metro.net
RegionalConnector@metro.net
P. Zen
R. Nicholas
T. Alder

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WESTIN
HOTELS & RESORTS

R-BU10

Responses to Comments from Westin Hotels & Resorts, Czarcinski, Michael

Response to Comment R-BU10-1

The proposed use of tunnel boring machine excavation extending to 4th and Flower Street, and cut and cover excavation between 4th Street and the existing 7th Street/Metro Center Station is shown in Figure 2-14 of the Supplemental EA/Recirculated Draft EIR Sections. Drawings showing the proposed construction staging areas for the project are included in Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections. Some of the construction staging areas in the vicinity of the Westin Bonaventure Hotel and Suites have since been reduced, as reflected in Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. Thank you for providing the additional information regarding hotel operations. The concerns in this comment letter are addressed in the responses below.

Response to Comment R-BU10-2

Comment noted. Mitigation measures have been identified and will be implemented during construction of the Locally Preferred Alternative, which involve a survey of all structures within 21 feet of the anticipated vibration-producing construction activity to verify the building category, structural condition, and to provide a baseline for monitoring of ground-borne vibration and the potential for ground-borne vibration to cause damage. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified historic and sensitive structures. With implementation of mitigation measures identified in Section 4.7.4.2.1 of this Final EIS/EIR, construction-related vibration impacts to historic and sensitive buildings located within 21 feet of the anticipated vibration-producing construction activity would not be adverse. In addition, consistency with the goals of the applicable local ordinances and implementation of best management practices (BMPs), would ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses.

Metro is committed to working with the surrounding community and businesses prior to and during construction of the project. To reduce community and neighborhood impacts associated with construction, mitigation measure number CN-6 (as identified in this Final EIS/EIR) requires Metro to develop a construction mitigation plan with community input to directly address specific construction impacts in the project area. Metro shall establish and receive input from the Regional Connector Community Leadership Council (RCCLC) in developing the construction mitigation plan. The RCCLC shall consist of representatives from all parts of the alignment area. Metro shall work with the RCCLC in developing the outreach plan, which will notify local communities and the general public of construction schedules and road and sidewalk detours.

Economic and fiscal impacts associated with construction of the project are analyzed in Section 4.14, Economic and Fiscal Impacts, and Appendix BB, Economic and Fiscal Impacts Technical Memorandum, of this Final EIS/EIR.

Response to Comment R-BU10-3

Construction noise experienced during the separate non-Metro plaza renovation project is noted. Since this was not a federally-funded transit project, it was not subject to the same stringent Federal Transit Administration (FTA) noise and vibration regulations that will apply to Regional Connector construction. Safety and security mitigation measures were included in Section 4.15.4 of the Draft EIS/EIR to ensure the safety of construction activities. These mitigation measures have been incorporated into Section 4.15.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. Metro does not anticipate that the Regional Connector project will cause any damage to the structural integrity of the hotel. As discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR, Metro would conduct a pre-construction survey of all structures within 21 feet of anticipated vibration-producing construction activity to verify the building category (type of construction), structural condition, and to provide a baseline for monitoring construction effects. This mitigation pertains to both geotechnical and vibration impacts. During construction, use of building protection measures such as underpinning, soil grouting, or other forms of ground improvement, use of lower vibration equipment and/or construction techniques, combined with a geotechnical and vibration monitoring program would be used to protect identified sensitive structures. These mitigation measures were included in Sections 4.7.4.1 and 4.9.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 and 4.9.4.2.1 of this Final EIS/EIR, and are included as mitigation measure numbers NV-1 and GT-1 of the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). In the unlikely event that there is damage due to construction, Metro would ensure that any damage caused by construction is repaired to pre-construction survey condition.

Response to Comment R-BU10-4

Noise impacts associated with construction of the project are analyzed in Section 4.7, Noise and Vibration, of this Final EIS/EIR. Metro will require the construction contractor to be consistent with the goals of Section 41.40(a) of the Los Angeles Municipal Code, and the goals of other applicable local ordinances, and to implement BMPs to ensure that noise levels associated with construction of the Locally Preferred Alternative would not result in an adverse effect under NEPA or a significant impact under CEQA to sensitive land uses.

As indicated in Response to Comment R-BU10-2, above, Metro will work with the RCCLC to serve all businesses affected by construction of the Regional Connector. The committee shall also be kept apprised of construction progress and upcoming transit, parking, or access changes.

Response to Comment R-BU10-5

Comment noted. Please refer to Responses to Comments R-BU10-2 and R-BU10-4, above. Geotechnical and ground-borne vibration monitoring shall be conducted during construction as part of mitigation to avoid any damage to sensitive buildings (Category I, II, III, IV buildings as defined by FTA in Table 4.7-4 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR) or historic buildings due to construction-induced vibration. Monitors will be located at points of the maximum potential impact as appropriate.

To reduce community and neighborhood impacts associated with construction, a 24-hour live hotline for community concerns regarding construction shall be provided. Residents and businesses shall also be provided with comment/complaint forms during construction. A construction office shall also be placed within the community to provide in-person assistance and services. The hotline and office shall enable Metro to maintain day-to-day contact with the community during construction and provide community members with all project details that may be relevant to the public.

If a noise complaint is filed during project construction, noise monitoring shall be conducted in the vicinity of the area in question. If monitored noise levels exceed FTA construction noise criteria, the contractor shall use all or a combination of the measures identified in Section 4.7, Noise and Vibration, of this Final EIS/EIR to reduce construction noise levels below FTA construction noise criteria.

Response to Comment R-BU10-6

Metro would maintain access to the hotel at all times during operating hours, as indicated in mitigation measure number TR-1 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR). Metro would also adhere to FTA noise criteria and mitigation measures in Section 4.7.4 of the Supplemental EA/Recirculated Draft EIR Sections to further reduce noise and vibration impacts. These mitigation measures have been incorporated into Section 4.7.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. These mitigation measures would minimize the potential for business disruption. Metro will continue to work with the hotel management to ensure minimization of business interruption. Metro will coordinate with the community, including Westin Bonaventure Hotel and Suites, regarding construction activities through the RCCLC, as provided in mitigation measure numbers CN-4 and CN-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-BU10-7

Opposition to the preliminary information is noted. Metro will continue to work with the hotel management throughout the project process. Metro has addressed the comments in this letter in the responses above.

Responses to Community Groups and Non-Profit Organizations Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-CN1	Fixing Angelenos Stuck in Traffic (FAST)	Norton	Hilary
R-CN2	The Colburn School	Kardan	Sel
R-CN3	Community Connector Coalition	Broad; Kardan	Eli; Sel
R-CN4	Los Angeles Conservancy	Fine	Adrian Scott

From: Hilary Norton [mailto:HNorton@tpgre.com]
Sent: Friday, July 22, 2011 9:48 AM
To: Kerman, Ann
Cc: Hilary Norton
Subject: RE: Regional Connector Supplemental EA/Recirculated Draft EIR Sections Available

R-CN1

Thank you so much, Ann!

We will ensure that there are LOTS of comments from those who want to see 5th & Flower built! 1

H

Hilary Norton

Executive Director

FAST - Fixing Angelenos Stuck in Traffic

515 South Flower Street, 6th Floor . Los Angeles, CA 90071

Telephone 213.233.2542 . Cellular 213.448.2900 . Fax 213.613.1903
www.fastla.org

F4-193

R-CN1

Responses to Comments from Fixing Angelenos Stuck in Traffic (FAST), Norton, Hilary

Response to Comment R-CN1-1

Comment noted. The Locally Preferred Alternative designated by the Metro Board of Directors on October 28, 2010 does not include a station at 5th and Flower Streets. However, the Locally Preferred Alternative would be designed so as not to preclude a station from being added at this location as a separate future project.

From: Sel Kardan <skardan@colburnschool.edu>
Date: September 6, 2011 4:44:54 PM PDT
To: "Roybal, Dolores" <ROYBALD@metro.net>
Cc: "welbourne@metro.net" <welbourne@metro.net>, "ray.sosa@aecom.com" <ray.sosa@aecom.com>, Susan Keran Solomon <sksolomon@mac.com>
Subject: Colburn School Comment on Connector EIR

Dear Dolores:

Thank you for presenting to the Colburn School Facilities Committee this morning. We are aware that the current comment period ends today at 5 PM. Therefore, the Colburn School would like to voice its concern regarding potential noise issues related to the construction and in particular the operation of the proposed Regional Connector Transit Corridor as it passes in close proximity to our campus.

The Colburn School is an internationally recognized performing arts institution with a $200 million campus that contains two world class concert halls, recording facilities, studios, practice rooms, and rehearsal spaces. Over 200 public performances of music and dance take place annually on our campus including long-standing series by outside performing arts organizations such as the Los Angeles Chamber Orchestra, LA Opera, and Camerata Pacifica. Additionally, our recording facilities are used for professional recordings year around. Given the importance of optimal conditions for the rehearsal, performance and recording of music, we are understandably concerned by any increased noise that the Light Rail may produce in its construction and daily operation.

We hereby request additional study by Metro of vibration and noise related to The Colburn School property and appropriate to the institution's classification as a premiere performance and recording facility. The Colburn School's use by multiple stakeholders, core mission of performance, and positioning on the cultural corridor warrant sound attenuation equal to that required by The Music Center's Disney Hall. We look forward to working with you in the coming months to better understand our specific needs and requirements and the impact of the connector on our operations.

1

Sincerely,

Sel Kardan
President & CEO
The Colburn School
200 South Grand Avenue
Los Angeles CA 90012
www.colburnschool.edu

t: 213-621-1000
c: 323-217-3171
f: 213-626-1624

R-CN2

Responses to Comments from The Colburn School, Kardan, Sel

Response to Comment R-CN2-1

In the area beneath the Colburn School, the LRT tunnels would be located approximately 50 feet below the 2nd Street Tunnel, within the public right-of-way. There is no special track work planned for this area. Per the as-built drawings of the Colburn School, the foundations of the school are located just south of the 2nd Street Tunnel and do not extend below the depth of the 2nd Street Tunnel.

According to Federal Transit Administration (FTA) land use criteria, the Draft EIS/EIR identified this site as a Category 3 land use, which are institutional land uses with primarily daytime uses that depend on low noise as an important part of operations (e.g., schools, libraries, theaters, places of study, and churches). The noise and vibration analysis using the Category 3 land use classification determined that no adverse effect under NEPA or significant impact under CEQA would occur at the Colburn School during construction. In response to the commenter's request, in Section 4.7, Noise and Vibration, of this Final EIS/EIR, the Colburn School is now analyzed as a Category 1 land use, which are buildings or parks where low noise is an essential element of their purpose (e.g., amphitheaters and concert pavilions). Although the Colburn School is properly considered as a Category 3 land use in this analysis, if the Colburn School were a Category 1 land use, there is a potential for ground-borne noise generated during construction and operation of the Locally Preferred Alternative to impact the Colburn School facilities. Please refer to Section 4.7, Noise and Vibration, of this Final EIS/EIR for a detailed analysis of noise and vibration impacts to the Colburn School. In an abundance of caution, Metro shall apply similar construction and operational mitigation measures that were identified for the Walt Disney Concert Hall, for the Colburn School. After implementation of the mitigation measures, ground-borne noise impacts at the Colburn School would be reduced to not adverse under NEPA and less than significant under CEQA. Refer to Section 4.7.4.2 for a list of mitigation measures identified for the Colburn School.

Community Connector Coalition

Advocates for the
Completion of the
Missing Link in
Los Angeles Rail Transit

August 30, 2011

Ms. Dolores Roybal Saltarelli, AICP
and Regional Connector Team, Metro
One Gateway Plaza, MS 99-22-2
Los Angeles, California 90012-2952

Mr. Ray Tellis, Team Leader
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, California 90017

Ladies and Gentlemen:

The Community Connector Coalition is a growing group of property owners, stewards, and users on and around Bunker Hill, the Historic Core, Civic Center, Little Tokyo, and the Arts District. Among its supporters, the Coalition counts office building owners and tenants, hotel building owners, residential building and unit owners and tenants, and cultural and educational institutions.

We welcome this opportunity to comment on the Regional Connector, in connection with your circulation of the July 22, 2011, Supplemental EA / Recirculated Sections of the Draft EIR. Our review of the revised Chapter 2 and the revised portions of Section 4.18.2, especially relating to Construction Impacts -- and specifically those impacts related to the narrow Second Street and its myriad underground utilities, in particular the very large Los Angeles County storm drain -- leads us to respectfully submit these comments / suggestions now.

1

The Coalition recognizes that one of the most significant public transit investments currently being undertaken in Los Angeles County is the Regional Connector Transit Corridor Project. The Coalition seeks to maximize, for members of the traveling public, transit accessibility to and from the multiple, diverse destinations surrounding the three planned stations of the Regional Connector.

To achieve that goal, the Regional Connector first has to be built.

One very simple route adjustment will allow the Connector to be built at substantially less cost, while improving community access and eliminating several property conflicts and other impacts along the route. We believe that these proposed modest changes to Metro's currently proposed alignment and station locations lessen environmental impacts. In this letter, we have organized our comments and our recommended changes around the stations.

Using a modestly moved Regional Connector route, travelers on the Blue Line, the Expo Line, and the Gold Line -- from the southern, western, northeastern, and eastern parts of Los Angeles County -- will have improved access *to and from* these lines through *more convenient* passenger portals.

2

Bunker Hill Station: This station should have its passenger portal at the TOP and CENTER of Bunker Hill. The Bunker Hill Station portal should be located on Second Street adjoining Grand Avenue . . . not one level lower down and nearer the western edge of the Hill, over on Hope Street across from Kosciuszko Way. The location of the present passenger portal requires almost all riders to walk up a very steep hill, on streets primarily designed for automobile access to Lower Grand and to garages, rather than designed for pleasant pedestrian experiences. There is just "no there, there" at Kosciuszko and Hope.

We believe that there still is time to optimize the locating of the Bunker Hill Station so that its passenger portal can be constructed where it should be -- essentially, on Grand Avenue. We also believe that there will be construction economies (and reduction of construction impacts) for Metro in so doing. We know that there will be long-lasting patronage advantages gained by having Bunker Hill's only subway station portal situated at the TOP of the Hill, on Second Street and Grand Avenue. It is at this location that riders will find most of the Hill's offices, residences, and cultural institutions, plus the County government center and Civic Park -- within only a one or two block walk north or south along Grand Avenue. Just one block further north is the Cathedral and the High School for the Visual and Performing Arts. Just one block further south is the Central Library and more hotels. (See the accompanying drawings.) 3

Broadway / Civic Center Station: We suggest you study a modified route that turns northeast from Second Street, at Hill Street, and proceeds 45 degrees across the currently vacant Federal courthouse parcel. (See the accompanying drawings.) This modification accomplishes numerous cost-saving and public-serving purposes, while significantly reducing construction impacts. *First*, being off-street, this station location allows much less expensive cut and cover construction of the station box, whose portal will be at Broadway and First Street. This station location will be less expensive because the alignment will not be as deep because it will have crossed *north of* the Second Street storm drain and *over* the Red Line tunnel. *Second*, the station will be substantially less expensive because it no longer requires construction under that same Los Angeles County Flood Control District Second Street storm drain. *Third*, this new location will allow a pedestrian passageway to be easily constructed between the existing Red/Purple Line Civic Center Station mezzanine and the new Regional Connector Broadway / Civic Center Station mezzanine. Providing a second direct passenger connection to the Red/Purple Line at Civic Center will help alleviate the crowded conditions where all such transfers would occur at 7th and Metro Center. *Fourth*, this location will allow a 45-degree curve to continue the route east under wider First Street (apparently with far fewer utilities conflicts). 4

Little Tokyo / Arts District Station: The Connector's route adjustment in this neighborhood provides construction cost savings and reduced construction impacts on the Little Tokyo community. In this revised location (see the accompanying drawing), the temporary construction impacts on businesses fronting First and Second Streets and Central Avenue are reduced almost entirely. The new station will be partially underground and open to the sky, and it will be located next to where the existing station is now, east of Alameda Street, north of First Street, on the Mangrove Estates site. This approach also allows for integration of the new Little 5

Tokyo / Arts District Station into future development on this parcel. Construction still will be staged at the Mangrove Estates site, and the connection of the east-west lines will be a simple straight line under First Street. The new route also will eliminate the significant, permanent construction impacts on the properties south of First Street (that result from the present alignment under Second Street – which requires significant demolition or disturbance). Similarly, "cut and cover" construction impacts on Central Avenue, south of First Street, will be eliminated by the new route.

5 cont'd

The main difference that this Little Tokyo / Arts District Station relocation makes in Regional Connector service, from what is currently proposed by Metro, is that the first westbound transfer station (between the Regional Connector's east-west and north-south lines) will be a few blocks west, at Broadway / Civic Center, instead of at Little Tokyo / Arts District.

All of these modest amendments -- on Bunker Hill, at Broadway / Civic Center, and at Little Tokyo / Arts District -- increase the probability of the Regional Connector ultimately being built because costs are lowered significantly . . . for example, by: (1) eliminating the substantial civil / bridge / street work at Second and Hope Streets; (2) decreasing the excavation depths for the three stations; (3) eliminating the conflicts with the Second Street storm drain; (4) building the stations on and under the edges of now-vacant *government* parcels -- the County's Parcels Q and W on Bunker Hill, the Federal (GSA) parcel for the Broadway / Civic Center Station, and the City's Mangrove Estates parcel for the Little Tokyo / Arts District Station (with that City site also being used for the tunnel access, staging, and dirt removal east of the main parts of Little Tokyo); and (5) *not* building on *private* property, except for tunneling a bit under the Broad Museum.

6

The Community Connector Coalition's interests are on Bunker Hill primarily. But we know that there is no benefit to transit riders on Bunker Hill if there is no Regional Connector. Therefore, the Coalition looks forward to working closely and aggressively with you and your consultants so that this simple route adjustment, with its several preferable alternatives (or the best parts of them) still can be achieved. What is designed now will be what the Los Angeles public, and its visitors, experience for the remainder of this century. If what is designed now is not the most cost-effective route, we worry that funding may fall short and that the needed Regional Connector might even not get built. We want to help insure that it does. You may contact us through our representative, Stacey A. Sullivan, Esquire. She may be reached at Hill, Farrer & Burrill, 300 South Grand Avenue, Los Angeles, California 90071-3147. Her telephone number is 213-621-0871, and her email is SSullivan@hillfarrer.com. Thank you.

7

Very truly yours,

for the Community Connector Coalition

CCC:hs
Encl.: Route Map Drawings
cc: LACMTA Board Members and Executives

MASTER PLAN

Posted June 10, 2005

THE PARCELS – BUILDING SITE (LARGER VIEW)

back to MASTER PLAN main page

DEVELOPMENT BLOCKS

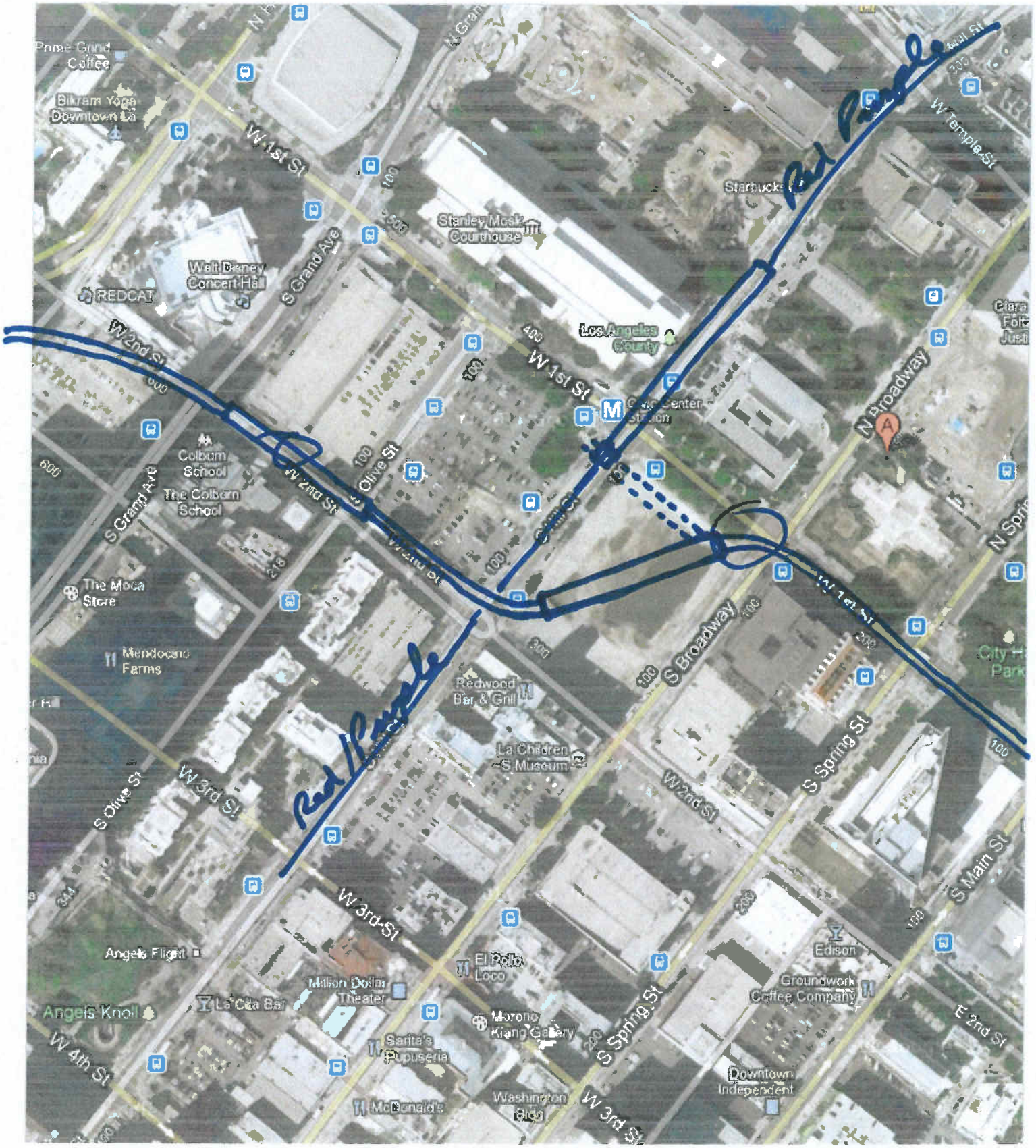
GRAND AVENUE

back to MASTER PLAN main page

back to MASTER PLAN main page

Google maps

To see all the details that are visible on the screen, use the "Print" link next to the map.



Google maps

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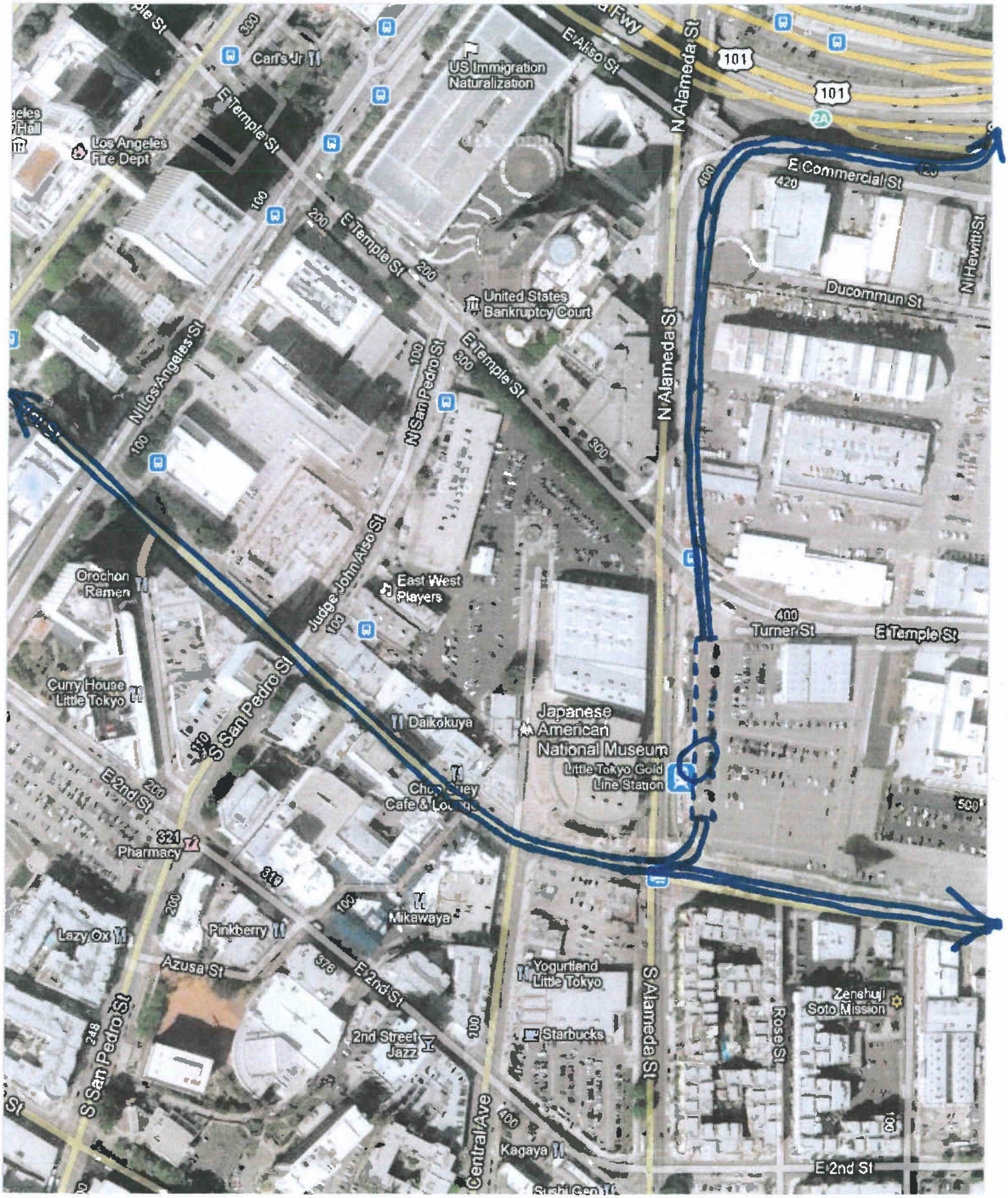

F4-202

R-CN3

Responses to Comments from Community Connector Coalition, Broad, Eli; Kardan, Sel

Response to Comment R-CN3-1

We thank you for your comment and appreciate your participation. Metro initiated the Alternatives Analysis study in 2007 and has conducted extensive engineering studies, environmental analysis and an extensive community outreach program that included meetings with property owners and the general public since the inception of the project. Based on these efforts over the last four years, various alignments and station locations were studied including those similar to the one proposed in the letter submitted August 30, 2011. The Locally Preferred Alternative designated by the Metro Board of Directors in October 2010 and the subsequent refinements identified in the Supplement EA/Recirculated Draft EIR Sections represent the results of this effort.

Response to Comment R-CN3-2

Metro agrees with maximizing transit accessibility to and from multiple destinations surrounding the three planned stations. Metro also agrees that in order to accomplish this, the Regional Connector must first be built. As stated, Metro initiated the project development process with the Alternatives Analysis in 2007 and studied 36 different alternatives comprised of various alignments, station locations, and configurations. These alternatives were based on previous studies as well as newly introduced alternatives developed in conjunction with extensive community input. The alternatives studied have been screened over time after extensive engineering, environmental analysis, and public input. The refined Locally Preferred Alternative is the result of this effort. At each major milestone in this process, the Metro Board of Directors has been presented with the results and refinements of the undertaken studies when significant changes have been made to address community concerns, environmental issues, or engineering analysis.

Metro has reviewed the recommended modifications to the Locally Preferred Alternative in light of the environmental analysis, modifications, and Alternative Analysis previously conducted.

Response to Comment R-CN3-3

Metro's design efforts for this station have focused on both connecting to the heart of Bunker Hill and ensuring potential connections to the Flower Street corridor and areas west of Flower Street not currently well served by transit. Metro agrees that a station entrance on Grand Avenue at the top of Bunker Hill at 2nd Street would be a great opportunity. However, based on our previous engineering analysis and due diligence, Metro's technical teams identified several technical challenges which make the alignment and station location described in the August 30, 2011 letter more costly than the Locally Preferred Alternative station location and difficult to achieve. The following is a brief, and by no means exhaustive, summary of those obstacles:

- Grand Avenue is approximately 20 feet higher in elevation than Hope Street.

- The proposed station box elevation and modification of the alignment is limited to the minimum depth of the 2nd Street Tunnel. The LRT tunnel must traverse beneath the 2nd Street tunnel to get from one side of Bunker Hill to the other.

- Based on utility records, the proposed station location described in the August 30, 2011 letter would place the alignment in conflict with the 2nd Street storm drain and require the relocation of the storm drain as it crosses over the existing Metro Red/Purple line tunnels.

- In addition, the proposed (August 30, 2011 letter) station box location is located below County-owned property between Grand Avenue and Olive Street which contains a large parking structure and has previously been entitled for the major multi-billion dollar, high-rise Grand Avenue Project. In its letter submitted on October 15, 2010 in response to the Draft EIS/EIR, Related Companies was concerned with additional structure impacts to the Broad Art Foundation Museum, currently under construction, and Grand Avenue Project site. A large portion of this or other Grand Avenue Project property would be needed to stage construction for the station. Considering the steep slope on this side of Bunker Hill as compared to the Locally Preferred Alternative's 2nd/Hope Street station site, extensive shoring of Grand Avenue and 2nd Street would be required. It would also require that the planned Grand Avenue Project be reconfigured in order to accommodate the station. At the end of construction, a portion of property or other adjacent Bunker Hill property would be needed to house the station entrance, ventilation and emergency shafts, and other ancillary facilities.

- Finally, as the alignment heads west from the proposed (August 30, 2011 letter) station location, it may need to traverse beneath a portion of the Walt Disney Concert Hall. Walt Disney Concert Hall has a multi-level subsurface parking structure beneath it and foundations that extend approximately 80-100 feet below the surface. Building protection and noise and vibration considerations have previously been evaluated and would need to be re-evaluated and a subsurface easement obtained if the alignment traverses under the Walt Disney Concert Hall. The current refined Locally Preferred Alternative does not traverse under Walt Disney Concert Hall and is deeper than the proposed Aug. 30th alignment. The proposed (August 30, 2011 letter) station location may be refined to avoid traversing under the Walt Disney Concert Hall; however, due to its raised profile, mitigation measures beyond those currently planned would likely be needed for building protection and to reduce noise and vibration.

Response to Comment R-CN3-4

From 2nd/Hope Street, the proposed (August 30, 2011 letter) alignment diverts north from 2nd Street at Hill Street and traverses through a vacant site owned and planned by the federal government for a new federal court house. As discussed with the federal government in 2007 and again confirmed in 2011, the site currently has an allocation of $400 million for the proposed federal court house. It is identified as an active site and has already been certified under the NEPA process. The amount of property required for the station at this location is greater than the station identified as part of the refined Locally Preferred Alternative since it is entirely off-street. Therefore, the property acquisition costs would be substantial. In addition,

another site for the federal court house would need to be identified or a redesign of the current facility would be required to accommodate the proposed (August 30, 2011 letter) station. Neither the relocation of the courthouse or redesign were considered as cost-effective or desirable during the alternatives analysis or Draft EIS/EIR phases. Furthermore, the location of the proposed (August 30, 2011 letter) Grand Avenue station is within approximately 450 feet of the August 30, 2011 letter Broadway Station and Civic Center Metro Red/Purple Line station and approximately 900 feet from the Locally Preferred Alternative's 2nd/Broadway station. This very close proximity reduces the coverage area and could adversely impact ridership. Moreover, the location of the station and alignment proposed in the comment letter would not avoid the 2nd Street storm drain relocation construction costs similar to those associated with the Locally Preferred Alternative.

Response to Comment R-CN3-5

We appreciate the input on the alignment and station location in Little Tokyo. Metro has conducted extensive engineering and environmental analysis and has worked closely and frequently with the Little Tokyo community and representatives to develop the proposed refined Locally Preferred Alternative design from late 2007 and continues to date. The refined Locally Preferred Alternative design reflects substantial community input and currently maintains extensive support from the Little Tokyo and Arts District communities.

Here are some technical challenges with the proposed alignment and station location in the August 30, 2011 letter.

- The station location and configuration would allow riders from the Little Tokyo and the Arts District communities to only access the North-South operation as the station is north of the East-West Alignment. This would reduce the accessibility of East Los Angeles riders to the businesses and services in Little Tokyo. This would reduce ridership at a location predicted to have a significant number of boardings per the refined Locally Preferred Alternative. This would also create significant issues for this environmental justice community.

The turning radius from 1st street to the Mangrove property and then to the existing LRT bridge over the US 101 Freeway would not meet Metro design criteria and would create significant safety and operational issues at the connection to the existing LRT bridge over 101 Freeway. This turning radius is more extreme than the curve proposed at 2nd Street and Central Avenue per the Locally Preferred Alternative. Metro is proposing to increase the turning radius in the refinement in the Supplemental EA/Recirculated Draft EIR Sections. However, the turning radius from 1st Street to the Mangrove property is even more extreme because at the same time it is turning north, the alignment also needs to rise to reach the existing LRT bridge over the US 101 Freeway. LRT vehicles have a limited ability to both come down an incline and immediately enter a curve. Such a design may result in derailment and is prohibited by Metro's design criteria. The LRT needs a minimum 200-foot radius curve to connect to 1st Street and still maintain a reasonable operating speed. This radii limitation is without the additional concern of turning on an incline.

- The turning radii limitation also makes the proposed (August 30, 2011 letter) station location infeasible when combined with the 270-foot long tangent for the station platform. The station platform length when combined with the design criteria limitation of a one

percent slope will not allow adequate depth to both meet the subsurface crossing of Alameda/1st Streets and the incline up to the US 101 bridge crossing.

Response to Comment R-CN3-6

The proposed modifications represent a new alternative with elements previously studied and screened out based on engineering, environmental analysis and community input. There are several project "critical constraints" in the Aug 30th proposal that render this proposal more expensive than the Locally Preferred Alternative.

Response to Comment R-CN3-7

Metro agrees that Bunker Hill is a prime station location. As indicated, since 2007 Metro has conducted extensive engineering, environmental analysis, and community input to evaluate, screen, and develop the refined Locally Preferred Alternative. Metro will continue to meet with representatives of the Connector Community Coalition to review the technical challenges, costs, and schedule impacts associated with the proposed alignment. The Metro analysis does not support these proposed modifications or reconsideration of alternatives to replace the refined Locally Preferred Alternative.

LOS ANGELES CONSERVANCY

September 6, 2011

Submitted by email

Mr. Ray Tellis, Team Leader
Los Angeles Metropolitan Office
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017
Email: ray.tellis@dot.gov

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-2
Los Angeles, CA 90012
Email: roybald@metro.net

Re: Regional Connector Transit Corridor Project Supplemental EA /Recirculated Sections of the Draft EIR

Dear Mr. Tellis and Ms. Saltarelli:

On behalf of the Los Angeles Conservancy, thank you for the opportunity to comment on Metro's Regional Connector Transit Corridor Project Supplemental Environmental Assessment/ Recirculated Draft Environmental Impact Report (Supplemental EA/Recirc DEIR). The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with over 6,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural heritage of Los Angeles County.

The Conservancy previously submitted comments in October 2010 for the Regional Connector Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR). Subsequently, we met with Metro and its project team to discuss impacts to historic resources and potential mitigation measures as part of the Regional Connector project. While it is unfortunate that alternatives to demolition of the California Register-eligible Atomic Café/Señor Fish have not been fully explored, we submit the following comments to ensure meaningful protection of historic resources is included as part of the proposed project.

1

I. Atomic Café/Señor Fish Building, 416 E. 1st Street

2

Under the Fully Underground LRT Alternative, selected by the Metro Board of Directors as the Locally Preferred Alternative (LPA) in October 2010, the proposed route would require

demolition of the S. Kamada Restaurant/Atomic Café/Señor Fish/Coast Import Building (Atomic Café/Señor Fish Building) at 416 E. 1st Street. Located at the southwest corner of 1st Street and Alameda in Little Tokyo, the one-story building dates from the early twentieth century but is best known and culturally significant as the location of the Atomic Café. Owners Minoru and Ito Matoba first opened the restaurant at another location in Little Tokyo one year after the bombing of Nagaski and Hiroshima, and moved it to the building at 416 East 1st Street in 1965. At this location, the Atomic Café was popular with intellectuals as a late night hang-out, and under the direction of the Matobas' daughter, Nancy, became a destination for the emerging punk rock music scene in the 1970s and 1980s. Today the building houses Señor Fish, which continues the decades-long tradition as a gathering place for an eclectic crowd of artists, musicians, and intellectuals.

The Draft EIS/EIR determined the building to be eligible for the California Register of Historic Resources for its direct association with a pattern of events linked to Japanese-American: as the site of an early Japanese restaurant, as well as its long-time identity as the iconic Atomic Café. As such, it is considered a historic resource under the California Environmental Quality Act (CEQA), and its demolition for an underground station at 1st between Central Avenue and Alameda Street would constitute a significant adverse impact to a historic resource under CEQA.

2 cont'd

a. Mitigation Measures Can Be Strengthened to Reduce Impacts

As mentioned in our October 2010 Draft EIS/EIR letter, CEQA sets a higher bar for adequate mitigation measures as compared with federal Section 106 review by requiring the lead agency to evaluate and adopt all feasible alternatives and mitigation measures that avoid or substantially lessen impacts on historic resources. While Metro has proposed additional mitigation measures for potential relocation, salvage and integration of building components, or keeping portions of the building intact for use in the 1st/Central Avenue station, none of these options provide sufficient specificity to fully mitigate the loss of a historic structure. Nor are the effects of the demolition reduced to a level of insignificance. As such, it is a faulty assumption to conclude in the Supplement EA/Recirc DEIR that implementation of the proposed mitigation measures would reduce adverse impacts to a less-than-significant level.[1]

3

To eliminate the significant adverse impact, we urge Metro to consider creative design options in the Final EIR that relocate or reengineer the station portal in order to retain the Atomic Café/Senor Fish Building in place. This may include temporarily relocating the building offsite or elsewhere onsite during construction, designing the station to maximize the vacant space around the building, or incorporating all or a significant portion of the existing building as an entryway to the underground station. While we recognize that saving the building presents some inherent challenges, in terms of the scope and intent of the proposed project, creative approaches could be further explored.

4

[1] Los Angeles County Metropolitan Transportation Authority, Regional Connector Transit Corridor, Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report, July 22, 2011, Page 4.12-33. In order for adverse impacts to be less than significant, a proposed project would need to comply with the *Secretary of the Interior's Standards for Rehabilitation* or ensure the historic resource retains its eligibility for state or local landmark listing. See CEQA Guidelines, Section 15064.5.

In addition, in our experience, solely offering the Atomic Café/Senor Fish Building for relocation without an adequate receiving site secured and financial resources committed rarely results in a successful preservation outcome of the historic resource according to the *Secretary of the Interior's Standards for Rehabilitation* (the *Standards*). If relocation remains a mitigation measure, we urge Metro to actively seek an appropriate and feasible new site for the building and provide incentives such as the funds dedicated to demolition to defray the relocation expense. 5

The Conservancy appreciates Metro's offer to provide an exhibit commemorating the history and significance of the Atomic Café/Senor Fish Building but it should be noted that documentation and interpretative programming under CEQA does not meaningfully reduce the impacts of demolition of a historic resource.[2] We urge Metro to continue its engagement with the Little Tokyo community and work with them and the Japanese American National Museum in developing an interpretive program at the new station to tell the full and layered story of the Atomic Café and its role as a significant cultural landmark in Los Angeles. This may include incorporation of parts of the physical structure into the station if all efforts to rehabilitate or relocate the building are unsuccessful. It may also involve incorporating some new construction as well as retaining the existing building or portions therein. As an example, under Attachment A, we are including a project that blended old and new through a creative design approach that attempts to visually relay the important role and cultural significance of a historic resource. 6

II. Historic Resources Potentially Impacted by Vibration and Differential Settlement

The Supplemental EA/Recirc DEIR identified twelve California Register-eligible historic resources along the proposed route that could potentially be impacted by construction-related vibration; all except the Higgins Building also are eligible for the National Register of Historic Places.[3] Similarly, eight National Register and/or California Register-eligible properties could be potentially damaged by differential settlement due to tunneling and cut and cover construction.

The Conservancy appreciates the details and additional requirements for studies, surveys, monitoring, and contractor best practices near historic resources to avoid adverse impacts from ground-borne vibration and differential settlement. This is particularly important for the earliest buildings along the LPA route, especially the 1876 St. Vibiana Cathedral and the 1910 Higgins Buildings. As Metro's Memorandum of Agreement (MOA) with the California State Historic Preservation Officer (Appendix R-3) only applies to National Register-eligible resources, we recommend including the building protection measures of the MOA as additional mitigation measures in the Final EIR to apply to resources eligible for the California Register as well, such as the Higgins Building. In particular, the commitment from Metro to repair damages that occur during construction, as alluded to in the MOA, in a manner consistent with the *Standards* should be explicated stated in the Final EIR. 7

[2] "A large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers." *League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 909.

[3] For complete list of the twelve locations, please see Supplement EA/Recirculated Draft EIR, p.4.12.36-38.

III. Los Angeles Zanja System

Although Section 4.12.2 Archeological Resource is not among the portions of the Draft EIR/EIR recirculated through the Supplemental EA/Recirc DEIR, it appears the route of the Locally Preferred Alternative potentially limits impacts to the Los Angeles zanja system to the segments that cross the LPA along First and Second Streets. The zanja system in Los Angeles was an extensive and integrated water conveyance network that served large areas of the city for many generations. Soon after founding of El Pueblo de la Reina de los Angeles in September 1781, the residents began construction of an extensive water management system to bring water from the Los Angeles River to the pueblo. This Zanja Madre, or mother ditch, in turn fed numerous smaller zanjas as the city grew and expanded. Over the decades, the zanja system supplied water for agriculture and ranching, as well as for domestic purposes, and was variously improved, covered, and piped until it fell out of use in the early 1900s. The Conservancy was actively involved with preservation efforts surrounding the 75-foot section of the Zanja Madre uncovered in the Los Angeles State Historic Park, also known as the Cornfields, in 2005 as part of the Gold Line construction.

8

According to the archeological technical report in the Regional Connector Draft EIS/EIR, many branches of the zanja likely remain within the project area. We look forward to the proactive and system-wide identification, documentation, and evaluation of the zanja system proposed as part of the mitigation measures in the Draft EIS/EIR. This will facilitate a better understanding of the current-day location of the various zanja branches, as well as ways to avoid adverse impacts from the construction of the Regional Connector. We also look forward to working with Metro and the project archeologists performing the onsite construction monitoring on appropriate preservation measures should segments of the zanja system be discovered as part of the proposed project.

Thank you for the opportunity to comment on the Regional Connector Transit Corridor Project Supplemental Environmental Assessment/Recirculated Draft EIR. Please feel free to contact me at (213) 430-4203 or afine@laconservancy.org or Flora Chou at fchou@laconservancy.org should you have any questions.

Sincerely,

Adrian Scott Fine

Adrian Scott Fine
Director of Advocacy

cc: Edgar Garcia, Office of Historic Resources, City of Los Angeles
Councilmember Jan Perry, Council District 9
Jessica Wethington McLean, Bringing Back Broadway, Council District 14
Chris Aihara and Mike Okamoto, Little Tokyo Community Council
Bill Watanabe, Little Tokyo Service Center

Attachment A

Modern Theatre, Boston

The Modern Theatre was built in 1876 to house two storefronts and furniture and carpet showrooms and storage. It was renovated in 1913 to accommodate a movie house, the first one in Boston, and did not originally contain a stage. From that point on, the building has been used for a variety of entertainment purposes, and as a performing arts center. The last attempt to restore the building was made in the late 1970's. The building has been vacant since the early 1980's and was in a state of severe neglect and disrepair.

Owner Suffolk University restored and reconstructed the grand building façade in 2010 as part of a $41 million development project that includes a new 185-seat theater and university housing in a 10-story residence hall built in a setback above the theater. One façade of the 10-story section displays names and dates in recognition of the rich history of the site and neighborhood.

While retaining only the façade of a building does not meet the *Secretary of the Interior's Standards for Rehabilitation*, and is not the ideal preservation solution, the approach at the Modern is an example of a creative way to recognize the complex and layered history of its site.

R-CN4

Responses to Comments from the Los Angeles Conservancy, Fine, Adrian Scott

Response to Comment R-CN4-1

Thank you for the information about the Los Angeles Conservancy. Responses to the Conservancy's previously submitted comments are provided in Volume F-2 of this Final EIS/EIR, numbered CN14-1 through CN14-5. Metro examined a full range of the potential build alternatives in the Alternatives Analysis Report completed in February 2009. The most feasible alternatives were carried forward into the Draft EIS/EIR, including the At-Grade Emphasis LRT Alternative, which would avoid the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building. However, this alternative would require the use of NRHP eligible historic resources, which is prohibited under Section 4(f) of the USDOT Act of 1966 when feasible and prudent avoidance alternatives, such as the Locally Preferred Alternative, exist. In consultation with the LA Conservancy, City of Los Angeles, and other stakeholders Metro has included additional mitigation measures, as shown in Section 4.12.1 of the Supplemental EA/Recirculated Draft EIR Sections, and Section 4.12.1.4.2 of this Final EIS/EIR, to address impacts to the building, including offering the building to any party willing to relocate it at their own expense, incorporating materials from the building into the station facilities, and providing an exhibit about the building to a local museum. These mitigation measures have been incorporated into Section 4.12.1.4.2 and the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR.

It should be noted that the historical uses of the building, such as the Atomic Café, have long been gone. The building now houses a Mexican restaurant that is unrelated to the historical uses. The architectural features of the building have been substantially altered, and offer little semblance of the historical uses. The fact that those former uses have an association with events linked to community history, which is the primary basis for why the building is considered historically significant, is best preserved through the recommended mitigation measures. The proposed mitigation measures would address the criteria that render the building historically significant because they would incorporate and enhance the story of the building's historic use into a museum exhibit and place interpretive materials on-site.

Response to Comment R-CN4-2

The Metro Board of Directors designated the Fully Underground LRT Alternative as the Locally Preferred Alternative on October 28, 2010. The Locally Preferred Alternative would require acquisition of the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building property, as analyzed in Section 4.12.1.3.5.2 of the Supplemental EA/Recirculated Draft EIR Sections. The CEQA impacts analysis is also provided in that section. As discussed in Section 4.12.1.3.5.2 of this Final EIS/EIR, implementation of the mitigation measures identified in Section 4.12.1.4.2 and the Mitigation and Monitoring Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR would reduce impacts to the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building property to not adverse under NEPA and less than significant under CEQA. Thank you for the information about the building. Additional information about the building is provided in the cultural resources inventory in Appendix X, Cultural Resources - Built Environment, of the Draft EIS/EIR and Appendix X, Cultural Resources - Built Environment (Updated), of this Final EIS/EIR.

As noted on the survey form, the building was determined to be eligible for the California Register of Historic Resources (CRHR) under Criterion 1, but the structure has been significantly altered subsequent to its period of significance of 1965-1989. The historic signage present during the period of significance has been removed, the original windows have been removed and replaced, a corner entranceway has been filled in, and a side wall has been covered with a coating of gunnite. Nonetheless, the building was still determined to be eligible for the CRHR under Criterion 1.

Response to Comment R-CN4-3

Metro will continue to work with the Los Angeles Conservancy and other project stakeholders to ensure the implementation of the mitigation measures as they are currently proposed for the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building. As previously noted, Metro has explored a full range of feasible mitigation measures and alternatives to building removal. The mitigation measures (identified in Section 4.12.1.4.2 and the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR), when taken as a whole, provide all feasible mitigation and would reduce impacts to not adverse under NEPA and a less than significant level under CEQA. This includes offering the building for a price of one dollar to any party willing to move it off of the station site, incorporating materials from the building into project facilities, or keeping portions of the building intact for use in the 1st/Central Avenue station, as well as providing Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) recordation (for use during any potential relocation or for a permanent record of the building), and develop an exhibit commemorating the building at the Japanese American National Museum, the 1st/Central Avenue station site, or other suitable location.

Response to Comment R-CN4-4

Thank you for the suggestions provided in regards to developing creative design options for the 1st/Central Avenue Station and the potential integration of the Atomic Café into the new facility. Given the need to connect the Regional Connector alignment beneath 2nd Street to the proposed underground rail junction beneath 1st and Alameda Streets, it will not be possible to retain the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building in place. The necessity for a subsurface station at this location would preclude the ability to maintain the building (in its entirety) at its current location due to the construction methods and access needed to safely implement the Locally Preferred Alternative. Metro has included mitigation measures, as shown in Section 4.12.1 of the Supplemental EA/Recirculated Draft EIR Sections and Section 4.12.1.4.2 of this Final EIS/EIR, to address impacts to the building.

It should be noted that many of the options laid out in the commenter's suggestions will be explored by implementing the mitigation measures as they are currently proposed in Section 4.12.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Metro will continue to work with the Los Angeles Conservancy and other project stakeholders to ensure that every effort is made to implement the mitigation measures.

Response to Comment R-CN4-5

Metro will work closely with the Los Angeles Conservancy and other project stakeholders to implement the mitigation measures for the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building.

Response to Comment R-CN4-6

Thank you for the information about the Modern Theater in Boston. The Draft EIS/EIR did include alternatives that avoided impacts to the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building property. However, the Locally Preferred Alternative identified in this Final EIS/EIR would require the acquisition of the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building property. The S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building has been significantly altered from its original condition and does not meet the criteria for architectural historic significance (Criterion 3) or association with persons significant to our past (Criterion 2). However, this location played an important role in the broad patterns of California history as the commenter points out. Metro agrees that mitigation is required for the change to the property. Metro also agrees that additional mitigation measures are warranted to mitigate for the impacts to this historic resource and that the proposed additional mitigation, while not required to reach the CEQA determination in the Draft EIS/EIR, would reinforce that determination. Metro has developed additional mitigation measures to enhance reduction of the impacts to not adverse under NEPA and a less than significant level under CEQA and to be responsive to these comments. These include Metro offering the building for a period of one year following certification of this Final EIS/EIR for the price of one dollar to any party willing to move the building off of the 1st/Central Avenue station site at their own expense. Should no parties come forward, Metro would incorporate materials from the building into the project facilities. Metro would also offer to provide an exhibit commemorating the Atomic Café at the Japanese American National Museum or other suitable location, including exploring incorporating such an exhibit into the proposed 1st/Central Avenue station; and developing an individual HABS/HAER submission. Section 4.12, Historic Resources, of this Final EIS/EIR and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) have been updated accordingly with the new mitigation measures.

Response to Comment R-CN4-7

The St. Vibiana Cathedral, the Higgins Building, and other historic resources along the proposed Locally Preferred Alternative alignment are analyzed in Section 4.12.1 of the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. Building protection measures are included for resources not eligible for the NRHP in Section 4.12.1.4 of the Supplemental EA/Recirculated Draft EIR Sections. These mitigation measures have been incorporated into Section 4.12.1.4.2 and the Mitigation Monitoring and Reporting Program (Chapter 8) of this Final EIS/EIR. No damage to historic structures is anticipated. However, Metro would repair any damage caused by construction by restoring the building to its pre-construction survey condition, as discussed in Section 4.7.3.5.1 of the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR. This mitigation measure was included in Section 4.7.4.1 of the Draft EIS/EIR and Supplemental EA/Recirculated Draft EIR Sections, Section 4.7.4.2.1 of this Final EIS/EIR, and is included as mitigation measure number NV-1 of the Mitigation Monitoring and Reporting Program (Chapter 8 of this Final EIS/EIR).

Response to Comment R-CN4-8

Comment acknowledged. Metro looks forward to working with the Los Angeles Conservancy as the mitigation measures are implemented for the Los Angeles Zanja System as noted in Section 4.12.2.4.2 of the Draft EIS/EIR and this Final EIS/EIR (CR/A-6).

Responses to Public Comment Letters

Comment Letter	Affiliation	Last Name	First Name
R-PC1		Kasperavicius	Alexis
R-PC2		Tooley	Eric
R-PC3		Norton	Jim
R-PC4		Dillard	Joyce
R-PC5		Kay	Gregory
R-PC6		Braunstein	Alex
R-PC7		Johnston	Mark R.
R-PC8		Frevele	Dave

From: Alexis Kasperavicius [mailto:ak@kaspex.com]
Sent: Monday, July 18, 2011 11:11 AM
To: Regional Connector
Subject: Question Regarding Car Storage For R/C

R-PC1

Dear Regional Connector Team,

I could really use your help in figuring something out. In looking over the map for the R/C something seems apparent that doesn't seem to have been considered:

The new tunnel for the Regional Connector project will intersect the isolated portion of the old Pacific Electric "Hollywood Subway" tunnel. It is large enough to be used as a storage area for trains. Holding at least two, but potentially as many as eight or more three car trains.

The land could be had cheaply, is almost a mile long, was built for this purpose and is wide enough for two tracks which split out to *four* platforms. It could also be accessed from the subway terminal building by operators starting or leaving shifts.

1

Do you know if anyone had considered this option? It seems like money laying on the table.

Thanks much for your time!

F4-216
Alex Kasperavicius

P.S. You can see a picture of the inside of the tunnel here (http://www.flickr.com/photos/7294653@N07/2816704344/)

R-PC1

Responses to Comments from Kasperavicius, Alexis

Response to Comment R-PC1-1

The abandoned Pacific Electric (Belmont) tunnel crosses the proposed Locally Preferred Alternative alignment near 4th and Flower Streets, and was partially demolished in this location during construction of the Bonaventure Hotel. Due to the depth of the proposed Regional Connector tunnel, which is confined by engineering and utility constraints, an additional section of the Pacific Electric tunnel would need to be removed during construction as indicated in Section 4.12.1 of the Draft EIS/EIR and the Supplemental EA/Recirculated Draft EIR Sections and this Final EIS/EIR. The Regional Connector tracks would not be level with the Pacific Electric tunnel in this location, making a connection difficult. The Subway Terminal Building is privately-owned, and it is Metro's goal to minimize the use of private property as requested by comments received during scoping and the Draft EIS/EIR review period. Therefore, Metro is not pursuing a connection to the Pacific Electric tunnel as part of the Regional Connector project.

From: Eric Tooley [mailto:eric@erictooleydesign.com]
Sent: Saturday, August 13, 2011 6:27 PM
To: Regional Connector
Subject: EIS/EIR

R-PC2

Hellow,

I am writing as a stackholder to tell you that I support he Regional Connector as layed out in the Final EIS/EIR 100%. This is the most important rail line for the future of Los Angeles, connecting the Gold, Blue and future Expo Line seamlesly through 7th/Metro. I use tat station often and look forward to the completion of the connector. I hope that the US Goverment decides to fund this project and I am happy that the work has been done so completely on this to this point. 1

While it would be nice to have a station in Buner Hill and FInancial District, I support the line without it as well.

Thank you

Eric Tooley

1741 Maltman Ave.
Los Angeles CA 90026

R-PC2
Responses to Comments from Tooley, Eric

Response to Comment R-PC2-1

Thank you for your comment. Support for the project with or without stations in the Bunker Hill and Financial District areas is noted.

From: PalmTown111@aol.com [mailto:PalmTown111@aol.com]
Sent: Sunday, August 14, 2011 11:38 AM
To: Regional Connector
Subject: Regional Connector

Dear Ms. Roybal Saltarelli,

First of all, the route chosen for the regional connector, as well as the decision to go underground, makes perfectly good sense--no surface route would have worked from either a speed or capacity standpoint. 1

What I do find troubling--and I realize this is not a new concern--is lack of a station at the heart of the financial district: 4th/5th and Flower. My chief concern is not a lessening of convenience for office workers in that vicinity: walking a couple of extra blocks would do us all good. Crowding at the 7th/Metro platforms is the real concern. Already those platforms can be uncomfortably crowded at rush hours, and adding the Expo Line traffic will only intensify the problem. 2

If monetary considerations won't allow for a Financial District station during initial construction, it would be extremely shortsighted not to construct the line in such a way that a station can be added in the future--it will surely be needed. 2 cont'd

Thank you for the opportunity to comment, and good luck as you move ahead with the excellent plan for a regional connector that promises to tie the entire light-rail system together in a rational way. 3

Jim Norton

R-PC3

Responses to Comments from Norton, Jim

Response to Comment R-PC3-1

Comment noted. The Locally Preferred Alternative alignment would be underground.

Response to Comment R-PC3-2

Due to a need to reduce project cost, the Locally Preferred Alternative designated by the Metro Board of Directors on October 28, 2010 does not include a station at 5th and Flower Streets. However, the Locally Preferred Alternative would be designed so as not to preclude a station from being added at this location as a separate future project. Ridership at 7th Street/Metro Center Station will be affected by a number of new developments in the area. As shown in Section 4.19.2.3 of this Final EIS/EIR, the separate Flower Street Fire/Life/Safety Project would address Fire/Life/Safety concerns at 7th Street/Metro Center Station. However the Regional Connector project is a separate project that, by itself, would not result in crowding at unsafe levels regardless of whether a station is built at 5th and Flower Streets.

Response to Comment R-PC3-3

Thank you for your comment.

From: Joyce Dillard <dillardjoyce@yahoo.com>
Date: September 6, 2011 4:41:32 PM PDT
To: Ray Tellis <ray.tellis@dot.gov>, "Roybal, Dolores" <ROYBALD@metro.net>
Reply-To: Joyce Dillard <dillardjoyce@yahoo.com>

Subject: Comments to Metro Regional Connector Recirculation Draft EIR/EIS due 9.6.2011

Comments to Metro Regional Connector Recirculation Draft EIR/EIS due 9.6.2011

Methane and mitigation standards and a Methane Prevention Detection and Monitoring Program (with the National Fire Protection Association standards) need to be taken into account as well as the City of Los Angeles Methane Task Force. 1

The Methane Task Force does not seem to meet and therefore may be inconsequential to mitigation of methane. An alternative needs to be decided. 2

Subsidence matters need to be taken into consideration. 3

Earthquake faults were not mentioned in this recirculation or mitigation factors. 4

Mangrove Estates property was a former oil field. This and any other site should be recognized for safety factors. 5

Methane migration would change any projected usage in the Greenhouse Gas Emissions. 6

The use of overweight trucks was not mentioned, nor any sewer breakage by their use. Who will be responsible, the private property owner? 7

No mention of stormwater projects including City of Los Angeles Proposition O projects or any State watershed projects including but not limited to State grants was not mentioned and its effect. 8

Water supply issues were not addressed and there appears to be no Water Supply Assessment. There lacks any mention of restroom placement and drinking water. 9

Noise and vibration was not measured during time of days of usage such as the Disney Center concert schedule. 10

What scientific data will be collected, who will analyze that data and who will report that data. 11

Who is responsible for any liability and with what securitization? 12

Joyce Dillard
P.O. Box 31377
Los Angeles, CA 90031

R-PC4

Responses to Comments from Dillard, Joyce

Response to Comment R-PC4-1

Analysis of the potential to encounter methane in the project area was analyzed in Section 4.9.3.5.2 of the Draft EIS/EIR and this Final EIS/EIR, and mitigation measures were proposed in Section 4.9.4. These mitigation measures have been incorporated into Section 4.9.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR. The Regional Connector project would be consistent with the City of Los Angeles Methane Mitigation Standards. Also, all project structures within methane zones and buffer zones would be consistent with municipal code requirements for gas concentration/pressure testing on a specified frequency and, based on the results, appropriate mitigation measures or controls to be included in the design. These measures would include the use of gas-impermeable liners and venting to reduce or eliminate gas intrusion into stations and along the length of the underground segments as needed to ensure consistency. Mitigation ensuring compliance with all applicable fire and methane standards and regulations is included as mitigation measure numbers SS-1 through SS-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR).

Response to Comment R-PC4-2

Adequate analysis and mitigation of methane was performed and included in the Draft EIS/EIR, as described in Response to Comment R-PC4-1 above. Metro would implement the mitigation measures identified in Sections 4.9.4.2 and 4.15.4.2 and the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8) of this Final EIS/EIR to ensure no adverse/significant methane risks occur, irrespective of Methane Task Force meetings.

Response to Comment R-PC4-3

Impacts associated with subsidence have been analyzed in Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials, of the Draft EIS/EIR and this Final EIS/EIR. As indicated in Section 4.9, the proposed tunneling would have the potential for adverse impacts related to ground settlement and differential settlement immediately above the alignment as well as adjacent to structures including the historical buildings. Mitigation measures were identified in the Draft EIS/EIR and have been refined in this Final EIS/EIR, which would reduce impacts associated with potential ground settlement to not adverse under NEPA and less than significant under CEQA.

Response to Comment R-PC4-4

Earthquake faults were discussed in Section 4.9.2.2 of the Draft EIS/EIR and this Final EIS/EIR. As indicated in the section, the project area is not located within a currently established Alquist-Priolo earthquake fault zone for surface fault rupture. A detailed inventory of regional fault zones is available in Appendix U, Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum.

Response to Comment R-PC4-5

The Union Station Oil Field along Los Angeles and Temple Streets has been delineated as a Methane Zone by the City of Los Angeles Department of Public Works, Bureau of Engineering. The area of the Union Oil Methane Zone, which includes the Mangrove property, is illustrated in Figure 4.9-3 of the Draft EIS/EIR and this Final EIS/EIR. Hazardous impacts associated with this methane zone have been discussed in Section 4.9, Geotechnical/Subsurface/Seismic/ Hazardous Materials, of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-PC4-6

The comment is unclear. Hazardous impacts associated with methane zones and methane buffer zones have been discussed in Section 4.9, Geotechnical/Subsurface/Seismic/Hazardous Materials, of the Draft EIS/EIR and this Final EIS/EIR. Greenhouse gas emissions were discussed in Section 4.6, Climate Change, of the Draft EIS/EIR and this Final EIS/EIR.

Response to Comment R-PC4-7

The potential for haul trucks to physically damage roadways was discussed in Chapter 3, Transportation Impacts and Mitigation, of the Draft and Final EIS/EIR. Mitigation was incorporated which required that roadways be restored to pre-construction condition if damaged by project-related traffic (see mitigation measure number TR-2 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR)). The construction contractor would be responsible for repairing roadways damaged due to project-related traffic during construction. The weight of loaded haul trucks would not be heavy enough to damage sewer lines.

Response to Comment R-PC4-8

No City of Los Angeles Proposition O or state watershed projects are located in the Regional Connector project area. As indicated in Section 4.10, Water Resources, of the Draft EIS/EIR and this Final EIS/EIR, the Regional Connector would have no adverse effects and no significant impacts on drainage or hydrology.

Response to Comment R-PC4-9

No public restrooms or drinking fountains would be provided as part of this project. Restrooms for Metro staff would be located at each station. The water supply required for private restroom facilities and fire flow needs would be minimal and adequate water supply would be available to serve the project from existing entitlements and resources, and no new water facilities or the expansion of existing facilities would be required. The Regional Connector project does not meet the definition of a "project" requiring of preparation of a Water Supply Assessment.

Response to Comment R-PC4-10

In order to obtain conservative ambient noise measurements, noise monitoring was conducted when Walt Disney Concert Hall facilities were not in use, which resulted in lower ambient noise levels. In addition, noise monitoring was conducted to minimize disruption with operations and activities at the Walt Disney Concert Hall.

Response to Comment R-PC4-11

The scientific data that was collected as part of this environmental analysis is presented in Volumes F-1, F-5, and F-6 of this Final EIS/EIR. Refer to Appendix C, List of Preparers (Updated), of this Final EIS/EIR for the list of staff who prepared the Draft EIS/EIR, Supplemental EA/Recirculated Draft EIR Sections, and this Final EIS/EIR.

Response to Comment R-PC4-12

It is unclear what liability the commenter is referring to. Liability varies depending on the circumstance. The EIS/EIR has been prepared in accordance with National Environmental Policy Act regulations and California Environmental Quality Act guidelines. Federal Transit Administration is the lead agency under NEPA and the Los Angeles County Metropolitan Transportation Authority (Metro) is the lead agency under CEQA.

From: Wufoo [mailto:no-reply@wufoo.com]
Sent: Thursday, September 01, 2011 11:16 PM
To: Roybal, Dolores
Subject: Feedback - Regional Connector Transit Corridor [#26]

Name *	Gregory Kay
Email (you@email.com) *	Gregoryekay@gmail.com
Phone Number	(323) 663-5900
Select a Subject *	I have a suggestion

Comment *

I have a comment on the Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmental Impact Report (Supplemental EA/Recirculated Draft EIR Sections) presenting information on the refinements to the Locally Preferred Alternative (LPA) for the Regional Connector.

I have one primary concern regarding the Regional Connector project, and it is about the proposed station at 1st and Alameda. It is my understanding that in order to build this station, three historic structures – and the successful businesses they house – must be razed. The businesses are Señor Fish, Weiland's Brewery, and The Spice Table. 1st st in Little Tokyo is one of the very few historic streets in Los Angeles that has kept the majority of its buildings

1

intact - this continuity has contibuted to a well-frequented pedestrian friendly streetscape.

I would like to encourage the Regional Connector planners to carefully consider how the proposed station will impact the intersection, particularly in regards to scale. The sense of place is already present. A station area consisting of oversized sculptural gestures in a vast plaza would be a step backwards. Perhaps at least the historic facade of the Señor Fish building could be preserved, in a similar manner as was done for facades on Vine Street, Hollywood when the massive "W" Hotel project was constructed.

From an urban planning perspective, it is unfortunate that the original plan - to replace the Office Depota property with the station - was found to be unsuitable. The Office Depot and its parking lot are at a surburban scale, and very out of character with the neighborhood. The focal point that a station would have contributed to that part of the neighborhood could have helped to tie together the gateways to the Artist District and Little Tokyo.

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cont'd

R-PC5

Responses to Comments from Kay, Gregory

Response to Comment R-PC5-1

Of the three structures mentioned, only the S. Kamada Restaurant, Atomic Café, Señor Fish, and Coast Imports building is eligible for the California Register of Historic Resources, and none are eligible for the National Register of Historic Places. Metro understands the value of these buildings, and the importance of small businesses to the Little Tokyo community. It is Metro's goal to minimize the number of business acquisitions needed for the project. Refinements made to the Locally Preferred Alternative since publication of the Draft EIS/EIR have reduced the number of businesses displaced on the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue, as shown in Table 4.2-5 and Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections and Table 4.2-5 and Appendix 1, Locally Preferred Alternative Drawings, of this Final EIS/EIR. No historic resources in the Little Tokyo Historic District would be affected. In mitigation measure number CN-8 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), Metro indicates that the design of the 1st/Central Avenue station would enhance pedestrian circulation, thus contributing to the pedestrian-friendliness of the streetscape. A visual and aesthetic analysis of the Locally Preferred Alternative was performed and documented in Section 4.4.3.5 of the Draft EIS/EIR and this Final EIS/EIR. Station design features would be developed in conjunction with the community. As indicated in Section 4.12.1 of the Supplemental EA/Recirculated Draft EIR Sections and mitigation measure number CR/B-5 in the Mitigation Monitoring and Reporting Program for the Locally Preferred Alternative (Chapter 8 of this Final EIS/EIR), would be offered for a period of one year following certification of this Final EIS/EIR for the price of one dollar to any party willing to move it off of the 1st/Central Avenue station site at their own expense. Should no parties come forward, Metro would incorporate materials from the building into the project facilities. Metro would explore keeping portions of the building intact for use in the 1st/Central Avenue station. The 1st/Central Avenue station would be adjacent to the Office Depot store, and would still be able to function as a focal point for both Little Tokyo and the Arts District.

From: Alex Braunstein [mailto:legandaryedition@gmail.com]
Sent: Friday, September 02, 2011 5:05 PM
To: Regional Connector
Subject:

I have read most of the EIR for the regional connector. It looks, for the most part, like a good system, with a few exceptions. The most glaring is the odd placement of portals. There are times when there are three portals places on the same side of the same block. Three portals are good, but when they are adjacent to each other, they are pointless. Instead, I would like suggest placing them across the street from each other, as the portals are in cities such as New York, London, and Paris. Besides that, there is not much more to say. It looks like a good extension, especially the part about grade-separating the Gold Line.

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R-PC6

Responses to Comments from Braunstein, Alex

Response to Comment R-PC6-1

It appears that the term "portals" refers to station entrances in this comment. Not all station entrances shown in Appendix R-1, Locally Preferred Alternative Drawings, of the Supplemental EA/Recirculated Draft EIR Sections would ultimately be built, as discussed in Section 2.3.6.2 of this Final EIS/EIR. Entrance locations would be confirmed during final design. Preference for having entrances across the street from each other is noted.

Response to Comment R-PC6-2

Support for the project and grade separation of the Metro Gold Line is noted.

From: Mark Johnston [mailto:canammj@yahoo.com]
Sent: Wednesday, September 07, 2011 9:40 AM
To: Regional Connector
Subject: Supplemental EA/Recirculated Draft EIR Sections Available for Public Review

I am still disappointed that there is no discussion or comments about connections to any lines heading south from Union Station/Alameda street area. These could be to the Blue Line, the Harbor Sub to LAX and the Santa Ana Branch corridor- a line that will desperately need a connection to Union Station/Downtown to be a success. Still feel you need a knock out panel near Central to allow a future line to the south. 1

This is a typical problem with METRO have individual teams doing individual lines, no one talks or communicates about connections or junctions with the other proposed lines. Good example is having to redo 1st/Alameda from the East LA just to make the downtown connector work.

other than the deleated station in the financial district, the rest of the project being underground and spacing of the stations is good. 2

thank you
Mark R. Johnston
4185 Van Buren St

R-PC7

Responses to Comments from Johnston, Mark R.

Response to Comment R-PC7-1

Connections southward along Alameda Street toward the Metro Blue Line, Harbor Subdivision, or the Santa Ana Branch corridor are outside the scope of this project, and would not meet the purpose and need goal of minimizing trip times between the Metro Gold, Blue, and Expo Lines at Union Station and 7th Street/Metro Center Station as stated in Section 1.2.2 of the Draft EIS/EIR and this Final EIS/EIR. The Harbor Subdivision Alternatives Analysis Report prepared in 2009 examined the possibility of an Alameda Street alignment. Metro ensures coordination and consistency between its corridor projects. The At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative would have preserved the existing Little Tokyo/Arts District station and much of the surface trackwork around the 1st and Alameda Streets intersection. However, the Metro Board of Directors designated the Fully Underground LRT Alternative as the Locally Preferred Alternative on October 28, 2010 because it would result in fewer impacts to the Little Tokyo community than the other build alternatives and it would successfully serve the project purpose and need.

Response to Comment R-PC7-2

Opposition to the deletion of the Flower/5th/4th Street station is noted. The Locally Preferred Alternative would be constructed in a way that does not preclude addition of a Flower/5th/4th Street station at a later time as a separate future project. Support for the spacing between station and the underground alignment is noted.

September 2, 2011

Dolores Roybal Saltarelli, AICP, Project Manager
One Gateway Plaza, MS 99-22-2
Los Angeles, CA, 90012

Dear Ms. Roybal Saltarelli,

This is a comment for the Supplemental Environmental Assessment/Recirculated Sections of the Draft Environmenta' Impact Report for the Regional Connector Transit Corridor Study. During the over-half century that I've lived my whole life here in Los Angeles, I haven't simply been a deeply intent fan of railroads in southern California, I've done thousands of hours of research and on site investigation. I'm the Huntington Library manuscript volunteer who works on railroad maps. I'm one of the rapidly disappearing few who made sure to ride local rail transit before its final fragments were totally erased county-wide on March 31, 1963. Few people have the knowledge in local railroads that I have. Because of extensive, long time interest, the proposed Regional Connector strikes me as one of the most badly needed projects that have ever been proposed.

The key message here is mandate that Measure R sent on November 2008. Ballot initiatives almost never pass with two thirds vote. Measure R did. Though figures vary, whether 2,039,214 votes (67.93%), or 67.22%, or other precise total is used, it's still clear that passage of Measure R was a truly rare event, a pointed and emphatic message that the majority of us need and want require relief from the increasing transportation gridlock we suffer. That's how deep our dissatisfaction is with our transit system, how much more we want it expanded and improved. It would be tough to claim that either the Westside Subway extension of the Purple Line or the Regional Connector trumps the other in being beneficial or overdue, that's a difficult choice. But we reject further single passenger automobile solutions that have gotten us in such a widespread predicament. Because of the signal value of the Regional Connector, I hope the Draft and Final Environmental Impact Reports are approved and construction expedited as soon as possible, we need it. 1

Unfortunately and even at this advanced date, the Regional Connector doesn't get the share of attention it deserves. Though the Regional Connector project some powerful people who advocate it, California Senator Barbara Boxer and Los Angeles Mayor Antonio Villaraigosa not being the least, I have to stress that insufficient attention is focused on the value and necessity of Connector, how it removes the critical gap that's prompted it, how it would take what is currently somewhat a patchwork of transit in one of the greatest cities on the planet and make that transit system far more useful.

This greatly refined Regional Connector is truly superb now, with its elegant alignment that now tunnels under Japanese Village Plaza. Besides simply

being "done right" it will make an overdue and welcome change to thousands of us, not only in saving time and making a daily impact in quality of life to those who need to use it but in the resulting gridlock it will relieve from the rest of us. This project has had some of the most demanding changes and stresses locally that such projects ever suffer. No small amount of work has been done by th e Connector staff to be hospitable and compliant with the wishes of the historic, valued Little Tokyo community that was concerned about the damage to them from at-grade crossings. The Little Tokyo Community Council understandably gave approval to the the good work doen revising the project, particularly the changed alignment under Japanese Village, proceeding with the underground-only alternative, and use of the Mangrove property to markedly reduce the impact of construction on the tiny, fragile and beloved Little Tokyo in downtown Los Angeles. By having so many different factions nearly unaminously stress the need and desire for the Regional Connector, I hope that Metro responds to the voice and wishes of the people to make every effort to have it in operation as soon as safely and competently possible.

1
cont'd

Sincerely,

Dave Frevele

Dave Frevele
622 S. Wall St. #A337
Los Angeles, CA 90014

R-PC8

Responses to Comments from Frevele, Dave

Response to Comment R-PC8-1

Thank you for your comment. Experience with railroads and support for the Regional Connector project is noted. Support for the Locally Preferred Alternative and refinements made since publication of the Draft EIS/EIR is noted. It is Metro's goal to complete the Regional Connector project in a safe and timely manner.

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX A

LIST OF ACRONYMS AND ABBREVIATIONS

State Clearinghouse Number: 2009031043

APPENDIX A: LIST OF ACRONYMS AND ABBREVIATIONS

AA	Alternatives Analysis
AASHTO	American Association of State Highway Transportation Officials
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
ADT	Average Daily Traffic
AGELRT	American Meteorological Society / EPA Regulatory Model
ALRT	At–grade Emphasis LRT Alternative
AM	Morning
ANSI	American National Standards Institute
APE	Area of Potential Effects
APN	Central City Association and Downtown Center Business Improvement District
ASI	Application Screening Index
AVTA	Antelope Valley Transit Authority
BART	Bay Area Rapid Transit
BAU	Business-as-usual
BEP	Business Emergency Plan
BID	Business Improvement Strategy
BMP	Best Management Practice
BRT	Bus Rapid Transit
BTU	British Thermal Unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAHSR	California High Speed Rail
Cal OSHA	California Occupational Safety and Health Administration
CALEPA	California Climate Action Team
California Register	California Register of Historical Resources
CALTRANS	California Department of Transportation
CARB	California Air Resources Board
CAS	Chemical Abstracts Service
CBC	California Building Code

CCA & DCBID	Central City Association and Downtown Center Business Improvement District
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CCTV	Closed-Circuit Television cameras
CDMG	California Division of Mines and Geology
CDPR	California Department of Parks and Recreation
CE	California Endangered
CEC	California Education Code
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulation
CGS	California Geological Survey
CH_4	Methane
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Plans
CLACG	City of Los Angeles Council of Governments
CNDDB	California Natural Diversity Database
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalents
CPUC	California Public Utilities Commission
CRA	Community Redevelopment Agency
CRA/LA	Community Redevelopment Agency of Los Angeles
CRHR	California Register of Historic Resources (California Register)
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
DART	Dallas Area Rapid Transit
dBA	Decibels
DCBID	Los Angeles Downtown Center Business Improvement District
DEIR	Draft Environmental Impact Report
DEIS	Draft Environmental Impact Statement
DHS	Department of Homeland Security

DOE	Department of Energy
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
DVR	Digital Video Recorder (DVR)
EDR	Environmental Data Resources
eGRID	USEPA Emissions & Generation Resource Integrated Database
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMF	Electromagnetic Field
EMFAC	Emission Factor Model for Onroad Motor Vehicles
EPCRA	Emergency Planning and Community Right-to-Know Act
FAR	Floor Area Ratio
FE	Federally Endangered
FEC	Fairly Endangered in California
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIDM	Fashion Institute of Design and Merchandising
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
FULRT	Fully Underground LRT Alternative
GBV	Ground-borne Vibration
GCC	Global Climate Change
GHG	Greenhouse Gases
GWP	Global warming potential
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HARP	Hotspots Analysis Reporting Program
HCM	Highway Capacity Manual
HFC	Hydrofluorocarbons
HHS	Health and Human Services
HIA	Acute Hazard Index
HIC	Chronic Hazard Index
HMBP	Hazardous Materials Business Plan
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
HRA	Health Risk Assessment
IPCC	United Nations Intergovernmental Panel on Climate Change

JANM	Japanese American National Museum
kWH/mi	Kilowatt Hours per Mile
LACFD	Los Angeles County Fire Department
LACMTA	Los Angeles County Metropolitan Transportation Authority
LACSD	Los Angeles County Sheriff's Department
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAHSA	Los Angeles Homeless Services Authority
LAMC	Los Angeles Municipal Code
LAP	Language Assistance Plan
LAPD	Los Angeles Police Department
LARWQCB	Los Angeles Regional Water Quality Control Board
LAUSD	Los Angeles Unified School District
Ldn	Average day-night Noise Level
LEP	Limited English proficiency
Leq	Equivalent Continuous Noise Level
LONP	Letter of No Prejudice
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LRV	Light rail vehicles
LST	Localized Significance Thresholds
LTCC	Little Tokyo Community Council
LTS	Less Than Significant Impact
LTSC	Little Tokyo Service Center
LTSM	TSM Lower Grand Shuttle Bus
LTWG	Little Tokyo Working Group
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MF	Multi-Family Residence
MICR	Maximum Individual Cancer Risk
MLD	Most Likely Descendant
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
MOA	Memorandum of Agreement
MOCA	Museum of Contemporary Art

MONA	Museum of Neon Art
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
Muni	San Francisco Municipal Railway
MWD	Metropolitan Water District
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NGA	Next Generation Attenuation
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NO_2	Nitrogen Dioxide
NOI	Notice of Intent
NOx	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places (National Register)
NTD	National Transit Database
NVEC	Not very endangered in California
O_3	Ozone
OAL	Office of Administrative Law
OCS	Overhead Catenary System
OCTA	Orange County Transportation Authority
OFFROAD	Emission Factor Model for Offroad Mobile Equipment
OHP	Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
Pb	Lead
PCB	Polychlorinated Biphenol
PCE	Perchloroethylene/Tetrachloroethene
PEC	Presumed Extinct in California
PFC	Perfluorocarbons

PM	Afternoon
PM_{10}	Particulate Matter 10 Microns or Smaller in Diameter
$PM_{2.5}$	Particulate Matter 2.5 Microns or Smaller in Diameter
POC	Pedestrian Overcrossing
ppd	Pounds Per Day
PPM	Parts per Million
PPP	Public Participation Plan
PPV	Peak particle velocity
PRC	Public Resources Code
PSC	Pollutant Screening Level
PSI	Pollutant Screening Index
PUC	Pedestrian Undercrossing
RCP	Regional Comprehensive Plan
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
RMS	Root mean squared
ROW	Right of Way
RPS	Renewable Portfolio Standard
RTAC	Regional Targets Advisory Committee
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
SAR	Second Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SC	Species of Concern in California
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCoAB	South Coast Air Basin
SCS	Sustainable Community Strategies
SEC	Seriously Endangered in California
SEM	Sequential Excavation Method
SF	Single Family Residence

SF_6	Sulfur hexafluoride
SHPO	State Historic Preservation Officer
SI	Significant Impact that can be mitigated to less than significant
SIP	State Implementation Plans
SO_2	Sulfur dioxide
SoCAB	South Coast Air Basin
SRO	Single Room Occupancy Establishment
SU	Significant and Unavoidable Impact
SUSMP	Standard Urban Stormwater Management Plan
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TBM	Tunnel boring machine
TCE	Trichloroethylene
TCP	Traditional Cultural Properties/Places
TMDL	Total Maximum Daily Loads
TOD	Transit Oriented Development
TPH-g	Total petroleum hydrocarbons - gasoline
TPS	Transport Priority System
TPSS	Traction power substations
TRB	Transportation Research Board
TSA	Transportation Security Administration (TSA)
TSCA	Toxic Substances Control Act
TSM	Transportation System Management
TVA	Threat and Vulnerability Analysis
UFC	Uniform Fire Code
ULRT	Underground LRT Alternative
USC	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
UTSM	TSM Upper Grand Shuttle Bus
v/c	Volume to capacity ratio
VdB	Vibration Decibels
VMC	Visual Modification Class

VMT	Vehicle Miles Traveled
VOC	Volatile organic compounds
VPD	Vehicles Per Day
WMA	Watershed Management Area

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX AA

PARKLANDS AND OTHER COMMUNITY FACILITIES

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Parklands and Other Community Facilities
Technical Memorandum
And Section 4(f) Evaluation

March 15, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

This technical memorandum was prepared by:

CDM
523 West Sixth Street
Suite 400
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ACRONYMS

ALRT	At-Grade Emphasis
CALTRANS	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
FIDM	Fashion Institute of Design and Merchandising
FLRT	Fully Underground LRT Alternative
FTA	Federal Transit Administration
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sheriff's Department
LADOT	Los Angeles Department of Transportation
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LAUSD	Los Angeles Unified School District
LRT	Light Rail Transit
LTSM	TSM Lower Grand Shuttle Bus
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MOCA	Museum of Contemporary Art
MONA	Museum of Neon Art
NEPA	National Environmental Policy Act

SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
TPS	Transport Priority System
TSM	Transportation Management System
UFC	Uniform Fire Code
ULRT	Underground Emphasis
USC	United States Code
USDOT	US Department of Transportation
UTSM	TSM Upper Grand Shuttle Bus

1.0 SUMMARY

This technical memorandum analyzes whether construction and operation of the proposed Regional Connector Transit Corridor project would result in potential adverse (National Environmental Policy Act [NEPA]) and significant (California Environmental Quality Act [CEQA]) short-term, long-term, and cumulative impacts on local parklands and community facilities. The analysis addresses potential direct and indirect impacts based on proposed acquisitions and potential effects on access.

Existing parklands and community facilities are located within 0.25 miles of the proposed Regional Connector Transit Corridor project alignments, stations, and construction sites. After cataloging the parklands and community facilities in close proximity to the proposed project, including those facilities found to be potential Section 4(f) resources, it was determined that the impacts to these facilities are less than significant (not adverse) for all alternatives and no mitigation is required.

2.0 INTRODUCTION

Transit improvements typically can enhance accessibility to parklands and community facilities, particularly for those individuals who are transit dependent. However, physical features associated with construction and operation of the transit improvements can also have direct and indirect adverse effects by acquisition of physical property, disruption to parkland users and other community facilities and their associated services, and changes to roadways and public right-of-ways that reduce pedestrian or vehicular access to facilities.

This technical memorandum identifies existing and potentially affected parklands and community facilities along and/or within 0.25 miles of either side of proposed project alignments, stations, and sites associated with construction activities. Parklands include public parks and outdoor recreational facilities, but do not include private plazas or private building-related open space. Community facilities include police and fire services, libraries, educational facilities (including day cares), churches, cemeteries, hospitals, and convalescent homes.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

The following sections describe the regulatory framework used to guide parkland and community facility development by applicable jurisdictions in the project area, as well as determine adverse and significant impacts.

3.1.1 Federal

3.1.1.1 Parklands and Schools

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 (re-codified as amended at 49 United States Code [USC] Section 303) affords special protection to public recreational lands and facilities, including local parks and school facilities, that are open and available to the general public for recreational purposes, significant cultural resources, and natural wildlife refuges. Federally funded transportation improvement projects are prohibited from encroachment (direct impacts, constructive use, or a taking) on Section 4(f) lands unless it can be demonstrated that no other alternative exists. Parks and recreational Section 4(f) lands within or adjacent to the proposed corridor are discussed in Section 4. The Historic, Archaeological and Paleontological Resources Technical Memorandum discusses Section 4(f) as it relates to historical resources.

Since 1966, Section 4(f) has undergone several changes. In August 2005, Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Act – A Legacy for Users (SAFETEA-LU) made the first substantive revision to Section 4(f) since the 1966 USDOT Act. Section 6009, which amended existing Section 4(f) legislation at both Title 49 USC Section 303 and Title 23 USC Section 138, simplified the process and approval of projects that would have only *de minimis* impacts on lands impacted by Section 4(f). Under the new provisions, once the Federal Transit Administration (FTA) determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete.

3.1.1.2 Fire Services

The Uniform Fire Code (UFC) contains regulations relating to building construction and maintenance and the use of their premises. Topics addressed in the UFC include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, and hazardous materials storage and use. The regulations also include provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and their premises. The UFC contains specialized technical regulations related to fire and human safety.

3.1.2 State

3.1.2.1 Fire Services

California Code of Regulations (CCR) Title 24 of the California Building Code (CBC) is a compilation of building standards. State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code and include regulations for building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. If there is no local fire authority and in state-owned and state-occupied facilities, the California State Fire Marshall has full enforcement jurisdiction of state fire regulations.

3.1.2.2 Educational Facilities:

Each of the state school districts is subject to the regulations of the California Education Code (CEC) and the governance of the California State Board of Education, relative to funding, school curriculum, operations, and facilities (including location considerations).

3.1.3 Local

Parklands, public services (i.e., police and fire protection), libraries, and other community facilities (i.e., educational facilities) are generally regulated by local agencies. Therefore, these components and implementation of the proposed project alternatives would be regulated primarily by agencies and policies of Los Angeles County and the City of Los Angeles.

In addition, public schools within 0.25 miles of either side of the proposed project alignments, stations, and maintenance and operations facility sites are within the Los Angeles Unified School District (LAUSD), which has its own policies and procedures. Specific policies pertaining to other community facilities are implemented through land use and zoning, and are described in more detail in the Land Use and Development Technical Memorandum.

The following sections summarize many of the applicable local policies, listed by jurisdiction:

3.1.3.1 Los Angeles County

Parklands and community facilities are subject to the guidelines set forth in the Los Angeles County General Plan. The County's General Plan has policies that affect park and recreation facilities and police and fire services in the project area, including the following:

- *Parks and Recreation*: Policy C/OS 1.1 promotes acquisition and preservation of open space areas throughout the County.
- *Police Services*: Policy PS 8.1 promotes phased development, whereby land use proposals are developed in conjunction with approved law enforcement capabilities.

- *Fire Services*: The Los Angeles County Fire Code and General Plan establish standards, policies, and goals for fire suppression facilities within the County. In addition, the County's General Plan includes policies (such as Policy PS 7.1) that promote phased development, whereby land use proposals are developed in conjunction with approved fire protection capabilities.

3.1.3.2 City of Los Angeles

Citywide Level

Parks and Recreation: Recreational planning is accomplished through various land use plans, including the City of Los Angeles General Plan and various community plans, specific plans, and recreational use plans developed by the City of Los Angeles Department of Recreation and Parks.

According to the City of Los Angeles Public Recreation Plan, a satisfactory recreation system must measure up to accepted standards in three respects. The first standard is sufficient land area must be set aside for recreation; the second is recreation areas must be properly distributed in residential areas throughout the City; and third, facilities must meet different recreation needs, including both active and passive recreation and provisions for every age (City of Los Angeles 1980).

Police Services: While there are no specific local or regional plans that address police services, the City's General Plan framework and specific community plans contain policies and objectives that ensure adequate police service infrastructure for the Los Angeles Police Department (LAPD).

Fire Services: The City of Los Angeles both surrounds and adjoins other cities, counties, and state and federally controlled lands; therefore, it has joined a variety of mutual aid agreements with other jurisdictions for the cooperative response and management of fires and other emergency incidents. The Los Angeles Fire Department (LAFD) participates in automatic response agreements with the County. The City's General Plan and Fire Code (part of the City's municipal code) contain the goals, objectives, and policies related to fire prevention and suppression services.

Community Level

The project area crosses two designated City of Los Angeles communities: Central City and Central City North. Both of these communities have community plans that contain applicable policies regarding existing parklands and community facilities. These policies are discussed in the following sections.

Central City Community Plan

Central City is a community within the City of Los Angeles located south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of the Harbor Freeway (I-110), and west of Alameda Street. The following paragraphs summarize applicable Central City Community Plan policies, listed by community facility type.

Parks and Recreation: Policy 4-1.1 seeks to expand the range of potential open space resources at the neighborhood and community levels. Policy 4-2.1 fosters physical and visual links between open spaces and public spaces in downtown Los Angeles with the implementation of the Civic Center Shared Facilities and Enhancement Plan and Metro's Angel's Walk Pedestrian Master Plan. Increased use of existing parks and recreational spaces is encouraged with Policy 4-3.1. Policy 4-4.1 supports improvement of Central City's pedestrian environment in recognition of its important role in the efficiency of the downtown's transportation and circulation systems. This policy also promotes improvement of the quality of life for its residents, workers and visitors.

Police Services: Policy 5-1.1 requires consultation with the LAPD during review of development projects and land use changes to determine law enforcement needs and requirements. This policy also requires decision-makers for proposed projects to include findings relevant to impacts to police service demand

Fire Services: Policy 6-1.1 requires coordination with the LAFD during review of significant development projects to determine the impacts on fire service demand. This policy requires decision-makers for proposed development projects to include findings regarding potential impacts to fire service demand and encourages continued consultation with the LAFD.

Libraries: Policy 8-1.1 encourages flexibility in locating libraries in mixed-use projects, pedestrian-oriented areas, transit-oriented districts, and similar areas.

Educational Facilities: Policy 7-1.1 encourages the location and design of school locations to be compatible with the surrounding neighborhood and to use schools to create a logical buffer between different land uses. It also requires that decision-makers be involved in review of proposed schools and adopt findings that support the application of this objective. Policy 7-1.2 encourages changes to the planning and building code to allow reuse of existing buildings for educational purposes.

Central City North Community Plan

Central City North is a community within the City of Los Angeles adjacent to downtown Los Angeles. The community is bounded by the Los Angeles River on the east; the City of Vernon to the south; Alameda Street, Cesar Chavez Avenue, Sunset Boulevard, and Marview Avenue to the west; and Stadium Way, Lilac Terrace, and North Broadway to the north. The following

paragraphs summarize applicable Central City North Community Plan policies, listed by community facility type:

Parks and Recreation: Policy 4-1.1 seeks to protect and preserve recreational facilities and park space by designating city recreation and park facilities as open space. Policy 5-1.1 encourages retention of passive and visual open space to provide a balance to the urban development of the Plan area. Policy 5-2.1 promotes accessibility, security, and safety of park users, especially families with children and senior citizens, by park design, construction, and maintenance methods.

Police Services: Policy 8-1.1 requires consultation with the LAPD during review of significant development projects to determine potential impacts on police service demand. Decision-makers are required to include findings considering potential impacts of a proposed project on police service demands.

Fire Services: Policy 9-1.1 requires coordination with the LAFD during review of significant development projects to determine the potential impact on fire service demands. This policy requires decision-makers to include findings regarding potential impacts on fire service demands of a proposed project.

Libraries: Policy 7-1.1 encourages flexibility in locating libraries in mixed-use projects, shopping malls, pedestrian-oriented areas, transit stations, office buildings, and other similar areas.

Educational Facilities: Policy 6-1.1 encourages the development and design of school locations to be compatible with the surrounding land uses and community character, and to use schools as a logical transition and buffer between different land uses.

3.2 Standards of Significance

3.2.1 NEPA and Section 4(f)

NEPA does not have specific requirements related to potential impacts on parklands and community facilities. However, Section 4(f) of the USDOT Act of 1966 requires protection of certain parklands and community facilities, as specified in the regulation. Section 4(f) properties are considered significant if they play an important role in meeting community objectives in terms of availability and functions of recreation, park, or wildlife and waterfowl.

Only selected levels of significance are relevant to this project because not all of the resources described in the guidance are present in the urban-built environment of downtown Los Angeles. Significance is determined by consultation with local, state, or federal agencies with jurisdiction over the resources. Therefore, a significant adverse impact to Section 4(f) properties would occur if an alternative would require:

- Direct use of Section 4(f) lands (physical acquisition, displacement or relocation)
- Constructive use (indirect effect) of Section 4(f) lands by which a project's proximity to the Section 4(f) resources substantially impairs the normal use of the land (i.e., altering access, introducing significant noise or vibration, casting shadows, or other substantive changes to the visual setting)

3.2.2 CEQA

CEQA thresholds for parklands are identified in Section K of the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006). In accordance with CEQA, a project would normally have a significant impact on parklands if it could:

- Result in substantial adverse physical impacts from new or physically altered government facilities, need for new or physically altered government facilities, and construction that could cause significant environmental impacts to maintaining acceptable service ratios, response times, or other performance objectives for parks.
- Increase the use of existing neighborhood and regional parks or other regional facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require construction or expansion of recreational facilities that might have a physical effect on the environment.

As indicated in the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006), significant impacts to community/public facilities would occur if the project could:

- Result in substantial adverse physical impacts associated with providing new or physically altered governmental facilities, need for new or physically altered governmental facilities, and construction that could cause significant environmental impacts to maintaining acceptable service ratios, response times, or other performance objectives for police protection, fire protection, schools, or other public facilities.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

3.3. Methodology

Potential impacts to parkland and community facilities, including Section 4(f) resources, were assessed by conducting an inventory of facilities located within 0.25 mile of either side of proposed project alignments, stations, and sites associated with construction (also referred to as the "project area"). A 0.25-mile radius from proposed alignments is consistent with

previous environmental analyses for Metro transit projects and identifies the facilities that are in closest proximity, thereby indicating those that could be directly or indirectly impacted by the proposed transit improvements.

Direct effects/impacts are those caused directly by, and immediately related to, project activities such as land acquisitions or noise from construction. This would occur only at facilities located adjacent to the project. Indirect effects/impacts are caused by the proposed project, but may occur later in time and at some distance from the project, or are in the chain of cause-and-effect relationships (such as elimination of parking that negatively affects a resource). Indirect effects/impacts would most likely occur at facilities adjacent to or in close proximity to the project.

This impact analysis for parklands and community facilities, including Section 4(f) resources, identifies locations of these facilities within the project area, and overlays the sites on the proposed transit alternatives to assess direct and indirect impacts. The first step was to identify parklands and community facilities within the area of potential impact. These sites were identified from existing sources, including planning documents for the City and County of Los Angeles; various internet sites for federal, state, and local agencies; map and satellite imagery of the area of potential impact; and field investigations. It should be noted that public parklands are protected as Section 4(f) resources, and were also identified for analysis. These sites are included on the figures in Section 4 that show the area of impact and are listed in the tables in Section 4 that show the proximity of each site to the alternative alignments.

The second step in the impact analysis was to consider potential short-term and long-term impacts on parklands and community facilities associated with construction and operation of the proposed project. The analysis addressed potential direct impacts from proposed acquisitions and indirect impacts from potential effects of project activities (i.e., construction of guideways and trackwork, underground and at-grade stations, tunnels, and below-grade separations) on pedestrian and vehicular access (including parking). Indirect impacts could be potentially significant if they create barriers or substantial disruption to pedestrian and vehicular access. , All applicable regulatory requirements and standards of significance were applied to analyze the potential for impacts.

Construction period impacts are discussed for each type of community facility, and specific facilities as appropriate. Operational impacts are anticipated to be primarily beneficial if they increase access to parks and community facilities.

Proximity impacts related specifically to traffic, safety, air quality, noise, and other related issues could also have an effect on parklands and community facilities. Effects on pedestrian and vehicular access are discussed further in the Transportation Technical Memorandum. Existing and future safety and security issues for motorists and the surrounding community are discussed in the Safety and Security Technical Memorandum. Other potential indirect

impacts related to air quality and noise impacts are addressed in the Air Quality and Noise Technical Memorandums, respectively.

This analysis also discusses cumulative (including growth inducing) impacts from construction and operation of the project alternatives. Cumulative impacts are environmental changes that result from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable projects. If there are no direct or indirect impacts, then there would be no cumulative effects.

3.4 Section 4(f) Evaluation Methodology

For Section 4(f) resources, the impact analysis includes a description of each affected public recreational land and facility and its significance. Significance is determined by consultation with federal, state, or local agencies that have jurisdiction over the site. Section 4(f) criteria for "use" (i.e., direct and constructive impacts) are applied to each resource identified. The analysis also describes alternatives that would avoid the use of the resource, measures that would minimize harm, and required coordination with other agencies.

Section 4(f) requires that lands meeting the 4(f) criteria must be protected unless unusual factors or unique problems are present, or the cost, environmental impacts, or community disruption from potential alternatives are particularly large. Therefore, if a Section 4(f) property would be impacted by a proposed project, the analysis must demonstrate that there are no other prudent and feasible alternatives that do not affect the 4(f) property.

If all potential alternatives include the use of Section 4(f) lands, the alternative that has the least overall impact on the resource (including mitigation measures), while still being prudent and feasible, is the alternative that must be selected.

This technical memorandum analyzes only Section 4(f) public recreational lands and facilities. An analysis of Section 4(f) effects related to historical resources is provided in the Historic, Archaeological, and Paleontological Resources Technical Memorandum.

4.0 AFFECTED ENVIRONMENT

This section describes the existing parklands and community facilities within the project area. The first part describes the general County and City settings for these facilities and the second part provides an inventory of existing facilities and maps showing the locations of each facility relative to each alternative's alignment.

4.1 Existing Parks and Community Facilities Context

The project area is encompassed by the jurisdictions of Los Angeles County and the City of Los Angeles. The following provides a general context for the parklands and community facilities under these jurisdictions:

4.1.1 Los Angeles County

Parks and Recreation: Los Angeles County offers its residents an array of parks, gardens, and beaches. There is one county park, the Civic Center Mall, located within 0.25 miles of the proposed alternatives. It is located adjacent to the Hall of Administration and the County Courthouse, on the block bounded by 1st Street, Hill Street, Temple Street, and Grand Avenue.

Police Services: The Los Angeles County Sheriff's Department (LACSD) currently employs approximately 9,474 sworn peace officers and 7,738 professional staff. The LACSD is comprised of 11 divisions, which provide law enforcement services to 40 contract cities, 90 unincorporated communities, 9 community colleges, Metro, and 48 superior courts (County of Los Angeles 2007). There are no LACSD stations located within 0.25 miles of the proposed alternatives.

Fire Services: The Los Angeles County Fire Department (LACFD) provides fire and safety services to unincorporated areas of Los Angeles County, contracted cities, and cities that are under an agreement for the cooperative response and management of fires and other emergency incidents, including the City of Los Angeles. The LACFD currently employs over 4,500 personnel, ranging from firefighters and paramedics to lifeguards and pilots. The LACFD operates 165 fire stations and several fire prevention offices (County of Los Angeles 2007). There are no LACFD fire stations within 0.25 miles of the proposed alternatives.

Libraries: Los Angeles County provides library services to residents living in the unincorporated areas of the County. One Los Angeles County library (Los Angeles County Law Library) is located within 0.25 miles of the proposed project.

Educational Facilities: There are no Los Angeles County educational facilities within the project area.

Other Community Facilities: A portion of the project area extends through the Civic Center, where there are number of government buildings and public facilities. There are five Los Angeles County government offices within the project area: the Los Angeles County Hall of Records, Los Angeles Archives & Records Center, Los Angeles County Courthouse, and two Los Angeles Superior Court locations (Broadway and Temple Street and 1st and Hill Streets).

4.1.2 City of Los Angeles

4.1.2.1 Central City Community Plan Area

Parks and Recreation: Downtown Los Angeles has the least amount of public open space of any major U.S. urban center. There are seven public parks and recreational facilities operated by the City of Los Angeles Department of Recreation and Parks in the Central City Community Plan area. Four of those parks (Pershing Square, City Hall South Lawn Park, Grand Hope Park, and Los Angeles Plaza Park) are located within 0.25 miles of the proposed project. Maguire Gardens is a landscaped open space located adjacent to all of the proposed alternatives at 5th and Flower Streets, but it is designated by the City of Los Angeles as a public facility, not a park. Fletcher Bowron Square is located near the proposed alternatives, but it is also designated as a public facility, not a park. In addition to these public spaces, there are a number of private building-related parks and plazas.

Police Services: The LAPD provides police protection services in the City of Los Angeles, which is an area of approximately 483 square miles, with 21 communities representing approximately four million residents (LAPD 2007). In addition to administrative and special investigative units, the City of Los Angeles is divided into four smaller operational units, or bureaus: the Central Bureau, the South Bureau, the West Bureau, and the Valley Bureau.

To facilitate response times, the LAPD has approximately 21 individual police stations located throughout the bureaus. The LAPD employs approximately 9,600 sworn and 2,900 civilian personnel, providing an average of approximately 2.4 sworn officers per 1,000 people (LAPD 2007). The LAPD Headquarters is located within 0.25 miles of the proposed project. The Central Bureau Station also services the area, but is located more than 0.25 miles from the proposed build alternatives. Additionally, the United States Department of Justice Los Angeles Federal Metropolitan Detention Center jail facility is located within 0.25-miles of all of the alternatives.

Fire Services: The LAFD provides fire suppression, emergency medical care, technical rescue, hazardous materials handling, disaster response, and community services to the City of Los Angeles. The LAFD has 3,594 uniformed personnel and 346 non-sworn support personnel located at 106 neighborhood fire stations, serving a 471-square-mile jurisdiction (LAFD 2008). There are 1,101 uniformed firefighters, including 226 firefighter/ paramedics, always on duty throughout the City. The location and number of stations that would be called in the event of a fire or other emergency depends on a number of factors, including the type of emergency,

severity of the emergency, and availability of the nearest fire station. In actuality, the resources of the entire LAFD force could be available collectively. There are three fire stations within the Central City Community Plan area and one of them lies within 0.25-miles of the proposed alternatives: Fire Station No. 3 at 1st Street and Fremont Avenue.

Libraries: There are two public libraries operated by the Los Angeles Public Library system within the Central City Community Plan area. Both of these are located within 0.25 miles of the proposed project. These libraries are the Central Library in the Financial District on Flower and 5th Streets and the Little Tokyo Branch Library at Alameda and 3rd Streets. Additionally, there are six other libraries in the area that are open to the public at least on a limited basis.

Educational Facilities: The LAUSD is the primary school district within the City of Los Angeles. The LAUSD encompasses a service area of almost 704 square miles, which is broken into eight local districts. In addition to the City of Los Angeles, the LAUSD serves all or portions of several incorporated cities and portions of the County, thus representing a total population of approximately 4.5 million residents. The LAUSD operates approximately 1,190 schools, including kindergarten through grade 12 (K-12), community and occupational centers, and charter schools (LAUSD 2008). The LAUSD is undergoing a $19.3 billion voter-approved transformation to build new schools and improve existing facilities. These improvements are being implemented to reduce overcrowding throughout the district. Since the program began in 2000, 67 new schools have been constructed, 12 new schools are currently under construction, 19 projects are under construction, and 171 projects have been completed (LAUSD 2008). Within the Central City Community Plan area, there is only one public elementary school. However, the area is also served by another elementary school in Chinatown, a high school in Westlake, a junior high in Boyle Heights, and the planned Edward R. Roybal Learning Center in Central City West. Three LAUSD high schools lie within 0.25 miles of the proposed project (California Academy for Liberal Studies Early College High School, Oscar de la Hoya Amino Leadership Charter High School, and High School for the Visual and Performing Arts).

Other Community Facilities: There are a number of other community facilities both within the Central City Community Plan area and within 0.25 miles of the proposed project alternatives. These include six museums, two medical facilities, ten day-care facilities, and numerous religious facilities.

4.1.2.2 Central City North Community Plan Area

Parks and Recreation: The City of Los Angeles Department of Recreation and Parks operates two community parks and nine neighborhood parks in the Central City North Community Plan area. None of these parks is located with 0.25 miles of the proposed project.

Police Services: Police protection services are provided by the LAPD. One police station, the Chinatown Substation, serves the area. There are no Central City North Community Plan police stations located within 0.25 miles of the proposed project alignments.

Fire Services: Fire services are provided by the LAFD. Two fire stations provide fire protection in the Central City North Community Plan area. Only one is within 0.25 miles of the proposed alignments. LAFD Station No. 4, is located on Temple Street between Garey and Alameda Streets.

Libraries: Two public libraries serve the Central City North Community Plan area. The Chinatown Branch Library in Chinatown at Castelar Elementary School is located outside the 0.25-mile radius around the proposed alignments. The Little Tokyo Branch Library is in the Central City Community Plan area, but serves the Central City North Community Plan area as well. The Little Tokyo Branch Library lies within 0.25 miles of the proposed project alignments.

Educational Facilities: The LAUSD is the primary school district servicing the Central City North Community Plan area. Within the community plan area are two elementary schools and one high school. Other LAUSD schools outside of the Central City North Community Plan area that serve the area include an elementary and junior high school in Boyle Heights, an elementary school in Central City, a high school in Westlake, and a junior high school in Lincoln Heights. None of these LAUSD schools are within 0.25 miles of the proposed project. No private schools are located within 0.25 miles of the proposed alignments.

Other Community Facilities: Other community facilities within the Central City North Community Plan area include two daycares, two religious facilities, and one medical facility within 0.25 miles of the proposed project alternatives.

4.2 Existing Parklands and Community Facilities

Existing parklands and community facilities within the area are described in the following paragraphs. The parklands and community facilities that service the area or are within 0.25 miles of the proposed project alternatives alignments and stations are detailed in Figures 4-1 through 4-12 and Tables 4-2 through 4-4. Figures 4-1 through 4-4 show parklands and recreational resources within 0.25 miles of each alternative and correspond to the numbers on Table 4-2, which describes each facility. Figures 4-5 through 4-8 show public services and religious facilities within 0.25 miles of each alternative and correspond to the numbers on Table 4-3, which describes each facility. Figures 4-9 through 4-12 show educational facilities within 0.25 miles of each alternative and correspond to the numbers on Table 4-4, which describes each facility.

Table 4-1 summarizes the number of parklands and community facilities located within 0.25 miles of the proposed project. Figures 4-1 through 4-4 and Table 4-2 pertain to the parklands

and other recreational resources—including parklands, museums, and recreational facilities—located within the project area and associated with the proposed alternatives.

Table 4-1. Summary of the Parklands and Community Facilities Located Within 0.25 Miles of the Project Alternatives

Facility Type	Project Alternatives				
	TSM	At-Grade Emphasis LRT	Underground Emphasis LRT	Fully Underground LRT – Little Tokyo Variation 1	Fully Underground LRT – Little Tokyo Variation 2
Parks	5	5	5	5	5
Recreational Facilities	7	6	6	6	6
Police Services	4	3	3	3	3
Fire Services	2	2	2	2	2
Libraries	9	4	3	3	3
Day-Care and Pre-School	13	6	7	8	8
Public Elementary and Middle Schools	0	0	0	0	0
Public High Schools	3	2	2	2	2
Colleges, Universities, & Trade Schools	12	8	9	10	10
Private Schools	0	0	0	0	0
Government Offices	13	13	12	12	12
Medical Facilities	1	1	1	1	1

Table 4-1. Summary of the Parklands and Community Facilities Located Within 0.25 Miles of the Project Alternatives

Facility Type	Project Alternatives				
	TSM	At-Grade Emphasis LRT	Underground Emphasis LRT	Fully Underground LRT – Little Tokyo Variation 1	Fully Underground LRT – Little Tokyo Variation 2
Religious Facilities	13	10	11	11	11
Museums	6	6	4	4	4

Source: CDM 2009

Figure 4-1. Parklands and Recreational Resources – TSM Alternative

Figure 4-2. Parklands and Recreational Resources – At-Grade Emphasis LRT Alternative

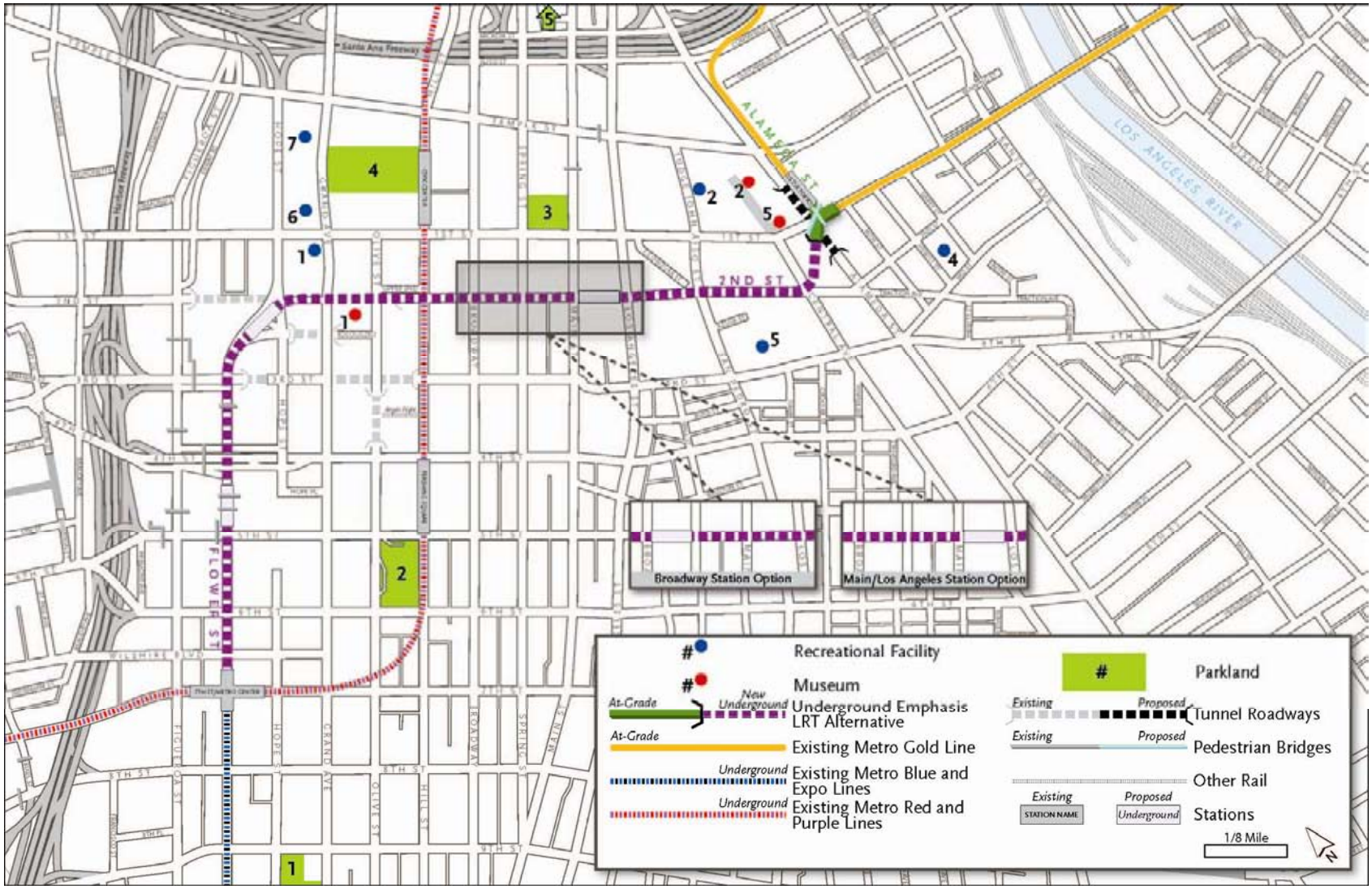

Figure 4-3. Parklands and Recreational Resources – Underground Emphasis LRT Alternative

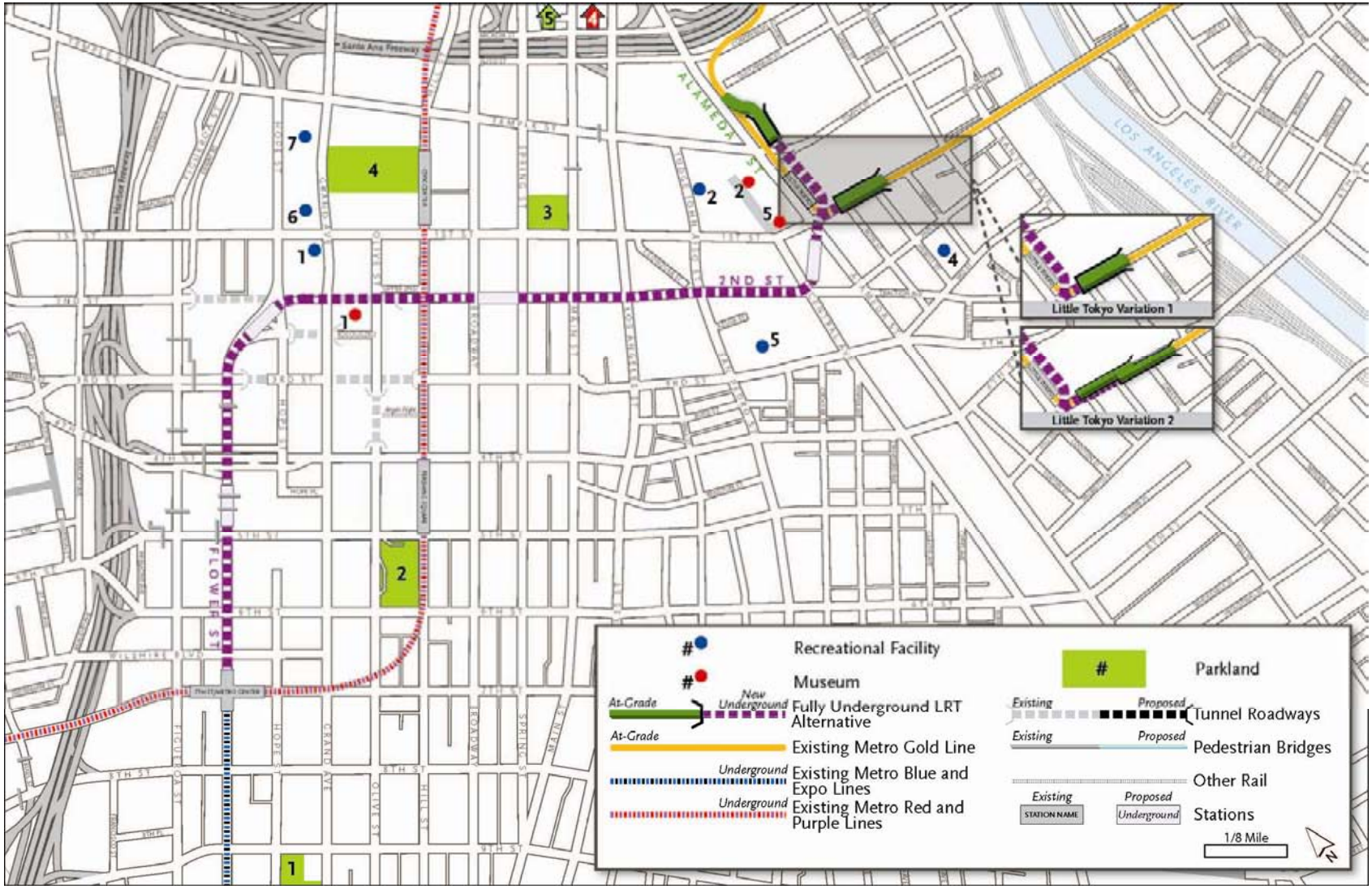

Figure 4-4. Parklands and Recreational Resources – Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 4-2. Parklands and Recreational Resources Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Type of Facility	Approx Size (acres)	Location	Regulatory Agency	Proximity to Alignment (miles[2])
Parklands						
1	Grand Hope Park	Special Features: • Decorative sidewalks • 2 fountains • Clock tower • Pergolas • Children's play area • Displays of various artists' work	2.5	919 S Grand Avenue	City of Los Angeles	0.16 ALRT 0.16 ULRT 0.16 FLRT 0.16 LTSM 0.25 UTSM
2	Pershing Square	Special Features: • Ice Skating Rink (seasonal) • Stage • Sunken Amphitheatre Other Programs: • Earth Day • Shakespeare in the Park • Special Events Concert • St. Patrick's Day Parade •	5.0	532 S Olive Street	City of Los Angeles	0.24 ALRT 0.24 ULRT 0.24 FLRT 0.24 LTSM 0.01 UTSM
3	City Hall South Lawn Park	Landscaped grounds of City Hall	4.0	200 N Main Street	City of Los Angeles	0.04 ALRT 0.14 ULRT 0.14 FLRT 0.14 LTSM 0.13 UTSM

Table 4-2. Parklands and Recreational Resources Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Type of Facility	Approx Size (acres)	Location	Regulatory Agency	Proximity to Alignment (miles[2])
4	Civic Center Mall	Special Features: • Large fountain • Multi-story parking garage for county employees underneath • Coffee shop	5.0	Block bounded by S Hill Street, S Grand Avenue, W 1st Street, & W Temple Street	County of Los Angeles	0.14 ALRT 0.14 ULRT 0.14 FLRT 0.14 LTSM 0.01 UTSM
5	Los Angeles Plaza Park	Special Features: • Part of El Pueblo de Los Angeles (see Museums) • Restaurants and Shops • Olvera Street	7.0	125 Paseo de la Plaza	City of Los Angeles	0.25 ALRT 0.25 ULRT 0.25 FLRT 0.10 LTSM 0.01 UTSM
Museums						
1	Museum of Contemporary Art (MOCA)	Museum devoted to contemporary art	N/A	250 S Grand Avenue	City of Los Angeles	0.09 ALRT 0.09 ULRT 0.09 FLRT 0.03 LTSM 0.04 UTSM
2	The Geffen Contemporary at MOCA	Museum devoted to contemporary art, it is part of MOCA	N/A	152 N Central Avenue	City of Los Angeles	0.09 ALRT 0.09 ULRT 0.09 FLRT 0.03 LTSM 0.04 UTSM
3	Los Angeles Children's Museum	Not open to the public yet. Beginning fabrication of exhibits.	1.3	310 N Main Street	Private	0.06 ALRT 0.32 ULRT 0.28 FLRT 0.18 LTSM 0.03 UTSM

Table 4-2. Parklands and Recreational Resources Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Type of Facility	Approx Size (acres)	Location	Regulatory Agency	Proximity to Alignment (miles[2])
4	El Pueblo de Los Angeles State Historical Monument	A living museum whose role is as a historic and symbolic heart of the City Attractions include: • Avila Adobe • Chinese American Museum • Plaza Firehouse Museum • Sepulveda House • Italian Hall Museum • Pico House • Olvera Street	44.0	500 Block of N Main Street	City of Los Angeles	0.24 ALRT 0.50 ULRT 0.20 FLRT 0.08 LTSM 0.03 UTSM
5	Japanese American National Museum	Museum to promote understanding and appreciation of America's ethnic and cultural diversity by sharing the Japanese American experience.	N/A	369 E 1st Street	Private	0.13 ALRT 0.02 ULRT 0.02 FLRT 0.01 LTSM 0.13 UTSM
6	Museum of Neon Art (MONA)	Museum to encourage learning and curiosity through the preservation, collection, and interpretation of neon art.	N/A	136 W 4th Street	Private	0.26 ALRT 0.26 ULRT 0.26 FLRT 0.13 LTSM 0.35 UTSM
Recreational Facilities						
1	The Walt Disney Concert Hall	Concert House, Los Angeles Music Center	3.6	111 S Grand Avenue	County of Los Angeles	0.06 ALRT 0.06 ULRT 0.06 FLRT 0.04 LTSM 0.08 UTSM

Table 4-2. Parklands and Recreational Resources Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Type of Facility	Approx Size (acres)	Location	Regulatory Agency	Proximity to Alignment (miles[2])
2	Union Center for the Arts	Exhibition space for LA Artcore where new and original art works are displayed each month.	N/A	120 Judge John Aiso Street	Private	0.10 ALRT 0.14 ULRT 0.14 FLRT 0.14 LTSM 0.10 UTSM
3	Ahmanson Theatre	Performance Center	N/A	135 N Grand Avenue	County of Los Angeles	0.29 ALRT 0.29 ULRT 0.29 FLRT 0.29 LTSM 0.03 UTSM
4	Maryknoll Shotokan Karate Club	Nonprofit organization dedicated to teaching traditional karate.	N/A	222 S Hewitt Street	Private	0.20 ALRT 0.20 ULRT 0.10 FLRT 0.16 LTSM 0.34 UTSM
5	Japanese American Cultural and Community Center	Mission is to present, perpetuate, transmit and promote Japanese and Japanese American arts and culture to diverse audiences, and to provide a center to enhance community programs.	N/A	244 S San Pedro Street, Suite 505	Private	0.13 ALRT 0.07 ULRT 0.07 FLRT 0.07 LTSM 0.13 UTSM
6	Dorothy Chandler Pavilion	Concert House, Los Angeles Music Center	N/A	135 N Grand Avenue	County of Los Angeles	0.14 ALRT 0.14 ULRT 0.14 FLRT 0.14 LTSM 0.03 UTSM

Table 4-2. Parklands and Recreational Resources Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Type of Facility	Approx Size (acres)	Location	Regulatory Agency	Proximity to Alignment (miles[2])
7	Mark Taper Forum	Performance Center	N/A	135 N Grand Avenue	County of Los Angeles	0.25 ALRT 0.25 ULRT 0.25 FLRT 0.25 LTSM 0.04 UTSM

Source: CDM, 2009

[1] Map numbers correspond to Figures 4-1 through 4-4.

[2] Distance to At-Grade Emphasis (ALRT), Underground Emphasis (ULRT), Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 (FLRT), Transportation System Management (TSM) Lower Grand Shuttle Bus (LTSM) and TSM Upper Grand Shuttle Bus (UTSM) unless otherwise noted.

Note: Distances are approximate following a straight line from location to the alternative line.

Table 4-3 and Figures 4-5 through 4-8 pertain to public service facilities (which include police and fire services, libraries, government offices, medical facilities, and religious facilities) within the project area and associated with the proposed alternatives.

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
Police Services[3]			
1	LAPD Parker Center	150 N Los Angeles Street	0.00 ALRT 0.14 ULRT 0.14 FLRT 0.14 LTSM 0.12 UTSM
2	New LAPD Headquarters	100 W 1st Street	0.01 ALRT 0.00 ULRT 0.00 FLRT 0.01 LTSM 0.17 UTSM
3	LAPD Central Division	251 E 6th Street	0.40 ALRT 0.40 ULRT 0.40 FLRT 0.24 LTSM 0.70 UTSM
4	Los Angeles Federal Metropolitan Detention Center	535 N Alameda Street	0.10 ALRT 0.20 ULRT 0.20 FLRT 0.01 LTSM 0.01 UTSM
Fire Services			
1	Fire Station #3	108 N Fremont Avenue	0.25 ALRT 0.25 ULRT 0.25 FLRT 0.15 LTSM 0.25 UTSM
2	Fire Station #4	450 E Temple Street	0.20 ALRT 0.20 ULRT 0.20 FLRT 0.20 LTSM

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
			0.20 UTSM
Libraries			
1	Little Tokyo Branch Public Library	203 S Los Angeles Street	0.02 ALRT 0.01 ULRT 0.01 FLRT 0.32 LTSM 0.02 UTSM
2	Los Angeles County Law Library	301 W 1st Street	0.13 ALRT 0.13 ULRT 0.13 FLRT 0.13 LTSM 0.16 UTSM
3	Los Angeles Central Library	630 W 5th Street	0.09 ALRT 0.09 ULRT 0.13 FLRT 0.09 LTSM 0.03 UTSM
4	Nonprofit Resource Library	1000 N Alameda Street, Ste 250	0.25 ALRT 0.25 ULRT 0.25 FLRT 0.25 LTSM 0.02 UTSM
5	United States Court Library	312 N Spring Street, #G8	0.08 ALRT 0.29 ULRT 0.29 FLRT 0.29 LTSM 0.02 UTSM
Government Offices			
1a	Los Angeles City Hall	200 N Spring Street	0.03 ALRT 0.20 ULRT

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
			0.20 FLRT 0.20 LTSM 0.07 UTSM
1b	City Hall East/Annex	200 N Main Street	0.00 ALRT 0.11 ULRT 0.11 FLRT 0.12 LTSM 0.01 UTSM
2	Los Angeles County Archives & Records Center	222 N Hill Street	0.11 ALRT 0.25 ULRT 0.25 FLRT 0.25 LTSM 0.03 UTSM
3	Los Angeles Superior Stanley Mosk Courthouse	110 N Grand Avenue	0.15 ALRT 0.15 ULRT 0.15 FLRT 0.15 LTSM 0.08 UTSM
4	Los Angeles Superior Stanley Mosk Courthouse	111 N Hill Street	0.15 ALRT 0.15 ULRT 0.15 FLRT 0.15 LTSM 0.14 UTSM
5	State of California Administrative Offices	300 S Spring Street	0.13 ALRT 0.13 ULRT 0.13 FLRT 0.01 LTSM 0.32 UTSM
6	State of California Department Offices	320 W 4th Street	0.26 ALRT 0.26 ULRT 0.26 FLRT 0.13 LTSM

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
			0.22 UTSM
7	Former Site of State of California Department Offices (Planned Federal Courthouse Site)	107 S Broadway	0.09 ALRT 0.09 ULRT 0.09 FLRT 0.09 LTSM 0.21 UTSM
8	United States Federal Government Offices	251 S Olive Street	0.09 ALRT 0.09 ULRT 0.09 FLRT 0.04 LTSM 0.07 UTSM
9	United States Federal Building (Roybal Center)	255 E Temple Street	0.01 ALRT 0.23 ULRT 0.18 FLRT 0.23 LTSM 0.03 UTSM
10	United States Federal Courthouse	312 N Spring Street	0.06 ALRT 0.30 ULRT 0.30 FLRT 0.30 LTSM 0.03 UTSM
11	Caltrans – District 7	100 S Main Street	0.01 ALRT 0.00 ULRT 0.00 FLRT 0.02 LTSM 0.25 UTSM
12	Los Angeles Superior Courthouse – Clara Shortridge Foltz Criminal Justice Center	210 W Temple Street	0.10 ALRT 0.23 ULRT 0.23 FLRT 0.23 LTSM 0.01 UTSM

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
13	Kenneth Hahn Hall of Administration	500 W Temple Street	0.25 ALRT 0.23 ULRT 0.23 FLRT 0.23 LTSM 0.01 UTSM
Medical Facilities			
1	Veterans Administration Los Angeles Ambulatory Care Center	351 E Temple Street	0.02 ALRT 0.17 ULRT 0.15 FLRT 0.05 LTSM 0.01 UTSM
Religious Facilities			
1	Third Church of Christ Scientist	730 S Hope Street	0.10 ALRT 0.10 ULRT 0.10 FLRT 0.10 LTSM 0.07 UTSM
2	Higashi Honganji Buddhist Temple	505 E 3rd Street	0.13 ALRT 0.13 ULRT 0.13 FLRT 0.12 LTSM 0.10 UTSM
3	Koyasan Buddhist Temple	342 E 1st Street	0.18 ALRT 0.05 ULRT 0.05 FLRT 0.04 LTSM 0.18 UTSM
4	Union Church of Los Angeles	401 E 3rd Street	0.19 ALRT 0.12 ULRT 0.12 FLRT 0.01 LTSM

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
			0.36 UTSM
5	Centenary United Methodist Church	300 S Central Avenue	0.22 ALRT 0.22 ULRT 0.22 FLRT 0.09 LTSM 0.45 UTSM
6	St. Francis Xavier Chapel Japanese Catholic Center	222 S Hewitt Street	0.19 ALRT 0.19 ULRT 0.15 FLRT 0.13 LTSM 0.33 UTSM
7	Zenshuji Soto Mission	123 S Hewitt Street	0.12 ALRT 0.13 ULRT 0.08 FLRT 0.12 LTSM 0.23 UTSM
8	Nishi Hongwanji Buddhist Temple	815 E 1st Street	0.28 ALRT 0.20 ULRT 0.01 FLRT 0.22 LTSM 0.28 UTSM
9	Jodo Shu North America Buddhist	442 E 3rd Street	0.13 ALRT 0.13 ULRT 0.13 FLRT 0.01 LTSM 0.36 UTSM
10	Vision Full Gospel Church	420 S Grand Avenue	0.15 ALRT 0.15 ULRT 0.15 FLRT 0.15 LTSM

Table 4-3. Public Services and Religious Facilities Within 0.25 mile of the Project Alternatives

Map No[1]	Facility	Address	Proximity to Alignment (miles)[2]
			0.01 UTSM
11	Church Federation of Southern California	401 E 3rd Street	0.01 ALRT 0.13 ULRT 0.13 FLRT 0.13 LTSM 0.36 UTSM
12	Cathedral of Our Lady of the Angels	555 W Temple Street	0.30 ALRT 0.30 ULRT 0.30 FLRT 0.30 LTSM 0.01 UTSM

Source: CDM, 2009

[1] Map numbers correspond to Figures 4-5 through 4-8.

[2] Distance to At-Grade Emphasis (ALRT), Underground Emphasis (ULRT), Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 (FLRT), TSM Lower Grand Shuttle Bus (LTSM), and TSM Upper Grand Shuttle Bus (UTSM) unless otherwise noted.

[3] The Central Community Police Station of the Central Bureau serves the project area, but is not located within 0.25 miles of the proposed project alternatives.

Note: Distances are approximate following a straight line from location to the alternative line.

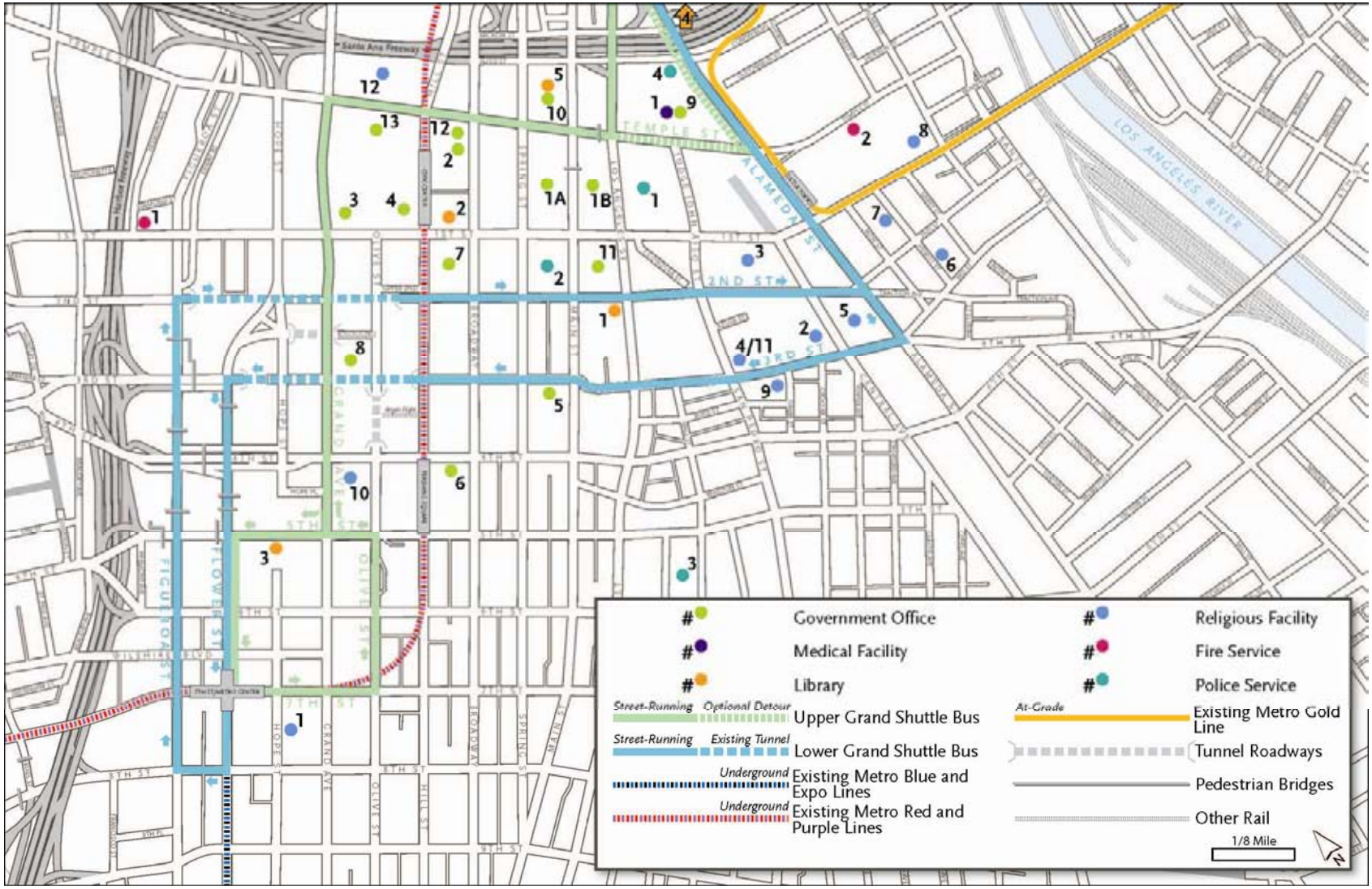

Figure 4-5. Public Services and Religious Facilities – TSM Alternative

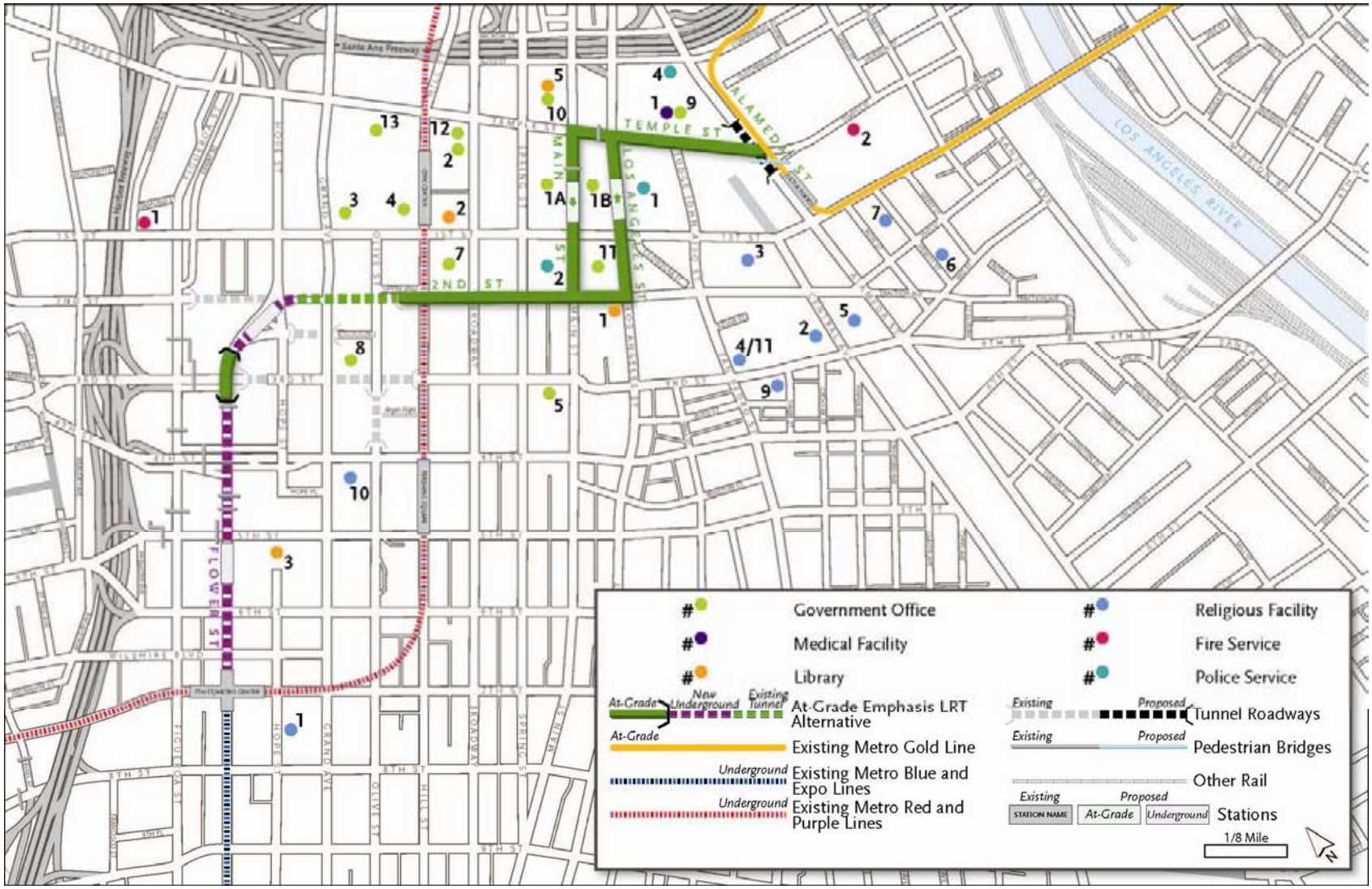

Figure 4-6. Public Services and Religious Facilities – At-Grade Emphasis LRT Alternative

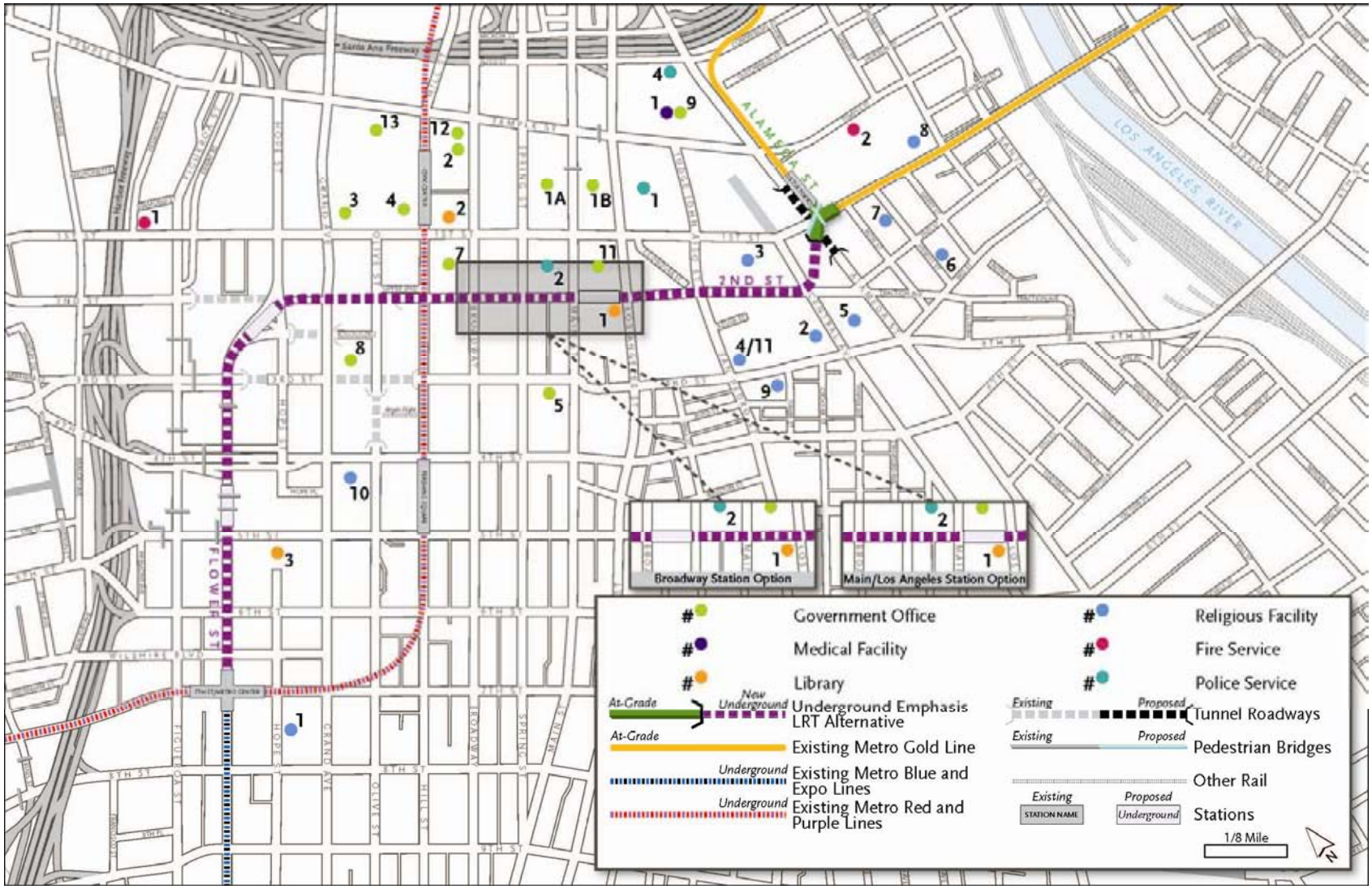

Figure 4-7. Public Services and Religious Facilities – Underground Emphasis LRT Alternative

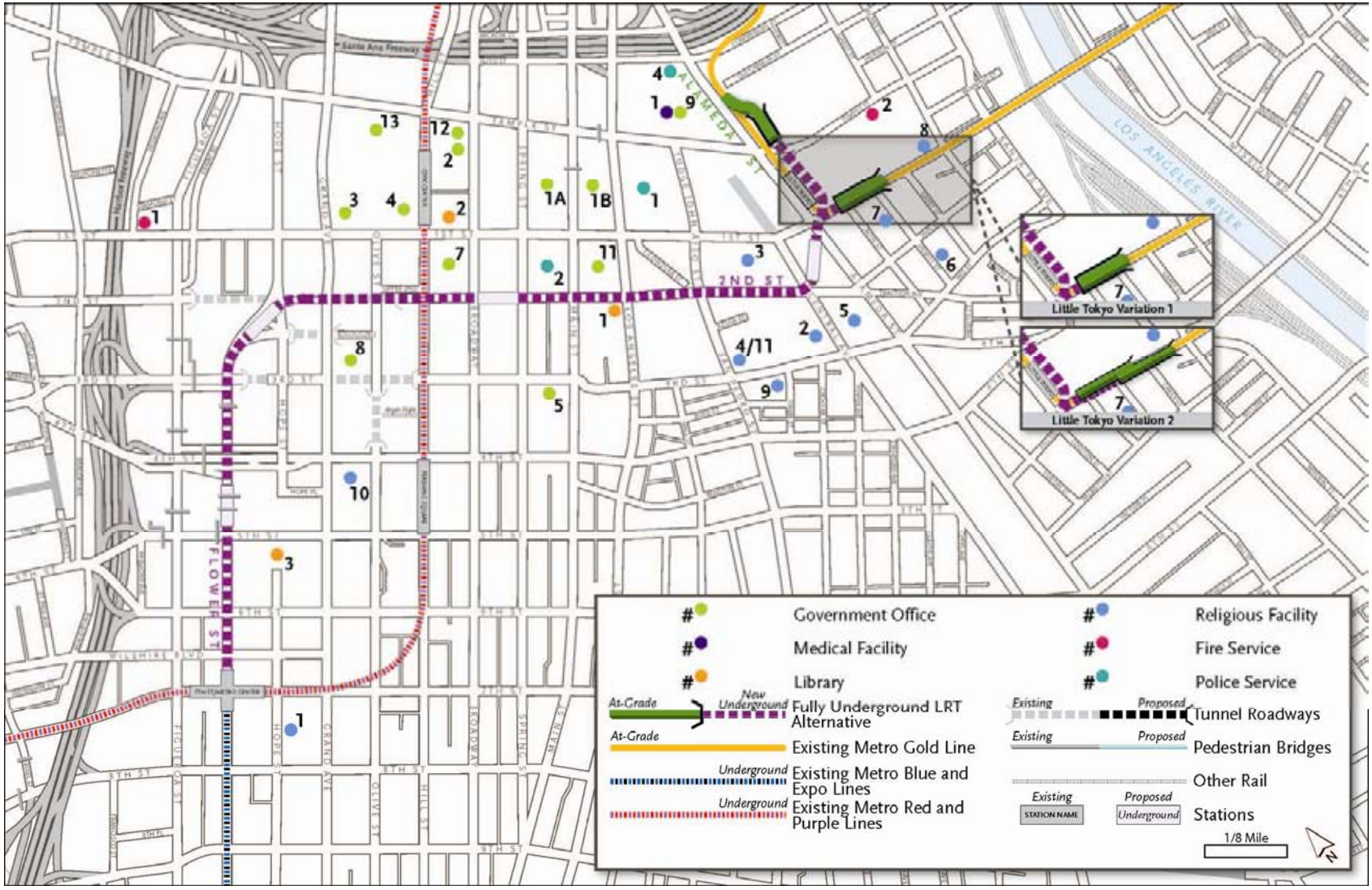

Figure 4-8. Public Services and Religious Facilities – Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 4-4 and Figures 4-9 through 4-12 pertain to educational facilities, including daycare and preschools, high schools, and college and trade schools within the project area and associated with the project alternatives.

Table 4-4. Educational Facilities Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Location	Proximity to Alignment (miles)[2]
Day Care and Preschools			
1	Nishi Hongwanji Child Development Center	815 E 1st Street	0.28 ALRT 0.20 ULRT 0.01 FLRT 0.22 LTSM 0.28 UTSM
2	Lumbini Child Development Center	505 E 3rd Street	0.33 ALRT 0.08 ULRT 0.08 FLRT 0.02 LTSM 0.32 UTSM
3	Cal Tot Child Care Center-a Serendipity School	300 S Spring Street	0.13 ALRT 0.13 ULRT 0.13 FLRT 0.01 LTSM 0.41 UTSM
4	H. Pregerson Child Care Center	255 E Temple Street	0.01 ALRT 0.26 ULRT 0.20 FLRT 0.26 LTSM 0.01 UTSM
5	Grace Lino Child Care Center	231 E 3rd Street	0.12 ALRT 0.11 ULRT 0.11 FLRT 0.03 LTSM 0.36 UTSM

Table 4-4. Educational Facilities Within 0.25 Miles of the Project Alternatives			
Map No[1]	**Name**	**Location**	**Proximity to Alignment (miles)[2]**
6	Bright Horizons	550 S Hope Street	0.09
7	Tiny DOTs – Early Education Center	100 S Main Street, suite 130	0.01 ALRT 0.00 ULRT 0.00 FLRT 0.02 LTSM 0.25 UTSM
8	Joy Picus Child Development Center	111 E 1st Street	0.02 ALRT 0.13 ULRT 0.13 FLRT 0.13 LTSM 0.13 UTSM
Public High Schools			
1	California Academy for Liberal Studies Early College High School	700 Wilshire Blvd, 4th Floor	0.07 ALRT 0.07 ULRT 0.07 FLRT 0.07 LTSM 0.04 UTSM
2	Oscar de la Hoya Animo Leadership Charter High School	350 S Figueroa St, Ste 100	0.07 ALRT 0.07 ULRT 0.07 FLRT 0.01 LTSM 0.23 UTSM
3	High School for the Visual and Performing Arts (formerly known as Central Los Angeles Area New High School #9)	450 N Grand Ave	0.40 ALRT 0.40 ULRT 0.40 FLRT 0.40 LTSM 0.15 UTSM

Table 4-4. Educational Facilities Within 0.25 Miles of the Project Alternatives			
Map No[1]	**Name**	**Location**	**Proximity to Alignment (miles)[2]**
College or Trade Schools			
1	The Colburn School of Performing Arts	200 S Grand Avenue	0.02 ALRT 0.02 ULRT 0.02 FLRT 0.02 LTSM 0.01 UTSM
2	The Colburn School Conservatory of Music	200 S Grand Avenue	0.02 ALRT 0.02 ULRT 0.02 FLRT 0.02 LTSM 0.01 UTSM
3	Chicago School of Professional Psychology	617 W 7th Street, 8th Floor	0.12 ALRT 0.12 ULRT 0.12 FLRT 0.12 LTSM 0.01 UTSM
4	Bukkyo University Los Angeles Extension	442 E 3rd Street	0.27 ALRT 0.12 ULRT 0.12 FLRT 0.01 LTSM 0.35 UTSM
5	Golden Gate University	725 S Figueroa Street, Suite 1550	0.08 ALRT 0.08 ULRT 0.08 FLRT 0.01 LTSM 0.08 UTSM
6	Fashion Institute of Design & Merchandising (FIDM)	919 S Grand Avenue	0.19 ALRT 0.19 ULRT 0.19 FLRT 0.19 LTSM

Table 4-4. Educational Facilities Within 0.25 Miles of the Project Alternatives

Map No[1]	Name	Location	Proximity to Alignment (miles)[2]
			0.27 UTSM
7	University of Southern California (Annenberg School for Communication; Institute for Justice and Journalism; Western Knight Center for Specialized Journalism)	300 S Grand Avenue, Suite 3950	0.02 ALRT 0.02 ULRT 0.02 FLRT 0.02 LTSM 0.04 UTSM
8	University of Southern California (Marshall School of Business; Institute for Communication Technology Management; Sports Business Institute)	444 S Flower Street, Suite 1000	0.08 ALRT 0.08 ULRT 0.08 FLRT 0.04 LTSM 0.01 UTSM
9	Southern California Institute of Architecture	960 E 3rd Street	0.35 ALRT 0.30 ULRT 0.20 FLRT 0.30 LTSM 0.35 UTSM
10	University of California, Los Angeles (UCLA Extension at Figueroa Courtyard)	261 S Figueroa Street	0.16 ALRT 0.16 ULRT 0.16 FLRT 0.02 LTSM 0.23 UTSM

Source: CDM 2009

[1] Map numbers correspond to Figures 4-9 through 4-12.

[2] Distance to At-Grade Emphasis (ALRT), Underground Emphasis (ULRT), Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 (FLRT), TSM Lower Grand Shuttle Bus (LTSM), and TSM Upper Grand Shuttle Bus (UTSM) unless otherwise noted.

Note: Distances are approximate following a straight line from location to the alternative line.

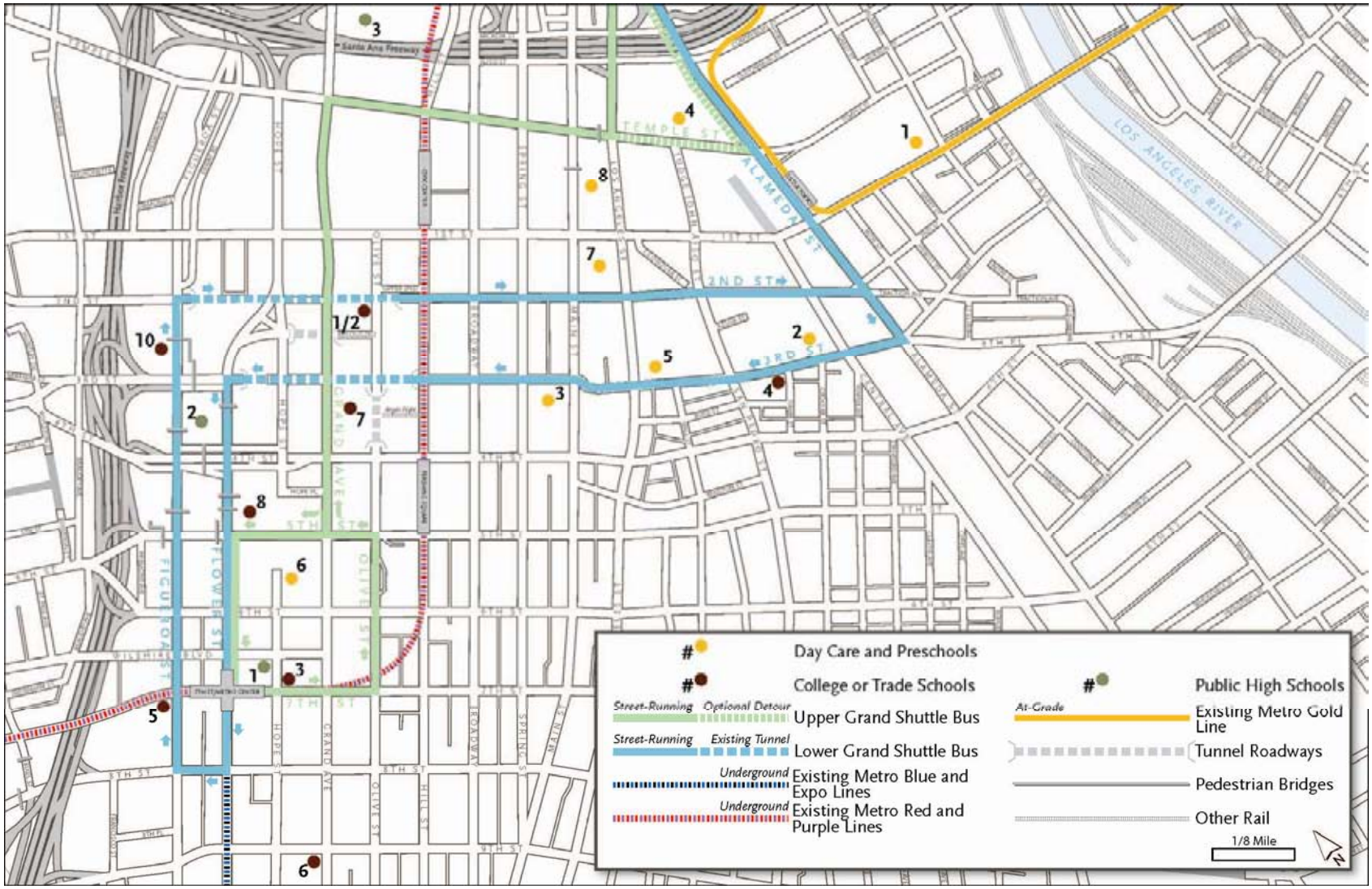

Figure 4-9. Educational Facilities – TSM Alternative

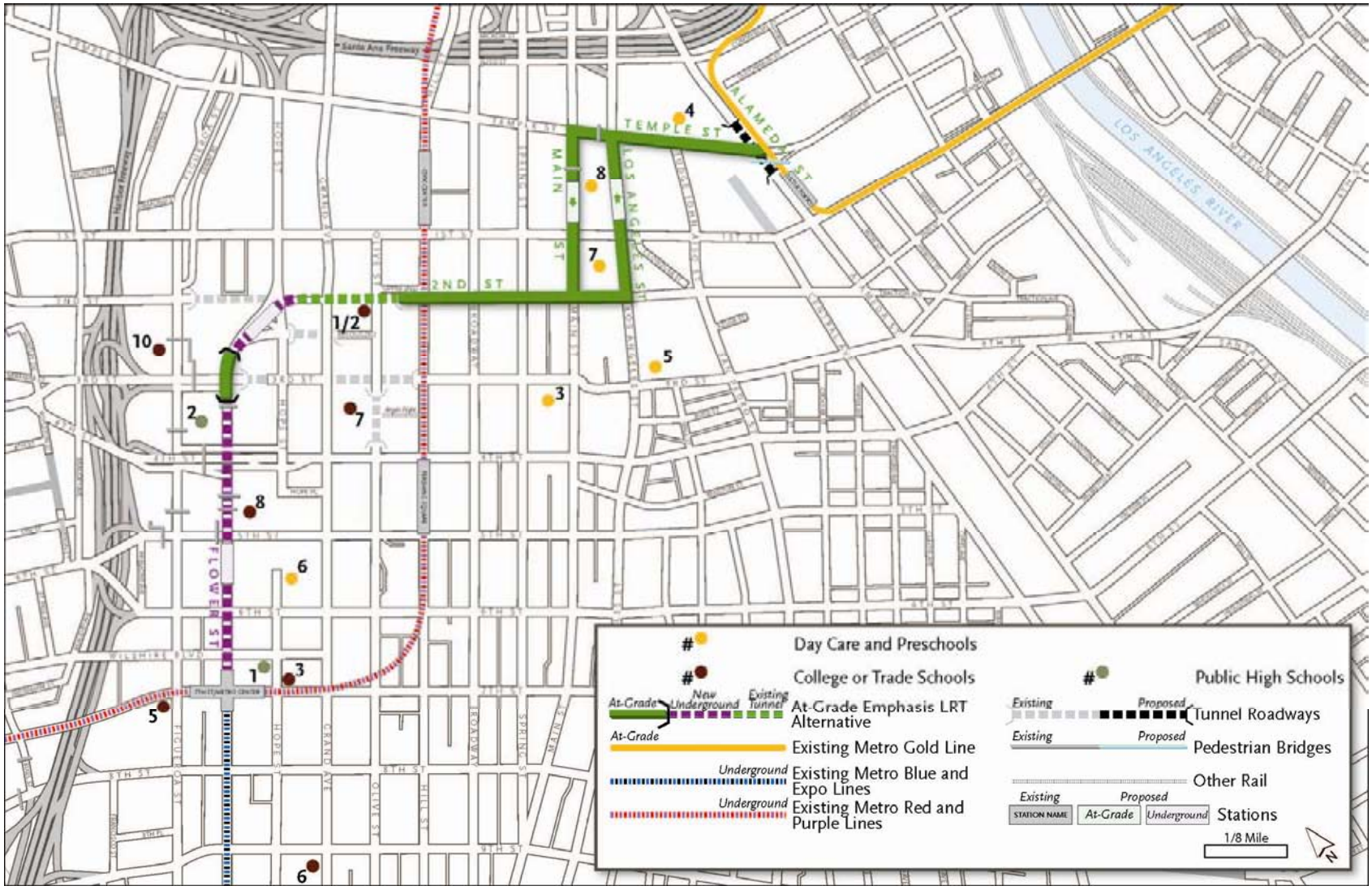

Figure 4-10. Educational Facilities – At-Grade Emphasis LRT Alternative

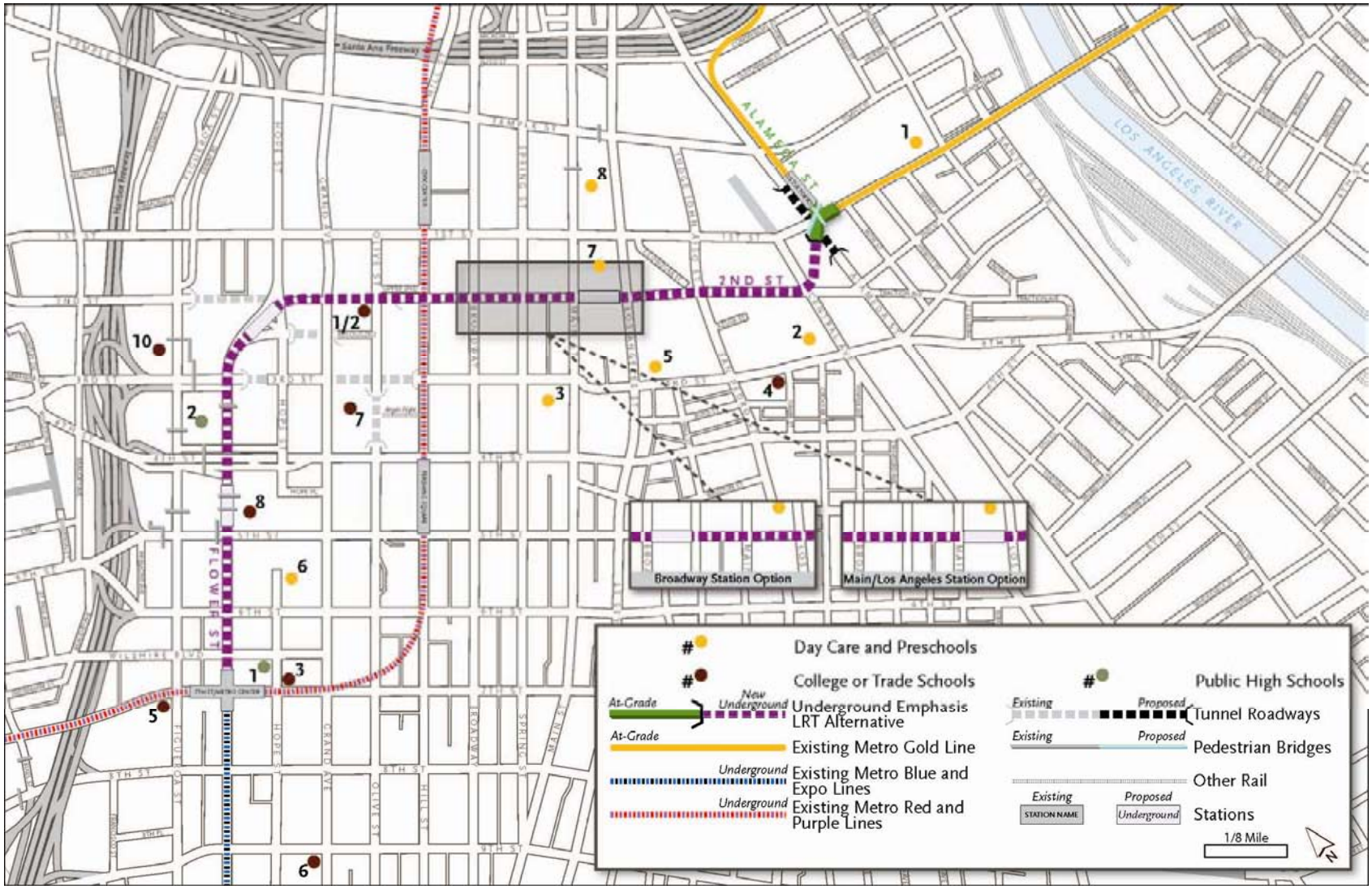

Figure 4-11. Educational Facilities – Underground Emphasis LRT Alternative

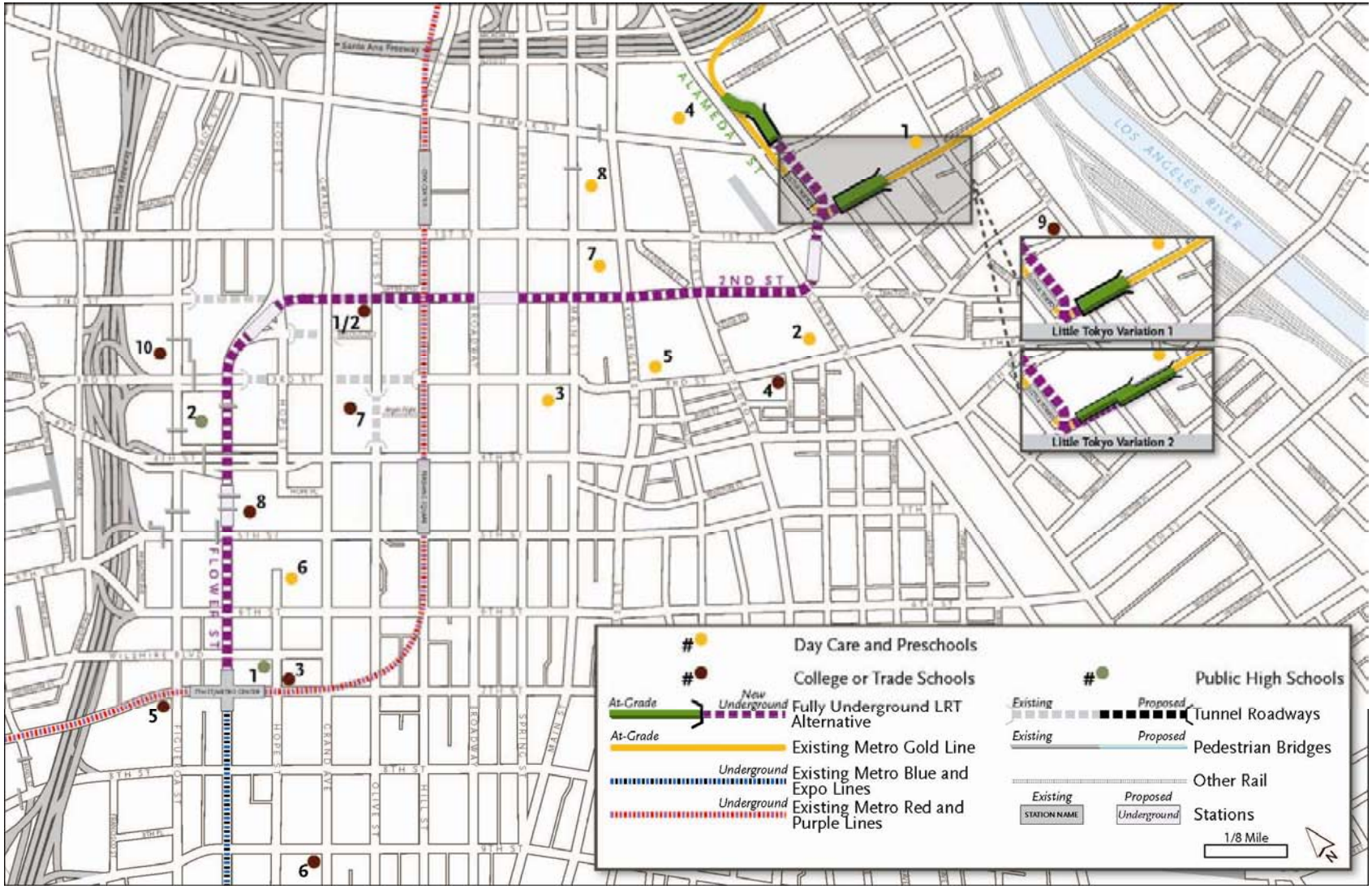

Figure 4-12. Educational Facilities – Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

5.0 IMPACTS

This section analyzes the potential impacts to parklands and community facilities associated with six project alternatives: No Build (Baseline), Transportation System Management (TSM), At-Grade Emphasis Light Rail Transit (LRT), Underground Emphasis LRT, Fully Underground LRT Alternative – Little Tokyo Variation 1, and Fully Underground LRT Alternative – Little Tokyo Variation 2. The analysis is organized by community facility type and each alternative, except Fully Underground LRT Alternative – Little Tokyo Variation 1 and 2 is addressed separately under each facility type. Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 were analyzed together due to their similarities.

5.1 Parklands and Recreational Resources

5.1.1 No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2035. No new transit infrastructure would be built, aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, parklands and recreational resources would not be affected by this proposed alternative. In addition, the projects under the No Build Alternative would undergo project-specific environmental review, as appropriate.

Due to the various locations, distance from the proposed project, and additional project-specific environmental review, the projects under the No Build Alternative would not result in significant direct or indirect adverse impacts on parklands, recreational resources, or other Section 4(f) lands within the project area. The No Build Alternative would not have the beneficial impact of increasing non-auto access to recreational areas and open space amenities throughout the region, including to and from downtown. In summary, no cumulative impacts would occur under the No Build Alternative because there would be no significant direct and indirect adverse impacts.

5.1.2 TSM Alternative

The TSM Alternative would include provisions of the No Build Alternative and add two shuttle bus routes to simulate the proposed LRT link between 7th Street/Metro Center and Union Stations. Buses would run frequently, perhaps just a few minutes apart during peak hours, and the routes would be designed to move passengers between the two stations as quickly as possible.

The Upper Grand Shuttle Bus Route would be along Grand Avenue and Temple and Los Angeles Streets, and the Lower Grand Shuttle Bus Route would be along Figueroa, Flower, Second, 3rd, and Alameda Streets. Shuttle buses would use existing bus-only lanes, where

available, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. The shuttle buses would be fitted with a Transit Priority System (TPS) similar to those used on Metro Rapid to increase bus speed and efficiency.

Stops would be located every two or three blocks to provide adequate coverage of the project service area. The shuttle routes would be operated by Metro and could use 30-foot shuttle buses. As shown on Figure 4-1, the TSM Alternative would be operated within existing public rights-of-way (i.e., streets) and would not have adverse direct or indirect impacts on parklands, recreational resources, or other Section 4(f) lands.

Removal of curb parking spaces may be needed along 2nd Street to create new bus stops for the Lower Grand Route. However, this would not effectively impede access to any surrounding parks or public facilities because there are several large surface parking lots and garages nearby. The TSM Alternative would have a beneficial impact of increasing non-auto access to recreational areas and open space amenities within the downtown area. No cumulative impacts would occur under the TSM Alternative because no direct and indirect adverse impacts are expected.

5.1.3 At-Grade Emphasis LRT Alternative

Table 5-1 summarizes potential impacts to parklands and recreational resources located within 0.25 miles of the At-Grade Emphasis LRT Alternative. The At-Grade Emphasis LRT Alternative would use a combination of at-grade and underground tracks along Temple, Main, Los Angeles, 2nd, and Flower Streets.

5.1.3.1 Acquisition

The At-Grade Emphasis LRT Alternative would include acquisition of additional right-of-way for tracks along the alignment, at-grade stations, and portals to underground stations. Under the worst case scenario, this alternative's alignment would reduce the 2nd Street tunnel from four lanes to a minimum of one lane. One travel lane and 23 on-street parking and five loading spaces along the south side of 2nd Street would be removed to Los Angeles Street, which would leave a single travel lane primarily for access to parking lots and loading zones.

In addition, new right-of-way would be needed for the at-grade double tracks on Flower Street between 4th and 3rd Streets (including the intersection at 3rd and Flower Streets) and on Temple Street between Los Angeles and Alameda Streets. Proposed at-grade single tracks would require property acquisition on Main and Los Angeles Streets between 2nd and Temple Streets, and on Temple and 2nd Streets between Main and Los Angeles Streets. The at-grade stations on Main Street north of 1st Street and on Los Angeles Street north of 1st Street could require acquisition of additional right-of-way. There would be no need for acquisitions, only possible

easements, for the pedestrian entrances to the stations on Flower Street south of 5th Street and southwest of 2nd and Hope Streets.

Construction staging for the proposed Flower/6th/5th Street station is expected to occur within the public right-of-way (i.e., sidewalk) adjacent to the Maguire Gardens at the Los Angeles Central Library, along Flower Street. Construction staging would also be required along the City Hall South Lawn Park's Main Street boundary as part of the proposed Main/1st Street station.

Maguire Gardens is not a designated City park, but an open space area that is part of the Central Library. The garden consists of a grass lawn, seating, and a water feature. In addition, there is a five-story subterranean parking structure located underneath the garden.

City Hall South Lawn Park is a designated park and consists of a lawn, landscaping, and a memorial. The park is mostly used for passive recreation.

The At-Grade Emphasis LRT Alternative would not result in direct or indirect impacts to parklands and recreational facilities from acquisition of or easements on either Maguire Gardens or City Hall South Lawn Park. In addition, because the At-Grade Emphasis LRT Alternative would be located within the existing street system and along existing right-of-way, no direct or indirect impacts associated with acquisition of or easements on a Section 4(f) would occur. Therefore, the At-Grade Emphasis LRT Alternative would not adversely affect the features, attributes, or activities of Section 4(f) parklands or recreational facilities.

Table 5-1. Parklands and Recreational Resources Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Parklands								
1	Grand Hope Park	919 S Grand Avenue	0.16	Yes	No	No	No	No
2	Pershing Square	532 S Olive Street	0.24	Yes	No	No	No	No
3	City Hall South Lawn	200 N Spring	0.04	Yes	No	Yes	No	Yes[2]

Table 5-1. Parklands and Recreational Resources Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
	Park	Street						
4	Civic Center Mall	Block bounded by S Hill Street, S Grand Avenue, W 1st Street, and W Temple Street	0.14	Yes	No	No	No	No
5	Los Angeles Plaza Park	125 Paseo de la Plaza	0.25	No	No	No	No	No
Museums								
1	Museum of Contemporary Art (MOCA)	250 S Grand Avenue	0.09	Yes	No	No	No	No
2	The Geffen Contemporary at MOCA	152 N Central Avenue	0.09	Yes	No	Yes[2]	Yes[2]	Yes[2]
3	Los Angeles Children's Museum	310 N Main Street	0.06	Yes	No	No	No	No
4	El Pueblo de Los Angeles State Historical	500 Block of N Main Street	0.24	Yes	No	No	No	No

Table 5-1. Parklands and Recreational Resources Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
	Monument							
5	Japanese American National Museum	369 E 1st Street	0.13	Yes	No	Yes	Yes	Yes[2]
6	Museum of Neon Art (MONA)	136 W 4th Street	0.26	No	No	No	No	No
Recreational Facilities								
1	The Walt Disney Concert Hall	111 S Grand Avenue	0.06	Yes	No	Yes[2]	No	No
2	Union Center for the Arts	120 Judge John Aiso Street	0.10	Yes	No	No	No	No
4	Maryknoll Shotokan Karate Club	222 S Hewitt Street	0.20	Yes	No	No	No	No
5	Japanese American Cultural and Community Center	244 S San Pedro Street, Suite 505	0.13	Yes	No	No	No	No
6	Dorothy Chandler	135 N Grand	0.14	Yes	No	No	No	No

Table 5-1. Parklands and Recreational Resources Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
	Pavilion	Avenue						
7	Mark Taper Forum	135 N Grand Avenue	0.25	Yes	No	No	No	No

Source: CDM 2009
[1] Map numbers correspond to Figure 4-2
[2] Temporary construction-related effects

No current and reasonably foreseeable related actions/projects would result in direct or indirect adverse impacts on the Maguire Gardens at the Central Library, City Hall South Lawn Park, or other parklands. In addition, no current and reasonably foreseeable related actions/projects would involve direct or indirect adverse impacts to other recreational resources within 0.25 miles of the At-Grade Emphasis LRT Alternative. Therefore, no cumulative impacts to parklands and recreational facilities would occur under the At-Grade Emphasis LRT Alternative.

5.1.3.2 Access

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot-wide surface right-of-way bordered by mountable curbs. An approximately 13-foot right-of-way would be needed along roadway segments with one LRT track, including the couplet on Main and Los Angeles Streets. The Main/1st Street and Los Angeles/1st Street couplet station platforms would require approximately 20 additional feet of right-of-way.

Vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to cross safely. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted.

Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities. Left-turn parking ingress and egress is presently allowed at many downtown sites. However, the at-grade LRT facilities would eliminate uncontrolled mid-block left turns, thus modifying existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT alignment travels at-grade along 2nd Street, and it is assumed that this street would be dedicated as a transit-only roadway between the 2nd Street tunnel and Los Angeles Street. This segment of 2nd Street would be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties.

To minimize conflicts between rail, vehicular, and pedestrian traffic, and to minimize delays at the intersection of Temple and Alameda Streets, this alternative includes a vehicular underpass and a pedestrian overpass along Alameda Street. The underpass would route through traffic beneath the rail tracks and Temple Street traffic. Through traffic traveling north and south on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. In addition, a one-lane, southbound, at-grade frontage road would be provided along Alameda Street to maintain access to businesses and properties on the west side of the street. Three bus loading zone spaces on Alameda Street adjacent to the Japanese American National Museum would have to be permanently removed to accommodate the underpass and associated frontage roads. The museum staff has indicated that many visitors arrive via school buses that unload in these spaces. However, additional bus loading zone spaces are available in front of the museum on 1st Street, and replacement loading spaces could be identified at other locations in close proximity to the museum entrance. Access to the museum's loading dock would be maintained.

During construction, the At-Grade Emphasis LRT Alternative would potentially impact vehicle access to an underground structure along Flower Street adjacent to the Maguire Gardens, pedestrian access to the gardens, and the City Hall South Lawn Park. Although access would be modified during construction, these impacts would be temporary and limited only to the portion of the sites adjacent to the proposed project; therefore, potential impacts on access would not be significant.

During operation of this alternative, the proposed stations in the vicinity of the Maguire Gardens and City Hall South Lawn Park would potentially modify pedestrian access. However, the modifications would be beneficial because the stations would increase access to these open space/park areas. No vehicle access impacts to recreational resources would occur during operation.

Construction of the underpass at Temple and Alameda Streets would occur along Alameda Street between US 101 and 1st Street. This could temporarily interupt vehicle and pedestrian access to the Geffen MOCA and Japanese American National Museum.

City Hall South Lawn Park is the only officially designated park subject to Section 4(f) evaluation along the At-Grade Emphasis LRT Alternative. Construction of the Main/1st Street station would potentially result in a temporary, indirect impact to pedestrian access to this public park. However, due to size and lack of active space and recreational amenities, the City Hall South Lawn Park is not considered a "significant public park" under Section 4(f). Any impacts to the park would be temporary and would not substantially diminish or adversely affect access to the property; therefore, the At-Grade Emphasis LRT Alternative would not adversely affect the features, attributes, or activities of the park.

There are no current and reasonably foreseeable related actions/projects in the vicinity of the open space/park areas (Maguire Gardens and City Hall South Lawn Park) that would be under construction at the same period of the At-Grade Emphasis LRT Alternative (years 2014 through 2018). Therefore, a cumulative impact would not occur under the At-Grade Emphasis LRT Alternative.

5.1.3.3 Parking

Construction of at-grade tracks along 2nd Street and the need for adequate street widths to provide local access lanes would require elimination of 23 existing on-street parking and five loading spaces to accommodate the At-Grade Emphasis LRT Alternative. This loss of parking may result in spillover to adjacent streets if parking on these streets is readily available.

The Alternative Analysis study showed that the number of parking spaces potentially lost under the At-Grade Emphasis LRT Alternative would total 88, with 35 of those spaces located on 2nd Street between Hill and Los Angeles Streets. Recent restriping by the City of Los Angeles to incorporate left-turn pockets has reduced the number of parking spaces potentially lost with this proposed alternative. All of the potentially lost parking spaces would be in the Civic Center, Historic Core, and Bunker Hill areas. No on-street parking would be displaced in the community of Little Tokyo.

In addition, 12 spaces may also be lost along the south side of Temple Street west of Alameda Street due to the proposed underpass. On the north side of Temple Street, the four off-peak parking spaces between Main and Los Angeles Streets would be eliminated. Consequently, it may be necessary to implement mitigation measures such as off-street parking facilities to replace the lost curb spaces. On the east side of Flower Street between 5th and 3rd Streets, seven curb spaces would be removed within one block of Maguire Gardens. An additional five on-street parking spaces on the west side of the street would also be removed. However, this localized loss of parking would not result in an adverse impact to garden access because there is a multi-level parking structure underneath, and several others nearby.

No on-street parking in the immediate vicinity of parkland or recreational resource along the alignment would be affected; therefore, there would be no direct or indirect construction and operational impacts to on-street parking. In addition, there are various nearby off-street

parking options available throughout the project area. Furthermore, operation of the proposed project would be beneficial by providing enhanced access to adjacent parklands and recreational resources.

On the south side of Temple Street, 12 curb parking spaces would need to be removed permanently to accommodate the new light rail tracks. It is possible that these spaces are currently being used by museum visitors. After construction is complete, however, non-automobile access to these museums would be greatly improved by the new transit service, which would more than offset the loss of curb parking.

The At-Grade Emphasis LRT Alternative would not impact a Section 4(f) resource; therefore, the At-Grade Emphasis LRT Alternative would not adversely affect the features, attributes, or activities associated with parklands or recreational resources. Cumulative impacts to parks and recreational facilities would not occur under the At-Grade Emphasis LRT Alternative because no direct or indirect adverse impacts on parking would occur during construction or operation.

5.1.4 Underground Emphasis LRT Alternative

Table 5-2 summarizes impacts to parklands and recreational resources located within 0.25 miles of the Underground Emphasis LRT Alternative. The Underground Emphasis LRT Alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets; the rest of the route would be constructed underground.

Table 5-2. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Parklands								
1	Grand Hope Park	919 S Grand Avenue	0.16	Yes	No	No	No	No
2	Pershing Square	532 S Olive Street	0.24	Yes	No	No	No	No
3	City Hall South Lawn Park	200 N Spring	0.14	Yes	No	No	No	No

Table 5-2. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
		Street						
4	Civic Center Mall	Block bounded by S Hill Street, S Grand Avenue, W 1st Street, and W Temple Street	0.14	Yes	No	No	No	No
5	Los Angeles Plaza Park	125 Paseo de la Plaza	0.25	No	No	No	No	No
Museums								
1	Museum of Contemporary Art (MOCA)	250 S Grand Avenue	0.09	Yes	No	No	No	No
2	The Geffen Contemporary at MOCA	152 N Central Avenue	0.09	Yes	No	Yes	Yes[2]	Yes[2]
5	Japanese American National Museum	369 E 1st Street	0.02	Yes	No	Yes	Yes	Yes[2]
6	Museum of Neon Art (MONA)	136 W 4th Street	0.26	No	No	No	No	No

Table 5-2. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Recreational Facilities								
1	The Walt Disney Concert Hall	111 S Grand Avenue	0.06	Yes	No	Yes[2]	No	No
2	Union Center for the Arts	120 Judge John Aiso Street	0.14	Yes	No	No	No	No
4	Maryknoll Shotokan Karate Club	222 S Hewitt Street	0.20	Yes	No	No	No	No
5	Japanese American Cultural and Community Center	244 S San Pedro Street, Suite 505	0.07	Yes	No	No	No	No
6	Dorothy Chandler Pavilion	135 N Grand Avenue	0.14	Yes	No	No	No	No
7	Mark Taper Forum	135 N Grand Avenue	0.25	Yes	No	No	No	No

Source: CDM 2009

[1] *Map numbers correspond to Figure 4-3*

[2] *Temporary construction-related effects*

5.1.4.1 Acquisition

The Underground Emphasis LRT Alternative would require acquisition of private property for additional right-of-way. The single at-grade crossing at the intersection of 1st and Alameda Streets would require acquisition of additional right-of-way at this intersection.

The tracks on 2nd Street would veer north through a new portal located on private property; therefore, acquisition of part of the block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street would be required. This block is currently occupied entirely by retail and restaurant businesses. No other acquisitions would be needed for the LRT tracks because the rest of the route would be underground.

The Underground Emphasis LRT Alternative would also require property acquisition for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the intersection of 2nd and Hope Streets, and on 2nd Street either between Broadway and Spring Street or between Main and Los Angeles Streets.

The Underground Emphasis LRT Alternative would not result in a direct or indirect impact (i.e., acquisition or easement) to any parkland or recreational resource. Therefore, there would be no significant adverse impact.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of this alternative. Therefore, there would be no direct or indirect significant adverse impacts on access to Section 4(f) lands.

No current or reasonably foreseeable related actions/projects would involve direct or indirect adverse impacts on parklands or recreational resources. Therefore, there would be no cumulative impacts under the Underground Emphasis LRT Alternative.

5.1.4.2 Access

The Underground Emphasis LRT Alternative alignment does not affect surface traffic or pedestrian circulation except at the intersection of Alameda and 1st Streets, where the LRT alignment operates in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate the same as current traffic flow patterns.

A vehicular underpass and pedestrian overpass are proposed at the intersection of Alameda and 1st Streets to minimize potential delays by separating the heavy traffic volumes along Alameda Street from rail traffic. The proposed underpass would result in uninterrupted flow along Alameda Street in the north and south directions between 2nd and Temple Streets. In addition, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection and on the southbound side of the street north of the intersection to maintain access to adjacent businesses and properties. A full northbound frontage road is

infeasible because of the location of the rail tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street.

Potential direct and indirect impacts to vehicle or pedestrian access to parklands and recreational resources would be minimal because a majority of the construction and operation of the Underground Emphasis LRT Alternative would occur underground. Construction associated with the Flower/5th/4th Street station could temporarily affect pedestrian access along a portion of Maguire Gardens. Three bus loading zone spaces on Alameda Street adjacent to the Japanese American National Museum would have to be permanently removed to accommodate the underpass and associated frontage roads. The museum staff has indicated that many visitors arrive via school buses that unload in these spaces. However, additional bus loading zone spaces are available in front of the museum on 1st Street, and replacement loading spaces could be identified at other locations in close proximity to the museum entrance. Access to the museum's loading dock would be maintained.

Operation of this alternative would not adversely impact access to parklands or recreational resources. In fact, as with the At-Grade Emphasis LRT Alternative, operation would be beneficial by increasing pedestrian access (via the stations) to these parklands and recreational resources.

Construction of the underpass at 1st and Alameda Streets would require work along Alameda Street between Temple and 2nd Streets. This would cause temporary access detours for the Geffen MOCA and Japanese American National Museum. Most of these potential traffic impacts would be resolved once construction is completed.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of this alternative. Therefore, no direct or indirect adverse impacts on access to Section 4(f) lands would occur.

No current and reasonably foreseeable related actions/projects would involve direct or indirect adverse impacts on parklands or recreational resources. Therefore, no cumulative impacts would occur under the Underground Emphasis LRT Alternative.

5.1.4.3 Parking

With the proposed alignment mostly underground, the Underground Emphasis LRT Alternative would result in a loss of on-street public parking spaces along Flower and Alameda Streets. Seven curb spaces would be removed on Flower Street between 5th and 3rd Streets, which is within one block of Maguire Gardens. However, there would be no adverse impact to garden access because there is a multi-level parking structure underneath, and several others nearby.

The proposed underpass at 1st and Alameda Streets would result in the loss of existing private parking spaces along the east side of Alameda Street near the intersection. Approximately 10 on-street spaces would be displaced, including three bus tour loading spaces. Construction of the Underground Emphasis LRT Alternative would temporarily displace parking spaces along the alignment for the duration of construction in that particular location.

No parkland or recreational resource would be directly impacted by the displaced parking. However, there is the potential that the ten on-street parking spaces displaced could be used by patrons going to the Japanese American National and MOCA (Geffen) museums. However, this would not be an adverse or significant effect on parking for these recreational resources because this indirect impact would be temporary (during construction) and there are off-street parking lots in the area. Also, non-automobile access to the museums would be significantly improved by the new transit service, which would offset the effects of the lost parking spaces.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of this alternative. Therefore, no would be no direct or indirect adverse impacts on access to Section 4(f) lands.

No current and reasonably foreseeable related actions/projects would involve direct or indirect significant adverse impacts on parklands or recreational resources. Therefore, no cumulative impacts would occur under the Underground Emphasis LRT Alternative.

5.1.4.4 Design Options

The Underground Emphasis LRT Alternative includes the following two design options:

- 2nd Street station – Broadway Option: This option would include an underground station on 2nd Street between Broadway and Spring Street.
- 2nd Street station –Los Angeles Street Option: This option would include an underground station on 2nd Street between Main and Los Angeles Streets.

No direct or indirect adverse impacts on parklands and recreational resources from construction and operation of this alternative would occur from acquisition, access, or parking associated with either of the two design options.

5.1.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 5-3 summarizes impacts to parklands and recreational resources located within 0.25 miles of the Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2. The entire route would be located

underground, and there would be no at-grade crossings constructed as part of these alternatives.

5.1.5.1 Acquisition

The Fully Underground LRT Alternative would require acquisition of private property for additional right-of-way. The tracks on 2nd Street would veer north through a new station located beneath private property on the block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street. This block is currently occupied entirely by retail and restaurant businesses.

Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities. This block could potentially be used to launch tunnel boring machines and transport material from the tunnels. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that are not directly impacted by construction activities. Acquisition of the entire block represents a worst-case scenario. However, no impacts to parklands or recreational resources would occur.

Potential reductions in acquisition on this block may occur based on further engineering analysis during the preliminary engineering and final design stages. Acquisition of part of the vacant parcel on the northeast corner of 1st and Alameda Streets would also be needed for tunnel and portal construction. Additionally, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would require acquisition of small vacant portions of two parcels on the south side of 1st Street between Hewitt and Garey Streets. None of these acquisitions would affect or impede access to any parklands or recreational resources. In addition, property acquisition could be needed for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the intersection of 2nd and Hope Streets, and on 2nd Street between Broadway and Spring Street.

Neither Fully Underground LRT Alternative – Little Tokyo Variations 1 or 2 would result in a direct or indirect impact (i.e., acquisition or easement) to any parkland or recreational resource. Therefore, there would be no significant adverse impact.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of these alternatives. Therefore, there would be no direct or indirect significant adverse impacts on access to Section 4(f) lands.

No current and reasonably foreseeable related actions/projects would involve direct or indirect adverse impacts on parklands or recreational resources. Therefore, no cumulative impacts would occur under either alternative.

Table 5-3. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Parklands								
1	Grand Hope Park	919 S Grand Avenue	0.16	Yes	No	No	No	No
2	Pershing Square	532 S Olive Street	0.24	Yes	No	No	No	No
3	City Hall South Lawn Park	200 N Spring Street	0.14	Yes	No	No	No	No
4	Civic Center Mall	Block bounded by S Hill Street, S Grand Avenue, W 1st Street, and W Temple Street	0.14	Yes	No	No	No	No
5	Los Angeles Plaza Park	125 Paseo de la Plaza	0.25	No	No	No	No	No
Museums								
1	Museum of Contemporary Art (MOCA)	250 S Grand Avenue	0.09	Yes	No	No	No	No

Table 5-3. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
2	The Geffen Contemporary at MOCA	152 N Central Avenue	0.09	Yes	No	Yes	Yes[2]	Yes[2]
4	El Pueblo de Los Angeles State Historical Monument	500 Block of N Main Street	0.20	No	No	No	No	No
5	Japanese American National Museum	369 E 1st Street	0.02	Yes	No	Yes	Yes[2]	Yes[2]
6	Museum of Neon Art (MONA)	136 W 4th Street	0.26	No	No	No	No	No
Recreational Facilities								
1	The Walt Disney Concert Hall	111 S Grand Avenue	0.06	Yes	No	Yes[2]	No	No
2	Union Center for the Arts	120 Judge John Aiso Street	0.14	Yes	No	No	No	No
4	Maryknoll Shotokan Karate Club	222 S Hewitt Street	0.10	Yes	No	No	No	No

Table 5-3. Parklands and Recreational Resources Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
5	Japanese American Cultural and Community Center	244 S San Pedro Street, Suite 505	0.07	Yes	No	No	No	No
6	Dorothy Chandler Pavilion	135 N Grand Avenue	0.14	Yes	No	No	No	No
7	Mark Taper Forum	135 N Grand Avenue	0.25	Yes	No	No	No	No

Source: CDM 2009
[1] Map numbers correspond to Figure 4-4.
[2] Temporary construction-related effects.

5.1.5.2 Access

The Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 alignments would not affect surface traffic or pedestrian circulation except at the intersection of 1st and Hewitt Streets, where the alignment would prevent cars and pedestrians from crossing 1st Street. Pedestrians and automobiles would still be able to cross nearby at Vignes Street. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate as they do today.

Since a majority of construction and operation of the two alternatives would occur underground, potential direct and indirect impacts to vehicle or pedestrian access to parklands and recreational resources would be minimal. Construction associated with the Flower/5th/4th Street station could temporarily affect pedestrian access along a portion of Maguire Gardens. Operation of this alternative would not adversely impact access to parklands or recreational resources. In fact, as with the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative, operation would be beneficial by increasing pedestrian access (via the stations) to these parklands and recreational resources.

During construction, both of the Fully Underground LRT Alternatives may require temporary closure of three bus loading zone spaces on Alameda Street adjacent to the Japanese American National Museum. The museum staff has indicated that many visitors arrive via school buses that unload in these spaces. However, additional bus loading zone spaces are available in front of the museum on 1st Street, and temporary alternate loading spaces could be identified at other locations in close proximity to the museum entrance during construction. Access to the museum's loading dock would be maintained.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of this alternative. Therefore, no direct or indirect adverse impacts on access to Section 4(f) lands would occur.

No current or reasonably foreseeable related actions/projects would involve direct or indirect adverse impacts on parklands or recreational resources. Therefore, no cumulative impacts would occur under Fully Underground LRT Alternative – Little Tokyo Variations 1 or 2.

5.1.5.3 Parking

Parking impacts of the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would be identical to the Underground Emphasis LRT Alternative except in the vicinity of 1st and Alameda Streets. Here, existing on-street parking and loading spaces would be maintained because the two Fully Underground LRT Alternatives would not include an underpass or pedestrian bridge.

No Section 4(f) resources are located adjacent to the areas needed for construction or operation of this alternative. Therefore, no direct or indirect adverse impacts on access to Section 4(f) lands would occur.

No current or reasonably foreseeable related actions/projects are anticipated to involve direct or indirect significant adverse impacts on parklands or recreational resources. Therefore, no cumulative impacts would occur under either alternative.

5.2 Public Services and Religious Facilities

5.2.1 No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2035. No new transit infrastructure would be built aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, public facilities would not be affected by the proposed project.

The No Build Alternative would not result in significant adverse impacts on public services and religious facilities (including emergency response times or access). No cumulative

impacts would occur under the No Build Alternative because no significant direct and indirect adverse impacts would occur.

5.2.2 TSM Alternative

The TSM Alternative would include the provisions of the No Build Alternative and add two shuttle bus routes to provide a transit link between 7th Street/Metro Center and Union Stations. The Upper Grand Shuttle Bus Route would be along Grand Avenue and Temple and Los Angeles Streets and the Lower Grand Shuttle Bus Route would be along Figueroa, Flower, 2nd, 3rd, and Alameda Streets. Shuttle buses would use existing bus-only lanes, where available, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. Stops would be located every two or three blocks to provide adequate coverage of the project service area. As shown in Figure 4-4, the TSM Alternative would be operated within public rights-of-way (i.e., streets).

Improvements associated with the TSM Alternative would add additional buses along the proposed routes. These additional buses would not have a significant adverse direct impact on public services and religious facilities. Even though the TSM Alternative improvements would require very minimal construction, operation of additional buses along the proposed routes could result in an indirect impact on traffic. However, this would not have a significant adverse impact on traffic.

Construction and operation of the TSM Alternative would not have significant adverse direct or indirect impacts on public services and religious facilities. No cumulative impacts would occur from the TSM Alternative because no significant direct and indirect adverse impacts would occur.

5.2.3 At-Grade Emphasis LRT Alternative

Table 5-4 summarizes the impacts to public facilities located within 0.25 miles of the At-Grade Emphasis LRT Alternative. The At-Grade Emphasis LRT Alternative would use a combination of at-grade and underground tracks along Temple, Main, Los Angeles, 2nd, and Flower Streets.

5.2.3.1 Acquisition

The At-Grade Emphasis LRT Alternative would require property acquisitions and easements to create sufficient right-of-way for the tracks along the alignment, at-grade stations, and entrances to the underground stations. In addition, the proposed at-grade stations on Main Street north of 1st Street and on Los Angeles Street north of 1st Street would require acquisition of additional right-of-way. Pedestrian entrances to proposed underground stations on Flower Street south of 5th Street and southwest of 2nd Street and Hope Streets would not require acquisition, only possible easements. The At-Grade Emphasis LRT Alternative would result in a direct impact (i.e., permanent partial take) to portions of the Los Angeles City Hall East/Annex and Parker Center properties for the Main Street and Los Angeles Street stations.

Construction of the Flower/6th/5th Street station would require temporary use of the sidewalk for construction staging adjacent to the Los Angeles Central Library along the portion known as the Maguire Gardens. No acquisition associated with the Central Library facility is proposed and construction staging would not impact the library building. Portions of the City Hall East/Annex and Parker Center properties that would be permanently acquired would not result in a significant adverse effect on the buildings or the function of the sites.

Construction and operation of the At-Grade Emphasis LRT Alternative would not have significant adverse direct or indirect impacts related to acquisitions and easements on public services and religious facilities. No cumulative impacts to public services and religious facilities would occur under the At-Grade Emphasis LRT Alternative because no significant direct and indirect adverse impacts would occur.

Table 5-4. Public Services and Religious Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Police Stations[3]								
1	LAPD Parker Center	150 N Los Angeles Street	0.00	Yes	Yes	Yes	Yes[2]	Yes[2]
2	New LAPD Headquarters	100 W 1st Street	0.01	Yes	No	No	No	Yes[2]
4	LA Federal Metropolitan Detention Center	535 N Alameda Street	0.10	Yes	No	No	No	No
Fire Stations								
1	LAFD Station #3	108 N Fremont Avenue	0.25	Yes	No	No	No	No
2	LAFD Station #4	450 E	0.20	Yes	No	No	No	No

Table 5-4. Public Services and Religious Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
		Temple						
		Street						
Libraries								
1	Little Tokyo Branch Public Library	203 S Los Angeles Street	0.02	Yes	No	Yes	No	No
2	Los Angeles County Law Library	301 W 1st Street	0.13	Yes	No	No	No	No
3	Los Angeles Central Library	630 W 5th Street	0.09	Yes	No	No	No	No
5	United States Court Library	312 N Spring Street, #G8	0.08	Yes	No	No	No	No
Government Offices								
1a	Los Angeles City Hall	200 N Spring Street	0.03	Yes	No	Yes	Yes[2]	Yes[2]
1b	City Hall East/Annex	200 N. Main Street	0.00	Yes	Yes	Yes	Yes	Yes[2]
2	Los Angeles County Archives & Records	222 N Hill Street	0.11	Yes	No	No	No	No

Table 5-4. Public Services and Religious Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
3	Los Angeles Superior Courthouse	110 N Grand Avenue	0.15	Yes	No	No	No	No
4	Los Angeles Superior Courthouse	111 N Hill Street	0.15	Yes	No	No	No	No
5	State of California Administrative Offices	300 S Spring Street	0.13	Yes	No	No	No	No
7	Former Site of State of California Department Offices (Planned Federal Courthouse Site)	107 S Broadway	0.09	Yes	No	No	No	No
8	United States Federal Government Offices	251 S Olive Street	0.09	Yes	No	No	No	No
9	United States Federal Building (Roybal Center)	255 E Temple Street	0.01	Yes	No	Yes	Yes[2]	Yes[2]
10	United States Federal Courthouse	312 N Spring Street	0.06	Yes	No	No	No	No

Table 5-4. Public Services and Religious Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
11	CALTRANS – District 7	100 S Main Street	0.02	Yes	No	Yes[2]	Yes[2]	Yes[2]
12	Los Angeles Superior Courthouse	210 W Temple Street	0.10	No	No	No	No	No
13	Kenneth Hahn Hall of Administration	500 W Temple Street	0.25	No	No	No	No	No
Medical Facilities								
1	Veterans Administration Los Angeles Ambulatory Care Center	351 E Temple Street	0.02	Yes	No	Yes	Yes[2]	Yes[2]
Religious Facilities								
1	Third Church of Christ Scientist	730 S Hope Street	0.10	Yes	No	No	No	No
2	Higashi Honganji Buddhist Temple	505 E 3rd Street	0.13	Yes	No	No	No	No
3	Koyasan Buddhist Temple	342 E 1st Street	0.18	Yes	No	No	No	No
4	Union Church of Los Angeles	401 E 3rd Street	0.19	Yes	No	No	No	No

Table 5-4. Public Services and Religious Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
5	Centenary United Methodist Church	300 S Central Avenue	0.22	Yes	No	No	No	No
6	St. Francis Xavier Chapel Japanese Catholic Center	222 S Hewitt Street	0.19	Yes	No	No	No	No
7	Zenshuji Soto Mission	123 S Hewitt Street	0.12	Yes	No	No	No	No
9	Jodo Shu North America Buddhist	442 E 3rd Street	0.13	Yes	No	No	No	No
10	Vision Full Gospel Church	420 S Grand Avenue	0.15	Yes	No	No	No	No
11	Church Federation of Southern California	401 E 3rd Street	0.13	Yes	No	No	No	No

Source: CDM 2009

[1] *Map numbers correspond to Figure 4-6.*

[2] *Temporary construction-related effects.*

[3] *The Central Community Police Station of the Central Bureau serves the project area, but is not located within 0.25 miles of the proposed project.*

5.2.3.2 Access

Vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections for the at-grade segments of the At-Grade Emphasis LRT Alternative. Signal phasing would be modified to provide adequate green time for the LRT vehicles to cross safely. Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities.

Left-turn parking ingress and egress is presently allowed at many downtown sites. The at-grade LRT facilities would eliminate uncontrolled mid-block left-turns, thus modifying existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT alignment would travel at-grade along 2nd Street, and this street would be dedicated as a transit-only roadway between the 2nd Street tunnel and Los Angeles Street. This segment of 2nd Street would be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties.

A vehicular underpass and a pedestrian overpass are proposed along Alameda Street to avoid potential conflicts between rail, vehicular, and pedestrian traffic, and to minimize delays at the intersection of Temple and Alameda Streets. Through traffic on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. In addition, a one-lane, southbound, at-grade frontage road would be provided along Alameda Street to maintain access to the businesses and properties on the west side of the street.

During construction, the At-Grade Emphasis LRT Alternative would potentially impact (directly and indirectly) pedestrian and vehicle ingress and egress associated with public services and religious facilities along the entire at-grade alignment. Discrete locations along the alignment that could experience modified pedestrian and vehicle access during construction and operation include LAPD's Parker Center, Caltrans, Los Angeles City Hall and City Hall East/Annex, U.S. Federal Government Building (Roybal Center), Los Angeles Ambulatory Care Center, and the Little Tokyo Branch Public Library.

The At-Grade Emphasis LRT Alternative would also involve modifications to the intersection of Temple and Alameda, one block from LAFD Station #4. This could require re-routing of emergency vehicles, but Metro will attempt to avoid or minimize impacts to emergency response times. Further consultation with LAFD will be needed to determine the extent of this impact.

Standard specifications and traffic work plans would be developed to lessen potential construction impacts on emergency service providers by reducing potential impacts on emergency response times. Potential impacts on other public services and religious facilities during construction would be temporary and therefore would not be considered significant.

Although vehicle and pedestrian access during operation— particularly along Main, Los Angeles, 2nd, and Alameda Streets, and Temple Street near Alameda Street—would be modified, the At-Grade Emphasis LRT Alternative includes elements that would minimize conflicts between rail, vehicular, and pedestrian traffic, and minimize delays at intersections. In addition, modification of pedestrian access during operation of the alternative would be beneficial because the proposed project would increase access to these facilities. Therefore, the effect on vehicle or pedestrian access to and from public services and religious facilities would not be significant.

Reasonably foreseeable related actions/projects under construction at the same time as the proposed project – (years 2014 to 2018) would not involve a direct or indirect adverse impact on public services and religious facilities, including the Children's Museum and Art Park, Block 8, Vibiana Phase II, the Federal Courthouse, and the Grand Phases I-III. As with the proposed project, these projects would be required to coordinate with, as well as prepare and submit traffic work plans to, the City of Los Angeles Department of Transportation (LADOT). LADOT would review and coordinate potential access issues associated with construction and operation of the proposed project and other projects. Therefore, cumulative impacts would not be significant under the At-Grade Emphasis LRT Alternative.

5.2.3.3 Parking

Construction of at-grade tracks along 2nd Street and the need for adequate street widths to provide local access lanes would eliminate existing on-street parking and loading spaces. This potential loss of parking may result in spillover to adjacent streets if parking on these streets is readily available.

Under the At-Grade Emphasis LRT Alternative, a total of 80 on-street parking spaces would be eliminated, with 28 of those spaces located on 2nd Street between Hill and Los Angeles Streets. Recent restriping by the City of Los Angeles to incorporate left-turn pockets has reduced the number of parking spaces potentially lost under this project alternative. All of the eliminated parking spaces would be in the Civic Center, Historic Core, and Financial District areas. No on-street parking would be displaced in the community of Little Tokyo. Of the total 80 parking spaces eliminated, 12 spaces would be lost along the south side of Temple Street west of Alameda Street due to the proposed underpass. Mitigation measures would be considered, including providing off-street parking facilities to replace the eliminated curb spaces.

Construction of the At-Grade Emphasis LRT Alternative would potentially impact (directly and indirectly) on-street parking near public services and religious facilities along the entire at-grade alignment. Specific locations along the alignment that could potentially experience direct and indirect on-street parking impacts during construction and operation of this alternative include LAPD's Parker Center, Los Angeles City Hall and City Hall East/Annex, U.S. Federal Building (Roybal Center), Caltrans, Los Angeles Ambulatory Care Center, and the Little Tokyo Branch Public Library. In some instances, the potential impacts to on-street

parking during construction would be localized and temporary. In other locations (i.e., portions of 2nd and Temple Streets), on-street parking would be eliminated for both construction and operation of the proposed project.

Although the At-Grade Emphasis LRT Alternative would impact on-street parking, impacts to off-street parking would be minimal because the number of spaces eliminated is small compared to other parking available (on- and off-street) throughout the downtown area. In addition, the reduction in on-street parking would be balanced by the benefit that the proposed transit system would provide to downtown access. Therefore, the effect on public services and religious facilities related to potential impacts on parking would not be adverse or significant.

There are several reasonably foreseeable related actions/projects that would involve direct or indirect adverse impacts on public services and religious facilities in the area. As with the proposed project, these projects would be required to coordinate with, as well as prepare and submit traffic work plans to, LADOT. LADOT would review and coordinate potential parking issues associated with construction and operation of the proposed project and other projects. Therefore, cumulative impacts would not be significant from the At-Grade Emphasis LRT Alternative.

5.2.4 Underground Emphasis LRT Alternative

Table 5-5 summarizes potential impacts to public services and religious facilities located within 0.25 miles of the Underground Emphasis LRT Alternative. The Underground Emphasis LRT Alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets; the rest of the route would be constructed underground.

5.2.4.1 Acquisition

The Underground Emphasis LRT Alternative would require acquisition of private property to create adequate right-of-way for the proposed alignment. The alignment would have a single at-grade crossing at the intersection of 1st and Alameda Streets. This at-grade crossing would require property acquisition at the intersection.

Tracks on 2nd Street would veer north through a new portal located on private property; therefore, acquisition of part of the block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street would be required. This block is currently occupied entirely by retail and restaurant businesses. No other acquisitions would be needed for the LRT tracks because the rest of the route would be underground.

The Underground Emphasis LRT Alternative would require acquisitions for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the intersection of 2nd and Hope Streets, and on 2nd Street either between Broadway and Spring Street or between

Main and Los Angeles Streets. Construction staging associated with the 2nd Street station - Broadway Option could potentially result in a temporary direct impact (i.e., easement) to a portion of the new LAPD headquarters property. The 2nd Street station – Los Angeles Street Option could potentially result in a direct impact (i.e., permanent partial take or temporary easement) to a portion of the new LAPD headquarters (easement for construction staging), Caltrans building (partial take for station entrance), and the Little Tokyo Branch Library (partial take for station plaza). The acquisition could also have an indirect impact to access and on-street parking along 2nd Street used by patrons of those facilities.

The minimal portion of the properties acquired would not result in a significant adverse effect on the buildings or the function of sites associated with public services or religious facilities. Therefore, the construction and operation of the Underground Emphasis LRT Alternative would not have a significant adverse direct or indirect impact on public services or religious facilities. No cumulative impacts would occur from the Underground Emphasis LRT Alternative because no significant direct or indirect adverse impacts would occur.

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
Police Stations[2]								
1	LAPD Parker Center	150 N Los Angeles Street	0.14	Yes	No	No	No	No
2	New LAPD Headquarters	100 W 1st Street	0.01	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]
4	LA Federal Metropolitan Detention Center	535 N Alameda Street	0.20	Yes	No	No	No	No
Fire Stations								
1	LAFD Station	108 N	0.25	Yes	No	No	No	No

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
	#3	Fremont Avenue						
2	LAFD Station #4	450 E Temple Street	0.15	Yes	No	No	No	No
Libraries								
1	Little Tokyo Branch Public Library	203 S Los Angeles Street	0.09	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]
2	Los Angeles County Law Library	301 W 1st Street	0.13	Yes	No	No	No	No
3	Los Angeles Central Library Bldg	630 W 5th Street	0.09	Yes	No	No	No	No
Government Offices								
1a	Los Angeles City Hall	200 N Spring Street	0.20	Yes	No	No	No	No
1b	City Hall East/Annex	200 N. Main Street	0.11	Yes	No	No	No	No
2	Los Angeles County Archives & Records	222 N Hill Street	0.25	Yes	No	No	No	No

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
3	Los Angeles Superior Courthouse	110 N Grand Avenue	0.15	Yes	No	No	No	No
4	Los Angeles Superior Courthouse	111 N Hill Street	0.15	Yes	No	No	No	No
5	State of California Administrative Offices	300 S Spring Street	0.13	Yes	No	No	No	No
7	Former Site of State of California Department Offices (Planned Federal Courthouse Site)	107 S Broadway	0.09	Yes	No	No	No	No
8	United States Federal Government Offices	251 S Olive Street	0.09	Yes	No	No	No	No
9	United States Federal Building (Roybal Center)	255 E Temple Street	0.23	Yes	No	No	No	No

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
11	Caltrans – District 7	100 S Main Street	0.01	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]
12	Los Angeles Superior Courthouse	210 W Temple Street	0.23	No	No	No	No	No
13	Kenneth Hahn Hall of Administration	500 W Temple Street	0.23	No	No	No	No	No
Medical Facilities								
1	Veterans Administration Los Angeles Ambulatory Care Center	351 E Temple Street	0.17	Yes	No	No	No	No
Religious Facilities								
1	Third Church of Christ Scientist	730 S Hope Street	0.10	Yes	No	No	No	No
2	Higashi Honganji Buddhist Temple	505 E 3rd Street	0.13	Yes	No	No	No	No
3	Koyasan Buddhist Temple	342 E 1st Street	0.05	Yes	No	No	No	No

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
4	Union Church of Los Angeles	401 E 3rd Street	0.12	Yes	No	No	No	No
5	Centenary United Methodist Church	300 S Central Avenue	0.22	Yes	No	No	No	No
6	St. Francis Xavier Chapel Japanese Catholic Center	222 S Hewitt Street	0.19	Yes	No	No	No	No
7	Zenshuji Soto Mission	123 S Hewitt Street	0.13	Yes	No	No	No	No
8	Nishi Hongwanji Buddhist Temple	815 E 1st Street	0.20	Yes	No	No	No	No
9	Jodo Shu North America Buddhist	442 E 3rd Street	0.13	Yes	No	No	No	No
10	Vision Full Gospel Church	420 S Grand Avenue	0.15	Yes	No	No	No	No

Table 5-5. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
11	Church Federation of Southern California	401 E 3rd Street	0.13	Yes	No	No	No	No

Source: CDM 2009

[1] *Map numbers correspond to Figure 4-7.*

[2] *The Central Community Police Station of the Central Bureau serves the project area, but is not located within 0.25 miles of the proposed project.*

[3] *There are no LAFD stations located within 0.25 miles of the proposed project, but five stations serve the area (Fire Stations #3, #4, #9, #10, and #11).*

[4] *Temporary construction-related effects.*

5.2.4.2 Access

The Underground Emphasis LRT Alternative alignment would not affect surface traffic or pedestrian circulation except at the intersection of Alameda and 1st Streets, where the LRT alignment would operate at-grade. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate in their current traffic flow patterns.

Future roadway levels of service for this alternative would be the same as the No Build and TSM Alternatives except potentially at the intersection of Alameda and 1st Streets. A vehicular underpass and pedestrian overpass would be proposed at this intersection to separate the heavy traffic volumes along Alameda Street from rail traffic and minimize delays.

The proposed underpass would result in uninterrupted flow along Alameda Street in the north and south directions between 2nd and Temple Streets. In addition, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection, and on the southbound side of the street north of the intersection to maintain access to adjacent businesses and properties. A full northbound frontage road is infeasible because of the location of the rail tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street. Instead, motorists traveling north along this frontage road would have to make a right turn on 1st Street to get back to 2nd Street for through, northbound travel.

The new underpass at 1st and Alameda Streets may facilitate emergency vehicle travel through the area, thus shortening trip times. For example, fire trucks from LAFD Station #4 would no longer have to negotiate cross-traffic at 1st Street when traveling south on Alameda Street.

The construction and operation of the Underground Emphasis LRT Alternative would occur mostly underground, and therefore significant adverse impacts to vehicle or pedestrian access to public services and religious facilities would not occur. However, construction of the proposed 2nd Street station – Los Angeles Street Option could temporarily modify and potentially affect pedestrian and vehicular access at the site of the new LAPD headquarters, Caltrans, and the Little Tokyo Branch Public Library.

Operation of this station would result in beneficial effects on pedestrian access because it would increase access to these facilities. In addition, no significant adverse impacts to vehicle access would occur. Therefore, the effect on vehicle or pedestrian access to and from public services and religious facilities would not be significant. No cumulative impacts would occur under the Underground Emphasis LRT Alternative because no direct or indirect significant adverse impacts would occur.

5.2.4.3 Parking

The proposed alignment for this alternative would be mostly underground, and thus would result in the loss of only a few on-street public parking spaces along Flower and Alameda Streets. The proposed underpass at 1st and Alameda Streets would result in the loss of 10 existing on-street parking spaces along the east side of Alameda Street near the intersection, including three bus tour loading spaces on the west side of the street. Approximately 20 on-street spaces would be displaced by this reconfiguration.

Construction of the Underground Emphasis LRT Alternative would temporarily displace parking spaces along the alignment for the duration of construction in discrete locations. In particular, construction of the proposed 2nd Street station – Los Angeles Street Option could temporarily modify and affect on-street parking along 2nd Street in the vicinity of the Caltrans building, new LAPD Headquarters, and Little Tokyo Branch Public Library.

If the proposed station requires modification of on-street parking during operation of the alternative, the loss of on-street parking would be minimal and not significant due to the low number of spaces being taken and availability off-street parking in the area. In addition, potential parking access impacts of the project would be balanced by an increase in non-automobile-related access that would be provided by the new transit system to the Little Tokyo Branch Public Library. Therefore, no direct or indirect potential impacts to public services or religious facilities would occur due to changes in available on-street parking.

No cumulative impacts would occur under the Underground Emphasis LRT Alternative because no direct or indirect significant adverse impacts would occur.

5.2.4.4 Design Options

The Underground Emphasis LRT Alternative includes the following two design options:

- 2nd Street station – Broadway Option: This option would include an underground station on 2nd Street between Broadway and Spring Street.
- 2nd Street station –Los Angeles Street Option: This option would include an underground station on 2nd Street between Main and Los Angeles Streets.

The 2nd Street station – Broadway Option has the potential to result in a direct impact (i.e., easement) to a portion of the new LAPD headquarters property. The 2nd Street – Los Angeles Street option would require acquisition of a temporary easement from a portion of the new LAPD headquarters, Caltrans building, and a small plaza area adjacent to the Little Tokyo Branch Library (both permanent partial takes). The direct impacts would not be significant and would not affect the function of the services provided to the public. Construction and operation of the Underground Emphasis LRT Alternative would cause no significant direct or indirect adverse impacts to public services or religious facilities due to acquisition, access, or parking associated with the two design options.

5.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 5-6 summarizes the potential impacts to public services and religious facilities located within 0.25 mile of Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2. The routes of these alternatives are entirely underground, and no at-grade crossings would be constructed.

5.2.5.1 Acquisition

The Fully Underground LRT Alternatives would require acquisition of private property for additional right-of-way. The tracks on 2nd Street would veer north to a new station located beneath private property on the block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street. This block is currently occupied entirely by retail and restaurant businesses.

Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities. This block is one of two possible launching sites being considered for the tunnel boring machines and transporting material from the tunnels. Metro intends to maintain the existing businesses acquired along Central Avenue between 1st and 2nd Streets that are not directly impacted by construction activities, except for Café Cuba and potentially Starbucks. Acquisition of this block would represent a worst-case scenario. However, no impacts to public services or religious facilities would occur.

Acquisition on this block may be reduced based on further engineering analysis during the preliminary engineering and final design stages. No additional impacts to public services or religious facilities would occur.

Acquisition of part of the vacant parcel on the northeast corner of 1st and Alameda Streets would be needed for tunnel and portal construction. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would also require acquisition of small vacant portions of two parcels on the south side of 1st Street between Hewitt and Garey Streets. None of these acquisitions would affect or impede access to any public services or religious facilities.

Property acquisition could be needed for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the intersection of 2nd and Hope Streets, and on 2nd Street between Broadway and Spring Street. Construction staging for the 2nd Street/Broadway station could potentially result in a temporary direct impact (i.e., easement) to a portion of the new LAPD headquarters property. The acquisition could also have an indirect impact to access and on-street parking along 2nd Street used by people traveling to the headquarters.

The portion of the properties acquired would not result in a significant adverse effect on the buildings or the function of the sites associated with public services or religious facilities. Therefore, construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variations 1 or 2would not have a significant adverse direct or indirect impact on public services or religious facilities. No cumulative impacts would occur from either alternative because no significant direct or indirect adverse impacts would occur.

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
Police Stations[2]								
1	LAPD Parker Center	150 N Los Angeles Street	0.14	Yes	No	No	No	No
2	New LAPD Headquarters	100 W 1st Street	0.01	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
4	LA Federal Metropolitan Detention Center	535 N Alameda Street	0.20	Yes	No	No	No	No
Fire Stations								
1	LAFD Station #3	108 N Fremont Avenue	0.25	Yes	No	No	No	No
2	LAFD Station #4	450 E Temple Street	0.15	Yes	No	No	No	No
Libraries								
1	Little Tokyo Branch Public Library	203 S Los Angeles Street	0.09	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]
2	Los Angeles County Law Library	301 W 1st Street	0.13	Yes	No	No	No	No
3	Los Angeles Central Library Bldg	630 W 5th Street	0.09	Yes	No	No	No	No
Government Offices								
1a	Los Angeles	200 N Spring	0.20	Yes	No	No	No	No

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
	City Hall	Street						
1b	City Hall East/Annex	200 N. Main Street	0.11	Yes	No	No	No	No
2	Los Angeles County Archives & Records	222 N Hill Street	0.25	Yes	No	No	No	No
3	Los Angeles Superior Courthouse	110 N Grand Avenue	0.15	Yes	No	No	No	No
4	Los Angeles Superior Courthouse	111 N Hill Street	0.15	Yes	No	No	No	No
5	State of California Administrative Offices	300 S Spring Street	0.13	Yes	No	No	No	No
7	Former Site of State of California Department Offices (Planned Federal Courthouse Site)	107 S Broadway	0.09	Yes	No	No	No	No

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
8	United States Federal Government Offices	251 S Olive Street	0.09	Yes	No	No	No	No
9	United States Federal Building (Roybal Center)	255 E Temple Street	0.23	Yes	No	No	No	No
11	Caltrans – District 7	100 S Main Street	0.01	Yes	Yes[4]	Yes[4]	Yes[4]	Yes[4]
12	Los Angeles Superior Courthouse	210 W Temple Street	0.23	No	No	No	No	No
13	Kenneth Hahn Hall of Adminstration	500 W Temple Street	0.23	No	No	No	No	No
Medical Facilities								
1	Veterans Administration Los Angeles Ambulatory Care Center	351 E Temple Street	0.17	Yes	No	No	No	No
Religious Facilities								

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
1	Third Church of Christ Scientist	730 S Hope Street	0.10	Yes	No	No	No	No
2	Higashi Honganji Buddhist Temple	505 E 3rd Street	0.13	Yes	No	No	No	No
3	Koyasan Buddhist Temple	342 E 1st Street	0.05	Yes	No	No	No	No
4	Union Church of Los Angeles	401 E 3rd Street	0.12	Yes	No	No	No	No
5	Centenary United Methodist Church	300 S Central Avenue	0.22	Yes	No	No	No	No
6	St. Francis Xavier Chapel Japanese Catholic Center	222 S Hewitt Street	0.19	Yes	No	No	No	No
7	Zenshuji Soto Mission	123 S Hewitt Street	0.13	Yes	No	No	No	No
8	Nishi Hongwanji Buddhist Temple	815 E 1st Street	0.20	Yes	No	No	Yes	Yes

Table 5-6. Public Services and Religious Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of supporting street parking	Affect vehicle access	Barrier to Pedestrian Access
9	Jodo Shu North America Buddhist	442 E 3rd Street	0.13	Yes	No	No	No	No
10	Vision Full Gospel Church	420 S Grand Avenue	0.15	Yes	No	No	No	No
11	Church Federation of Southern California	401 E 3rd Street	0.13	Yes	No	No	No	No

Source: CDM 2009

[1] *Map numbers correspond to Figure 4-8.*

[2] *The Central Community Police Station of the Central Bureau serves the project area, but is not located within 0.25 mile of the proposed project.*

[3] *There are no LAFD stations located within 0.25 mile of the proposed project, but five stations serve the area (Fire Stations #3, #4, #9, #10, and #11).*

[4] *Temporary construction-related effects.*

5.2.5.2 Access

The alignment of both Fully Underground LRT Alternatives would not affect surface traffic or pedestrian circulation except at the intersection of 1st and Hewitt Streets, where the LRT alignments would prevent pedestrians and automobiles from crossing 1st Street. This may affect routes that visitors take to Nishi Hongwanji Temple. However, alternative access would be available (Vignes Street), and this one-block detour would not significantly impede access to the Temple.

Overall, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate as they currently do. The future roadway levels of service for these alternatives would be the same as the No Build and TSM alternatives.

Most of the construction and operation of these two alternatives would occur underground, and significant adverse impacts to vehicle or pedestrian access to public services or religious facilities would not occur. However, construction of the proposed 2nd/Broadway station could temporarily modify and potentially affect pedestrian and vehicular access at the new LAPD headquarters site. Operation of this station would result in beneficial effects because it would increase access for pedestrian use.

There would be no significant adverse impacts to vehicle access. Therefore, the effect on vehicle or pedestrian access to and from public services and religious facilities would not be significant. No cumulative impacts would occur with either alternative because no direct or indirect significant adverse impacts are would occur.

5.2.5.3 Parking

Parking impacts of the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would be identical to the Underground Emphasis LRT Alternative except in the vicinity of 1st and Alameda Streets. Here, no curb parking spaces would be removed because the two Fully Underground LRT Alternatives would not include an underpass or pedestrian bridge and the three bus tour loading spaces on the west side of Alameda would not be permanently displaced. Therefore, a total of approximately 7 on-street spaces would be displaced by the Fully Underground LRT Alternatives.

The loss of on-street parking would be minimal and not significant due to the low number of spaces being taken and available off-street parking in the area. In addition, potential parking access impacts of the project would be balanced by an increase in non-automobile-related access provided by the new transit system to the adjacent library.

Therefore, no direct or indirect potential impacts to public services or religious facilities would occur due to changes in available on-street parking. No cumulative impacts would occur under either alternative because there would be no direct and indirect significant adverse impacts.

5.3 Educational Facilities

5.3.1 No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2035. No new transit infrastructure would be built aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, educational facilities within the corridor would not be affected by the No Build Alternative.

The No Build Alternative would not result in significant adverse impacts on educational facilities. No cumulative impacts would occur under the No Build Alternative because no significant direct and indirect adverse impacts would occur.

5.3.2 TSM Alternative

The TSM Alternative would include provisions of the No Build Alternative and add two shuttle bus routes to provide a link between 7th Street/Metro Center and Union Stations. The Upper Grand Shuttle Bus Route would be along Grand Avenue and Temple and Los Angeles Streets, and the Lower Grand Shuttle Bus Route would be along Figueroa, Flower, 2nd, 3rd, and Alameda Streets. Shuttle buses would use existing bus-only lanes, where available, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes.

Stops would be located every two or three blocks to provide adequate coverage of the project service area. As show on Figure 4-7, the TSM Alternative would be operated within public rights-of-way (i.e., streets).

Improvements associated with the TSM Alternative would require very minimal construction. Additional buses would not have a significant adverse impact on educational facilities; therefore, construction and operation of the TSM Alternative would not have significant direct or indirect impacts on educational facilities. In addition, the TSM Alternative would not have adverse direct or indirect impacts on Section 4(f) resources (i.e., public school facility opened for public recreation). No cumulative impacts would occur under the TSM Alternative because no significant direct or indirect adverse impacts would occur.

5.3.3 At-Grade Emphasis LRT Alternative

Table 5-7 summarizes potential impacts to educational facilities located within 0.25 miles of the At-Grade Emphasis LRT Alternative. This alternative would use a combination of at-grade and underground tracks along Temple, Main, Los Angeles, 2nd, and Flower Streets.

5.3.3.1 Acquisition

The At-Grade Emphasis LRT Alternative would require partial or full acquisition of properties for the tracks along the alignment, at-grade stations, and portals to the underground stations. This alternative's alignment would reduce the 2nd Street tunnel from four lanes to a minimum of one lane (potentially two lanes, pending further detailed engineering).

One travel lane and both parking lanes would be removed along 2nd Street to Los Angeles Street, which would leave a single travel lane, primarily for access to parking lots and loading zones. In addition, new right-of-way would be needed for the at-grade double tracks on Flower Street between 4th and 3rd Streets, including the intersection at 3rd and Flower Streets, and on Temple Street between Los Angeles and Alameda Streets.

Proposed at-grade single tracks would require additional right-of-way on Main and Los Angeles Streets between 2nd and Temple Streets, and on Temple and 2nd Streets between Main and Los Angeles Streets. Additional right-of-way would be required for the proposed

pedestrian entrances to stations on Flower Street south of 5th Street and southwest of 2nd and Hope Streets. In addition, the at-grade stations on Main Street north of 1st Street and on Los Angeles Street north of 1st Street would require acquisition of additional right-of-way.

The At-Grade Emphasis LRT Alternative would not result in a direct or indirect acquisition or easement impact to an educational facility. Therefore, construction and operation of the At-Grade Emphasis LRT Alternative would not have significant direct or indirect adverse impact related to acquisitions or easements on educational facilities.

No impact to a Section 4(f) resource (i.e., schools open to the public for recreation) would occur because there is no proposed direct or indirect impact on an educational facility. No cumulative impacts would occur under the At-Grade Emphasis LRT Alternative because no significant direct or indirect adverse impacts would occur.

Table 5-7. Educational Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Day Cares and Preschools								
3	Cal Tot Child Care Center	300 S Spring Street	0.13	Yes	No	No	No	No
4	H. Pregerson Child Care Center	255 E Temple Street	0.01	Yes	No	Yes	Yes[2]	Yes[2]
5	Grace Lino Child Care Center	231 E 3rd Street	0.12	Yes	No	No	No	No
6	Bright Horizons	550 S Hope Street	0.09	Yes	No	No	No	No
7	Tiny DOTs – Early Education Center	100 S Main Street	0.01	Yes	No	Yes[2]	Yes[2]	Yes[2]

Table 5-7. Educational Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
8	Joy Picus Child Development Center	200 N Main Street	0.00	Yes	No	Yes	Yes	Yes[2]
Public High Schools								
1	California Academy for Liberal Studies Early College High School	700 Wilshire Boulevard	0.07	Yes	No	No	No	No
2	Oscar de la Hoya Animo Leadership Charter High School	350 S Figueroa Street, Suite 100	0.07	Yes	No	No	No	No
Colleges and Trade Schools								
1	The Colburn School of Performing Arts	200 S Grand Avenue	0.02	Yes	No	No	No	No
2	The Colburn School of Conservatory Music	225 S Olive Street	0.21	Yes	No	No	No	No

Table 5-7. Educational Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
3	Chicago School of Professional Psychology	617 W 7th Street, Suite 404	0.12	Yes	No	No	No	No
5	Golden Gate University	725 S Figueroa Street, Suite 1550	0.08	Yes	No	No	No	No
6	Fashion Institute of Design & Merchandising (FIDM)	919 S Grand Avenue	0.19	Yes	No	No	No	No
7	USC (Annenberg School for Communication ; Institute for Justice and Journalism; Western Knight Center for Specialized Journalism)	300 S Grand Avenue, Suite 3950	0.02	Yes	No	No	No	No

Table 5-7. Educational Facilities Within 0.25 Miles of the Proposed At-Grade Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
8	USC (Marshall School of Business; Institute for Communication Technology Management; Sports Business Institute)	444 S Flower Street, Suite 1000	0.08	Yes	No	No	No	No
10	UCLA Extension at Figueroa Courtyard	261 S Figueroa Street	0.16	Yes	No	No	No	No

Source: CDM 2009
[1] Map numbers correspond to Figure 4-10.
[2] Temporary construction-related effects.

5.3.3.2 Access

For the at-grade segments vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections. Signal phasing would be modified to provide adequate green time for the LRT vehicles to cross safely. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted.

Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities. Left-turn parking ingress and egress is presently allowed at many downtown sites. However, the at-grade LRT facilities would eliminate uncontrolled mid-block left-turns, and thus modify existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT alignment travels at-grade along 2nd Street, and it is assumed that this street would be dedicated as a transit-only roadway between the 2nd Street tunnel and Los Angeles Street. This segment of 2nd Street would be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties.

This alternative includes a vehicular underpass and pedestrian overpass along Alameda Street to avoid potential conflicts between rail, vehicular, and pedestrian traffic, and minimize delays at the intersection of Temple and Alameda Streets,. Through traffic on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. In addition, a one-lane, southbound, at-grade frontage road would be provided along Alameda Street to maintain access to the businesses and properties on the west side of the street.

Construction of the Alameda Street underpass under the At-Grade Emphasis LRT Alternative would potentially impact (directly and indirectly) pedestrian and vehicle access to the U.S. Federal Government Building (Roybal Center), which contains the H. Pregerson Child Care Center. In addition, construction of the couplet station along Main Street would potentially impact (directly and indirectly) pedestrian and vehicle access to the Tiny DOTs – Early Education Center and pedestrian access to Joy Picus Child Development Center. Potential impacts would be temporary (during construction) and are not considered significant.

Operation of the LRT and station along Main Street could potentially impact vehicle access to the Joy Picus Child Development Center. However, the alignment would only consist of a single LRT track and a couplet station along the roadway. Main Street is wide enough to accommodate the single track and maintain acceptable vehicular circulation. Therefore, impacts associated with vehicle access to the Joy Picus Child Development Center would be less than significant.

No adverse impact to a Section 4(f) educational resource would occur because no direct or indirect impacts on educational facilities would occur. No cumulative impacts would occur under the At-Grade Emphasis LRT Alternative because there would be no significant direct or indirect adverse impacts.

5.3.3.3 Parking

Construction of at-grade tracks along 2nd Street and the need for adequate street widths to provide local access lanes would eliminate existing on-street parking and loading spaces. This loss of parking may result in spillover to adjacent streets if parking on those streets is readily available.

The number of parking spaces potentially lost under the At-Grade Emphasis LRT Alternative would total 80, with 28 of those spaces located on 2nd Street between Hill and Los Angeles Streets. Recent restriping by the City of Los Angeles to incorporate left-turn pockets has reduced the number of parking spaces potentially lost under this project alternative. All of the parking spaces potentially lost would be in the Civic Center area. No on-street parking would be displaced in the community of Little Tokyo.

Twelve spaces would also be lost along the south side of Temple Street west of Alameda Street due to the proposed underpass. Mitigation measures would be considered, including providing off-street parking facilities to replace the lost curb spaces.

Construction and operation of the At-Grade Emphasis LRT Alternative would potentially impact on-street parking that could be used to access the U.S. Federal Government Building (Roybal Center), which contains the H. Pregerson Child Care Center, Joy Picus Child Development Center, and the Tiny DOTs – Early Education Center. The availability of various nearby off-street parking options throughout the project area would result in this impact being not adverse or significant. Furthermore, operation of the proposed project could be beneficial by providing enhanced transit access to the child care centers.

No adverse impact to a Section 4(f) educational resource would occur because there would be no direct or indirect impacts on educational facilities.

Reasonably foreseeable related actions/projects (potential projects under construction at the same time as the proposed alternative - years 2014 to 2018) are in the vicinity of the H. Pregerson Child Care Center and could cause direct and indirect impacts to the Children's Museum and Art Park, which is proposed across Temple Street from the U.S. Federal Government Building (Roybal Center). The off-street parking lot that could be eliminated by the proposed new museum is not a public lot, and potential direct or indirect impacts on parking for the child care center would not be significant. Therefore, cumulative impacts would not be significant under the At-Grade Emphasis LRT Alternative.

5.3.4 Underground Emphasis LRT Alternative

Table 5-8 summarizes potential impacts to educational facilities located within 0.25 miles of the Underground Emphasis LRT Alternative. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be constructed underground.

5.3.4.1 Acquisition

The Underground Emphasis LRT Alternative would require acquisitions of private property for additional right-of-way. The alignment would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The tracks on 2nd Street would veer north through a new portal; therefore, acquisition of a portion of the block bounded by Central Avenue, Alameda, 1st, and 2nd Streets would be required. The properties at this intersection are currently occupied entirely by retail and restaurant businesses. No other right-of-way acquisitions would be needed for the LRT tracks because the rest of the route would be underground. The Underground Emphasis LRT Alternative would also require acquisitions for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the

intersection of 2nd and Hope Streets, and on 2nd Street either between Broadway and Spring Street or between Main and Los Angeles Streets.

The Underground Emphasis LRT Alternative would not result in direct or indirect acquisition-related impacts to educational facilities. Therefore, the construction and operation of the Underground Emphasis LRT Alternative would not have significant direct or indirect impacts on educational facilities related to acquisitions and easements.

No adverse impacts to a Section 4(f) educational resource (schools open to the public for recreation) would occur because this alternative would have no direct or indirect impacts on educational facilities. No cumulative impacts would occur under the Underground Emphasis LRT Alternative because there would be no significant direct or indirect adverse impacts.

Table 5-8. Educational Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Day Cares and Preschools								
1	Nishi Hongwanji Child Development Center	815 E 1st Street	0.20	Yes	No	No	No	No
2	Lumbini Child Development Center	505 E 3rd Street	0.08	Yes	No	No	No	No
3	Cal Tot Child Care Center	300 S Spring Street	0.13	Yes	No	No	No	No
5	Grace Lino Child Care Center	231 E 3rd Street	0.11	Yes	No	No	No	No
6	Bright Horizons	550 S Hope	0.09	Yes	No	No	No	No

Table 5-8. Educational Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
		Street						
7	Tiny DOTs – Early Education Center	100 S Main Street	0.00	Yes	No	Yes[2]	Yes[2]	Yes[2]
8	Joy Picus Child Development Center	200 N Main Street	0.11	Yes	No	No	No	No
Public High Schools								
1	California Academy for Liberal Studies Early College High School	700 Wilshire Boulevard	0.07	Yes	No	No	No	No
2	Oscar de la Hoya Animo Leadership Charter High School	350 S Figueroa Street, Suite 100	0.07	Yes	No	No	No	No
Colleges and Trade Schools								
1	The Colburn School of Performing Arts	200 S Grand Avenue	0.02	Yes	No	No	No	No

Table 5-8. Educational Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
2	The Colburn School of Conservatory Music	225 S Olive Street	0.05	Yes	No	No	No	No
3	Chicago School of Professional Psychology	617 W 7th Street, Suite 404	0.12	Yes	No	No	No	No
4	Bukkyo University	442 E 3rd Street	0.12	Yes	No	No	No	No
5	Golden Gate University	725 S Figueroa Street, Suite 1550	0.08	Yes	No	No	No	No
6	Fashion Institute of Design & Merchandising (FIDM)	919 S Grand Avenue	0.19	Yes	No	No	No	No

Table 5-8. Educational Facilities Within 0.25 Miles of the Proposed Underground Emphasis LRT Alternative

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
7	USC (Annenberg School for Communication; Institute for Justice and Journalism; Western Knight Center for Specialized Journalism)	300 S Grand Avenue, Suite 3950	0.02	Yes	No	No	No	No
8	USC (Marshall School of Business; Institute for Communication Technology Management; Sports Business Institute)	444 S Flower Street, Suite 1000	0.08	Yes	No	No	No	No
10	UCLA Extension at Figueroa Courtyard	261 S Figueroa Street	0.16	Yes	No	No	No	No

Source: CDM 2009

[1] *Map numbers correspond to Figures 4-11.*

[2] *Temporary construction-related effects.*

5.3.4.2 Access

Construction of Underground Emphasis LRT Alternative – Los Angeles Street Station option along 2nd Street could potentially impact (directly and indirectly) pedestrians and vehicles traveling northbound, from areas south of 2nd Street, to the Tiny DOTs – Early Education

Center. Potential impacts would be temporary (during construction) and are not considered significant.

The Underground Emphasis LRT Alternative alignment would not affect surface traffic or pedestrian circulation except at the intersection of Alameda and 1st Streets, where the LRT alignment operates in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate as they do today.

Future roadway levels of service for this alternative would be the same as the No Build and TSM alternatives except at the intersection of Alameda and 1st Streets, where a vehicular underpass and pedestrian overpass are proposed. The proposed underpass would result in uninterrupted flow along Alameda Street between 2nd and Temple Streets. In addition, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection, and on the southbound side of the street north of the intersection, to maintain access to adjacent businesses and properties. A full northbound frontage road is not feasible because of the location of the rail tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street.

The Underground Emphasis LRT Alternative would not result in significant direct or indirect adverse access impacts to an educational facility. Therefore, construction and operation of this alternative would not have a significant adverse impact.

There would be no adverse impact to Section 4(f) resources (schools open to the public for recreation) because there is no proposed direct or indirect impact on educational facilities. No cumulative impacts would occur under the Underground Emphasis LRT Alternative because there would be no significant direct or indirect adverse impacts.

5.3.4.3 Parking

The proposed Underground Emphasis LRT Alternative alignment is mostly underground, and would result in the loss of seven on-street public parking spaces along Flower Street. The proposed underpass at 1st and Alameda Streets would result in the loss of 10 on-street parking spaces along the east side of Alameda Street near the intersection, including three bus tour loading spaces. Approximately 20 on-street spaces would be displaced.

Construction of the Underground Emphasis LRT Alternative would temporarily displace parking spaces along the alignment for the duration of construction in discrete locations. This would not be a significant adverse effect on street parking for educational facilities because the alignment for this alternative would be mostly underground.

The Underground Emphasis LRT Alternative would not result in significant direct or indirect adverse impacts to on-street parking associated with educational facilities. Therefore,

construction and operation of this alternative would not have an adverse or significant impact.

No adverse impacts to a Section 4(f) resource (schools open to the public for recreation) would occur because the Underground Emphasis LRT Alternative would not result in direct or indirect impacts on educational facilities. No cumulative impacts would occur under the Underground Emphasis LRT Alternative because there would be no significant direct or indirect adverse impacts.

5.3.4.4 Design Options

The Underground Emphasis LRT Alternative includes the following two design options:

- 2nd Street station – Broadway Option: This option would include an underground station on 2nd Street between Broadway and Spring Street.
- 2nd Street station –Los Angeles Street Option: This option would include an underground station on 2nd Street between Main and Los Angeles Streets.

The two design options would not significantly affect educational facilities by acquisitions or easements, changes in vehicle or pedestrian access, or on-street parking. Therefore, there would be no impacts. In addition, these design options would not have a direct or indirect adverse impact on access and parking to Section 4(f) lands. No cumulative impacts would occur under the design options for the Underground Emphasis LRT Alternative because there would be no direct or indirect adverse impacts.

5.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 5-9 summarizes the potential impacts to educational facilities located within 0.25 miles of the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2. Both alternatives would be completely underground, and no at-grade crossings would be required.

5.3.5.1 Acquisition

The Fully Underground LRT Alternatives would require acquisition of private property for additional right-of-way. The tracks on 2nd Street would veer north through a new station located beneath private property on the block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street. This block is currently occupied entirely by retail and restaurant businesses.

Metro has identified this entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities. Metro may also use the site to launch tunnel boring machines and transport material from the tunnels.

Metro intends to maintain some of the businesses acquired on Central Avenue between 1st and 2nd Streets that are not directly impacted by construction activities. This would represent a worst-case scenario. However, no impacts to educational facilities would occur. Potential reductions in acquisition on this block may occur based on further engineering analysis during the preliminary engineering and final design stages.

Acquisition of part of the vacant parcel on the northeast corner of 1st and Alameda Streets would be needed for tunnel and portal construction under both alternatives. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would also require acquisition of small vacant portions of two parcels on the south side of 1st Street between Hewitt and Garey Streets. None of these acquisitions would affect or impede access to any educational facilities. Both alternatives would require property acquisition for pedestrian entrances to stations on Flower Street north of 5th Street, southwest of the intersection of 2nd and Hope Streets, and on 2nd Street between Broadway and Spring Street.

Neither of the Fully Underground LRT Alternatives would result in direct or indirect acquisition-related impacts to educational facilities. Therefore, construction and operation would not have significant direct or indirect impacts related to acquisitions or easements on educational facilities.

There would be no adverse impacts to Section 4(f) educational resources (schools open to the public for recreation) because there would be no direct or indirect impact on educational facilities. No cumulative impacts would occur under either alternative because no significant direct or indirect adverse impacts would occur.

Table 5-9. Educational Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
Day Cares and Preschools								
1	Nishi Hongwanji Child Development Center	815 E 1st Street	0.20	Yes	No	No	No	No

Table 5-9. Educational Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
2	Lumbini Child Development Center	505 E 3rd Street	0.08	Yes	No	No	No	No
3	Cal Tot Child Care Center	300 S Spring Street	0.13	Yes	No	No	No	No
4	H. Pregerson Child Care Center	255 E Temple Street	0.20	No	No	No	No	No
5	Grace Lino Child Care Center	231 E 3rd Street	0.11	Yes	No	No	No	No
6	Bright Horizons	550 S Hope Street	0.09	Yes	No	No	No	No
7	Tiny DOTs – Early Education Center	100 S Main Street	0.00	Yes	No	No	No	No
8	Joy Picus Child Development Center	200 N Main Street	0.11	Yes	No	No	No	No
Public High Schools								
1	California Academy for Liberal Studies Early College	700 Wilshire Boulevard	0.07	Yes	No	No	No	No

Table 5-9. Educational Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
	High School							
2	Oscar de la Hoya Animo Leadership Charter High School	350 S Figueroa Street, Suite 100	0.07	Yes	No	No	No	No
Colleges and Trade Schools								
1	The Colburn School of Performing Arts	200 S Grand Avenue	0.02	Yes	No	No	No	No
2	The Colburn School of Conservatory Music	225 S Olive Street	0.05	Yes	No	No	No	No
3	Chicago School of Professional Psychology	617 W 7th Street, Suite 404	0.12	Yes	No	No	No	No
4	Bukkyo University	442 E 3rd Street	0.12	Yes	No	No	No	No
5	Golden Gate University	725 S Figueroa Street, Suite 1550	0.08	Yes	No	No	No	No

Table 5-9. Educational Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
6	Fashion Institute of Design & Merchandising (FIDM)	919 S Grand Avenue	0.19	Yes	No	No	No	No
7	USC (Annenberg School for Communication ; Institute for Justice and Journalism; Western Knight Center for Specialized Journalism)	300 S Grand Avenue, Suite 3950	0.02	Yes	No	No	No	No
8	USC (Marshall School of Business; Institute for Communication Technology Management; Sports Business Institute)	444 S Flower Street, Suite 1000	0.08	Yes	No	No	No	No
9	Southern California Institute of Architecture	960 E 3rd Street	0.20	No	No	No	No	No

Table 5-9. Educational Facilities Within 0.25 Miles of the Proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

Map No[1]	Name	Location	Proximity to Alignment (miles)	Within ¼ mile of station	Land Acquisition	Loss of street parking	Affect vehicle access	Barrier to Pedestrian Access
10	UCLA Extension at Figueroa Courtyard	261 S Figueroa Street	0.16	Yes	No	No	No	No

Source: CDM 2009
[1] Map numbers correspond to Figures 4-12
[2] Temporary construction-related effects

5.3.5.2 Access

The Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 alignments would not affect surface traffic or pedestrian circulation except at the intersection of 1st and Hewitt Streets. Here, the LRT alignment would prevent automobile and pedestrian traffic from crossing 1st Street. An alternative crossing would remain one block east at Vignes Street.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate as it does currently. Future roadway levels of service for this alternative would be the same as the No Build and TSM alternatives.

Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would not result in significant direct or indirect adverse impacts to educational facility access. Therefore, construction and operation of the two alternatives would not have significant adverse impacts.

There would be no adverse impacts to a Section 4(f) resource (schools open to the public for recreation) because there would be no direct or indirect impacts on educational facilities.

No cumulative impacts would occur under the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 because there would be no significant direct or indirect adverse impacts.

5.3.5.3 Parking

The alignment for, Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 is entirely underground. Both alternatives would result in the loss of seven on-street public parking spaces along Flower Street. Therefore, there would not be a significant adverse effect on educational facilities from on-street parking loss. Neither alternative would result in significant direct or indirect adverse impacts to on-street parking for educational facilities. Therefore, construction and operation of the alternatives would not have adverse or significant impacts.

There would be no adverse impacts to Section 4(f) resources (schools open to the public for recreation) under either alternative because there would be no direct or indirect impacts on educational facilities. No cumulative impacts would occur under either alternative because there would be no significant direct or indirect adverse impacts.

6.0 POTENTIAL MITIGATION MEASURES

No adverse construction or operational impacts to parklands and other community facilities have been identified, and the project would comply with applicable regulations. Therefore, no mitigation measures would be required. However, permanent replacement bus loading spaces should be identified near the Japanese American National Museum for the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. Temporary replacement spaces should be identified for the Fully Underground LRT Alternatives during construction. Additional information on potential parking impacts and potential mitigation measures are detailed in the Transportation Technical Memorandum.

7.0 CONCLUSIONS

7.1 Parklands and Recreational Resources

NEPA does not have specific thresholds related to potential impacts on parklands and community facilities. However, Section 4(f) of the U.S. Department of Transportation Act of 1966 requires protection of some parklands and community facilities, as specified in the regulation. The standards of significance for impacts to Section 4(f) resources are discussed in this memorandum. Based on the *L.A. CEQA Thresholds Guide,* Section 3.2 lists significance thresholds for impacts to parklands and recreational resources.

7.1.1 No Build Alternative

7.1.1.1 NEPA Findings

The No Build Alternative would not to result in an adverse impact on parklands and recreational resources.

7.1.1.2 CEQA Determinations

The No Build Alternative would maintain existing transit service through the year 2035. No new transit infrastructure would be built aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, the No Build Alternative would not affect parklands and recreational resources in the project area.

The No Build Alternative would not result in significant adverse physical impacts. Potential impacts could occur if there was a need to provide new or physically altered parks. However, the No Build Alternative would not increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. The No Build Alternative would not require construction or expansion of parklands and recreational resources that might have a physical impact on the environment. The No Build Alternative would not have the beneficial impact of increasing non-auto access to recreational facilities throughout the region, including to and from downtown.

7.1.2 TSM Alternative

7.1.2.1 Section 4(f) and NEPA Findings

The TSM Alternative would be operated within existing public right-of-way (i.e., streets) and would not have a significant adverse impact on parklands, recreational resources, or Section 4(f) resources.

7.1.2.2 CEQA Determinations

The TSM Alternative would include provisions of the No Build Alternative and would add two shuttle bus routes to provide a transit link between 7th Street/Metro Center and Union Stations. This alternative would not result in significant physical impacts that might otherwise occur if there were a need to provide new or physically altered parks.

The TSM Alternative would not increase use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. The TSM Alternative does not affect parklands and recreational resources or require construction or expansion of parklands and recreational resources.

7.1.3 At-Grade Emphasis LRT Alternative

7.1.3.1 Section 4(f) and NEPA Findings

The At-Grade Emphasis LRT Alternative would not result in direct impacts to parkland or recreational facilities. During construction there would be potential indirect and temporary impacts to vehicle and pedestrian access at the Maguire Gardens (a public facility) and City Hall South Lawn Park (a designated park). However, the impacts would be temporary and would not significantly affect the amenities or access associated with either site. Therefore, there would be no adverse impacts to Section 4(f) resources.

7.1.3.2 CEQA Determinations

The proposed At-Grade Emphasis LRT Alternative would have the beneficial effect of situating public transit adjacent to parklands and recreational resources and thereby potentially increasing the public's ability to visit them. As shown in Table 4-1, five parks are within 0.25 miles of the proposed alignment.

Although the proposed At-Grade Emphasis LRT Alternative would potentially make these parklands more accessible, this would not create a demand on parklands to the extent that they would need to be expanded or have new facilities constructed. Therefore, the At-Grade Emphasis LRT Alternative would not result in significant physical impacts that might occur if there were a need for new or physically altered parks.

The At-Grade Emphasis LRT Alternative would not increase use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. The At-Grade Emphasis LRT Alternative does not affect parklands or recreational resources, or require construction or expansion of parklands or recreational resources that might otherwise have a physical impact on the environment.

In conclusion, no significant impact to parklands or recreational resources would occur from construction and operation of the At-Grade Emphasis LRT Alternative.

7.1.4 Underground Emphasis LRT Alternative

7.1.4.1 Section 4(f) and NEPA Findings

The Underground Emphasis LRT Alternative would not result in direct or indirect impacts (i.e., acquisition or easement) to any parkland or recreational resource. Therefore, no significant adverse impact would occur. Additionally, because there would be no significant adverse impacts, there would be no adverse impact to Section 4(f) resources.

7.1.4.2 CEQA Determinations

The proposed Underground Emphasis LRT Alternative would have the beneficial effect of situating public transit adjacent to parklands and recreational resources and thereby potentially increasing accessibility to these resources. As shown in Table 4-1, four parks are within 0.25 miles of the proposed alignment.

The proposed Underground Emphasis LRT Alternative would potentially make these parklands more accessible, but not to an extent that parklands would need to be expanded or new facilities constructed. Therefore, this alternative would not result in significant physical impacts that might otherwise occur if there were a need for new or physically altered parks.

The Underground Emphasis LRT Alternative would not increase use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. The Underground Emphasis LRT Alternative does not affect parklands or recreational resources, or require the construction or expansion of parklands or recreational resources, that might otherwise have a physical impact on the environment.

In conclusion, no significant impact to parklands or recreational resources would occur from construction and operation of the Underground Emphasis LRT Alternative.

7.1.4.3 Design Options

The two station design options would not result in significant adverse physical impacts that might occur if there were a need for new or physically altered parks. These options would not increase use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. Neither option would affect parklands and recreational resources or require construction or expansion of parklands and recreational resources that might otherwise have a physical impact on the environment.

In conclusion, no significant impact to parklands or recreational resources would occur from either Underground Emphasis LRT Alternative design option.

7.1.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

7.1.5.1 Section 4(f) and NEPA Findings

Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would not result in direct or indirect impacts (i.e., acquisition or easement) to any parkland or recreational resource. Therefore, because there would be no significant adverse impacts with these alternatives, there would be no adverse impact to Section 4(f) resources. .

7.1.5.2 CEQA Determinations

The two alternatives would have the beneficial effect of situating public transit adjacent to parklands and recreational resources, thereby potentially increasing the public's ability to visit them. As shown in Table 4-1, four parks are within 0.25 miles of the proposed alignment.

Although the proposed alternatives would potentially make these parklands more accessible, they would not create a demand to the extent that parklands would need to be expanded or new facilities constructed. Therefore, neither of the Fully Underground LRT Alternative – Little Tokyo variations would result in significant physical impacts that might otherwise occur if there were a need for new or physically altered parks.

Neither alternative would increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. Neither alternative would affect parklands and recreational resources or require construction or expansion of parklands and recreational resources that might otherwise have a physical impact on the environment.

In conclusion, no significant impact to parklands and recreational resources would occur from construction and operation of either Fully Underground LRT Alternative – Little Tokyo variations.

7.2 Public Services and Religious Facilities

NEPA does not have specific thresholds related to potential impacts on public services and religious facilities. Significance thresholds from the *L.A. CEQA Thresholds Guide* that address impacts to public facilities are identified in Section 3.

7.2.1 No Build Alternative

7.2.1.1 NEPA Findings

The No Build Alternative would not result in significant adverse impacts on public services and religious facilities.

7.2.1.2 CEQA Determinations

The No Build Alternative would maintain existing transit service through the year 2035. No new infrastructure would be built, aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, the No Build Alternative would not affect public services and religious facilities in the project area. In addition, the No Build Alternative would not result in significant physical impacts.

Potential impacts could occur if new or physically altered governmental facilities were required to maintain acceptable service ratios, response times, or other performance objectives for police protection, fire protection, and other public services. The No Build Alternative would not physically affect an adopted emergency response plan or evacuation plan, nor would it expose people or structures to a significant risk of loss, injury, or death.

7.2.2 TSM Alternative

7.2.2.1 NEPA Findings

The TSM Alternative would be operated within existing public right-of-way (i.e., streets) and would not have significant adverse impacts on public services or religious facilities.

7.2.2.2 CEQA Determinations

The TSM Alternative would include the provisions of the No Build Alternative and would add two shuttle bus routes to provide a transit link between 7th Street/Metro Center and Union Stations. The TSM Alternative would not result in significant physical impacts that might otherwise occur if new or physically altered governmental facilities were required to maintain acceptable service ratios, response times, or other performance objectives for police protection, fire protection, and other public services.

The TSM Alternative would not physically affect an adopted emergency response plan or evacuation plan, nor would it expose people or structures to a significant risk of loss, injury, or death. The TSM Alternative would also not significantly impact religious facilities in the project area.

7.2.3 At-Grade Emphasis LRT Alternative

7.2.3.1 NEPA Findings

Several public service or religious facilities could experience potential impacts during construction of the At-Grade Emphasis LRT Alternative. However, the impacts would be temporary and not significant.

7.2.3.2 CEQA Determinations

As shown in Table 4-1, the At-Grade Emphasis LRT Alternative would not displace existing public services or religious facilities, including police and fire services or other public facilities,

nor would it hinder access to these facilities. This alternative would provide increased access to existing public service and religious facilities, but not to the extent that would require new or expanded services or facilities, or interfere with response times of police and fire service providers.

The At-Grade Emphasis LRT Alternative could potentially affect emergency vehicle routes in the vicinity of Temple and Alameda Streets, particularly trucks coming from LAFD Station #4. However, Metro would coordinate with LAFD to minimize or avoid impacts to emergency vehicle response times. This alternative would not expose people or structures to any significant risk of loss, injury, or death.

The At-Grade Emphasis LRT Alternative would not result in a need for new or expanded public services or hinder implementation of an emergency response plan. Therefore, the potential impact on public service facilities would be less than significant.

7.2.4 Underground Emphasis LRT Alternative

7.2.4.1 NEPA Findings

Although most of construction and operation of the Underground Emphasis LRT Alternative would be underground, several public service facilities could experience potential impacts during construction. These impacts, however, would be temporary and not significant.

7.2.4.2 CEQA Determinations

As shown in Table 4-1, the Underground Emphasis LRT Alternative would not displace existing public services or religious facilities, including police or fire services or other public facilities, nor would it hinder access to these facilities. The Underground Emphasis LRT Alternative would provide increased access to existing public service and religious facilities, but would not generate a need for new or expanded services or facilities or interfere with response times of police and fire service providers.

The Underground Emphasis LRT Alternative would not affect adopted emergency response plans or emergency evacuation plans, nor would it expose people or structures to a significant risk of loss, injury, or death. This alternative may improve response times for emergency vehicles traveling on Alameda Street through the intersection with 1st Street because traffic would be grade separated.

The Underground Emphasis LRT Alternative would not require new or expanded public services or hinder implementation of an emergency response plan. Therefore, the potential impact on public service facilities would be less than significant.

7.2.4.3 Design Options

The two Underground Emphasis LRT Alternative station design options would not displace or hinder access to existing public services or religious facilities, including police or fire services or other public facilities. In addition, these options would not affect adopted emergency response plans or emergency evacuation plans, nor would they expose people or structures to a significant risk of loss, injury, or death.

The two Underground Emphasis LRT Alternative options would not require new or expanded public services or hinder implementation of an emergency response plan. Therefore, potential impacts on public service facilities would be less than significant.

7.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

7.2.5.1 NEPA Findings

Although most construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would be underground, several public service facilities could experience potential impacts during construction. However, the impacts would be temporary and not significant.

7.2.5.2 CEQA Determinations

As shown in Table 4-1, neither of the Fully Underground LRT alternatives would displace existing public services or religious facilities, including police or fire services or other public facilities, nor would they hinder access to these facilities. The two alternatives would provide increased access to existing public service and religious facilities, but not to the extent that would require new or expanded services or facilities or interfere with response times of police and fire service providers.

Neither Fully Underground LRT Alternative – Little Tokyo Variations 1 or 2 would affect adopted emergency response plans or emergency evacuation plans, nor would they expose people or structures to a significant risk of loss, injury, or death. No effects on emergency vehicle response times are anticipated.

Neither alternative would require new or expanded public services or hinder implementation of an emergency response plan. Therefore, potential impacts on public service facilities would be less than significant.

7.3 Educational Facilities

NEPA does not have specific thresholds related to potential impacts on education facilities with the exception of those that meet the requirements of Section 4(f) resources. Significance

thresholds from the *L.A. CEQA Thresholds Guide* that address impacts to educational facilities are identified in Section 3.

7.3.1 No Build Alternative

7.3.1.1 NEPA Findings

The No Build Alternative would not result in significant impacts on educational facilities.

7.3.1.2 CEQA Determinations

The No Build Alternative would maintain existing transit service through the year 2035. No new infrastructure would be built aside from projects currently under construction or identified in Metro's *2009 Long Range Transportation Plan*. Therefore, the No Build Alternative would not affect educational facilities in the project area.

Other transportation projects under Metro's *2009 Long Range Transportation Plan* would undergo project-specific environmental review, as appropriate. The No Build Alternative would not result in significant physical impacts to the area. Potential impacts could occur if new or physically altered educational facilities were required.

7.3.2 TSM Alternative

7.3.2.1 Section 4(f) and NEPA Findings

The TSM Alternative would be operated within existing public right-of-way (i.e., streets) and would not have a significant impact on educational facilities or Section 4(f) resources (i.e., schools used for public recreation).

7.3.2.2 CEQA Determinations

The TSM Alternative would include the provisions of the No Build Alternative and would add two shuttle bus routes to provide a transit link between 7th Street/Metro Center and Union Stations. The TSM Alternative would not result in significant physical impacts that might otherwise occur if new or physically altered educational facilities were required.

7.3.3 At-Grade Emphasis LRT Alternative

7.3.3.1 Section 4(f) and NEPA Findings

A limited number of public facilities could experience potential impacts during construction. However, the impacts would be temporary and not significant.

7.3.3.2 CEQA Determinations

As shown in Table 4-1, the At-Grade Emphasis LRT Alternative would not displace existing educational facilities, nor would it hinder access to these facilities. This alternative would provide increased access to existing education facilities, but not to an extent that new or

expanded education facilities would be required. Potential impacts of the At-Grade Emphasis LRT Alternative on public service facilities would be less than significant because this alternative would not require new or expanded education facilities.

7.3.4 Underground Emphasis LRT Alternative

7.3.4.1 Section 4(f) and NEPA Findings

Most of construction and operation of the Underground Emphasis LRT Alternative would be underground, so potential impacts during construction would be temporary and not significant.

7.3.4.2 CEQA Determinations

As shown in Table 4-1, the Underground Emphasis LRT Alternative would not displace existing educational facilities, nor would it hinder access to these facilities. This alternative would provide increased access to the existing educational facilities, but would not require new or expanded educational facilities. Potential impacts of the Underground Emphasis LRT Alternative on educational facilities would be less than significant because this alternative would not require new or expanded educational facilities.

7.3.4.3 Design Options

The two Underground Emphasis LRT Alternative station design options would not displace or hinder access to and from existing educational facilities. Potential impacts on educational facilities under these two options would be less than significant because they would not require new or expanded educational facilities.

7.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2

7.3.5.1 Section 4(f) and NEPA Findings

Most of the construction and operation of Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would be underground, and therefore no educational facilities would be affected.

7.3.5.2 CEQA Determinations

As shown in Table 4-1, neither Fully Underground LRT Alternative would displace or hinder access to existing educational facilities. Both alternatives would provide increased access to the existing educational facilities, but not to an extent that would require new or expanded educational facilities. Potential impacts on educational facilities under these two alternatives would be less than significant because they would not require new or expanded educational facilities.

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APPENDIX B

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX BB

ECONOMIC AND FISCAL IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Economic and Fiscal Impacts
Technical Memorandum

March 29, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

BART	Bay Area Rapid Transit
CEQA	California Environmental Quality Act
CLACG	City of Los Angeles Council of Governments
DART	Dallas Area Rapid Transit
LRT	Light Rail Transit
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NEPA	National Environmental Policy Act
SCAG	Southern California Association of Governments
TOD	Transit Oriented Development
TPSS	Traction power substations
TSM	Transportation Management System

1.0 SUMMARY

The proposed Regional Connector would be built in downtown Los Angeles. The area surrounding the proposed Regional Connector is substantially built out. Therefore, construction and operation of the transit system could result in impacts to land use including displacements. Such land use impacts could create economic and fiscal impacts.

Construction activities may impact local businesses along the project alignment. Construction spending may result in construction-related employment growth, and the Regional Connector Build Alternatives would result in improved accessibility and mobility and from downtown and other parts of the region by train in lieu of car. Increased public investment in infrastructure could result in overall employment growth in the region.

The analysis in this section identified the economic and fiscal impacts associated with construction and operation of the proposed project alternatives. The analysis assessed the significance of the potential impacts of each project alternative.

The project area for purposes of this study is a six-county region (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties). These counties belong to the Southern California Association of Governments (SCAG). The analysis of construction and property tax related impacts focused on properties that would abut the proposed alignments.

The alternatives under consideration for the Regional Connector are: the No Build Alternative, the Transportation Systems Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground Alternative – Little Tokyo Variation 1, and the Fully Underground Alternative – Little Tokyo Variation 2.

The No Build Alternative would include transit investments in the Metro 2009 Long-Range Transportation Plan with the exception of the Regional Connector Transit Corridor Project. The No Build Alternative would not substantially alter the physical environment and would not have significant, adverse economic impacts within the project area.

The Transportation System Management (TSM) Alternative includes the same transit improvements as the No Build Alternative and two new shuttles that would connect Union Station with the 7th Street/Metro Center Station. The TSM Alternative could permanently displace up to 24 parking spaces along its alignment to make way for new bus stops. The loss of parking spaces could impact some businesses. It is difficult to estimate the exact impact because the bus station locations have yet to be determined. However, like to the No Build Alternative, the TSM Alternative is not anticipated to have adverse impacts.

The At-Grade Emphasis LRT Alternative would require partial takes of five privately-owned parcels for station site construction and construction staging locations. Takes would result in an approximately 0.85 percent decrease in total property tax revenue from all privately-owned businesses that directly abut the proposed alignment. However, this loss in revenue could be offset by an increase in property values near station sites. Therefore, this alternative would not have an adverse impact to property tax revenues.

Adverse, but temporary, construction-related impacts could occur. Typical impacts could include disruption of access for adjacent land uses, increased levels of noise, vibration and dust, utility disruptions, the permanent displacement of up to 80 parking spaces, and a general disinterest in area businesses due to construction. These impacts could have the secondary effect of reducing area activity levels and, therefore, revenue for adjacent businesses.

Approximately 36 businesses along the At-Grade Emphasis LRT Alternative alignment could be adversely affected by construction. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain from construction.

The At-Grade Emphasis LRT Alternative is estimated to create approximately 13,800 direct and indirect employment opportunities and generate approximately $1.9 billion in direct and indirect revenues. Such employment projections are consistent with estimated levels of growth for the project area. They would represent beneficial impacts.

The Underground Emphasis LRT Alternative would require acquisition of 20 privately-owned parcels for tunnel boring and station construction. Construction could significantly impact 38 businesses along the alignment due to street and sidewalk closures, the permanent displacement of up to 20 parking spaces, dust, and noise. This alternative proposes a pedestrian underpass and an automobile underpass at the intersection of 1st and Alameda Streets.

Temporary and intermittent street closures for 1st and Alameda Streets throughout the 24-36 month construction process could significantly impact businesses in Little Tokyo. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain during construction.

With property acquisitions under the Underground Emphasis LRT Alternative, property tax revenues would decrease by 1.2 percent of the property tax base of properties that directly

abut the proposed alignment. This would be a less than significant impact to revenues and offset by property value increases in the vicinity of stations.

This alternative would lead to a $2.8 billion increase in regional economic output and would create 20,700 direct and indirect employment opportunities. This increase in employment opportunities is within projected levels of growth for the project area and would be a beneficial impact. Additionally, new job growth and spending could increase income and sales tax revenues by $117 million.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have similar construction impacts to businesses as the Underground Emphasis LRT Alternative. The exception would be businesses near the intersection of 1st and Alameda Streets. Neither a pedestrian overpass nor an automobile underpass would be built there under this alternative; thus, impacts to nearby businesses would be less significant than with the Underground Emphasis LRT Alternative.

However, approximately five businesses along the south side of 1st Street could be significantly impacted by street relocation during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain during construction.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require removal of fewer parking spaces than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. Approximately seven parking spaces would be displaced under this alternative. This would cause less than significant impacts to businesses.

Additionally, this alternative would necessitate acquisition of 17 privately-owned parcels. The parcels located on the block bounded by 1st, 2nd and Alameda Streets and Central Avenue would be fully acquired as opposed to partial takes in the Underground Emphasis LRT Alternative. This acquisition is needed to stage construction and build a new underground station, station entrances, and ancillary facilities. However, Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not be directly impacted by construction activities. As a result, property tax loss for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be slightly higher than the Underground Emphasis LRT Alternative. Property tax revenue losses would still equal 1.2 percent of the property tax base of properties that directly abut the proposed alignment. This loss would be a less than significant impact and offset by property values increases in the vicinity of stations.

Higher capital costs associated with this alternative could induce a total economic output of over $3.2 billion and create 23,500 employment opportunities. This increase in employment opportunities is within projected levels of growth for the project area and would result in a beneficial impact.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would generally have the same construction and parking displacement impacts to businesses along the alignment as the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, this alternative would require the acquisition of two additional, partial takes of privately-owned parcels on 1st Street between Hewitt and Garey Streets. These takes would be necessary for street widening purposes. This alternative would require a partial take of parcel #5161018020 (see Table 5-4) as opposed to a full take in Fully Underground LRT Alternative – Variation 1.

The total property tax loss associated with this alternative would be 1.1 percent of the total property tax base of properties that directly abut the proposed alignment. Such a loss in revenues would be a less than significant impact. This alternative could create a total economic output of approximate $3.4 billion, including an increase of over $143 million in sales and income taxes. Direct and indirect employment population is estimated to increase by over 25,400 jobs.

This increase in employment opportunities is within projected levels of growth for the project area and economic output would result in a beneficial impact. Mitigation measures for construction-related impacts to local businesses would include compensation to property owners for acquisitions, relocation subsidies for businesses, and assistance to business owners.

2.0 INTRODUCTION

The Regional Connector Transit Corridor project would be an important component of the transportation system for Los Angeles, enhancing regional and local connectivity and accessibility. This technical memorandum considered the impacts to local and regional economies during construction and operation of each project alternative. Economic and fiscal impacts of each alternative were evaluated by analyzing the following:

- Property Tax Revenue Impacts
- Construction-Related Economic Impacts
- Construction Spending on the Regional Economy
- Construction-Related Employment
- Regional Economic Impacts

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 NEPA Guidelines

The National Environmental Policy Act (NEPA) requires an examination of indirect consequences, or secondary impacts, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 CFR 1508.8). Consequences and impacts can include economic and fiscal changes due to a proposed project.

NEPA does not include specific guidelines on measuring adverse economic impacts, so this study measures impacts based on multipliers from the U.S. Department of Commerce. These multipliers were developed to estimate potential construction-related employment spending and economic impacts. The multipliers measure employment creation and total tax revenue generation.

3.2 CEQA Guidance

The draft EIS/EIR process must adhere to California Environmental Quality Act (CEQA) guidelines. CEQA guidelines state that economic changes resulting from a project shall not be treated as significant effects on the environment. Economic effects of a physical change, however, may be used to determine that the physical change is a significant change to the environment (CEQA 15358b). In the case of project alternatives, physical changes would result from construction; therefore, this section measures the effect construction would have on the existing economic environment.

In the absence of specific thresholds of significance for economic impacts, CEQA guidelines encourage each public agency to develop their own. The following thresholds of significance were applied in the analysis of economic and fiscal impacts of the Regional Connector Transit Corridor project alternatives.

- The alternative would substantially reduce the amount or value of taxable property in the study area.
- Construction of the alternative would have substantial, adverse effects on businesses along the alignment.

3.3 Methodology

3.2.1 Tax Revenue Impacts

Using alignment maps, conceptual station plans, and potential construction staging maps, specific parcels or portions of parcels have been identified for possible acquisition. Using these same resources and historical data from similar developments, this analysis identified a

benefits area that will capture potential increases in property value and tax revenue due to station location.

Assessor's Parcel Number, land value, improvement value, square footage, 2009 tax payments, and owner's information were obtained from the Los Angeles County Tax Assessor's office. 2009 property tax records were used to estimate tax revenue loss for identified parcels that would be completely acquired.

Trends in property value increases were identified using historical data. They were used to analyze potential property tax and property value increases that could result from new station sites.

3.2.2 Construction-Related Economic Impacts

For each build alternative, construction would last approximately 4 to 5 years. Surface streets would be impacted for approximately 24 to 36 months. The duration of the proposed construction and extent of impacts to surface streets could affect local businesses.

Construction-related impacts and areas that could be affected were identified using site maps, location of construction staging areas, and conceptual station designs. Windshield surveys were conducted to identify local businesses and categorize them by use. Vehicular and pedestrian access was identified for each business along the proposed alignments.

Historical data were gathered for similar transit projects completed in the downtown area. These data were used in a quantitative assessment of business viability to estimate the potential significance of construction impacts.

3.2.3 Construction Spending on the Regional Economy

Direct investment in construction leads to investment from businesses in the area. Local businesses seek to take advantage of the increase in spending (purchases of supplies and equipment) and employment activity. Such investment is considered indirect investment.

Both direct and indirect investment streams provide businesses in the regional economy revenue and personal income. Income spent throughout the economy supports other jobs and related spending. Such effects are referred to as induced impacts. A multiplier developed by the U.S. Department of Commerce was used to quantify the impacts of construction-related spending on the regional economy.

3.2.4 Construction-Related Employment

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits in two basic ways. It creates jobs and leads to investment or spending by suppliers whose goods and services are used in a project. This

analysis used the same multiplier to calculate impacts to employment as it used to calculate construction-related spending. The employment analysis was compared to SCAG employment projections for the same period.

3.2.5 Regional Economic Impacts

Improved accessibility and mobility could lead to an increase in employment opportunities for the regional population. Improved mobility could result in decreases in regional hours of travel and costs associated with regional travel. Information from travel demand models was used to characterize potential shifts in regional travel behavior and transit ridership as a result of improved connectivity.

4.0 AFFECTED ENVIRONMENT

4.1 Project Area

The project area for purposes of evaluating economic and fiscal impacts is generally the same as in the Growth-Inducing Impacts Technical Memorandum. The analysis of direct and indirect regional economic and fiscal impacts focuses on downtown Los Angeles and areas served by transit lines that would connect to the Regional Connector in Los Angeles County (Long Beach, Pasadena, Culver City, and East Los Angeles).

The project area lies within the geographic scope of the City of Los Angeles Council of Governments (CLACG), a subregion of SCAG, which includes Los Angeles, San Fernando and portions of unincorporated areas of Los Angeles County. The analysis of potential property tax and construction-related impacts focuses on properties directly abutting the proposed alignments.

4.2 Regional Population and Employment Projections

As discussed in the Growth-Inducing Impacts Technical Memorandum, the region could have a population of more than 24 million persons with 10.2 million persons employed by 2035. This would represent an increase of approximately 26 percent over 2008 conditions. Population and employment in Los Angeles County are projected to increase by 1.8 million people and 542,574 jobs between 2008 and 2035.

This would represent an average annual increase of approximately 69,953 persons and 20,095 jobs. Los Angeles County is expected to experience the slowest rate of job growth in a five-county region (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). The job growth rate in Los Angeles County is expected to increase 0.4 percent annually.

4.3 Local Population and Employment Projections

This section includes population, housing, and employment growth estimates for census tracts comprising the project area. For comparison purposes, this section includes data from the City of Los Angeles and the CLACG.

The City of Los Angeles is expected to increase by 274,285 households by the year 2035. The City would comprise approximately 21 percent of the region's total households. The project area is expected to increase by 2,552 households. This represents a minimal share of the City's total project household growth, but growth would occur at a similar rate (0.77 %) as in the City (0.76 %) and the CLACG subregion (0.75 %).

Table 4-1 shows employment growth for the project area, City of Los Angeles, and CLACG subregion. The table shows that the project area is expected to gain approximately 12,630

new jobs by 2035. This would be an increase in employment of approximately 0.26 percent per year between 2008 and 2035. The annual rate of growth for the project area would be similar to that in the City but lower than in the CLACG subregion.

Table 4-1. Local Area Employment Growth 2008-2035

Area	2008	2035	2000-2008 Employment Change	2008-2035 Annual Average % Change
CLACG	1,839,988	2,037,473	197,485	0.40
City of Los Angeles	1,879,666	1,994,137	114,471	0.23
Project Area	169,328	181,962	12,634	0.26

4.4 Local Businesses and Privately-Owned Properties

Properties adjacent to proposed alignments are comprised of high-density multi-family, commercial, industrial, and government-related uses. Construction activities under build alternatives could affect the mix of business and government-related uses along the alignment. Approximately 112 businesses and commercial office buildings along the proposed alignments could be impacted.

Acquisitions of privately-owned properties would affect city, county and state property tax generation in this area. Under the At-Grade Emphasis LRT Alternative, 56 privately-owned properties would directly abut the alignment. These businesses represent a total tax base of $21,867,759.

With the Underground Emphasis LRT Alternative, 82 privately-owned parcels would abut the alignment. This represents a property tax base of $24,280,248. With the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2, 90 privately-owned properties would directly abut the alignment. These properties represent a property tax base of $24,365,168.

5.0 IMPACTS

5.1 Property Tax Revenue Impacts

Project alternatives would use the public right-of-way for track construction and station sites, minimizing the need for land acquisition. However, some acquisitions would be required under each build alternative. Property tax losses would result. Property tax losses from the acquisition of privately-owned properties would likely be offset by increases in property values.

Property tax losses would not occur from acquisitions of government-owned parcels. Property tax losses would result strictly from acquisitions of privately-owned parcels where owners pay an annual property tax. Thus, section 5.1 only analyzed partial and full takes of privately-owned parcels. Using Los Angeles County Tax Assessor 2009 data, property tax loss was calculated based on the amount of square feet to be acquired (the impact area). The No Build and TSM Alternatives would not involve property acquisitions and would not have property tax revenue impacts.

5.1.1 At-Grade Emphasis LRT Alternative

Five privately-owned parcels would be acquired with the At-Grade Emphasis LRT Alternative. The acquisitions would be partial takes. The impact area outlined in Table 5-1 shows the approximate size of property (square feet) that would be purchased. Acquisitions would be required for construction staging, new stations, a pedestrian overpass, and a Traction Power Substation (TPSS) site.

Total tax revenue loss due to land acquisitions with the At-Grade Emphasis LRT Alternative is estimated to be approximately $186,734 (see Table 5-1). This loss would be approximately 0.85 percent of the $21,867,759 property tax revenue base of all the properties that directly abut the alignment. The At-Grade Emphasis LRT Alternative would have a less than significant impact on property tax revenues for the area. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

5.1.2 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would require the acquisition of more privately-owned parcels than the At-Grade Emphasis LRT Alternative. Acquisitions would be required for construction staging, new stations, portals, a bridge pier, and a pedestrian overpass. Both partial and full takes would be required. Twenty privately-owned parcels would be impacted under this alternative.

Nine of these parcels are located in the Little Tokyo area, on the block bounded by 1st, 2nd, Alameda Streets and Central Avenue. Total tax revenue loss from acquisitions is estimated to be approximately $286,847. Losses to property tax revenues would be approximately 1.2

percent of the area's $24,280,248 tax revenue base of all the properties that directly abut the alignment. Property tax revenue loss would be a less than significant impact. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

5.1.3 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require acquisitions of 17 properties. Fewer parcels would be acquired under this alternative than the Underground Emphasis LRT Alternative. However, acquisitions of parcels bounded by 1st, 2nd, and Alameda Streets and Central Avenue would be full takes and not partial takes like in the Underground Emphasis LRT Alternative. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not be directly impacted by construction activities.

Property tax losses for the Fully Underground LRT Alternative – Variation 1 would be approximately $281,775. This is slightly less than the Underground Emphasis LRT Alternative. Property tax revenue losses would represent 1.2 percent of the area's $24,365,168 tax revenue base of all the properties that directly abut the alignment. Property tax revenue loss would be a less than a significant impact. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

5.1.4 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require acquisitions of generally the same properties as the Fully Underground LRT Alternative – Little Tokyo Variation 1. This alternative would require only a partial take of parcel #5161018020 but would require acquisitions of two additional parcels. The two additional properties are located on 1st Street between Hewitt and Garey Streets. The properties would be required for street relocation purposes.

The total property tax loss for the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be $278,556 or 1.1 percent of the area's $24,365,168 property tax base of all the properties that directly abut the alignment. This would be less than significant impact to property tax revenues. Losses in property tax revenue could be offset by increases in property taxes in areas surrounding new stations.

Table 5-1. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– At-Grade Emphasis LRT Alternative

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Revenue Loss
5151023400	525 S. Flower Street	2,339	City National Plaza	Station Entrance	$576,349	$44,187
5151014032	703 West 3rd Street	16,927	Central Plant	Construction Staging/Station Site	$2,318,604	$51,151
5151014033	Parcel bounded by 3rd/Hope/Flower Streets	39,363	Vacant Land	Construction Staging/Station Site	$5,227,575	$65,708
5151027256	Parcel Bounded by Figueroa/3rd/Flower/ 2nd Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008032	201 S. Spring Street	22,783	Parking Lot	TPSS Site	$1,779,235	$25,688
Total:					$9,901,763	$186,734

Source: LA County Tax Assessor

Table 5-2. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5151014032	703 West 3rd Street	16,927	Central Plant	Construction Staging/Station Site	$2,318,604	$51,151
5151014033	Parcel bounded by 3rd/Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	$5,252,276	$66,018
5151027256	Parcel Bounded by Figueroa/3rd/Flower/ 2nd Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	$417,733	$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	$656,442	$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	$2,005,134	$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	$1,103,562	$33,034
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	$689,414	$17,918
5161026033	Parcel at SW corner of Los Angeles/2nd Street	4,128	Plaza	Station Entrance	$250,186	$4,852

Table 5-2. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5161024014	Parcel at SE corner of Los Angeles/2nd Streets	20,829	Parking Lot	Construction Staging/Station Entrance	$2,403,732	$14,573
5161024018	Parcel at SE corner of Los Angeles/2nd Streets	9,151	Parking Lot	Construction Staging	$2,272,560	$2,997
5161018007	401 E. 2nd Street	17,890	Parking Lot	Portal and Construction Staging	$770,014	$10,688
5161018020	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	24,967	Retail	Portal and Construction Staging	$1,252,996	$17,511
5161018011	437 E. 2nd Street	26,239	Parking Lot	Portal and Construction Staging	$1,485,467	$20,010
5161018010	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	2,204	Parking Lot	Portal and Construction Staging	$16,924	$347
5161018009	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	1,834	Parking Lot	Portal and Construction Staging	$13,960	$311

Table 5-2. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5161018008	105 S. Alameda Street	3,436	Retail	Portal/Bridge Pier	$26,155	$288
5161018001	416 E. 1st Street	5,111	Retail	Portal and Construction Staging	$82,224	$1,606
5161018021	Parcel Bounded by 1st/ Alameda Streets and Central Avenue	1,618	Parking Lot	Portal and Construction Staging	$16,664	$508
5161018002	402 E. 1st Street	459	Parking Lot	Portal and Construction Staging	$4,727	$144
Total:					$21,008,774	$286,847

Source: LA County Tax Assessor

Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5151014032	703 West 3rd Street	16,927	Central Plant	Construction Staging/Station Site	$2,318,604	$51,151
5151014033	Parcel bounded by 3rd/Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	$5,252,276	$66,018
5151027256	Parcel Bounded by Figueroa/3rd/Flower/ 2nd Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	$417,733	$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	$656,442	$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	$2,005,134	$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	$1,103,562	$33,034

Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	$689,414	$17,918
5161018007	401 E. 2nd Street	17,890	Parking Lot	Portal and Construction Staging	$770,014	$10,688
5161018011	437 E. 2nd Street	26,239	Parking Lot	Portal and Construction Staging	$1,485,467	$20,010
5161018001	416 E. 1st Street	5,111	Retail	Portal and Construction Staging	$82,224	$1,606
5161018020	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	43,664	Retail	Portal and Construction Staging	$2,191,324	$30,624
5161018010	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	2,731	Parking Lot	Portal and Construction Staging	$20,971	$421
5161018009	Parcel Bounded by 1st/2nd/Alameda Streets.	2,119	Parking Lot	Portal and Construction	$16,130	$359

Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
	and Central Avenue			Staging		
5161018008	105 S. Alameda Street	3,572	Retail	Portal/Bridge Pier	$29,045	$299
5161018021	Parcel Bounded by 1st/ Alameda Streets and Central Avenue	22,370	Parking Lot	Portal and Construction Staging	$16,664	$508
5161018002	402 E. 1st Street	13,544	Parking Lot	Portal and Construction Staging	$230,359	$4,249
Total:					$17,285,363	$281,775

Source: LA County Tax Assessor

Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5151014032	703 West 3rd Street	16,927	Central Plant	Construction Staging/Station Site	$2,318,604	$51,151
5151014033	Parcel bounded by 3rd/Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	$5,252,276	$66,018
5151027256	Parcel Bounded by Figueroa/3rd/Flower/ 2nd Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	$417,733	$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	$656,442	$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	$2,005,134	$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	$1,103,562	$33,034
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	$689,414	$17,918
5161018007	401 E. 2nd Street	17,890	Parking Lot	Portal and Construction Staging	$770,014	$10,688
5161018011	437 E. 2nd Street	26,239	Parking Lot	Portal and Construction	$1,485,467	$20,010

Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
				Staging		
5161018001	416 E. 1st Street	5,111	Retail	Portal and Construction Staging	$82,224	$1,606
5161018010	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	2,731	Parking Lot	Portal and Construction Staging	$20,971	$421
5161018009	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	2,119	Parking Lot	Portal and Construction Staging	$16,130	$359
5161018008	105 S. Alameda Street	3,572	Retail	Portal/Bridge Pier	$29,045	$299
5161018021	Parcel Bounded by 1st/ Alameda Streets and Central Avenue	22,370	Parking Lot	Portal and Construction Staging	$16,664	$508
5161018002	402 E. 1st Street	13,544	Parking Lot	Portal and Construction Staging	$230,359	$4,249
5161018020	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	38,712	Retail	Portal and Construction Staging	$1,942,802	$27,151

Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2						
APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5163003002	710 E. 1st Street	401	Parking Lot	Street Relocation	$6,820	$125
5163003003	712 E. 1st Street	411	Vacant	Street Relocation	$6,990	$128
		Total:			$17,050,651	$278,556

Source: LA County Tax Assessor

5.1.5 Property Value Impacts

Loss in property tax revenue from land acquisitions would likely be offset by increases in overall property values as a result of new transit station sites. According to the 2001 study *The Effect of Rail Transit on Property Values* (Parsons-Brinckerhoff), the impact to commercial property values from new transit rail stations varies according to:

- How much the stations improve accessibility
- The relative attractiveness of locations near stations
- The real estate market in the region

The four build alternatives would increase connectivity between light rail lines. Accessibility and mobility by train in lieu of car would be improved regionally and especially for businesses and residential properties near new station sites. Based on current ridership models, the build alternatives could increase ridership by 12,300 to 17,500 new passengers.

Increased accessibility around station sites would significantly enhance the area for businesses and residents. The following are examples of benefits to property values from similar LRT projects:

- In the San Francisco Bay Area, in Alameda and Contra Costa counties, residential property values decline by $3,200 to $3,700 per square foot per mile as ones moves away from Bay Area Rapid Transit (BART) stations. Commercial property values also decrease as one moves further from stations (Transportation Research Board 1993).
- In Dallas, commercial property values near Dallas Area Rapid Transit (DART) rail stations increased 53 percent more than comparable commercial properties not near station sites (Center for Economic Development and Research University of Northern Texas September 2002).
- In Washington, DC and Atlanta, average office rents near station sites rose with system-wide ridership. Additionally, office vacancy rates were lower around station sites (Klosterman 1994).

5.2 Construction-Related Economic Impacts

Construction-related impacts to businesses could occur in areas adjacent to the proposed alignment. Impacts would likely be most significant near proposed station sites due to sidewalk closures. Businesses with at-grade, retail store fronts catering to pedestrians would be most directly impacted by construction.

A temporary decrease in business accessibility due to construction could lessen the competitiveness and attractiveness of businesses near construction sites. The No Build and TSM Alternatives would not involve construction that would impact businesses. However, the TSM alternative would require permanent removal of approximately 24 curb parking spaces from 2nd Street, Hill Street and Central Avenue.

Potential construction impacts of the build alternatives are as follows:

- Traffic disruption
- Increased noise, vibration, and dust
- Modified vehicular and pedestrian traffic patterns
- Modified parking areas
- Utility disruptions
- Reduction in business access/visibility of signs and businesses
- General disinterest in area businesses due to construction

The project would be fully implemented by 2018. Depending on the phasing schedule, businesses would be affected by construction at different intervals throughout the four to five year construction period. Figure 5-1 divides the project area into four distinct geographic areas for purposes of analyzing potential impacts.

Flower Street: Flower Street, between 3rd Street and Wilshire Boulevard, runs through the heart of downtown. The street is lined with hotels, street level retail space, and medium to high-density multi-family residential units.

2nd Street: Land uses along 2nd Street, between Los Angeles and Flower Streets, are largely commercial (retail and office buildings) and minimally high-density residential. Second Street, between Broadway and Figueroa Street, runs through a tunnel beneath Bunker Hill. The segment of 2nd Street through the tunnel consists of two lanes in each direction.

Little Tokyo: 2nd Street, between Los Angeles and Alameda Streets, runs through the heart of Little Tokyo. The street is lined with restaurants, hotels, Japanese markets, and retail stores. The area contains many recently-completed residential and mixed-use projects.

Civic Center: Government offices and employment are concentrated within the Civic Center area. Here, the Civic Center is defined as Temple Street between Main and Alameda Streets and Los Angeles and Main Streets between Temple and 2nd Streets. City Hall, City Hall East, the Caltrans Building, VA Hospital, Los Angeles Police Department Headquarters, Federal Building, and Courthouse are found in this area.

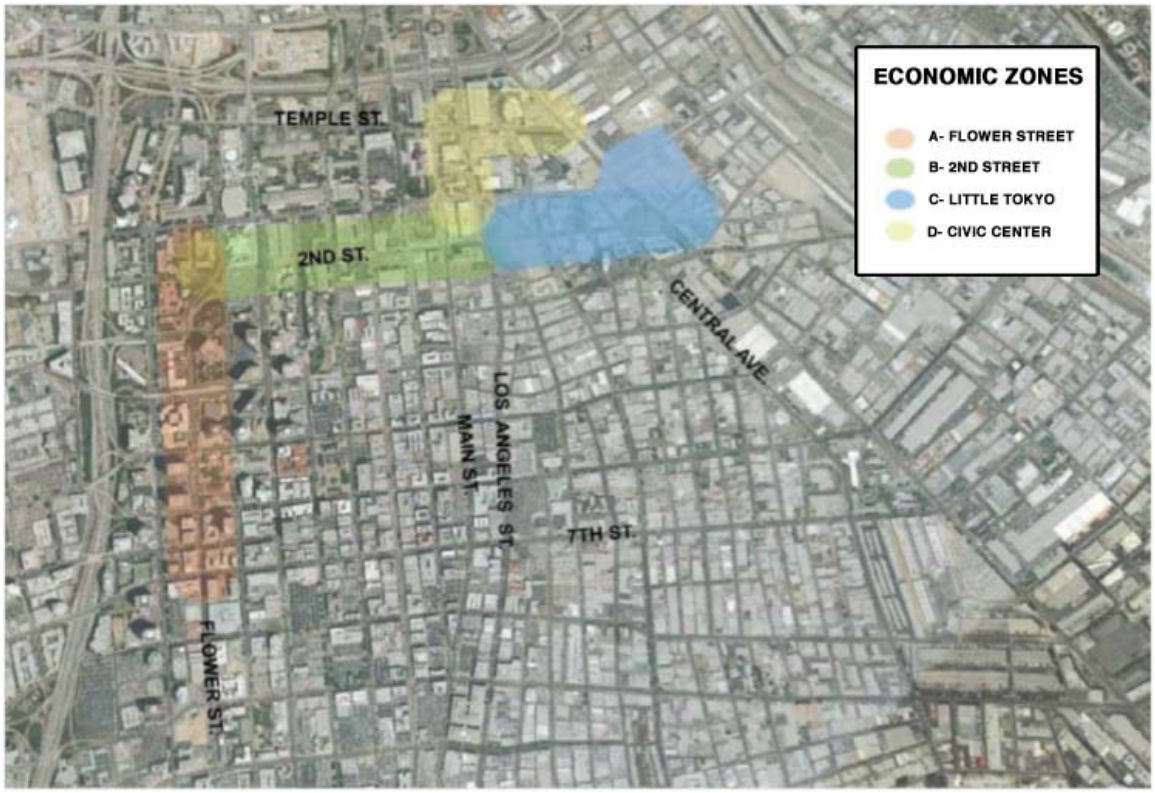

Figure 5-1. Economic Zone Map

5.2.1 Transportation System Management Alternative

The TSM Alternative would not require construction activities or have construction-related impacts to businesses. However, the TSM Alternative would require the permanent removal of approximately 24 curb parking spaces on 2nd Street between Hill Street and Central Avenue. Parking spots would be removed to accommodate six new bus stops. This analysis assumed that each new bus stop on 2nd Street would be 90 feet in length and displace up to four curb parking spaces.

Approximately 18 businesses between Hill Street and Central Avenue could be impacted by the loss of parking spaces. The exact locations of new bus stops has not been determined, so it is difficult to estimate the level of impacts parking displacements could have on businesses.

5.2.2 At-Grade Emphasis LRT Alternative

5.2.2.1 Flower Street

The At-Grade Emphasis LRT Alternative would have both at-grade and underground double track configurations. It would connect the 7th Street/Metro Center Station to the Metro Gold Line.

Under this alternative, tracks would run underground beneath Flower Street from the 7th Street/Metro Center Station to the 2nd Street tunnel. The alignment would briefly surface before 3rd Street and return underground after 3rd Street. This alternative would create two underground stations. One station would be between Hope and Flower Streets and one would be beneath Flower Street between 5th and 6th Streets.

During construction, street closures would be implemented in phases. Impacts to traffic disruptions would depend on tunneling techniques used and locations of exhaust vents. Construction effects that would disrupt business activities would be limited to areas of cut and cover construction. Such effects include noise, vibration, dust, decreased view of signage and overall disinterest in the area. Cut and cover construction would cause sidewalk and street closures near new station locations and have the greatest impacts to businesses located within close proximity.

Approximately 80 parking spaces would be permanently displaced for construction of the alternative. Such displacement of parking could have significant, adverse impacts to businesses. Of the 80 parking spaces, 12 are located on Flower Street between 3rd and 5th Streets. Seven of those 12 spaces are located on the east side of Flower Street, and five of them are located on the west side. Table 5-5 shows a detailed breakdown of the businesses that would be affected on Flower Street.

Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction	
Business	**Construction-Related Impacts**
World Trade Center Parking	The World Trade Center parking lot located near the corner of 3rd and Flower Streets would have decreased access due to construction and possible street closure. The parking lot has alternate access on Figueroa Street that could alleviate some adverse impact.
World Trade Center Monthly Parking Entrance	The World Trade Center monthly parking lot located near the corner of 3rd and Flower Streets would experience decreased access due to construction and possible street closure. The parking lot has alternate access on Figueroa Street that could alleviate some adverse impact.
Bank of America Plaza Parking	The Bank of America Plaza parking lot located near the corner of 3rd and Flower Streets would experience decreased access due to construction and possible street closure. The parking lot has alternate access from Bunker Hill that could alleviate some adverse impact.
400 S. Flower Parking	The parking lot located at 400 S. Flower Street at the corner of 4th and Flower Streets would experience decreased access due to construction and possible temporary, intermittent street closure.
City National Plaza Parking	The City National Plaza parking lot located near the corner of 4th and Flower Streets would experience decreased access due to construction and possible temporary, intermittent street closure.
Westin Bonaventure	The entrance to the Westin Bonaventure is located on Flower Street in between 5th and 4th Streets. Construction would decrease access to the hotel from Flower Street and could decrease overall appeal of the hotel entrance from Flower Street. The Hotel has an entrance from Figueroa Street that could alleviate the significance of this impact.
Suede	The entrance to Suede Restaurant is located on Flower Street near the corner of 4th and Flower Streets. Construction would decrease access to the restaurant from Flower Street and could decrease overall appeal of the restaurant. The restaurant has access from the Westin Bonaventure Hotel that could alleviate the severity of this impact.

Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction	
Business	**Construction-Related Impacts**
Citibank	The entrance to Citi Bank is located at the corner of Flower and 5th Streets. Citi Bank could be affected by a decrease in accessibility by the loss of seven curb parking spaces Flower Street.
Westin Parking Entrance	The Westin Hotel parking lot at the corner of 5th and Flower Streets would experience decreased access due to construction and possible temporary and intermittent street closure. The parking lot has alternate access on Figueroa Street that could alleviate some of the impact.
Standard Hotel Parking Entrance	The Standard Hotel parking lot near the corner of 6th and Flower Streets would suffer decreased access due to construction and possible temporary and intermittent street closure.
Standard Hotel Entrance	The Standard Hotel Entrance on Flower Street would be affected by construction impacts; however, the main entrance to the hotel is on 6th Street.
Floyd's Barbershop	Floyd's Barbershop, located on the ground floor of the Standard Hotel, has an entrance on Flower Street that would be affected. However, the barbershop can also be accessed from the hotel.
Pegasus	The Pegasus Apartments would be affected by street closures and construction in the area. Traffic disruptions would impact tenant mobility and could influence leasing activities.
Daily Grill	The entrance to the Daily Grill is located at the corner of Flower and 7th Streets. Street closure in this area would make accessing the restaurant difficult from Flower Street; however, patrons would be able to access the restaurant from 7th Street
Roosevelt Lofts	Access to the Roosevelt Lofts would be decreased due to street closure on Flower Street, but the development could be accessed from Hope Street. Depending on the tunnel construction technique used for the underground segment of the track in this area, tenants of the Roosevelt could be impacted by increased noise, vibration, and dust. This could impact vacancy rates in the high-density, residential development.

Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction	
Business	**Construction-Related Impacts**
City National Plaza Valet Entrance	Access to the City National Plaza valet entrance would be limited during construction due to possible street closure.
City National Plaza	A new underground station would be located at the City National Bank branch on the ground floor of the City National Plaza building.
800 W. 6th Parking	Access to the 800 W. 6th Street parking lot would be limited during construction due to possible street closure.
Cathay Bank	Access to the Bank would be limited during construction due to possible street closure.
Vieta Café	Access to the cafe would be limited during construction due to possible street closure.
Maria's Italian Kitchen	Access to the restaurant would be limited during construction due to possible street closure.
ABC Printing	Access to ABC printing would be limited during construction due to possible street closure.
Mail Box Etc.	Access to Mail Box Etc. would be limited during construction due to possible street closure.
PCS Printing	Access to PCS Select would be limited during construction due to possible street closure.
Big Mamma's Pizza	Access to Big Mamma's Pizza would be limited during construction due to possible street closure.

5.2.2.2 2nd Street

This segment of the alignment would run above ground with the At-Grade Emphasis LRT Alternative. This alternative would include new stations on 2nd Street. A portion of 2nd Street runs through a tunnel underneath Bunker Hill. The tunnel would likely be shut down during track construction. This would cause traffic disturbances on 2nd Street and throughout the area. However, constructing tracks here avoids impacts to businesses because none are located in the tunnel.

Construction of at-grade segments of the alignment would directly impact businesses on 2nd Street between Los Angeles and Hill Streets. Approximately 23 parking spaces on the south side of 2nd Street, between Hill and Los Angeles Streets, would be removed for construction. The new Los Angeles Police Department Headquarters and the Los Angeles Times office buildings are located along 2nd Street.

Construction impacts would be relatively significant in this area because retail businesses along 2nd Street, including Pitfire Pizza, China Bistro, and the Kawada Hotel, have greater dependence on pedestrian traffic for customers than other businesses along the alignment. Table 5-6 shows businesses along 2nd Street that could be affected by at-grade track and station construction.

5.2.2.3 Little Tokyo

The At-Grade Emphasis LRT Alternative does not run through Little Tokyo as it turns north from 2nd Street to Los Angeles Street. However, 2nd Street is the general access point for most businesses in Little Tokyo. Any decreased mobility on 2nd Street could cause adverse impacts in Little Tokyo. Businesses along 2nd Street, between Los Angeles Street and Central Avenue, could be significantly affected during track construction on the corner of 2nd Street and Los Angeles Street due to a decrease in accessibility.

5.2.2.4 Civic Center

In this segment, the At-Grade Emphasis LRT Alternative would run above ground. Dual track configurations would run in the majority of this section, with a single-track configuration on both Main and Los Angeles Streets between 2nd and Temple Streets. This alternative proposes a couplet station in the Civic Center area: a southbound platform on Los Angeles Street between Temple and 1st Streets, and a northbound platform on Main Street.

For the most part the alignment runs within the public right-of-way, limiting the need for land acquisition and pedestrian walkway closures during construction. Depending on the design, technology, and construction techniques employed, phased street closures would be required to complete track construction. Traffic disruption would decrease access to businesses in the area.

Government entities located within the Civic Center do not depend on pedestrian or automobile traffic to generate revenue. Therefore, economic impacts to this area would be relatively less significant than in other areas along the alignment. Traffic disruptions could decrease access to government offices for government employees and citizens seeking services.

The At-Grade Emphasis LRT Alternative would construct a pedestrian overpass and an automobile underpass at the intersection of Alameda and Temple Streets. However,

construction activities would not likely significantly impact businesses because the intersection is mostly surrounded by parking lots or buildings that do not have entrances near the intersection.

Table 5-6. Businesses on 2nd Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction

Business	Construction-Related Impacts
Pitfire Pizza	The main entrance to the restaurant is located at the corner of 2nd and Main Streets and could be significantly impacted. Construction could cause increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area. Loss of parking spaces along 2nd Street could cause significant impacts by reducing accessibility to the business.
China Bistro	China Bistro is located at 2nd and Main Streets. Track construction could cause increased noise, vibration, particulate matter, decreased view of signage, and a general disinterest in the area. Loss of metered parking spaces directly in front of China Bistro could significantly impact its business by reducing accessibility.
Edison Bar	The Edison bar is located at 2nd and Main Streets. The main entrance to the bar is located in an alley between Spring and Main Streets, alleviating some potential access issues on 2nd Street. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area.
Groundwork Coffee	Groundwork Coffee is located near the corner of 2nd and Main Streets. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area.
2nd Street Cigar & Gallery	2nd Street Cigar & Gallery is located near the corner of 2nd and Spring Streets. Pedestrian access to the business from 2nd Street would be removed for the duration of track construction for this phase of the project. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area. Loss of metered parking spaces directly in front of China Bistro could significantly impact its business by reducing accessibility.
Kawada Hotel	The Kawada Hotel is located at 2nd Street and Broadway Impacts could include decreased access and overall attractiveness and increased noise, vibration, and dust. Increased vacancy rates would be likely.

Approximately 21 curb parking spaces would be removed in the Civic Center area for construction of the At-Grade Emphasis LRT Alternative. Eleven of those spaces are located on the east side of Main Street between 2nd and Temple Streets. The other 10 spaces are located on the east side of Los Angeles Street between 2nd and Temple Streets. Parking spaces along both these streets are mostly used by government employees, and losing these spaces would not have a significant impact to surrounding businesses.

Construction of at-grade stations would require pedestrian walkway closures that could cause significant temporary impacts near proposed station sites. Businesses in the area are predominately government-oriented and tend not to rely on traffic to generate customers. Table 5-7 shows a detailed breakdown of businesses in the area that could be temporarily affected by construction of the couplet station. Construction is estimated to last between 24-36 months in this area.

5.2.3 Underground Emphasis LRT Alternative

Construction of the Underground Emphasis LRT Alternative could have significant construction impacts to businesses near station sites. Depending on tunneling and construction techniques used to construct the tunnel, phrased street closures may be required. However, impacts would not be as significant as under the At-Grade Emphasis LRT Alternative. Boring of the tunnel could increase noise and vibration, but it would not be severe enough to economically impact business or inhabitants in the area.

Economic impacts caused by the Underground Emphasis LRT Alternative would mostly be limited to businesses surrounding station sites and cut-and-cover construction areas. However, these impacts could expand geographically due to a general decrease in the desirability of the area during construction. For this section of the report, it is assumed that a cut-and-cover technique would be used to construct new stations.

Cut-and-cover construction would generate temporary inconveniences like increased noise, vibration, and dust, decreased view of signage, limited or no access to business within close proximity of new station areas, and a general disinterest in the area. There are two station options proposed on 2nd Street, the 2nd Street station - Broadway Option and the 2nd Street station - Los Angeles Street Option.

Like the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative calls for construction of a pedestrian overpass and an automobile underpass. However, under this alternative, it would be constructed at the intersection of 1st and Alameda Streets. Construction of the overpass and underpass would necessitate additional pedestrian and roadway detours. This could cause significant impacts to businesses in the Little Tokyo area.

Approximately 20 curb parking spaces would be removed for construction of the Underground Emphasis LRT Alternative. Seven of those spaces are on the east side of Flower Street between 3rd and 5th Streets. The other 13 are on Alameda Street between Aliso and 2nd Streets. The loss in curb parking spaces could have significant impacts to businesses like Citibank on Flower Street, which currently depends on those spaces for some daytime customer parking needs.

Table 5-7. Businesses in the Civic Center Potentially Affected During At-Grade Emphasis LRT Alternative Construction

Business	Construction-Related Impacts
Geffen Contemporary	The main parking area for the museum is on Temple Street. Construction would very likely cause a decreased use of the parking lot and a loss in parking revenue. It would lead to parking difficulties for Geffen Contemporary patrons, which could reduce patronage. The main entrance for the museum is on 1st Street, which reduces the noise, dust and vibration effects of construction.
Los Angeles Mall Entrance	The Los Angeles Mall is bounded by Main, Temple and Los Angeles Streets and would be impacted by construction of the LRT track. The entrance on Los Angeles Street is in close proximity to the proposed northbound couplet station. Pedestrian and vehicular access to the mall would decrease, which could have adverse impacts to businesses located inside the mall.
Kyoto Grand Hotel	The Kyoto Grand Hotel is located on Los Angeles Street between 1st and 2nd Streets. The main entrance to the hotel lobby and parking structure is on Los Angeles Street, so construction effects could be relatively significant. Impacts could include decreased access to the hotel, increased noise and vibration, decreased visibility of signs, and a general disinterest in the area.
Starbucks	Starbucks Coffee is on the corner of 1st and Los Angeles Streets. It would be affected track and couplet station platform construction on Los Angeles Street. Starbucks would suffer the same impacts as the Kyoto Grand Hotel; however, Starbucks could be accessed from 1st Street, alleviating some impacts.
Azalea Restaurant	Azalea Restaurant is near the corner of 1st and Los Angeles Streets. It would be significantly impacted by construction of track and the couplet station platform on Los Angeles Street. Like Starbucks and the Kyoto Grand hotel, the restaurant would be significantly impacted by

Table 5-7. Businesses in the Civic Center Potentially Affected During At-Grade Emphasis LRT Alternative Construction	
Business	**Construction-Related Impacts**
	construction activities.

If street closure is necessary to construct the tunnel and 2nd Street station - Broadway Option, the businesses mentioned in the previous section, except those located within the Civic Center area, would be negatively affected by decreased access. Table 5-8 shows a detailed breakdown of businesses in close proximity to proposed station sites.

Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative	
Business	**Construction-Related Impacts**
Flower Street	
Westin Bonaventure	The entrance to the Westin Bonaventure is on Flower Street at the corner of 4th and Flower Streets. Station construction would decrease access to the hotel from Flower Street, and construction impacts could decrease overall appeal of the hotel entrance from Flower Street. The hotel has an entrance from Figueroa Street that could alleviate the severity of this impact.
Suede	The entrance to Suede restaurant is on Flower Street near the corner of 4th and Flower Streets. Station construction would decrease access to the restaurant from Flower Street, and construction impacts could decrease overall appeal of the restaurant. The restaurant has access from the Westin Bonaventure Hotel that could alleviate the severity of this impact.
Citi Parking Entrance	The entrance to the Citi parking lot located near the corner of 5th and Flower Streets would have decreased access due to construction and could be impacted by temporary, intermittent street closures.
Starbucks	Starbucks, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4th and 5th Streets. Starbucks is within the station construction area and would be affected by noise, vibration, and dust.

Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative

Business	Construction-Related Impacts
Citibank	Citibank, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4th and 5th Streets. Citibank is located in the station construction area and would be affected by noise, vibration, and dust. Citibank could be affected by the loss of seven curb parking spaces directly in front of its entrance on Flower Street.
Uptown Drug Store	The proposed underground station between 4th and 5th Streets would affect Uptown Drug Store on the ground floor of the Citi Bank Center. Uptown Drug Store is located in the station construction area and would be affected by the noise, vibration, and dust.
California Computer Center	The California Computer Center, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4th and 5th Streets. Although the Computer Center is not located in the station construction area, it is close to it, and might be affected by noise, vibration, and dust.
2nd Street	
Grand Kyoto Hotel	The Grand Kyoto Hotel would be affected by construction of the 2nd Street station - Los Angeles Street Option. Although the hotel is not directly in the station construction area, the main entrance to the hotel lobby and parking structure are located on Los Angeles Street. Noise, dust, and vibration from construction could impact the hotel's business.
Starbucks	Starbucks would be affected by construction of the 2nd Street station - Los Angeles Street Option. Although Starbucks is not directly in the station construction area, the entrance is located on Los Angeles Street, and noise, dust, and vibration from construction would impact business.
Azalea Restaurant	The Azalea Restaurant would be affected by construction of the 2nd Street station - Los Angeles Street Option. Although the restaurant is not directly in the station construction area, the entrance is located on Los Angeles Street, and noise, dust, and vibration from construction would impact business.
Little Tokyo	

Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative

Business	Construction-Related Impacts
American Apparel	American Apparel is located on 2nd Street between Azusa Street and Central Avenue. Cut and cover construction is proposed on 2nd Street and would begin directly in front of American Apparel. This could cause significant impacts during construction. American Apparel and other businesses nearby depend mostly on foot traffic. Any heavy construction in this area would likely decrease accessibility and make the area less desirable for consumers to visit. The temporary removal of curb parking spaces in front of American Apparel along 2nd Street would also likely lead to significant impacts. Cut and cover construction would likely last between 24-48 months and involve temporary, intermittent street closures.
EBISU	This retail store is located directly across from the American Apparel store and would be similarly impacted.
KIMSKImakes	This retail store is adjacent to American Apparel and would be similarly impacted.
SPITZ Doner Kebab	This restaurant is on 2nd Street near businesses mentioned above and would be similarly impacted.
2nd Street Jazz Bar & Grill	The 2nd Street Jazz Bar & Grill is located on 2nd near Central Avenue near other businesses mentioned above. It would likely be similarly impacted.
Subway	Subway is located adjacent to 2nd Street Jazz Bar & Grill and would likely be similarly impacted.
City Hair	City Hair is located next to Subway near the corner of 2nd Street and Central Avenue and would be similarly impacted.
FedEx Kinko's	FedEx Kinko's is located across from City Hair on the northwest corner of 2nd Street and Central Avenue and would be similarly impacted. However, FedEx Kinko's is accessible from both 2nd Street and Central Avenue, and impacts may not be as significant as those to previously mentioned businesses.
Honda Plaza	Honda Plaza is a strip mall bounded by 2nd Street, Central Avenue, and Alameda Street. Nineteen businesses in this plaza could be impacted by cut and cover construction proposed on 2nd Street. Access to the parking entrance on 2nd Street would be decreased during construction, and construction noise and dust would decrease the general desirability of the area. Therefore, construction could result insignificant impacts. Honda Plaza has another parking entrance on Alameda Street that would not be

Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative	
Business	**Construction-Related Impacts**
	impacted during construction. This entrance would alleviate some of the accessibility issues along 2nd Street.

5.2.4 Fully Underground LRT Alternative – Little Tokyo Variation 1

West of Central Avenue, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would follow generally the same alignment as the Underground Emphasis LRT Alternative and would have similar construction-related impacts to local businesses. However, this alternative does not propose a pedestrian overpass or automobile underpass at the intersection of 1st and Alameda Streets. This would result in less significant impacts to nearby businesses than the Underground Emphasis LRT Alternative.

This alternative would remove the same seven curb parking spaces as the Underground Emphasis LRT Alternative on Flower Street between 5th and 3rd Streets but not the 13 spaces on Alameda Street between Aliso and 2nd Streets. This alternative would include extensive street relocation and roadway work east of Alameda Street along 1st Street. Most roadway work on 1st Street for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would occur between Alameda and Vignes Streets. Table 5-9 shows businesses on the south side of 1st Street that could be impacted by construction.

Table 5-9. Businesses within Close Proximity to Station Sites Proposed for the Fully Underground LRT Alternatives	
Business	**Construction-Related Impacts**
Kato's Sewing Machines	Kato's Sewing Machine is a retail store near the corner of 1st and Rose Street that could be significantly impacted by construction activities. The only entrance for customers is on 1st street, and any major construction activity would likely deter customers from visiting the store.
P.G. Motoring	P.G. Motoring is a retail store located just east of Kato's Sewing Machine and could also be significantly impacted by construction on 1st Street. The only entrance for visitors is on 1st Street. This entrance would be significantly impacted during temporary street closures as construction progresses.
District Healing	The District Healing Center's only parking entrance is on 1st Street. It could be significantly impacted during temporary, intermittent street closures during

Center	construction. Visitors to the District Healing Center would have to park on Hewitt Street and enter the building from the secondary entrance on that street.
Hiroshima Building	The Hiroshima Building is a two-story office building that would be significantly impacted by construction on 1st street. The hotel's only parking entrance fronts 1st Street. However, the Hiroshima Building is attached to parking behind the building that is accessible from 2nd and Garey Streets. This lot could be used as an alternative parking space during construction.
724 1st Street	The parking entrance to the office building on the corner of 1st and Garey Streets would not be significantly impacted during construction because it is located on the corner of 2nd and Garey Streets. However, access to the entrance to the building on 1st Street would be significantly limited during construction.

5.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 follows generally the same alignment as Fully Underground LRT Alternative – Little Tokyo Variation 1 and would have similar construction-related impacts to local businesses.

5.3 Construction Spending on the Regional Economy

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits like direct and indirect job creation and investment or spending by suppliers whose goods and services are used in a project. To quantify the economic effects of construction spending, this analysis used 2008 multipliers from the Regional Input-Output Modeling System developed by the Bureau of Economic Analysis at the U.S. Department of Commerce. Los Angeles County Economic Development Corporation recently used this model for an Economic Impact Study report on the Metro Gold Line Foothill Extension Phase 2A.

Construction cost estimates for each build alternative, from which land acquisition and fees were excluded, were used to estimate total economic output, total employment, total earnings and total tax revenue. Direct investment in the form of capital construction cost can lead to investment from area business. Such businesses look to take advantage of the increase in employment activity and purchase of supplies and equipment. Such investment is considered indirect investment.

Both direct and indirect investment streams provide businesses revenue and personal income, and income spent throughout the economy supports other jobs and related spending. These secondary effects are referred to as induced impacts. Table 5-10 show the effects of the build alternatives on these forms of indirect investment.

Total output represents cumulative impacts associated with revenues of businesses involved in direct sales of the build alternatives or indirect sales from those businesses selling goods and services to workers who are directly involved in construction or operation activities of build alternatives. Total earnings include earnings from all direct and indirect workers associated with each build alternative. Total tax revenue includes income and sales taxes and local fees that would be generated as a result of increased job creation and spending from the build alternatives.

The At-Grade Emphasis LRT Alternative is estimated to generate the least amount of sales of the build alternatives. Its lower capital costs reflect the relatively low amount of materials and labor it would require.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have the most beneficial economic impact of the build alternatives. At a cost of $1.54 billion, this alternative could generate increases in tax revenues of approximately $143 million and increase earnings by approximately $1.13 billion.

Table 5-10. Regional Economic Effects of the Regional Connector

Alternative	Initial Spending	Total Output	Total Earnings	Total Tax Revenue
At-Grade	$885 million	$1.9 billion	$619 million	$78 million
Underground	$1.2 billion	$2.8 billion	$927 million	$117 million
Fully Underground (Variation 1)	$1.4 billion	$3.2 billion	$1.05 billion	$132 million
Fully Underground (Variation 2)	$1.5 billion	$3.4 billion	$1.13 billion	$143 million

5.4 Construction-Related Employment Impacts

This analysis calculated direct and indirect impacts to employment from construction of the Regional Connector. The calculations used the same multipliers as in section 5.3. Employment impacts would be felt by industries throughout the five-county region in Southern California. Direct employment includes people who work on construction and operation of the Regional Connector. Indirect jobs are those that result from construction-related purchases and spending.

Industries that would be impacted through indirect jobs include professional and scientific services, retail trade, accommodation, food services, and manufacturing. Most direct jobs would occur during construction, while indirect jobs would occur over the entire life of the project. Table 5-11 show the results for each build alternative.

The At-Grade Emphasis LRT Alternative would likely create the fewest jobs of the build alternatives with 13,800. The other three build alternatives could create between 20,800 and 25,400 jobs in the region. Such job creation would not be considered adverse or significant. It would be within SCAG's estimates for job growth in the next decade.

Table 5-11. Construction Related Employment Impacts

Alternative	Direct Employment	Indirect Employment	Total
At-Grade	4,600	9,200	13,800
Underground	6,900	13,900	20,800
Fully Underground (Variation 1)	7,800	15,700	23,500
Fully Underground (Variation 2)	8,500	16,900	25,400

5.5 Regional Economic Impacts

Improved transit accessibility and mobility from downtown and other parts of the region would likely lead to an increase in employment and business opportunities for the regional population. Under each build alternative, transit market share increases (among all modes). Increases would be greatest under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2.

Increases would range from 12,286 additional linked trips under the At-Grade Emphasis LRT Alternative to 17,479 under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2. Compared to the TSM Alternative, the At-Grade Emphasis LRT Alternative would add an additional 6,999 linked trips. Compared to the TSM Alternative, the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2 would add an additional 12,210 linked trips. Regionally, more people would use light-rail transit if the Regional Connector Transit corridor were developed. Greater transit usage would enhance accessibility and attractiveness of businesses surrounding stations sites.

Under each proposed build alternative, urban rail transit market shares would increase compared to the No-Build and TSM Alternatives. The greatest increases would occur under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2. The Fully

Underground Alternatives – Little Tokyo Variations 1 and 2 would increase urban rail transit market share by 6.52 percent compared to the TSM Alternative. An increase in regional transit riders would increase efficiency in travel times and create region-wide, economic benefits for businesses and employees traveling to and from work.

Under each proposed build alternative, urban rail passenger transfers would decrease compared to the No-Build and TSM alternatives. Table 5-12 shows that urban rail transit boardings per linked trip would be reduced under the build alternatives compared to the No Build and TSM alternatives. Reducing urban rail transit transfers would decrease travel time and costs for employees and businesses. It would increase the overall attractiveness of using public transit.

Table 5-13 shows that urban rail passenger miles traveled would increase under each proposed build alternative compared to the No Build and TSM Alternatives. Longer trips would suggest that the average commute of transit riders using LRT lines would increase in distance. This would provide a larger, regional labor pool for employers and increase employment opportunities for workers.

Table 5-12. Urban Rail Boardings per Linked Trip

Alternative	Peak	Off-Peak	Daily
No Build	1.34	1.22	1.30
TSM	1.33	1.22	1.30
At-Grade Emphasis	1.27	1.17	1.24
Underground Emphasis	1.27	1.17	1.24
Fully Underground (Variation 1)	1.27	1.17	1.24
Fully Underground (Variation 2)	1.27	1.17	1.24

Under each proposed build alternative, urban rail passenger boardings for Green Lines and North-South and East-West Lines (currently called the Gold, Blue, and Expo Lines) would increase compared to the No Build and TSM Alternatives. The proposed project would promote urban rail ridership outside of the project area at the regional level.

In general, urban rail provides residents, commuting employees, and visitors a safer, faster, and more reliable transportation alternative to automobiles. Urban rail travel is less expensive and often more convenient for commuters than automobile travel, such as in downtown Los

Angeles where parking is constrained. The four build alternatives would increase accessibility and mobility from downtown and other parts of the region by train in lieu of car. Regional residents and businesses could access the downtown Los Angeles area, and other employment activity centers, more efficiently.

Table 5-13. Urban Rail Passenger Miles Traveled per Linked Trips

Alternative	Peak	Off-Peak	Daily
No Build	8.59	7.11	8.11
TSM	8.56	7.12	8.10
At-Grade Emphasis	8.88	7.62	8.47
Underground Emphasis	8.96	7.70	8.56
Fully Underground (Variation 1)	9.05	7.80	8.65
Fully Underground (Variation 2)	9.05	7.80	8.65

An increase in accessibility to downtown and other parts of the region would increase employment along routes. Residents along transit routes could work farther away, potentially increasing their employment opportunities. Over time, development patterns may concentrate along connected routes because of the increased mobility these locations would offer. Additionally, Transit Oriented Development (TOD) near stations along linked routes would become more attractive as accessibility is increased for transit riders. New TOD developments would beneficially impact regional and local economies.

6.0 POTENTIAL MITIGATION MEASURES

The No Build and TSM alternatives are not anticipated to create adverse economic impacts and, therefore, would not require implementation of any mitigation measures.

Mitigation measures for the build alternatives would include:

- Compensation to property owners for acquisition of property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Relocation assistance for affected property and business owners in compliance with the California Relocation Act
- Measures to assist business owners significantly impacted by temporary construction activity (temporary parking, marketing programs, and other measures to be identified by Metro working with the appropriate businesses).
- Replacement parking locations and strategies (Metro is committed to implementing a feasible parking replacement plan that would reduce parking impacts to a less than significant level).

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

The No Build Alternative would include transit investments already planned in the Metro 2009 LRTP. It proposes no construction or physical changes to the study area. Therefore, this alternative would not create any adverse, economic or fiscal impacts. Given that an LRT system through downtown Los Angeles would not be constructed under the No Build Alternative, economic benefits would not occur in direct and indirect job creation and investment or spending by suppliers whose goods and services are used in a project. Since the No Build Alternative would forego beneficial economic impacts, such as increased employment opportunities or increased direct and indirect revenues that would occur with the development of the build alternatives, an adverse impact could occur on the regional economy.

7.1.2 CEQA Determinations

CEQA guidelines state that the economic effects of a physical change may be used to determine if the change is a significant change to the environment.

The No Build Alternative would not include construction and would not substantially change the physical environment. Therefore, this alternative would have no adverse economic or fiscal impacts and no mitigation measures would be required.

7.2 TSM Alternative

7.2.1 NEPA Findings

The TSM Alternative would include minor transportation improvements. It would not involve substantial physical changes to the environment and, therefore, would not have any adverse economic or fiscal impacts. However, the TSM Alternative would not result in beneficial economic impacts to the extent associated with the other build alternatives.

7.2.2 CEQA Determinations

The TSM Alternative would not involve substantial physical changes and would not create a significant economic or fiscal impact. However, this alternative could permanently displace up to 24 parking spaces to make way for new bus stops. This parking displacement could impact some businesses. It is difficult to estimate the exact impact of the parking displacements because bus station locations have yet to be determined. However, with implementation of mitigation measures, impacts would be reduced to less than significant levels.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would improve transit accessibility and mobility in the region. This could increase economic activity and benefit businesses and employees traveling to and from work. This alternative would decrease transit transfers in the region. This would result in decreased travel times and costs for commuting employees.

Additionally, applying Regional Input-Output Modeling System multipliers, secondary economic impacts of the At-Grade Emphasis Alternative are estimated to produce over $1.9 billion in economic output from construction and operations spending. Total economic output could increase employment by 13,859 jobs and tax revenues by $78 million. This increase in employment and tax revenue would beneficially impact local and regional economies.

7.3.2 CEQA Determinations

Five privately-owned parcels would be acquired for construction of the At-Grade Emphasis LRT Alternative. Acquisition of these parcels would result in annual property tax revenue losses of $186,734. This revenue loss would equal about 0.76 percent of the property tax base of properties that abut the alignment ($24,381,100). Thus, property tax revenue losses would be a less than significant impact. Losses in property tax revenues would likely be offset by increased property values in areas surrounding new stations.

This alternative would have temporary construction-related impacts (between 24-48 months) to local businesses in the project area. These impacts would include dust, noise, street closures, the permanent displacement of up to 80 curb parking spaces and possible sidewalk closures. These impacts could reduce visibility, accessibility and attractiveness of local businesses. Construction impacts would have a significant impact to activity levels and revenue streams of businesses along the alignment.

Approximately 30 businesses could be impacted by construction activity. Implementation of mitigation measures, such as compensation to property for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

The At-Grade Emphasis LRT Alternative would create construction-related employment growth, adding up to 13,789 employees to the area economy. However, this growth in employment would be within planned levels and would not represent a significant impact to the economy.

7.4 Underground Emphasis LRT

7.4.1 NEPA Findings

Like the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would improve accessibility and mobility and reduce travel time and costs in the region. This alternative could encourage greater economic activity and would provide benefits for businesses and commuting employees.

The Underground Emphasis LRT Alternative would result in an economic output of $2.8 billion and would increase direct and indirect employment by over 20,789 jobs. This economic growth would be within planned levels for Los Angeles and Los Angeles County. Tax revenues are estimated to increase by $117 million. Increased revenues would result from new jobs and spending on project construction and operations and have beneficial impacts to local and regional economies.

7.4.2 CEQA Determinations

The Underground Emphasis LRT Alternative would require land acquisitions for tunnel boring, station construction, and station sites. Twenty privately-owned parcels would be acquired. Land acquisitions could decrease annual property tax revenues by $286,800 or 1.2% of the property tax base of businesses that abut the proposed alignment. This would be a less than significant impact. Decreased property tax revenues would likely be offset by increased property values in areas surrounding new stations.

The Underground Emphasis LRT Alternative would have temporary construction-related impacts including dust, noise, street closure, the permanent displacement of up to 20 parking spaces and possible sidewalk closures. This could reduce the visibility, accessibility and attractiveness of local businesses.

Construction could affect approximately 38 businesses along the alignment. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the

alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

7.5 Fully Underground LRT – Little Tokyo Variation 1

7.5.1 NEPA Findings

As with the other build alternatives, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would improve accessibility and mobility and reduce travel times and costs in the region. This could encourage greater economic activity and benefit businesses and commuting employees.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 could create a total economic output of over $3.2 billion and increase employment by 23,534 jobs. Such employment growth would be within growth estimates. Overall, an increase in employment and economic output would beneficially impact local and regional economies.

7.5.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would generally require the same land acquisitions as the Underground Emphasis LRT Alternative. The exception would be businesses on the block bounded by 1st, Alameda and 2nd Streets, and Central Avenue, and business located on the south side of 1st Street east of Alameda Street. However, Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not be directly impacted by construction activities.

Approximately five businesses along 1st Street could be impacted during construction from street relocation and road work. Implementation of mitigation measures, such as compensation to property owner for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Land acquisitions would result in property tax losses of approximately $300,900, or 1.2 percent of the tax revenue base of properties abutting the alignment. This would be a less than significant impact. Property tax revenue losses would likely be offset by increases in property values in areas surrounding new stations.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

7.6 Fully Underground LRT – Little Tokyo Variation 2

7.6.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have similar impacts and could utilize similar mitigation measures as the Fully Underground Emphasis LRT Alternative – Little Tokyo Variation 1. It would improve regional connectivity and mobility and reduce travel times and costs region-wide. This could encourage greater economic activity and benefit businesses and commuting employees.

This alternative could produce an economic output of $3.4 billion and increase employment by 25,396 jobs. This alternative would have the greatest regional economic impact of the four build alternatives. Increases in employment and economic output would beneficially impact local and regional economies.

7.6.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require nearly the same land acquisitions as the Fully Underground LRT Alternative – Little Tokyo Variation 1. The exception would be acquisition of two additional parcels on 1st Street between Hewitt and Garey Streets. Property tax revenue losses with this alternative are estimated to be $328,300 or 1.1 percent of the tax revenue base of properties that abut the alignment. This would be a less than significant impact. Losses to property tax revenue would likely be offset by increased property values in areas surrounding new stations.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have similar construction-related impacts to local businesses as the Fully Underground LRT Alternative – Little Tokyo Variation 1 because they both generally follow the same alignment. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

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Draft Environmental Impact Statement/
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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
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APPENDIX CC

SAFETY AND SECURITY

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Safety and Security
Technical Memorandum

March 23, 2010

Prepared for

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ACRONYMS

CBC	California Building Code (CBC)
CCR	California Code of Regulations (CCR
CCTV	Closed-Circuit Television cameras
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
DHS	Department of Homeland Security
DVR	Digital Video Recorder (DVR)
FTA	Federal Transportation Authority
LACFD	Los Angeles County Fire Department (LACFD)
LACSD	Los Angeles County Sheriff's Department's (LACSD)
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADWP	Los Angeles Department of Water and Power (LADWP)
LAFD	Los Angeles Fire Department (LAFD)
LAPD	Los Angeles Police Department (LAPD
LRT	Light Rail Transit
LRV	Light rail vehicles
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association (NFPA
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users
TSA	Transportation Security Administration (TSA)

TVA	Threat and Vulnerability Analysis
UFC	Uniform Fire Code

1.0 SUMMARY

This technical memorandum identifies, evaluates, and characterizes existing and future safety and security issues within the project area as they relate to passengers, pedestrians, motorists, and the public using the surrounding areas. Safety refers to the prevention of accidents to passengers, pedestrians, motorists, or employees through a formal process of hazard identification, assessment, and resolution. Security refers to the prevention of acts defined as unlawful, criminal, or intended to bring harm to another person or damage property.

This crime and security assessment used available crime statistics for the City of Los Angeles and included a review of other transit systems in the United States that are similar to the Regional Connecter Transit Corridor project alternatives.

The affected environment in the project area is represented by a highly urban environment which, for the most part, provides a substantial and adequate infrastructure to benefit pedestrians and the travelling public. As part of the field work for this analysis, observations were made within the project area to document this infrastructure and identify cursory issues that may need to be addressed as the Regional Connector Transit Corridor project proceeds further in design. The assessment found that the existing infrastructure is generally adequate to accommodate the proposed project from a safety perspective.

The alternatives evaluated include:

- No Build Alternative
- Transportation System Management (TSM) Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT Alternative – Little Tokyo Variation 1
- Fully Underground LRT Alternative – Little Tokyo Variation 2

Results of the safety and security assessment show there are no significant adverse safety and security impacts associated with project alternatives that could not be mitigated by design refinements. Although some impacts may be more prevalent between alternatives, all impacts can be mitigated by actions identified in Section 6.0 of this technical memorandum. All proposed mitigation measures relevant to safety and security would be developed in conformance with Metro's Rail Transit Design Criteria and Standards, Fire/Life Safety Criteria, Volume IX. Proposed mitigation measures include providing safe detours for pedestrians and motorists around construction zones and implementing project operational modifications to address potential safety and security issues.

2.0 INTRODUCTION

The purpose of this technical memorandum is to identify, evaluate, and characterize existing and future safety and security issues within the project area as they relate to passengers, pedestrians, motorists, and the public using surrounding areas. This analysis focuses on potential safety and security impacts that may result from the proposed Regional Connector Transit Corridor project.

Safety refers to the prevention of accidents to passengers, pedestrians, motorists, or employees through a formal process of hazard identification, assessment, and resolution. Security refers to the prevention of acts defined as unlawful, criminal or intended to bring harm to another person or damage property. Security also means freedom from threats or uncertainty about the likelihood of such acts.

All proposed stations, at-grade intersections along the light rail transit (LRT) alignment, and crossing locations between intersections were assessed for safety and security issues. The major focus of the safety analysis is how the proposed action(s) may affect light rail transit system passengers, employees, and the overall pedestrian environment/infrastructure. The assessment is not a detailed analysis of motorized travel conditions and traffic mitigation in Los Angeles. However, where appropriate, relevant traffic mitigation and/or concerns have been identified if they might influence pedestrian/motorist interactions.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

The following sections briefly discuss the regulatory framework used to guide the evaluation of project safety and security.

3.1.1 Federal

3.1.1.1 NEPA

The National Environmental Policy Act (NEPA) does not include specific guidance or direction for evaluating alternatives and their relative effects on public safety and security.

3.1.1.2 SAFETEA-LU

SAFETEA-LU was passed to address issues such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. SAFETEA-LU further promotes efficient and effective federal surface transportation programs by focusing on transportation issues of national significance.

Some of the key programs targeted by SAFETEA-LU include safety, equity, innovative finance, congestion relief, mobility and productivity, efficiency, environmental stewardship, and environmental streamlining. SAFETEA-LU gives states more flexibility to use road pricing to manage congestion, and promotes real-time traffic management in all states to improve transportation security.

3.1.1.3 FTA New Starts Program

States with rail fixed guideway systems must comply with Federal Transportation Authority's (FTA) State Safety Oversight Rule. Codified at 49 CFR Part 659, the State Safety Oversight Rule (or Part 659) sets forth FTA's requirements to improve rail transit safety and security. Only those states with rail fixed guideway systems must comply with FTA's State Safety Oversight Rule.

Part 659 requires a state to establish and carry out a safety program plan for rail-based New Starts projects. Part 659 requires safety and security to be considered well before a rail-based New Starts project begins revenue service. Project sponsors must ensure that safety considerations are weighed during the preliminary engineering phase.

3.1.1.4 Fire Services

The Uniform Fire Code (UFC) contains regulations related to construction and maintenance of buildings and use of their premises. Topics addressed in the UFC include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and their premises. The UFC contains specialized technical regulations related to fire and human safety.

3.1.2 State

3.1.2.1 CEQA

Appendix G of California Environmental Quality Act (CEQA) Guidelines draws particular attention to those projects that would "create a potential public health hazard" or "interfere with emergency response plans or emergency evacuation plans." In particular, CEQA highlights the following safety and security concerns:

- Pedestrian and/or bicycle safety;
- Safety conditions for users of public transit systems, including station accidents, boarding and disembarking accidents, right-of-way (ROW) accidents, collisions, fires, and major structural failures;
- Delivery of community safety services, such as police, fire, or emergency services, to locations along a proposed alignment; and
- Security conditions, including incidents, offenses, and crimes.

3.2.2.2 California Public Utilities Commission

The California Public Utilities Commission (CPUC) has adopted General Order 143-B (GO 143B), the *Safety Rules and Regulations Governing Light-Rail Transit in California*. The order describes all the general requirements for light-rail transit, including braking, lighting, operating speeds, ROW standards, and maintenance of light-rail vehicles (LRVs). The Regional Connector Transit Corridor project would be subject to rules and regulations set forth by GO 143-B. In accordance with GO 143 B, all LRV equipment shall be maintained in safe and proper working condition. Once the LRT carrier/operator establishes operating rules and procedures, including grade crossings, the CPUC would have final review and approval of the operating plan. The following lists some of the major rules set forth in GO 143-B.

- **Title 5, Section 01—Headlights.** Every LRV that operates on a separate right-of-way shall be equipped with a headlight or headlights that are capable of revealing a person or motor vehicle in clear weather at a distance of 600 feet. Every LRV that operates on a public street or road shall be equipped with a headlight or headlights that are capable of revealing a person or motor vehicle in clear weather at a distance of 350 feet and shall be designed and adjusted so as not to interfere with the vision of drivers of motor vehicle. Headlights may be dimmed or extinguished under conditions where their use could pose a safety hazard to motorists in adjacent traffic lanes.
- **Title 7, Section 01—Basic Speed Rule.** The operator of an LRV shall at all times operate at a safe speed that is consistent with weather, visibility, track conditions, traffic signal indications, and the indication of Automatic Train Protection systems where used.

- **Title 7, Section 08—Crossing of Street and Highways at Grade.** LRT systems that cross streets, roads, and highways at grade shall install and maintain automatic gate crossing signals to control motor vehicle traffic and automatic warning signals to control pedestrian traffic. When LRV operation is on a street or highway that permits motor vehicle traffic, all intersections shall be controlled by traffic control devices.

- **Title 7, Section 09—Audible Warning.** The LRV operator shall sound an audible warning:

  - When approaching at-grade crossings protected by automatic crossing signals conforming to the requirements of General Order 75-C to control vehicle and pedestrian traffic,

  - At other locations specifically identified in the LRT system's operating rules, and

  - Whenever the operator believes it is necessary and in accordance with the LRT system's operating rules and regulations.

- **Title 9, Section 03—Installation of Curbs, Fences, and Barriers.** Concrete curbs, fences, or barriers shall be installed along sections of the separate right-of-way of an LRT system when there is a likelihood that motor vehicles or pedestrians may leave the traveled way of any nearby street or highway and encroach onto a mainline track.

- **Title 9, Section 04—Alignment Classification.**

  - Exclusive: A right-of-way without at-grade crossings that is grade separated or protected by a fence or substantial barrier, as appropriate to the location (includes subways and aerial structures).

  - Semi-Exclusive: (1) Fully exclusive right-of-way with at-grade crossings, protected between crossings by a fence or substantial barrier, if appropriate to the location; (2) within the street right-of-way, but protected by 6-inch-high curbs and safety fences between crossings (the safety fences should be located outside the tracks).

- **Title 9, Section 05—Emergency Walkways.** An unobstructed emergency walkway at least 30 inches wide and accessible to persons getting off disabled trains shall be provided along all tracks in subways and tunnels, on bridges, and on alignment Classifications 9.04a, 9.04b(1), and 9.04b(2). Walkways shall have a reasonably regular surface and shall not have a slope exceeding 1 foot vertical to 6 feet horizontal. A single walkway may serve more than one track.

- **Title 11, Section 01—Fire Protection Requirements.** All LRT systems shall establish fire protection requirements to control potential fire hazards. The minimum requirements for underground segments of the LRT system shall be as specified in the Standards for Fixed Guideway Transit Systems published by the National Fire

Protection Association (NFPA 130). The minimum requirements for all other segments shall be established by the LRT system based upon a documented engineering analysis of the factors affecting fire hazards and fire risks using NFPA 130 as a guide.

3.1.2.2 Fire Services

California Code of Regulations (CCR) Title 24 of the California Building Code (CBC) is a compilation of building standards. State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code and include regulations for building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, and fire suppression training. This code would apply to design criteria for safety of the proposed project.

3.1.3 Regional/Local

Public services (i.e., police and fire protection) are generally regulated by local agencies. Therefore, design of these components and operation of the proposed project alternatives would be regulated primarily by the policies and agencies of Los Angeles County and the City of Los Angeles. Metro also implements policies, plans, and actions specifically directed toward maintaining safety and security during operation of the transit system.

3.1.3.1 Los Angeles County Metropolitan Transportation Authority (Metro)

Metro is responsible for compliance with all FTA and CPUC regulations governing the safe operation of the transit systems, both for patrons and its employees. In operating light-rail transit, subways, and bus transit throughout Los Angeles County, Metro has established departments to address specific issues. Metro relies on the Grade Crossing Policy, revised in December of 2003, for determining appropriate grade separation of LRT. The Metro Emergency Response Plan is incorporated into Metro's standard operating procedures and was established to address the potential for emergencies to occur and the ways in which Metro employees are to respond. Excerpts from both of these documents are provided in the following paragraphs.

Metro Grade Crossing Policy for Light-Rail Transit

The Grade Crossing Policy is intended to provide a structured process for evaluating potential grade separations versus at-grade operation along light-rail lines. The policy describes a three-step process.

Milestone 1: Initial Screening. A preliminary planning-level assessment of roadway crossings based upon readily available, planning-level data for roadway volumes and proposed train frequencies leading to an initial categorization of roadway crossings into three groups: "At Grade Should be Feasible," "Possible At Grade Operation," and "Grade Separation Usually Required."

Milestone 2: Detailed Analysis. This milestone is a detailed evaluation of operations, taking into account peak period, movement-by-movement, analysis of roadway traffic in

conjunction with an assessment of potential impacts to rail operations due to priority control. It provides a more refined assessment of feasibility of at-grade operation and also identifies operational trade-offs between roadway traffic conditions and rail operations. This review includes an initial assessment of safety issues based on site-specific evaluation of geometric conditions and observed and/or projected use of proposed crossings. It results in a preliminary determination of locations that may be operated at-grade versus grade-separated.

Milestone 3: Verification. This step includes the process of developing consensus regarding the proposed design solution with local constituencies, including other involved agencies and the community as appropriate. This step may include preliminary engineering studies and cost estimates for alternative treatments. It may also include refinement of projected traffic volumes and validation of traffic and rail operations using simulation modeling. Finally, it may include additional effort on safety issues and countermeasures. At the conclusion of this milestone, it is expected that all technical studies will have been completed leading to a final recommendation by Metro for the crossing configuration.

Metro Rail Emergency Response Plan

The Emergency Response Plan is intended to establish guidelines for standard operating policy and procedures for the mobilization of Metro employees and resources during an emergency situation. The Plan is shared with other public safety resources and agencies to provide a fast, controlled, and coordinated response to the various emergencies that may occur on the Metro rail system.

The goal of this Plan is to establish guidelines that would impact the fewest number of responders, allowing the emergency situation to be mitigated with as little impact to the system as practicable and service to be restored as quickly as possible. To this end, only the personnel who are essential to respond to a particular emergency situation should be called. As an incident grows, the list of responders may also grow to conduct investigations and provide recovery efforts necessary to restore service.

Certain objectives must be met to implement guidelines in the Emergency Response Plan. They are:

- Minimize potential danger to passengers, employees, and others during emergency incidents.
- Maximize the effectiveness of the Metro during an emergency incident.
- Ensure there is proper investigation into the cause of the incident.
- Restore service or provide alternative service at the earliest possible time.

Fire/Life Safety Design Criteria

The Fire/Life Safety Design Criteria would need to address specific fire protection requirements for design and construction of the Regional Connector Transit Corridor project systems and equipment. The criteria would establish minimum requirements to provide a reasonable degree of safety from fire and its related hazards.

Fire safety on a light-rail transit system is achieved through a composite of facility design, operating equipment, hardware, procedures, and software subsystems that are integrated to provide protection of life and property from the effects of fire. The criteria identify and discuss fire safety as they relate to the following specific design criteria: station and guideway facilities; passenger vehicles: vehicle yard and maintenance facilities: system fire/life safety procedures; communications; rail operations control; and inspection, maintenance, and training.

3.1.3.2 Los Angeles County

The Los Angeles County General Plan includes policies that also affect police and fire services in the project area, including:

- *Police Services*: Policy PS 8.1 promotes phased development, whereby land use proposals are developed in conjunction with approved law enforcement capabilities.
- *Fire Services*: The Los Angeles County Fire Code and the General Plan safety element establish the standards, policies, and goals for fire suppression facilities within the County. In addition, the General Plan includes policies (such as Policy PS 7.1) that promote phased development, whereby land use proposals are developed in conjunction with approved fire protection capabilities.

3.1.3.3 City of Los Angeles

City of Los Angeles General Plan

The City of Los Angeles General Plan Safety Element identifies various goals and policies to improve the overall safety and security of all residents within the City. Specifically, Goal 2 of the General Plan indicates that the City should strive to respond with the maximum feasible speed and efficiency to disaster events to minimize injury, loss of life, property damage, and disruption of the City's social and economic life and its immediate environs. Objective 2.1 of this General Plan Goal further clarifies that the City should develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans and programs.

The City's General Plan policies regarding safety and security include:

2.1.1 Coordination. Coordinate program formulation and implementation between City agencies, adjacent jurisdictions, and appropriate private and public entities to achieve, to the greatest extent feasible and within the resources available, the maximum mutual benefit with the greatest efficiency of funds and staff.

2.1.3 Information. Develop and implement, within the resources available, training programs and informational materials designed to assist the general public in handling disaster situations in lieu of or until emergency personnel can provide assistance.

2.1.5 Response. Develop, implement, and continue to improve the City's ability to respond to emergency events.

2.1.6 Standards/fire. Continue to maintain, enforce, and upgrade requirements, procedures, and standards to facilitate more effective fire suppression. The Fire Department and/or appropriate City agencies shall revise regulations or procedures to establish minimum standards for location and expansion of fire facilities based upon fire flow requirements, intensity and type of land use, life hazard, occupancy, and degree of hazard to provide adequate fire and emergency medical event response.

Police Services: While there are no specific local or regional plans that address police services, the City's citywide General Plan framework and specific community plan documents do contain policies and objectives that deal with ensuring adequate police service infrastructure for the Los Angeles Police Department (LAPD).

Fire Services: The City of Los Angeles both surrounds and adjoins other cities, counties, and state and federally controlled lands; therefore, it has joined a variety of mutual aid agreements with other jurisdictions for the cooperative response and management of fires and other emergency incidents. The Los Angeles Fire Department (LAFD) participates in automatic response agreements with the County. The City of Los Angeles General Plan, the City of Los Angeles Fire Code (part of the City's municipal code), and the General Plan safety element contain the goals, objectives, and policies related to fire prevention and suppression services.

City of Los Angeles Community Plans

The project area crosses two designated City of Los Angeles communities: Central City and Central City North. Both of these communities have community plans that have applicable policies for police services and fire services. These policies are discussed in the following paragraphs.

Central City Community Plan

The Central City area is located south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of the Harbor Freeway (SR 110), and west of Alameda Street. Applicable Central City Community Plan policies, listed by community facility type are as follows:

Police Services: Policy 5-1.1 requires consultation with the LAPD during review of development projects and land use changes to determine law enforcement needs and requirements. Programs complementing this policy include requiring decision-makers to address a proposed project's potential demand for police services.

Fire Services: Policy 6-1.1 requires coordination with the LAFD during review of significant development projects to determine potential impacts on fire service demand. Implementation of this policy requires decision-makers to address potential impacts of a development project on fire services and encourages consultation with the LAFD.

Central City North Community Plan

The Central City North area is located adjacent to downtown Los Angeles. The Los Angeles River bounds it on the east; the City of Vernon to the south; Alameda Street, Cesar Chavez Avenue, Sunset Boulevard, and Marview Avenue to the west; and Stadium Way, Lilac Terrace, and North Broadway to the north. Applicable Central City North Community Plan policies, listed by community facility type, are as follows:

Police Services: Policy 8-1.1 requires consultation with the LAPD during review of significant development projects to identify potential impacts on police services.

Fire Services: Policy 9-1.1 requires coordination with the LAFD during review of significant development projects to determine potential impacts on fire services. This policy requires decision-makers to address potential impacts of a proposed project on fire services.

City of Los Angeles Emergency Preparedness Department

In addition to numerous police and fire stations located near the proposed alignments, the City of Los Angeles' Emergency Preparedness Department is responsible for providing citywide emergency management services. The Mayor and City Council established the Emergency Preparedness Department in July 2000 to improve the direction and control of local emergency preparations, response, and recovery activities, and to ensure that the needs of all the citizens of Los Angeles are met in the event of a local emergency.

The Emergency Preparedness Department coordinates the interdepartmental preparedness, planning, training, and recovery activities of the Emergency Operations Organization, its divisions, and all City departments. Additionally, it serves as a liaison with other municipalities, state and federal agencies, and the private sector, and performs related public education and community preparedness activities.

3.2 Standards of Significance

Appendix G of the California State CEQA Guidelines draws particular attention to those projects that would "create a potential public health hazard" or "interfere with emergency response plans or emergency evacuation plans." A significant adverse safety and security impact would occur under CEQA if an alternative would:

- Create the potential for increased pedestrian and/or bicycle safety risks
- Create substantial adverse safety conditions, including station accidents, boarding and disembarking accidents, right-of-way accidents, collisions, fires, and major structural failures
- Substantially limit the delivery of community safety services, such as police, fire, or emergency services, to locations along the proposed alignment
- Create the potential for adverse security conditions, including incidents, offenses, and crimes

3.3 Evaluation Methodology

3.3.1 Safety

A safety assessment includes consideration of potential safety conflicts for pedestrians, bicyclists, transit riders, and automobiles as well as existing conditions of the project area, which is a very heavily used and diverse urban environment. The pedestrian safety assessment along the proposed LRT corridor focused on three separate categories, including:

- Pedestrian safety at station locations
- Pedestrian safety near the trackway

- Pedestrian safety at designated grade crossings

To evaluate these potential issues, other similar conditions were reviewed along existing LRT lines within Los Angeles County. In addition, lessons learned from other system studies were utilized, including TriMet's (Portland, OR) recently published *Light Rail Pedestrian and Bicycle Crossing Final Report* (TriMet 2008). Best practices in safety and security analysis relative to LRT systems were evaluated using guidance contained in the *Transit Cooperative Research Program (TCRP) Report 17 – Integration of Light Rail Transit into City Streets* (Korve Engineering, Inc. 1996), *TCRP Report 69 – Light Rail Service: Vehicular and Pedestrian Safety* (Korve Engineering, Inc. 2001), and *TCRP Report 117 – Design, Operation, and Safety of At-Grade Crossings of Exclusive Busways* (Vanesse, Hangen, Brustlin, Inc. 2007). Input from Metro fire and life safety staff was sought, and information and concerns were gathered at public meetings and during scoping.

Analysis factors were evaluated at appropriate locations such as at intersections, along existing corridors, at proposed station platforms, and near important generators of pedestrian movements such as the Civic Center, the Financial District, and Little Tokyo. In addition, fire services and emergency response factors were taken into account. Station and track design and operational procedures are also pertinent to efficiency in emergency response and were assessed.

Pedestrian and bicycle safety analysis factors considered included, but were not limited to, the following:

- Necessary clearances for boarding platforms and emergency walkways
- Location and adequacy of public street crossings
- Location and adequacy of LRT crossings
- Location and adequacy of barriers (curbs, fences, and vegetation) to channelize pedestrians and bicyclists
- Presence of existing and planned lighting
- Potential for decreased emergency services response times

Mitigation of rail passenger and employee accident potential was evaluated through a process of hazard identification, assessment, and resolution. The number and types of potential accidents for each of the alternatives were estimated based on existing Metro data and other available information. This was expressed in the number of "accidents per mile" (i.e., accident rate) within the corridor. In addition, accident potential was categorized by potential for station accidents, boarding and disembarking accidents, and right-of-way accidents. Developing potential accident rates and data was helpful in identifying possible system concerns that might be mitigated.

System safety factors evaluated included the alignment configuration, engineering safeguards, and the type of control system proposed. System safety documentation prepared previously was reviewed for information appropriate to this environmental document. All proposed grade crossings were evaluated for consistency with the Los Angeles County Metropolitan Transportation Authority (LACMTA) Board adopted *Grade Crossing Policy for Light Rail Transit* (Metro 2003) to ensure safe surface or grade-separated operation.

Other data evaluated for the safety analysis include traffic queuing at select locations; sight distance at intersections and along the proposed LRT alignment, type and availability of pedestrian/patron stacking areas, overall area geometrics, readability/delineation of proposed signing and pavement markings, and overall operational observations.

3.3.2 Security

Security refers to prevention of acts defined as unlawful, criminal, or intended to bring harm to another person or damage property. The project alternatives, including proposed station areas, operational parameters, and surrounding neighborhoods, were evaluated to determine potential for crime risks.

To fully evaluate the security risks, a Threat and Vulnerability Analysis (TVA), following FTA (FTA C 5800.1 and FTA Project Management Guidelines, Chapter 2) and Metro protocols, will ultimately be conducted for the selected locally preferred alternative. That process will give a more refined and detailed analysis of the security environment by identifying domestic and international security threats and potential vulnerabilities/shortcomings in the transit system, and result in recommendations to reduce those vulnerabilities to acceptable levels.

The process for determining vulnerabilities begins with identifying and grouping transit agency assets based on their criticality to transit operations, their attractiveness as targets for security breaches or terrorist attack, and their vulnerability to the impacts of a successful breach or act of terrorism. Critical assets are defined as the specific assets most critical to Metro's ability to provide transit services and to protect people.

Threat types are then identified using existing crime statistics for the area and threat information received from local, state, and federal law enforcement sources. Each critical asset is then assessed for its vulnerability to each potential threat, coupled with the probable frequency of occurrence for each threat. Severity of consequences for each threat is then given a rating from catastrophic to negligible.

This information is put into a criticality matrix, which organizes the resulting consequences into categories of high, serious, and low. The matrix helps to prioritize consequences and focus available resources on the most serious threats requiring resolution while effectively managing the available resources.

To evaluate security risks of the proposed alternatives, interviews were conducted with the Metro Security team including representatives of the LAPD and U.S. Homeland Security, to determine current protocols; identify and document current crime statistics around existing

Metro rail stations and major bus stops in the project area; identify project-likely crime issues around the proposed LRT stations; and identify design factors that may maximize the security of the expected patrons and pedestrians around station areas. Comparative crime statistics from Metro's recent experience with the Metro Gold Line to Pasadena and Metro Orange Line, along with statistics from other Metro urban area LRT systems and metropolitan areas in the United States, were reviewed to help identify potential effects on neighborhood crime and security with the proposed operating facilities. Crime data for the areas surrounding the proposed alignment compared to other existing Metro station area neighborhoods and other urban LRT systems similar to this project would be incorporated in the Threat and Vulnerability Assessment.

Mitigation measures were identified that could be incorporated into the security plan for the locally preferred alternative. The measures identify possible threats and propose appropriate actions to minimize potential impacts of the project.

4.0 AFFECTED ENVIRONMENT

Existing conditions along the Regional Connector Transit Corridor alternatives alignments were assessed to establish a baseline by which alternatives could be evaluated. For purposes of safety and security, this evaluation was performed on a qualitative basis. The assessment of existing conditions centers on safety of pedestrians, LRT passengers, and employees; response times for emergency services (police, fire, and ambulance); crime and security statistics; and other relevant data as available through Metro and other sources.

4.1 Safety

Metro is the regional agency that serves as transportation planner and coordinator, designer, builder, and regional operator of transit services in Los Angeles County. Metro is regulated by the CPUC. In operating LRT, subways, and bus transit (including dedicated bus transit ways) throughout Los Angeles County, Metro has established departments to address specific issues. One department is the Transit Education Programs Department, which works to create programs to educate the public on proper safety practices with respect to LRT.

To improve the safety of passengers and pedestrians, Metro operates all transit-related vehicles according to the guidelines established by the CPUC. The CPUC sets requirements for vehicle and pedestrian crossing gates to discourage pedestrians and motorists from crossing tracks when an LRV is approaching.

Other general safety regulations established by the CPUC for LRV include rear view mirrors, audible warning devices, and grab handles for standing passengers. The CPUC also regulates LRV braking, lighting, and operating speeds.

Separating the tracks from street level reduces potential for conflict between vehicles and LRVs. Metro has also established a Grade Crossing Policy for LRT that establishes a three-step analysis to determine the required grade crossing (at-grade or grade-separated) along light-rail alignments. Additional programs, such as the Rail Safety Education Program, educate local residents, specifically children, on safety around LRVs.

Metro is constantly working to improve passenger and bystander safety along its current LRT lines. There are a variety of programs established by Metro to educate rail users and nonusers alike about proper safety precautions around operating transit vehicles. The transit safety team offers courses aimed at improving passenger and bystander safety. Photos and video from existing stations and rail crossings along the Blue and Gold Lines are used to illustrate safety around rail alignments and rail crossings.

Additionally, the Rail Safety Orientation Safety Program offers guided tours for students, including safety and system information and limited rides on the Gold, Red, and Blue Lines. While most of the education and training is geared toward elementary and middle school students, the transit safety team also works with community organizations to educate local residents on the proper safety procedures and precautions around LRVs.

In addition to safety considerations for the day-to-day operations of the LRT lines, safety must also be considered during construction activities for the LRT infrastructure. During construction, precautions must be made for the safety of pedestrians, bicyclists, motor vehicle drivers, and construction workers. In many cases, interim modifications to sidewalks, parking areas, travel lanes, and traffic control signing must be made to advise the public of construction activities. Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing may be necessary to prevent specific travel movements that may create pedestrian and vehicle circulation hazards. Security measures would have to be in place when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state. These conditions often require temporary, secure barricades during the night time hours when construction personnel are not on site.

Construction methods and sequencing may also affect emergency service response times. Construction traffic control planning would be utilized during construction activities to coordinate temporary route modifications such that emergency service providers can plan ahead and minimize potential delays in response times due to LRT construction activities.

4.1.1 Pedestrian Safety

Downtown Los Angeles contains a great diversity of streets, places, buildings, and environments. Adding an LRT connection along the Flower and 2nd Street alignment may have the effect of increasing potential safety conflicts for pedestrians, bicyclists, transit riders, and automobiles within some of the most heavily used portions of downtown Los Angeles. There is a high level of pedestrian traffic in the project area. Pedestrian density is most concentrated in the vicinity of the commercial and governmental facilities in the Civic Center and Financial Districts.

4.1.2 Existing At-Grade Intersection Conditions

The following sections describe the existing at-grade intersection conditions applicable to pedestrian safety within the project area. These existing conditions would inform the design process and proposed mitigations to address pedestrian and motorist safety concerns.

4.1.2.1 Flower Street and 6th Street (Photo 1)

- This intersection has marked crosswalks on all four legs of the intersection.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection

- Crosswalks are colored asphalt with a stamped brick pattern. Stamped pattern is absent for the path connecting the diagonal wheelchair ramps, presumably to provide a smooth travel surface for wheelchair users.
- Intersection is well lit, with street lighting present on all four corners.
- 6th Street is a one-way facility in the eastbound direction and traffic at this location, on 6th, is primarily from the SR 110 freeway off-ramps. This can cause elevated travel speeds in the eastbound direction which may be a concern to pedestrians.

Photo 1 - The west leg of 6th Street carries one-way traffic from SR 110. Vehicle speeds were observed in the field to be higher than would be expected in a downtown environment.

4.1.2.2 Flower Street and 5th Street (Photo 2)

- This intersection has marked crosswalks on all four legs of the intersection.
- Wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner for three of the corners, and it generally points toward the middle of the intersection. The southeast corner of the intersection does have two wheelchair ramps lining up with the appropriate crosswalk across the relevant leg of the intersection.

Photo 2 - The west leg of 5th Street carries one-way traffic to SR 110.

- Crosswalks are colored asphalt with a stamped brick pattern. Stamped pattern is absent for the path connecting the diagonal wheelchair ramps, presumably to provide a smooth travel surface for wheelchair users.

- Intersection is well lit, with street lighting present on all four corners.
- 5th Street is a one-way facility in the westbound direction and traffic at this location, on 5th, is primarily heading west to enter the US 110 freeway on-ramps. This can cause elevated travel speeds in the westbound direction, which may be a concern to pedestrians.
- There is a pedestrian grade-separated crossing over the west leg of 5th Street that connects to the Westin Hotel complex located on the northwest corner of the intersection.

4.1.2.3 Flower Street and 4th Street (Photo 3)

- This intersection has marked crosswalks on all four legs.
- Wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.
- Crosswalks are colored asphalt with a stamped brick pattern. Stamped pattern is absent for the path connecting the diagonal wheelchair ramps, presumably to provide a smooth travel surface for wheelchair users.
- Intersection is well lit, with street lighting present on all four corners. Pedestrian facilities are shaded and dark at times because of the overpasses on the north leg of the intersection.

Photo 3 - The intersection of Flower Street and 4th Street is essentially a "tee" intersection because the south leg serves a parking garage access. The overall intersection is dark with limited pedestrian sight distance due to bridge piers.

Ped4.1.2.4 Flower Street and 3rd Street (Photo 4)

- This intersection has marked crosswalks on all four legs.
- Pedestrian push buttons are not consistent on each signal standard.
- Wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and it generally points toward the middle of the intersection.

Photo 4 - The Flower Street and 3rd Street intersection has excellent sight distance and is very open. The east leg begins the uphill grade to Bunker Hill.

- The north leg of the intersection has a raised median that extends into the crosswalk. This raised median does not have an accessible wheelchair lay-down.
- Crosswalks are colored asphalt with a stamped brick pattern. Stamped pattern is absent for the path connecting the diagonal wheelchair ramps, presumably to provide a smooth travel surface for wheelchair users.
- Intersection is well lit, with street lighting present on all four corners.
- 3rd Street is a one-way facility in the westbound direction. This can cause elevated travel speeds in the westbound direction, which may be a concern to pedestrians.
- The World Trade Center is on the southwest corner of the intersection.

4.1.2.5 Flower Street/Hope Street and Kosciuszko (Photo 5)

- Sight distance issues exist approaching the intersection from the south due to the steep approach grade of the roadway.
- A five-legged intersection exists at this location, creating a rather large, unfriendly crossing for pedestrians.
- Triple left turns onto Kosciuszko travelling eastbound. As a result, there is no pedestrian crossing across the northwest leg of the intersection. There are "no pedestrian crossing" signs at this location.
- There are pedestrian crosswalks across remaining three legs. These are only marked with white thermoplastic bars (i.e., no colored or stamped asphalt).
- Intersection is well lit, with street lighting present on all four corners.

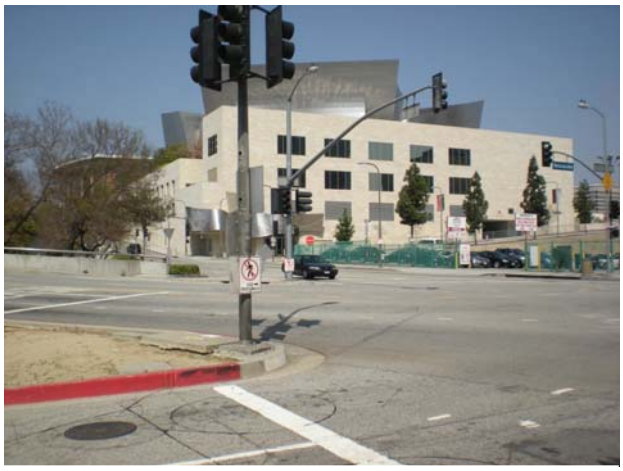

Photo 5 - Flower Street/Hope Street and Kosciuszko intersection is difficult to navigate as a pedestrian due to prohibited crossings, poor sight distance, and skewed intersection geometry.

- Sidewalk infrastructure is aging, with various degrees of concrete settlement on the corners of the intersection where pedestrians are present.

- Wheelchair ramps are present on all corners of the intersection, except across the northwest leg of the intersection (i.e., eastbound Kosciuszko). Note that there is only a single wheelchair ramp per corner, and it generally points towards the middle of the intersection.

4.1.2.6 2nd Street and Hope Street (Photo 6)

- This intersection is located just north of the intersection of Kosciuszko and Hope Street. It is located at the western corner of the Disney Concert Hall block. The Disney Concert Hall is a significant pedestrian generator in this area.

- There is only one pedestrian crossing opportunity at this intersection, located on the east leg of 2nd Street. This crossing is marked with white thermoplastic bars (i.e., no colored or stamped asphalt).

- Intersection is well lit, with street lighting present on all corners.

Photo 6 - Hope Street and 2nd Street provides for a pedestrian crossing on the east leg of the intersection only.

- Sidewalk infrastructure is aging, with various degrees of concrete settlement on the corners of the intersection where pedestrians are present.

- Wheelchair ramps are present on two corners and line up appropriately with the crosswalk alignment.

4.1.2.7 2nd Street and S. Grand Avenue (Photo 7)

- The intersection of 2nd Street and South Grand Avenue is newly constructed and located at the south corner of the Disney Concert Hall block. The Disney Concert Hall is a significant pedestrian generator in this area.

- The intersection includes marked crosswalks on all four legs, of various widths. These crossings are marked with white thermoplastic bars (i.e., no colored or stamped asphalt).

- On the Disney Concert Hall block, a vast pedestrian stacking area exists near the northern corner of the intersection.
- The intersection uses pedestrian countdown timers for pedestrian signalization control.
- Wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection. The exception to this is the southern corner of the intersection, which exhibits two wheelchair ramps in line with the adjacent crosswalks across the intersection legs.

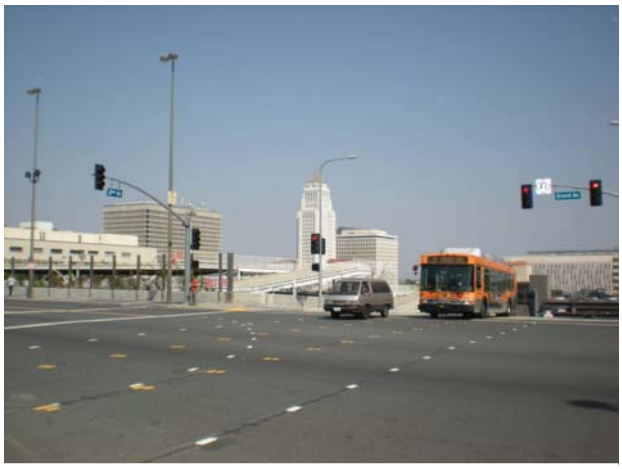

Photo 7 - 2nd Street and S. Grand Avenue is near the Walt Disney Concert Hall – a very large pedestrian generator.

- Intersection is well lit, with street lighting present on all corners.

4.1.2.8 2nd Street and S. Olive Street (Photo 8)

- There is no pedestrian crossing on the north leg of the intersection. This is because of the eastbound double left turning movements coming off the west leg of 2nd Street. There are "no pedestrian crossing" signs at this location directing pedestrians to the other crosswalks.
- Crosswalks of various widths are marked on three legs of the intersection. These crossings are marked with white thermoplastic bars (i.e., no colored or stamped asphalt).
- Wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection. The exception to this is the southern corner of the intersection, which exhibits two wheelchair ramps in line with the adjacent crosswalks across the intersection legs.

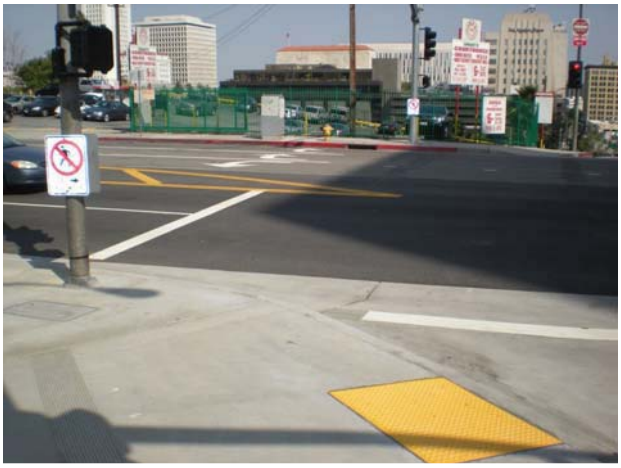

Photo 8 – Pedestrian movements are prohibited across the north leg of the intersection due to the protected green phase for the dual left turns off of the west leg of 2nd Street.

- Intersection is well lit, with street lighting present on all corners.

4.1.2.9 2nd Street and Hill Street (Photo 9)

Photo 10 – The intersection of 2nd Street and Broadway includes adequate pedestrian crossing features on all legs. There are vehicle turning restrictions during peak hours due to heavy traffic flows

- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.
- Crosswalks are colored asphalt with a stamped brick pattern. There is no smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as encountered in other area intersections.
- Intersection is well lit, with street lighting present on all four corners.
- 2nd Street and Upper 2nd Street converge as the west leg at this intersection. 2nd Street is an existing tunnel in the eastbound direction, while Upper 2nd Street traverses down a hill with the top at Olive Street and the bottom at Hill Street. Where these two facilities converge, there is a concrete median extension that is in disrepair and not suitable as a pedestrian stacking refuge.

4.1.2.10 2nd Street and Broadway (Photo 10)

- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.
- Crosswalks are colored asphalt with a stamped brick pattern. There is no smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as is encountered in other area intersections.
- Intersection is well lit, with street lighting present on all four corners.
- The actual intersection, within the areas bounded by the colored stamped crosswalks, is comprised of colored concrete materials. This can cause a slick surface during storm events because vehicles may slide into the intersection crosswalks–a potential concern for pedestrians.

4.1.2.11 2nd Street and Spring Street (Photo 11)

Photo 11 – The intersection of 2nd Street and Spring Street exhibits varying degrees of infrastructure repair - potentially causing safety concerns for pedestrians and bicyclists.

- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.
- Crosswalks are of various widths. The crossings are marked with white thermoplastic bars (i.e., no colored or stamped asphalt).
- The intersection surfacing is a mix of asphalt and concrete surfacing in various stages of disrepair. This can present a tripping hazard to pedestrians crossing the intersection.
- Intersection is well lit, with street lighting present on all four corners.

4.1.2.12 2nd Street and Main Street (Photo 12)

Photo 12 – 2nd Street and Main Street is adjacent to the Caltrans building. All legs of this intersection have marked crosswalks.

- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that the north and east corners of the intersection each have two wheelchair ramps, in line with the adjacent crosswalks. The south and west corners only have a single wheelchair ramp per corner, and it generally points toward the middle of the intersection.
- Crosswalks are of various widths. The crossings are marked with white thermoplastic bars (i.e., no colored or stamped asphalt).
- This intersection is next to a large pedestrian traffic generator–the CalTrans building. The intersection is located at the west corner of the CalTrans block.

- Intersection is well lit, with street lighting present on all four corners.

4.1.2.13 2nd Street and Los Angeles Street (Photo 13)

- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that the north corner of the intersection has two wheelchair ramps, in line with the adjacent crosswalks. The remaining three corners only have a single wheelchair ramp per corner, and it generally points toward the middle of the intersection.

Photo 13 – 2nd Street and Los Angeles Street is also adjacent to the Caltrans building. All legs of this intersection have marked crosswalks of inconsistent widths.

- Crosswalks are of various widths. The crossings are marked with white thermoplastic bars (i.e., no colored or stamped asphalt).
- This intersection is next to a large pedestrian traffic generator–the CalTrans building. The intersection is located at the south corner of the CalTrans block.
- Intersection is well lit, with street lighting present on all four corners.

4.1.2.14 2nd Street and San Pedro Street (Photo 14)

- This intersection is a "gateway" to the Little Tokyo neighborhood.
- The intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection and generally point toward the middle of the intersection.

Photo 14 – The 2nd Street and San Pedro Street intersection is a gateway to the Little Tokyo neighborhood.

- The crosswalks are all very wide and imprinted with a unique gridded pattern cut into the asphalt that is filled in with colored epoxy filler. In addition, purple designs are prevalent at numerous locations in each crosswalk.

- This is an important intersection into the neighborhood, with high aesthetic value. It is part of a recent and on-going redevelopment area (Weller Court and adjacent housing).

4.1.2.15 2nd Street and Central Avenue (Photo 15)

- This intersection is located in the Little Tokyo neighborhood.
- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection and generally point toward the middle of the intersection for three of the corners. At the northeast corner are two wheelchair ramps that are in line with the adjacent crosswalk direction.

Photo 15 – 2nd Street and Central Avenue, in the heart of the Little Tokyo neighborhood, exhibits the unique imprinted crosswalks found throughout the newer intersections in the area.

- The crosswalks are all very wide and are imprinted with a unique gridded pattern cut into the asphalt that is filled in with colored epoxy filler. In addition, purple designs are prevalent at numerous locations in each crosswalk.
- This is an important intersection in the neighborhood, with high aesthetic value. It is clustered with adjacent mixed land uses.

4.1.2.16 1st Street and Alameda Street (Photo 16)

- This intersection was recently re-constructed due to the Gold Line extension construction. The intersection is quite large as compared to most others along the alignment.
- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.

- Crosswalks are colored asphalt with a stamped brick pattern. There is no smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as encountered in other area intersections.
- Intersection is well lit, with street lighting present on all four corners.
- This is an important intersection in the area for pedestrians because it is near the new Little Tokyo station, which is a major future destination and exhibits large traffic flows.
- New raised median on the east leg of the intersection provides a curb cut through the median for unimpeded wheelchair access.

Photo 16 – The corner of 1st Street and Alameda Street is a fairly large intersection and was recently reconstructed due to the Gold Line LRT construction. The Little Tokyo/Arts District Station can be seen in the background.

4.1.2.17 Temple Street and Alameda Street (Photo 17)

- This intersection is located just north of the new Little Tokyo/Arts District Station. The Gold Line to East Los Angeles, which began operation in the Fall of 2009, crosses the east leg of this intersection.
- This intersection was also reconstructed due to construction of the adjacent LRT facilities.
- This intersection has marked crosswalks on all four legs.
- Diagonal wheelchair ramps are present on all corners of the intersection. Note that there is only a single wheelchair ramp per corner, and is generally pointing toward the middle of the intersection.

Photo 17 – The intersection of Temple Street and Alameda Street is located directly adjacent to the Little Tokyo LRT station. Crosswalks are provided on all four legs of the intersection.

- Crosswalks are colored asphalt with a stamped brick pattern. There is also a smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as encountered in other area intersections.
- Intersection is well lit, with street lighting present on all four corners.
- This is an important intersection in the area for pedestrians because it is near the new Little Tokyo station, which is a major future destination and exhibits large traffic flows.
- The sidewalk on the southwest corner of the intersection is very narrow and undulates in grade due to several abandoned driveway accesses.

4.1.2.18 Temple Street and Judge John Aiso Street (Photo 18)

- The corner of Temple Street and Judge John Aiso Street is three-legged "tee" intersection. There is no north leg to the intersection.
- The intersection is adjacent to the Federal Building complex and accordingly is a large pedestrian traffic generator.
- There are marked crosswalks on two (south and east) legs of the intersection.
- The west leg of the intersection does not contain a marked crosswalk, and signage is present to divert pedestrians to the south and east leg crossings.

Photo 18 – The intersection of Temple Street and Judge John Aiso Street is adjacent to the Federal Building complex.

- Diagonal wheelchair ramps are present on the southwest and southeast corner of the intersection, pointing toward the middle of the intersection. There is also a curb lay-down on the north side of the east leg for pedestrians approaching or leaving the Federal Building complex.
- Vehicles at this area of Temple Street were observed queuing up from the intersection of Temple Street and Los Angeles Street all the way back to Judge John Aiso Street (west leg). This is currently not a large concern because there is no pedestrian crosswalk across the affected (west) leg of the intersection).
- Intersection is well lit, with street lighting present on all four corners.

4.1.2.19 Temple Street and Los Angeles Street (Photo 19)

- The corner of Temple Street and Los Angeles Street is a four-legged intersection next to the Los Angeles Mall and near the City Hall complex.
- There are marked crosswalks on all four legs of the intersection.
- Diagonal wheelchair ramps are present on all of the intersection corners. There is only one ramp per corner and it points toward the middle of the intersection.
- Crosswalks are colored asphalt with a stamped brick pattern. There is also a smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as encountered in other area intersections.

Photo 19 – The intersection of Temple Street and Los Angeles Street is adjacent to City Hall. Vehicle queuing was observed to back up into pedestrian crosswalks during peak time – a potential safety concern.

- Vehicles at this area of Temple Street were observed queuing up from the intersection of Temple Street and Main Street all the way back to Los Angeles Street (northwest leg). This causes potential motorist/pedestrian conflict because vehicles were stacked in the crosswalk as pedestrians attempted to cross. This situation was observed in the PM peak hour of the day.
- Intersection is well lit, with street lighting present on all four corners.
- A grade-separated pedestrian crossing is located over the northwest leg of the intersection.

4.1.2.20 Temple Street and Main Street (Photo 20)

- This intersection has four legs.
- There are marked crosswalks on all four legs of the intersection.
- Diagonal wheelchair ramps are present on all of the intersection corners. There is only one ramp per corner and they each point toward the middle of the intersection.

- Crosswalks are colored asphalt with a stamped brick pattern. There is also a smooth surface within the stamped pattern connecting the diagonal wheelchair ramps, as encountered in other area intersections.
- Vehicles at this area of Temple Street were observed queuing up from the intersection of Temple Street and Spring Street, all the way back to Main Street (northwest leg). This causes potential motorist/pedestrian conflict because vehicles were stacked in the crosswalk as pedestrians attempted to cross. This situation was observed in the PM peak hour of the day.

Photo 20 – The intersection of Temple Street and Main Street is located in the general vicinity of City Hall, and vehicle queuing was observed to back up into pedestrian crosswalks during the PM peak time – a potential safety concern.

- Intersection is well lit, with street lighting present on all four corners.

4.1.2.21 1st Street and Los Angeles Street (Photo 21)

- This intersection has four legs and is located next to the CalTrans and LAPD complex.
- There are marked crosswalks on all four legs of the intersection.
- Diagonal wheelchair ramps are present on all of the intersection corners. There is only one ramp per corner and each points toward the middle of the intersection.
- Crosswalks are not colored or textured, and consist of white thermoplastic markings for delineation.
- There are quite a few mature shade trees directly in front of the LAPD complex. These cause darkened conditions at times.

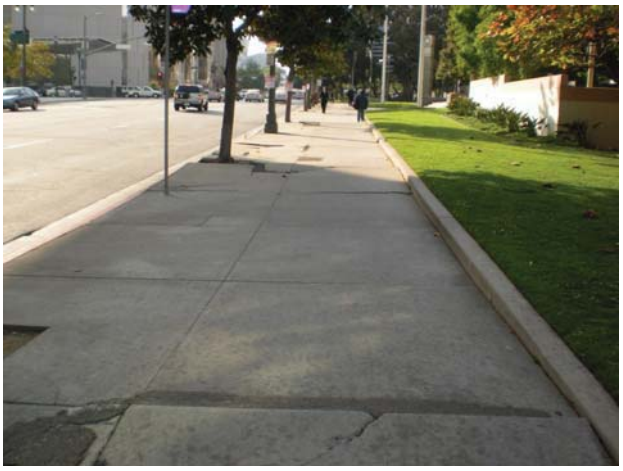

Photo 21 – Uneven and fractured concrete sidewalk, likely caused by boulevard tree roots, can be a pedestrian safety issue due to tripping hazards. This photo shows the sidewalk at the intersection of 1st Street and Los Angeles Street.

- The northwest leg of the intersection, on the north side of 1st Street, contains uneven and fractured concrete in various stages of disrepair. This is primarily caused by the root system of adjacent boulevard trees next to the curb line.
- Intersection is well lit, with street lighting present on all four corners.

4.1.2.22 1st Street and Main Street (Photo 22)

- This four-legged intersection is next to City Hall.
- There are marked crosswalks on all four legs of the intersection.
- Diagonal wheelchair ramps are present on all of the intersection corners. There is only one ramp per corner and each points toward the middle of the intersection.
- Crosswalks are not colored or textured, and consist of white thermoplastic markings for delineation.
- Intersection is well lit, with street lighting present on all four corners.

Photo 22 – 1st Street and Main Street exhibit marked pedestrian crosswalks on all four legs to the intersection. The intersection is near City Hall.

4.1.2.23 1st Street and Rose Street (Photo 23)

- The corner of 1st Street and Rose Street is a three-legged "T" intersection. The Metro Gold Line traverses through the intersection in an east-west orientation.
- Pedestrian crossings are allowed on the south leg of the intersection (Rose Street).
- Intersection contains a light standard on both the southwest and southeast corners.

Photo 23 – 1st Street and Rose Street is a "T" intersection. The Metro Gold Line traverses in an east-west direction (behind rail in photo).

4.1.2.24 1st Street and Hewitt Street (Photo 24)

- The corner of 1st Street and Hewitt Streetis a four-legged intersection. The Metro Gold Line traverses through the intersection in an east-west orientation.
- Pedestrian crossings are allowed on all four legs of the intersection and crosswalks are marked with single white transverse lines.
- Intersection is signalized and contains light standards on all intersection corners.

Photo 24 – The corner of 1st Street & Hewitt Street is a four-legged intersection. Pedestrian crossings are allowed across all intersection legs.

4.1.2.25 1st Street and Garey Street (Photo 25)

- 1st Street and Garey Street meet in a three-legged "T" intersection. The Metro Gold Line traverses through the intersection in an east-west orientation.
- Pedestrian crossings are allowed on the south leg of the intersection (Garey Street).

Photo 25 – The corner of 1st Street & Garey Street is a "T" intersection. Pedestrian crossings are allowed on the south leg. Intersection is unmarked.

4.1.2.26 1st Street and Vignes Street (Photo 26)

- This is a four-legged intersection.
- There are marked crosswalks on three legs of the intersection. The east leg of the intersection has no marked crosswalk because pedestrian crossing is prohibited.
- Intersection is signalized, with street lighting present on all four corners.

Photo 26 – 1st Street and Main Street exhibits marked pedestrian crosswalks on three legs. Pedestrian crossing is prohibited along the east leg.

4.2 Security

The affected environment is the security on the rail system, both at the stations and in the light rail vehicles. Passengers, transit employees, vendors, contractors, and the general public who come in contact with the system as well as the transit property and equipment, would be susceptible to the same crimes as experienced in the surrounding neighborhoods of all four alternative alignments.

Features included for passenger security are closed-circuit television cameras (CCTV), emergency call boxes, and fully lighted station stops and transit parking areas. These features are within all trains and buses, as well as rail stations, and are designed to offer security and a personal sense of well being for passengers.

The CCTV video in trains is recorded to a Digital Video Recorder (DVR), which is then made available for upload by the Los Angeles County Sheriff's Department's (LACSD) in the event of an incident. If no incident is reported, the video is erased after 3 days. As opposed to the CCTV on trains, the CCTV that monitors rail stops is connected directly to the Metro Control Center, where it is viewed in real time by Metro personnel. If an incident is occurring, Metro transit security is notified. Emergency call boxes in trains connect passengers directly to the train operators while those in stations connect directly to Metro central control.

Additionally, Metro personnel receive Community Emergency Response Training in collaboration with the LAFD. This training includes earthquake awareness, disaster medical procedures, and rescue operations. Security statistics for Metro can be found in Table 4-1.

As is the case with the safety considerations described in Section 4.1, security must also be considered during construction activities for the LRT infrastructure. Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing may be necessary to provide an obstruction thus preventing unauthorized personnel from entering construction areas, especially after hours and/or when construction is dormant. This is especially important when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state. Coordination with police and

fire service providers, regarding construction schedules and how emergency service providers will serve the area during periods of construction, must be made prior to and during construction.

4.2.1 Police Service Areas

The Regional Connector Transit Corridor project would be located in downtown Los Angeles. The LAPD has primary policing responsibility for this area. The LACSD's Transit Services Bureau, the second largest transit services bureau in the country, already provides exclusive contract police services to Metro, which operates the public transit system serving Los Angeles County, one of the country's largest, most populous counties. Deputies provide police services for both the light rail and bus transportation systems throughout 1,433 square miles. The contract with LACSD would be extended to cover the Regional Connector.

Both the LAPD and LACSD are active members of the Regional Transit Security Working Group. Through this working group these agencies coordinate activities and police functions, such as the April 2007 multi-agency security exercise around Union Station.

4.2.1.1 Los Angeles County Sheriff Department

The LACSD currently employs approximately 9,474 sworn peace officers and 7,738 professional staff. The LACSD is comprised of 11 divisions, which provide law enforcement services to 40 contract cities, 90 unincorporated communities, 9 community colleges, Metro, and 48 superior courts (Metro 2009).

In addition to the safety and security measures established by Metro to improve passenger and public safety, Metro contracts with the LACSD to provide law enforcement across the entire Metro system. The Metro system encompasses three LRT systems (the Blue Line, the Gold Line, and the Green Line), two subways (the Red Line and the Purple Line), four dedicated bus transitways (the Orange Line, the Harbor Transitway, the Wilshire Rapid Express, and the Hawthorne Rapid Express), and 191 bus routes over a 1,433 square-mile service area.

Table 4-1. Summary of Part 1 Crimes Reported for Metro System

Type of Part I Crime	Year			
	2003	2004	2005	2006
Criminal Homicide	1	0	0	0
Forcible Rape	1	6	3	7
Robbery	189	341	351	344
Aggravated Assault	91	145	215	199

Burglary	8	35	26	29
Larceny Theft	283	524	602	498
Grand Theft Auto	113	221	208	150
Arson	3	3	3	4
Total Part I Offenses	*689*	*1,275*	*1,408*	*1,231*

Source: Metro 2009

LACSD security personnel and deputies patrol the transit system routes and stations. LACSD security personnel work primarily on fare evasion and passenger complaints. While these officers cover the entire Metro system, they focus on specific patrol routes that experience more fare evasion and customer complaints.

Sheriff's deputies, both uniformed and undercover, patrol all vehicles of the Metro-operated LRT systems, as well as all Metro-operated buses, bus transitways, and subway systems. Deputies respond to fare evasion and minor complaints, but also respond to serious crimes.

While exact deployment numbers are not available, Sheriff's deputies are on patrol 24 hours a day, 7 days a week. The evening shift, which lasts until 2:00 a.m., has a larger deployment of uniformed and undercover officers than the morning shift (Metro 2009).

On October 27, 2002, the LACSD established the Office of Homeland Security to better protect county residents. This department works on a local level to protect citizens from terrorist attacks. The Transit Services Bureau falls within this department and oversees all security personnel and deputies that patrol the Metro transit system.

The Transit Services Bureau also tracks all criminal activities that occur on Metro buses, subways, and light-rail trains, and in all transit stations. This same department provides law enforcement across the entire 1,433-square-mile service area of the Metro system.

Table 4-1 lists Part I crime statistics occurring within the Transit Services Bureau jurisdiction from 2003 to 2006. Part I crimes can be defined as the most violent forms of crime, including criminal homicide, forcible rape, robbery, aggravated assault (involving deadly weapons), burglary, larceny theft, grand theft auto, and arson.

The LACSD reported that 1,231 Part I crimes occurred either on a Metro-operated LRVs, subways, or buses or within a station stop during 2006. Sheriff's deputies arrested approximately 5,300 adults and 400 juveniles within the transit system during 2006 (Metro 2009).

While there were 1,230 Part I crimes reported by the Transit Services Bureau for 2006, there were 4,504 Part II crimes, which include offenses like vandalism, non-aggravated assault, and

disorderly conduct. The most common incident was vandalism, with 1,906 reported incidents in 2006. Additionally, there were 2,188 non-criminal incidents reported by the Transit Services Bureau, including missing or found persons, transit accidents, and miscellaneous noncriminal activity.

Overall, of the 7,923 incidents reported by the Transit Services Bureau, Part I crimes made up 16 percent of the total incidents that were reported for Metro transit; Part II crimes made up 57 percent of the total incidents; and non-criminal incidents made up 27 percent of the total incidents reported.

4.2.1.2 City of Los Angeles - Central City

The LAPD provides police protection services in the City of Los Angeles, which is an area of approximately 483 square miles, with 21 communities representing approximately four million residents (LAPD 2007). In addition to administrative and special investigative units, the City of Los Angeles is divided into four smaller operational units or bureaus: the Central Bureau, the South Bureau, the West Bureau, and the Valley Bureau.

To facilitate response times, the LAPD has approximately 21 individual police stations located throughout the bureaus. The LAPD employs approximately 9,600 sworn and 2,900 civilian personnel, providing an average of approximately 2.4 sworn officers per 1,000 people (LAPD 2007). The LAPD Headquarters is located within 0.25 mile of the proposed project. The Central Bureau Station also services the area, with the Central Community Police Station located at 251 east 6th Street approximately 0.50 mile from the project.

4.2.1.3 City of Los Angeles - Central City North Community Plan Area

Police protection services are provided by the LAPD (refer to the Section 4.2.1.2 for detailed LAPD personnel and services information). One police station, the Chinatown Substation, serves the area and is located at 823 north Hill Street approximately 0.60 mile from the project.

4.2.1.4 Metro Transit Policing

By contract, the LACSD provides full police services for stations, rail vehicles, and property of Metro. These services include patrols of stations, platforms, and rail cars. Quality of life enforcement and fare evasion are two key responsibilities that LACSD Transit Services Bureau focuses on in the Metro system.

Metro security officers, under the direction of the LACSD Transit Services Bureau, have specific duties which primarily include guarding Metro facilities and closing Metro Rail stations late at night.

4.2.2 Fire Service Areas

The Metro Fire/Life Safety Committee meets regularly with area Los Angeles Fire Department and area ambulance service personnel to discuss past incidents and how to best coordinate

future responses. There are communications systems established between Metro Operations and adjoining fire agencies.

4.2.2.1 Los Angeles County

The Los Angeles County Fire Department (LACFD) provides fire and safety services to the unincorporated areas of Los Angeles County, to contracted cities, and to cities that are under an agreement for the cooperative response and management of fires and other emergency incidents, including the City of Los Angeles. The LACFD currently employs over 4,500 personnel, ranging from firefighters and paramedics to lifeguards and pilots. The LACFD operates 165 fire stations and several fire prevention offices (County of Los Angeles 2007). There are no LACFD fire stations within 0.25 mile of the proposed alternatives.

4.2.2.2 City of Los Angeles – Central City Community Plan Area

The LAFD provides fire suppression, emergency medical care, technical rescue, hazardous materials handling, disaster response, and community services to the City of Los Angeles. The LAFD has 3,594 uniformed personnel and 346 non-sworn support personnel located at 106 neighborhood fire stations and serving a 471-square-mile jurisdiction (LAFD 2008). There are 1,101 uniformed firefighters, including 226 firefighter/ paramedics, who are always on duty throughout the City.

The location and number of stations that would be called in the event of a fire or other emergency depend on a number of factors, including the type of emergency, the severity of the emergency, and the availability of the nearest fire station. In actuality, the resources of the entire LAFD force could be available collectively. There are three fire stations within the Central City Community Plan area, one of which is within 0.25 mile of the proposed alternatives.

4.2.2.3 City of Los Angeles - Central City North Community Plan Area

Fire services are provided by the LAFD (See Section 4.2.2.2 for detailed LAFD personnel and services information). Two fire stations, one of which is within 0.25 mile of the proposed project alignments, provide fire protection in the Central City North Community Plan area.

4.2.3 Homeland Security Concerns

Metro and LACSD coordinate regularly with the Department of Homeland Security (DHS) at several levels. They both work through the Regional Transit Security Working Group, are members of the local Joint Terrorist Task Force, and both coordinate with the area Federal Security Director for the Transportation Security Administration (TSA). Metro is currently in compliance with all TSA directives as well as 49 CFR1580, which requires designating a rail security coordinator and reporting significant security concerns to TSA.

The LACSD Transit Services Bureau represents Metro at FTA/TSA sponsored Security Round Table meetings where transit security chiefs discuss best practices and lessons learned, and coordinate with TSA and FTA leaders from those agencies' headquarters. Metro also follows

the FTA's "Transit Agency Security and Emergency Management Protective Measures," which were developed in consultation with TSA.

As is the case with the safety and security concerns described in section 4.1, Homeland Security should be assessed and considered during construction activities for the LRT infrastructure. Coordination with police and fire service providers must be made prior to and during construction to understand the daily construction schedules, and how emergency services will serve the area during periods of construction. Evacuation plans should be in place for those areas that are temporarily affected by constructions activities, such as the overnight closure of a roadway and/or other temporary detours that may affect evacuation plans. Additionally, public events such as "May Day Parades" or civic protests must be taken into consideration when construction activities occur to ensure safety of workers, participants, Metro patrons, and other members of the public.

5.0 IMPACTS

5.1 No Build Alternative

The No Build Alternative (Figure 5-1) is focused on preserving existing services and projects. Transit service under the No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line and the Metro Gold Line to the San Gabriel Valley will have opened, and a number of bus services will have been reorganized and expanded to provide connections with these new rail lines. The transit network within the project area would otherwise be largely the same as it is now.

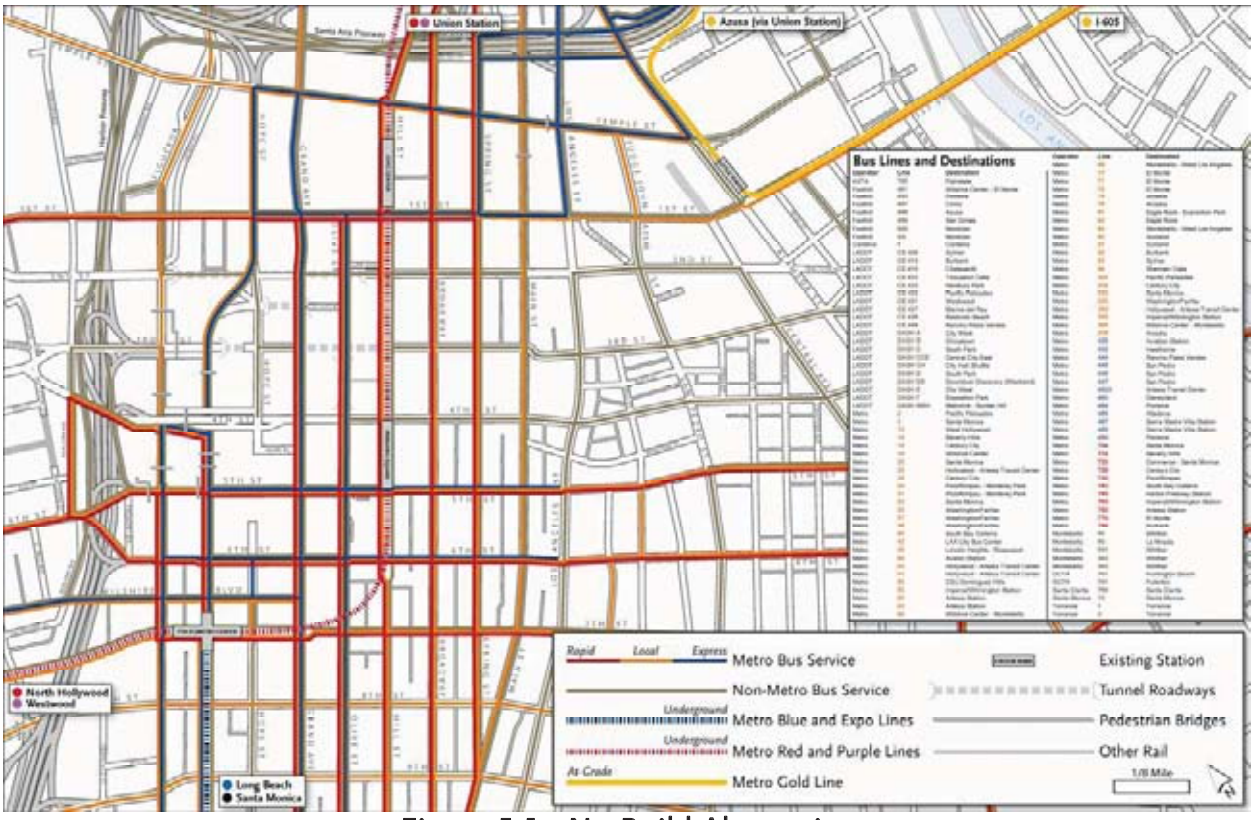

Figure 5-1. No Build Alternative

5.1.1 Direct Impacts - Construction and Operation

The No Build Alternative would maintain the current level of transit service in the project corridor and, therefore, would not have an immediate impact on public safety or accidents.

There are no direct construction-related impacts from the No Build Alternative.

5.1.2 Indirect Impacts – Construction and Operation

The No Build Alternative would maintain the current level of transit service in the project corridor and, therefore, would not have an indirect or future impact on public safety or accidents.

There are no indirect construction-related impacts from the No Build Alternative.

5.1.3 Cumulative Impacts – Construction and Operations

The No Build Alternative would maintain the current level of transit service in the project corridor and, therefore, would not have a cumulative impact on public safety or accidents.

There are no cumulative construction-related impacts from the No Build Alternative.

5.2 Transportation System Management (TSM) Alternative

The Transportation System Management (TSM) Alternative (Figure 5-2) includes all of the provisions of the No-Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours.

The buses may also have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the proposed routes.

5.2.1 Direct Impacts – Construction and Operation

The TSM Alternative would maintain the current level of transit service in the project corridor and also increase cross-station opportunities by adding two new express shuttle buses. The TSM Alternative would not have a detrimental and/or increased impact on public safety or accidents. Buses would operate on existing streets, so there would be no changes to the existing environment.

There are no direct construction-related impacts from the TSM Alternative related to safety and security.

5.2.2 Indirect Impacts – Construction and Operation

The TSM Alternative would not have a detrimental and/or increased impact on public safety or accidents. A potential indirect impact would be the "induced demand" created by better and more frequent service for the overall LRT system by providing the express shuttle buses. This induced demand can be viewed as both positive and negative: positive in that this type of transportation improvement may result in appropriate transit-oriented land use changes, and negative in that more people could be brought into a defined geographic area, possibly resulting in potential new conflicts between transit and pedestrians and motorists.

There are no indirect construction-related impacts from the TSM Alternative to safety or security.

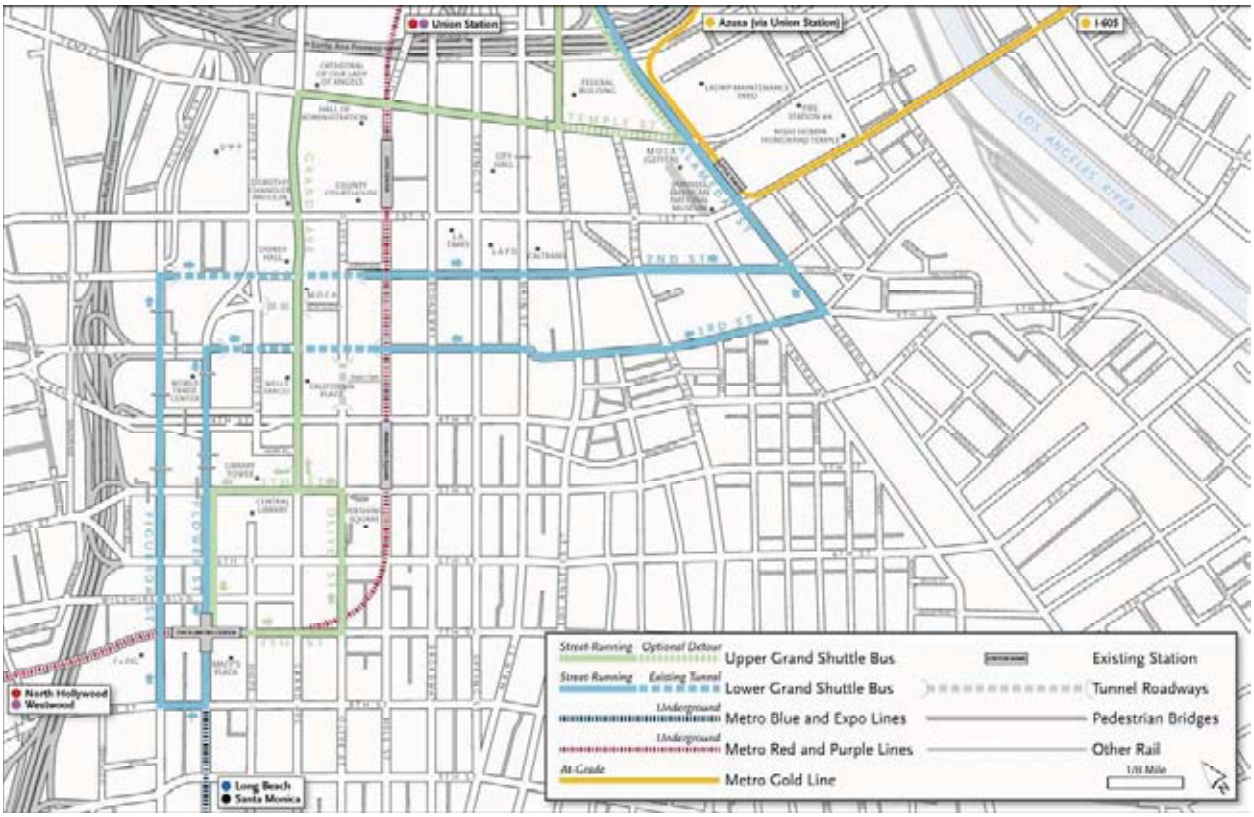

Figure 5-2. Transportation System Management (TSM) Alternative

5.2.3 Cumulative Impacts – Construction and Operation

When considered in combination with other reasonably foreseeable projects in the project area, the TSM Alternative would not have either a construction-related or operational cumulative effect because there would be no direct or indirect effects. .

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative (Figure 5-3) extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces to at-grade north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The alignment continues along 2nd Street and splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). It then heads east on Temple Street, realigns into a dual-track configuration just east of Los Angeles Street, and connects to the Metro Gold Line in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street. An automobile underpass and proposed pedestrian overpass would be constructed at the intersection of

Temple and Alameda Streets due to the high volume of trains that would traverse the Regional Connector. This would eliminate potential pedestrian/train and automobile/train conflicts.

This alignment includes both underground and at-grade configurations (46 percent of the route is underground) and serves the Financial District, Grand Avenue, and the Civic Center. Conversion of 2nd Street to a pedestrian-friendly transit mall is assumed. To implement this alternative, the number of traffic lanes and on-street parking on 2nd Street would be reduced. As a result, traffic would likely divert to adjacent parallel streets such as 1st Street and 3rd Street, but the roadway capacity along these streets would remain unchanged, as with the No Build Alternative.

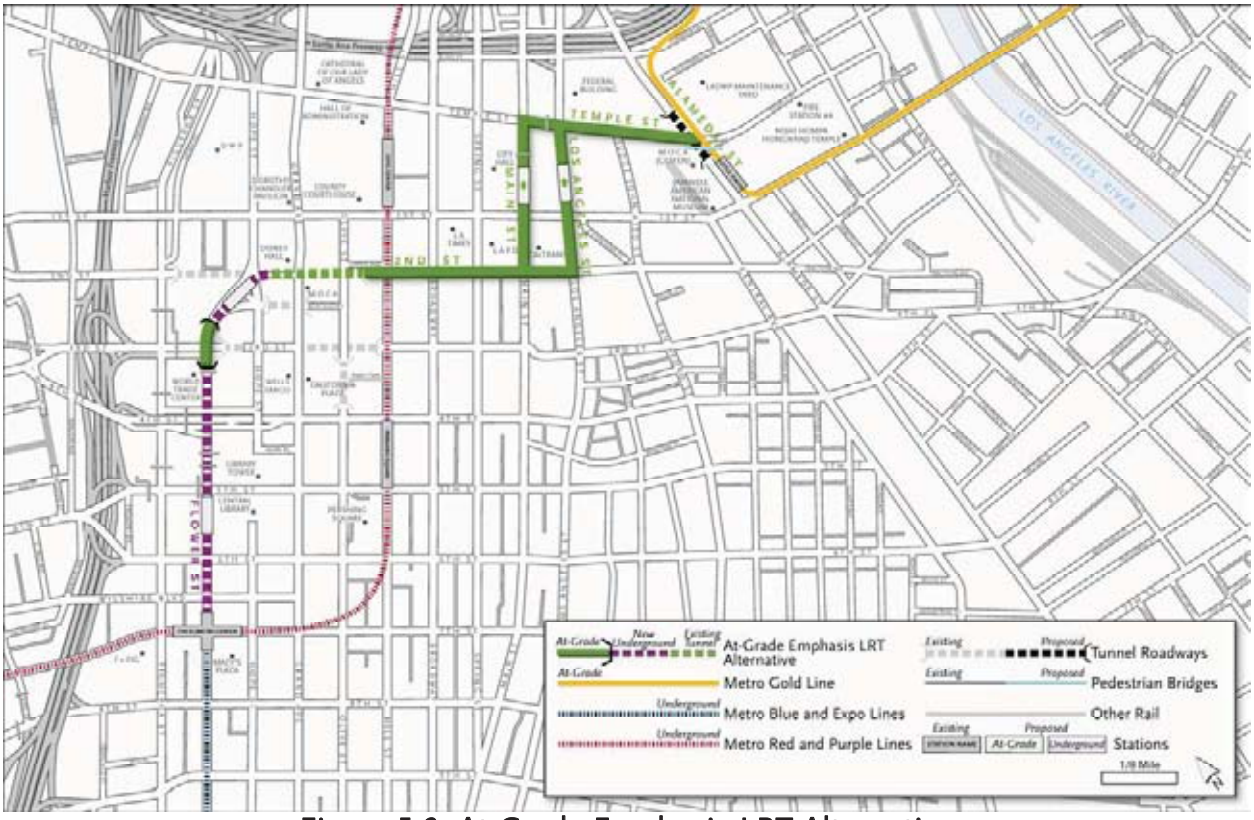

Figure 5-3. At-Grade Emphasis LRT Alternative

5.3.1 Direct Impacts – Construction and Operation

The At-Grade Emphasis LRT Alternative could affect the pedestrian environment, motorist safety, and emergency response times for emergency service providers during both construction and LRT operation. Identified concerns from Section 4 have been reviewed within the context of this alternative, and key potential issues related to pedestrian and motorist safety have been identified. Table 5-1 lists these potential effects. CEQA guidelines

on safety and security regarding pedestrian safety, station accidents and collisions, police and fire response, and criminal activity are addressed in the following sections.

5.3.1.1 Pedestrian Safety and Station Accidents

The pedestrian safety assessment along the proposed LRT corridor focused on three separate categories, including:

- Pedestrian safety at station locations
- Pedestrian safety near the trackway
- Pedestrian safety at designated grade crossings

These safety considerations would apply primarily to proposed at-grade stations. These concerns either do not arise with underground LRT facilities (there are no corridor crossings for pedestrians or vehicles) or the stations can be designed to avoid these concerns (e.g., a design that avoids the need for pedestrians to cross tracks and the potential for collisions with light rail vehicles). The At-Grade Emphasis LRT Alternative includes both underground and at-grade stations, so these safety considerations would apply to the evaluation of this alternative.

Passenger Safety at Proposed Station Locations

The presence of at-grade stations may introduce a new safety hazard for pedestrians if the stations do not adequately account for pedestrian traffic and movement. This hazard would be present irrespective of the headways of the LRVs. The occurrence of this hazard may be attributed to the inherent purpose of a station, where large numbers of people congregate and cross the trackway to access or depart from the transit stations, thus creating a potential hazard of collision between pedestrians and LRVs.

Anticipated passenger loads and pedestrian counts would be used to determine the most appropriate pedestrian treatments to control and channel pedestrian/passenger movements during design. Additionally, stations would be appropriately sized to accommodate the anticipated number of passengers. These design solutions would reduce this potential impact to a less than significant level.

Pedestrian Safety near the Trackway

Adding light rail vehicles would be the primary new safety hazard for pedestrian traffic along the proposed alignment. The speed of the vehicles would be similar to or slower than adjacent automobile traffic. The LRV would be electrically powered and, therefore, quieter than most automobile traffic and may not be easily heard. This hazard includes crossings at intersections where pedestrians cross over the light rail tracks, and human intrusion on the ROW (jaywalking).

Channelization techniques would be used to direct pedestrians to designated pedestrian crossings and minimize inappropriate crossing behaviors. LRVs are equipped with audible warning bells and horns, which would be used as appropriate to alert pedestrians to the approach of a train. This safety consideration is only relevant to the at-grade portions of the alignment because there would be no opportunity for pedestrians to cross tracks that run in an underground tunnel. The design solutions and operating guidelines would reduce this potential impact to a less than significant level.

Pedestrian Safety at Designated Grade Crossings

Pedestrian safety at designated grade crossings is a key factor to be considered in the design of LRT systems. This safety consideration is relevant only to the at-grade portions of the alignment because there would be no opportunity for pedestrians to cross tracks that run in an underground tunnel.

Multiple designated pedestrian grade crossings would be created by the proposed At-Grade Emphasis LRT Alternative. A vast majority of these pedestrian crossings would be located at motorist crossings of the tracks.

A potential safety hazard could occur if the distance between designated crossings tempts pedestrians to cross the tracks at locations other than designated pedestrian crossings. In addition, potential riders who see a train approaching may attempt to cross streets and tracks illegally in order to avoid missing a train in much the same way as these violations currently occur at bus stops. Furthermore, departing passengers may be tempted to take shortcuts from station areas to access nearby destinations instead of crossing at designated crossings.

Pedestrian traffic control and channelization techniques would be used to control pedestrian movements at intersections and encourage the use of designated pedestrian crossings. In addition, Metro would prepare grade crossing applications in coordination with the CPUC and local public agencies, such as LADOT, Bureau of Engineering, and the City and County Fire departments. Based on review of grade crossing applications, additional safety and security design features may be incorporated if necessary. Applications would be available for review by the public prior to approval. These design solutions and grade crossing application process would reduce this potential impact to a less than significant level.

5.3.1.2 Motorist Safety and Collisions

In the downtown area, LRVs would operate within the existing streets at street level for approximately half of the At-Grade Emphasis LRT Alternative alignment length. LRVs would be required to observe all traffic laws just as a car or bus would, including stopping for red lights. LRVs would also be required to yield to emergency vehicles at intersections.

It would be possible for automobiles to stray into the rail right-of-way at some locations because LRVs would share the same right-of-way with automobiles, and accidents between the LRT vehicle and motor vehicles would be possible. However, studies have shown that light rail vehicle accidents with motor vehicles at non-intersection locations are extremely rare.

Studies that have demonstrated this include Korve Engineering, Inc, *Transit Cooperative Research Program (TCRP) Report 17 – Integration of Light Rail Transit into City Streets (1996)*; PB Americas, Inc. and Science Applications International Corporation (SAIC), *Transit Cooperative Research Program (TCRP) Report 79 – Light Rail Vehicle Collisions with Vehicles at Signalized Intersections (2009)*; and Texas Transportation Institute, *METRO Rail Traffic Safety Assessment (2004)*.

The single-most frequent cause for motor vehicle/light rail accidents at intersections is when motorists turn left in front of a light rail vehicle (with the LRV traveling in the same direction). To reduce this risk, it is assumed that a left turn from 2nd Street or from the side streets to 2nd Street would not be permitted when LRVs are approaching the intersection from either direction.

Other accidents between LRVs and motorists stem from motorists disobeying red light signals. The LRV operators would have audible warning devices available to alert unwary drivers to the risk of accidents. Additionally, active "Train Approaching" signs may be used to further alert drivers of the approach of a train.

Although all such accidents may not be totally prevented, studies have found active "Train Approaching" signs to greatly reduce the likelihood of a collision. Traffic signal phasing (all-red phase and lagging left turns) has also proven to be effective in reducing LRV and motor vehicle collisions. Furthermore, the low operating speeds of both LRVs and motor vehicles reduce the possibility of serious injury or damage. As previously discussed, Metro would prepare grade crossing applications in coordination with the CPUC and local public agencies, such as LADOT, Bureau of Engineering, and the City and County Fire departments. All of these design and operating characteristics and the grade crossing application process would reduce this potential safety concern to a less than significant level.

5.3.1.3 Security

Security issues may be related to police and fire response, emergency evacuation, and addressing criminal and terrorist activity. To mitigate potential safety and security concerns, a complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected.

Police and Fire Response

Standard specifications and traffic work plans would be developed to reduce potential construction impacts on emergency service provider emergency response times. The project would include coordination with police and fire services to develop construction and operation plans and provide appropriate public safety and security for the Metro system, employees, and surrounding communities. The LACSD policing contract with Metro would be extended to include the Regional Connector project, and the project would be coordinated and compliant with TSA/DHS. Potential impacts would be reduced to a less than significant level through these measures.

LAFD Station #3 is located at the corner of 1st Street and Fremont Avenue, about 0.25 miles away from an underground portion of the At-Grade Emphasis LRT Alternative alignment. This portion of the alignment is not expected to affect fire response times because it is underground. LAFD Station #4 is located at Temple and Garey Streets, less than 0.25 mile away from the proposed underpass and three-way rail junction at Temple and Alameda Streets. Further coordination with LAFD will be conducted to determine whether construction and operation of the new underpass and frontage roads would restrict fire truck turning movements, and whether any needed detours would lengthen response times.

Fire safety in particular is addressed through design considerations. Metro's *Fire/Life Safety Design Criteria* outline specific requirements for fire protection at stations, along the alignment, and within LRVs. Requirements include providing fire alarm control systems at each enclosed station facility and a public address system at each station.

All LRVs would be equipped with fire extinguishers, and fans to ventilate the LRV in case of fire. The LRVs would also experience reduced hazards from fire by specifying materials with minimum burning rates, smoke generation, and toxicity characteristics.

Additional design criteria address emergency responder access, passenger egress standards, standards for sprinkler systems, and standpipe connections for fire response. Adherence to these standards and federal, state, and local regulations, in conjunction with the low risk of fires at stations, would result in less than significant potential impacts to safety and security.

Crime and Terrorist Activity

Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing would be used to prevent unauthorized personnel from entering construction areas, especially after hours and/or when construction is dormant. This is especially important when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state.

There is the potential for security issues associated with the proposed project to occur such as assault or robbery. These concerns would be addressed both through design considerations and by providing law enforcement personnel on the transit system during hours of operation.

Every station would be well lit to provide visibility around the entire station day and night, as specified by City requirements and Metro *Design Criteria*. The stations and the LRVs would be equipped with closed circuit TV systems and monitored by Metro personnel. Additionally, emergency call boxes would be available in all stations for passenger use in case of emergency, and each LRV would have an operator that could be contacted by passengers via an intercom system.

An at-grade system is vulnerable to both public demonstrations and vehicle-borne or other improvised explosive devices. Public demonstrations and large-scale disturbances can negatively impact an LRT system built at grade level, potentially disrupting service and leaving

stations and equipment vulnerable to damage. Terrorist groups have been increasing their use of vehicle-borne improvised explosive devices, which can damage equipment and injure or kill passengers.

The underground portions of the alignment are less vulnerable to these types of security concerns; however, in recent years terrorist groups have struck at underground rail systems in some of the major capitols of the world, such as London and Tokyo. In addition, underground systems have a greater potential for safety issues related to evacuation needs. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected. For the At-Grade Emphasis LRT Alternative this would include a complete evacuation plan that would mitigate any potential safety concerns.

5.3.2 Indirect Impacts – Construction and Operation

Given project design features, the grade crossing application process, and the Threat and Vulnerability Assessment, potential indirect impacts associated with the At-Grade Emphasis LRT Alternative would not have a detrimental and/or increased impact on public safety or accidents during both construction and LRT operation. A potential indirect impact would be increased ridership created by increased public transportation service for the overall LRT system through the system-wide connections provided by the Regional Connector project. This increased demand could have both beneficial and adverse effects. Transit-oriented developments could create more pedestrian appropriate and safe environments and/or cause an increase in the number of people in a defined geographic area, potentially resulting in new conflicts between pedestrians and motorists.

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	OK	Compromised – access to parking garage
Pedestrian Sight Distance	OK	OK	Somewhat compromised due to overpass shading & overpass structural support (abutments and piers)
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative

Evaluation Factor (per Section 3.0)	6th Street	5th Street	4th Street
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection; Also two pedestrian overpasses present just north of intersection on Flower Street; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines
Traffic Control Compliance Issues	West leg (6th Street) is an off-ramp from SR 110. Field observations noted speeds higher than predicted because of this	West leg (5th Street) is an on-ramp to SR 110. Field observations noted speeds higher than predicted because of this	Vehicles exiting parking garage access (east leg) must encroach into crosswalk to see oncoming traffic on Flower Street
Special Generators	City National Plaza (office complex)	Bonaventure Hotel Complex CitiCorp Plaza	World Trade Center
Presence of Adequate Lighting	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	Dark location due to shading of bridge overpass; standard luminaires located on all four quadrants of intersection

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative (cont.)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Queuing	Pre-signal would be provided At-grade intersection with LRT	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	Eastbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street); one-way leg in westbound direction only (2nd Street)
Pedestrian Sight Distance	OK	Slightly compromised due to vegetation on southwest corner of intersection	Slightly compromised due to vegetation on southwest corner of intersection	Intersection is elevated and on top of crest; excellent sight distance for pedestrians on all legs of intersection	OK
Crash History	Not evaluated	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian overpass provided on south leg of intersection near World Trade Center; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	All crosswalks are well marked and signing is appropriate; fairly new intersection construction	No pedestrian crossing allowed on north leg of intersection – prohibited by signage and lack of marked crosswalk
Traffic Control Compliance Issues	None observed	None observed; triple left turns off of north leg of Kosciuszko	None observed; triple left turns off of north leg of Kosciuszko	None observed; designated left turn arrows present for heavy left-turn movements	None observed; designated left turn arrows present for heavy left-turn movements from 2nd Street to S. Olive Street
Special Generators	World Trade Center	Walt Disney Concert Hall	Walt Disney Concert Hall	Walt Disney Concert Hall	None noted

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative (cont.)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	Pre-signal would be provided At-grade intersection with LRT; tunnel transitions to grade at west leg of intersection; also one-way up grade on west leg for westbound movement up 2nd Street	Pre-signal would be provided At-grade intersection with LRT; slight grade on east leg of 2nd Street	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	Minor concern for EB vehicle traffic due to existing building on west corner of intersection	OK	OK	Boulevard trees cause minor sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	Minor concern for WB vehicle traffic due to existing building on east corner of intersection	OK	OK	OK
Pedestrian Sight Distance	Poor on west leg due to tunnel exit and one-way hill on west leg of 2nd Street	OK	OK	LRT would split at this location; pedestrians would have essentially have two LRT routes to observe	One-way LRT operation through intersection
Crash History	Not reviewed	Not reviewed	Not reviewed	Not reviewed	Not reviewed
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings; poor median refuge area on west leg separating tunnel exit from one-way grade on hill	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only
Traffic Control Compliance Issues	None observed	None observed	None observed	None observed	
Special Generators	None noted	LA Times	LAPD	Caltrans Building	Caltrans Building

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative (cont.)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT	Pre-signal would be provided At-grade intersection with LRT
Motorist Approach Sight Distance (North Leg[1])	OK; some boulevard tree sight distance conflicts throughout	OK	OK	OK	Not applicable (no vehicular leg present)
Motorist Approach Sight Distance (South Leg[1])	OK; some boulevard tree sight distance conflicts throughout	Minor concern due to existing building (Caltrans) on west corner of intersection	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK; some boulevard tree sight distance conflicts throughout	Minor concern due to existing building (Caltrans) on west corner of intersection	OK	OK	OK
Motorist Approach Sight Distance (East Leg[1])	OK; some boulevard tree sight distance conflicts throughout	OK	OK	OK	OK
Pedestrian Sight Distance	OK; One-way LRT operation through intersection	Minor concern due to existing building (Caltrans) on west corner of intersection; One-way LRT operation through intersection	OK; One-way LRT operation through intersection	OK; One-way LRT operation through intersection	Compromised on west leg due to bus drop-off along north side of temple; also excessive vehicle queuing during peak hours of vehicles backed into adjacent intersection and through crosswalks (for west leg)
Crash History	Not reviewed	Not reviewed	Not reviewed	Not reviewed	Not reviewed
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with white markings	Pedestrian crossings allowed on all four legs; marked with white markings	Pedestrian overpass on east leg of intersection (over Temple Street); Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass on west leg of intersection (over Temple Street); Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian crossings allowed on all three; marked with white markings
Traffic Control Compliance Issues	None observed	None observed	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks

Table 5-1. Safety Analysis for the At-Grade Emphasis LRT Alternative (cont.)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Special Generators	City Hall; LAPD	City Hall	City Hall	Federal Building	Federal Building
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all three quadrants of intersection

[1] *A leg of an intersection is the street segment that forms one part of the intersection. For example, the north leg would be the street that forms the northern portion of an intersection.*

5.3.3 Cumulative Impacts – Construction and Operation

Potential cumulative impacts of the At-Grade Emphasis LRT Alternative are qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative, there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed use developments under consideration. However, each of these projects would address safety and security of pedestrians and motorists accessing the developments. From a cumulative perspective, potential impacts associated with the At-Grade Emphasis LRT Alternative would be mitigated to a less than significant level and not have a cumulative effect on the safety and security environment in the project area during both construction and LRT operation.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative (Figure 5-4) would connect directly to the Metro 7th Street/Metro Center Station, continue north underneath Flower Street to 3rd Street, and then proceed northeast to 2nd and Hope Streets. Tracks would be constructed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. The tracks would then veer north into a new portal on the private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. It is expected that a portion of this block would need to be acquired in order to construct the portal and stage construction of the tunnels beneath 2nd Street. The tracks would then enter the intersection of 1st and Alameda Streets in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative, with a potential pedestrian overpass and vehicular underpass for through traffic on Alameda Street.

5.4.1 Direct Impacts – Construction and Operation

The Underground Emphasis LRT Alternative could affect the pedestrian environment, motorist safety, and emergency response times for emergency service providers during both construction and LRT operation. Identified concerns from Section 4 have been reviewed within the context of this alternative, and key potential issues related to pedestrian and motorist safety have been identified.

Table 5-2 lists these potential effects. CEQA guidelines on safety and security regarding pedestrian safety, station accidents and collisions, police and fire response, and criminal activity are addressed in the following sections.

5.4.1.1 Pedestrian and Motorist Safety, Station Accidents, and Collisions

The pedestrian safety assessment along the proposed LRT corridor focused on three separate categories, including:

- Pedestrian safety at station locations
- Pedestrian safety near the trackway
- Pedestrian safety at designated grade crossings

These safety considerations would apply primarily to proposed at-grade segments. These concerns do not arise with underground LRT facilities (there are no trackway crossings for pedestrians or vehicles) and, where applicable, stations could be designed to avoid these concerns (e.g., a design that avoids the need for pedestrians to cross tracks and the potential for collisions with light rail vehicles). Underground stations would be designed to avoid this potential safety hazard by designing stations to prevent or avoid the need for pedestrians to cross trackways as they enter or depart the station.

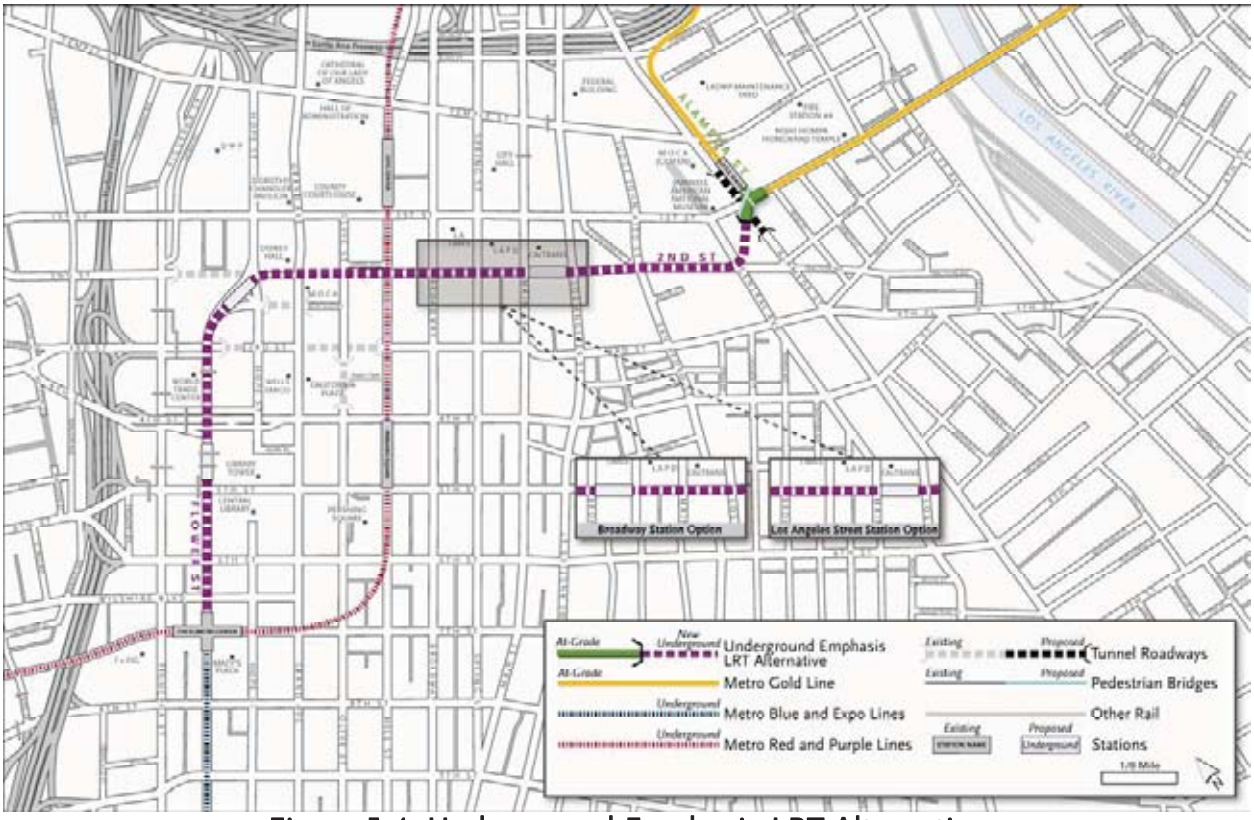

Figure 5-4. Underground Emphasis LRT Alternative

The only at-grade crossing proposed for the Underground Emphasis LRT Alternative is located at 1st and Alameda Streets. At this location, most vehicles and pedestrians would be grade-separated from the LRT tracks. A proposed pedestrian bridge structure over the intersection would allow pedestrians to cross the intersection without crossing paths with auto traffic or trains. For motor vehicles and LRVs operating at-grade at this intersection, Metro would prepare grade crossing applications in coordination with the CPUC and local public agencies, such as LADOT, Bureau of Engineering, and the City and County Fire departments. Based on review of grade crossing applications, additional safety and security design features may be incorporated if necessary. Applications would be available for review by the public prior to approval. The grade crossing application process would reduce potential safety concerns between motor vehicles and LRVs to a less than significant level.

A new underpass would allow traffic on Alameda Street to travel below 1st Street and the LRT tracks. Only auto traffic on 1st Street would cross the new LRT tracks at-grade. This proposed design would avoid potential safety effects at pedestrian and motorist crossings. The grade-separated nature of the Underground Emphasis LRT Alternative would avoid these potential effects and result in no impact.

5.4.1.2 Security

Security issues may be related to police and fire response, emergency evacuation and responses, and addressing criminal and terrorist activity. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected to mitigate potential safety and security concerns.

Police and Fire Response

Standard specifications and traffic work plans would be developed to reduce potential construction impacts on emergency service providers by reducing potential impacts on emergency response times. The project would include coordination with police and fire services to develop construction and operation plans that support appropriate safety and security of the public using the Metro system, employees, and the surrounding communities. The LACSD policing contract with Metro would be extended to include the Regional Connector project, and the project would be coordinated and compliant with TSA/DHS. Potential impacts would be reduced to a less than significant level through these measures.

LAFD Station #3 is located at the corner of 1st Street and Fremont Avenue, about 0.25 mile away from an underground portion of the Underground Emphasis LRT Alternative alignment. This portion of the alignment is not expected to affect fire response times because it would be underground.

LAFD Station #4 is located at Temple and Garey Streets, less that 0.25 mile away from the proposed underpass and three-way rail junction at 1st and Alameda Streets. The new underpass would likely improve response times for emergency vehicles travelling south on Alameda Street because they would no longer encounter cross traffic at 1st Street. Further coordination with LAFD will be conducted to determine whether construction or operation of the new underpass and frontage roads would affect response times.

Fire safety in particular is addressed through design considerations. Metro's *Fire/Life Safety Design Criteria* outline specific requirements for fire protection at stations, along the alignment, and within LRVs. Some of the identified requirements include fire alarm control systems at each enclosed station facility and a public address system at each station. All LRVs would be equipped with fire extinguishers, and fans to ventilate the LRV in case of fire.

Hazards to LRVs from fire would be reduced by specifying LRV materials with minimum burning rates, smoke generation, and toxicity characteristics. Additional design criteria address emergency responder access, passenger egress standards, and standards for sprinkler systems and standpipe connections for fire response. Adherence to these standards

and federal, state, and local regulations, and the low risk of fires at stations would result in a less than significant potential impact to safety and security.

Crime and Terrorist Activity

Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing would be used to prevent unauthorized personnel from entering construction areas, especially after hours and/or when construction is dormant. This is especially important when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state.

There is the potential for security issues to occur such as assault or robbery on the proposed project. These concerns would be addressed by applying design considerations and providing law enforcement personnel on the transit system during hours of operation. Every station would be well lit to provide visibility around the entire station day and night, as specified by City requirements and Metro *Design Criteria*.

The stations and the LRVs would be equipped with closed circuit TV systems monitored by Metro personnel. Additionally, emergency call boxes would be available in all stations for passenger use in case of emergency, and each LRV would have an operator that could be contacted by passengers via an intercom system.

The Underground Emphasis LRT Alternative presents a different set of conditions than the At-grade Emphasis LRT Alternative because there are more underground stations and longer underground tunnels. Some of these altered conditions might include:

- Activity in underground stations and tunnels would be out of the general public view, and less observable by routine neighborhood security/police patrols in the general area, as compared to street level facilities.
- Tunnels may offer non-domiciled persons refuge from the elements.
- Staircases and passageways may create opportunities for criminal activity.
- Tunnels offer a greater consequence to train service should trespassers enter; clearance and concealment issues may arise.
- Limited access to stations and the LRT system results in greater control and ability to monitor activities in an underground system.
- Underground system operation may be more reliable.

The Underground Emphasis LRT Alternative would be less vulnerable to disruptions from public demonstrations and to impacts from vehicle-borne improvised explosive devices. By controlling entries, an underground system may continue to function during public demonstrations and large-scale disturbances at grade level. However, terrorist groups have

recently struck at underground rail systems in some of the major capitols of the world, including London and Tokyo.

In addition, underground systems have a greater potential for safety issues related to evacuation needs. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected. For the Underground Emphasis LRT Alternative, this would include a complete evacuation plan to mitigate any potential safety concerns.

5.4.2 Indirect Impacts – Construction and Operation

Potential indirect impacts associated with the Underground Emphasis LRT Alternative would not have a detrimental or increased effect on public safety or accidents during both construction and LRT operation. A potential indirect impact could be the increased ridership created by increased public transportation service for the overall LRT system through the system-wide connections provided by the Regional Connector project.

Increased demand could have both beneficial and adverse effects. Transit-oriented developments could create more pedestrian appropriate and safe environments and/or cause an increase in the number of people in a defined geographic area, potentially resulting in new conflicts between pedestrians and motorists.

5.4.3 Cumulative Impacts – Construction and Operation

Potential cumulative impacts of the Underground Emphasis LRT Alternative are qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative, there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed-use developments under consideration. Each of these projects would address safety and security of pedestrians and motorists accessing the developments. From a cumulative perspective, potential impacts associated with the Underground Emphasis LRT Alternative would be mitigated to a less than significant level and they would not have a cumulative effect on the safety and security environment in the project area during both construction and LRT operation.

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	OK	Compromised – access to parking garage
Pedestrian Sight Distance	Not applicable	Not applicable	Somewhat compromised due to overpass shading & overpass structural support (abutments and piers)
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection. Also two pedestrian overpasses present just north of intersection on Flower Street; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines
Traffic Control Compliance Issues	West leg (6th Street) is an off-ramp from SR 110. Field observations noted speeds higher than predicted because of this	West leg (5th Street) is an on-ramp to SR 110. Field observations noted speeds higher than predicted because of this	Vehicles exiting parking garage access (east leg) must encroach into crosswalk to see oncoming traffic on Flower Street
Special Generators	City National Plaza (office complex)	Bonaventure Hotel Complex CitiCorp Plaza	World Trade Center
Presence of Adequate Lighting	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	Dark location due to shading of bridge overpass; standard luminaires located on all four quadrants of intersection

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	Eastbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street); one-way leg in westbound direction only (2nd Street)
Pedestrian Sight Distance	OK	Slightly compromised due to vegetation on southwest corner of intersection	Slightly compromised due to vegetation on southwest corner of intersection	Intersection is elevated and on top of crest; excellent sight distance for pedestrians on all legs of intersection	OK
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian overpass provided on south leg of intersection near World Trade Center; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	All crosswalks are well marked and signing is appropriate; fairly new intersection construction	No pedestrian crossing allowed on north leg of intersection – prohibited by signage and lack of marked crosswalk
Traffic Control Compliance Issues	None observed	None observed; triple left turns off of north leg of Kosciuszko	None observed; triple left turns off of north leg of Kosciuszko	None observed; designated left turn arrows present for heavy left-turn movements	None observed; designated left turn arrows present for heavy left-turn movements from 2nd Street to S. Olive Street

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Special Generators	World Trade Center	Walt Disney Concert Hall	Walt Disney Concert Hall	Walt Disney Concert Hall	None noted
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	Minor concern for EB vehicle traffic due to existing building on west corner of intersection	OK	OK	Boulevard trees cause minor sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	Minor concern for WB vehicle traffic due to existing building on east corner of intersection	OK	OK	OK
Pedestrian Sight Distance	Poor on west leg due to tunnel exit and one-way hill on west leg of 2nd Street	OK	OK	Not applicable	Not applicable
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings; poor median refuge area on west leg separating tunnel exit from one-way grade on hill	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	None observed	None observed	
Special Generators	None noted	LA Times	LAPD	Caltrans Building	Caltrans Building
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; Alameda is routed underneath 1st Street at new station location		
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK		
Pedestrian Sight Distance	OK	OK	OK		
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated		
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian overpass will be provided across Alameda Street: Currently has pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings		

Table 5-2. Safety Analysis for the Underground Emphasis LRT Alternative (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks		
Special Generators	Little Tokyo Neighborhood	Little Tokyo Neighborhood	Station for existing Metro Gold Line		
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection		

[1] *A leg of an intersection is the street segment that forms one part of the intersection. For example, the north leg would be the street that forms the northern portion of an intersection.*

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative - Little Tokyo Variation 1 (Figure 5-5) would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue.

At 2nd Street and Central the tracks continue underground, heading northeast under 1st and Alameda Streets. A three-way (wye) junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect to the Metro Gold Line heading north to Azusa and east to I-605.

One portal would be located northeast of the existing Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the Los Angeles Department of Water and Power (LADWP) Maintenance Yard and connect to the existing LRT bridge over US-101, allowing a connection to the Metro Gold Line to Azusa. The portal would be connected to the 1st and Alameda junction by a new tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (on the northeast corner of 1st and Alameda Streets) and running immediately east of the existing Little Tokyo/Arts District station and tracks.

The second portal would be located within 1st Street between Alameda and Vignes Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate the portal. Widening the street would initiate at Alameda and continue east, tapering down significantly as it crosses Hewitt Street to join the existing 1st Street LRT tracks about one and half blocks west of the 1st Street Bridge.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and construct the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 1 would be located entirely underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center Station. There would be four proposed underground stations located at Flower/5th/6th Streets, 2nd/Hope Streets, 2nd Street/Broadway, and 2nd Street/Central Avenue.

5.5.1 Direct Impacts – Construction and Operation

The Fully Underground LRT Alternative – Little Tokyo Variation 1 could affect the pedestrian environment, motorist safety, and emergency response times for emergency service providers during both construction and LRT operation. Identified concerns from Section 4 have been reviewed within the context of this alternative, and key potential issues related to pedestrian and motorist safety have been identified. Table 5-3 lists these potential effects. CEQA guidelines on safety and security regarding pedestrian safety, station accidents and collisions, police and fire response, and criminal activity are addressed in the following sections.

5.5.1.1 Pedestrian and Motorist Safety, Station Accidents, and Collisions

The pedestrian safety assessment along the proposed LRT corridor focused on three separate categories, including:

- Pedestrian safety at station locations
- Pedestrian safety near the trackway
- Pedestrian safety at designated grade crossings

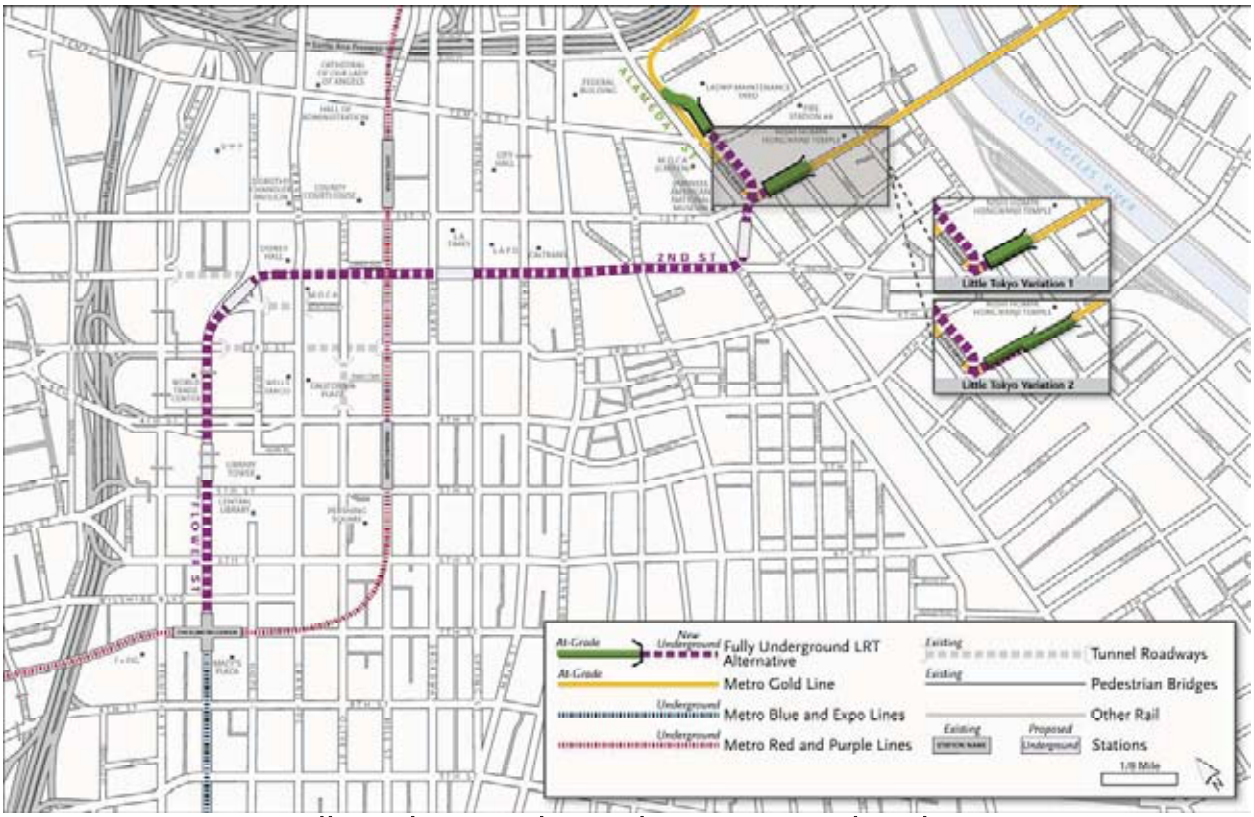

Figure 5-5. Fully Underground LRT Alternative – Little Tokyo Variation 1

The safety considerations identified previously would apply primarily to proposed at-grade locations. These concerns do not arise with underground LRT facilities (there are no trackway crossings for pedestrians or vehicles); for at-grade locations the stations can be designed to avoid these concerns (e.g., a design that avoids the need for pedestrians to cross tracks and the potential for collisions with light rail vehicles). Since the Fully Underground LRT Alternative – Little Tokyo Variation 1 includes four underground stations along the planned route, the stations would be designed to avoid potential safety hazards and prevent or avoid the need for pedestrians to cross trackways as they enter or depart the station. Stations would also be appropriately sized to accommodate the anticipated number of passengers. These design solutions would reduce this potential impact to less than significant level.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 results in the entire LRT facility being placed underground, eliminating all potential conflicts with at-grade roadway and pedestrian infrastructure. In that regard, the proposed alternative and associated design would avoid potential safety effects related to both pedestrian and motorist crossings. The grade-separated nature of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would avoid these potential effects and no impact would occur.

5.5.1.2 Security

Security issues may be related to police and fire response, emergency evacuation and responses, and addressing criminal and terrorist activity. To mitigate potential safety and security concerns, a complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected.,

Police and Fire Response

Standard specifications and traffic work plans would be developed to minimize potential construction impacts on emergency service providers by reducing potential impacts on emergency response times. The project would include coordination with police and fire services to develop construction and operation plans that would provide appropriate safety and security of the public using the Metro system, employees, and the surrounding communities. The LACSD policing contract with Metro would be extended to include the Regional Connector project, and the project would be coordinated and compliant with TSA/DHS. Potential impacts would be reduced to a less than significant level by implementing these measures.

LAFD Station #3 is located at the corner of 1st Street and Fremont Avenue, about 0.25 mile away from a section of the Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment. This portion of the alignment is not expected to affect fire response times because it would be underground. LAFD Station #4 is located at Temple and Garey Streets, less that 0.25 mile away from the proposed underground station at 2nd Street/Central Avenue. Emergency response times will neither improve nor degrade over existing conditions because: 1) at-grade roadway conditions will essentially remain unchanged from an operational perspective and 2) the LRT alignment is fully underground as it passes underneath the congested intersection of 1st and Alameda Streets.

Fire safety in particular is addressed through design considerations. Metro's *Fire/Life Safety Design Criteria* outline specific requirements for fire protection at stations, along the alignment, and within LRVs. Identified requirements include providing fire alarm control systems at each enclosed station facility and a public address system at each station. All LRVs would be equipped with fire extinguishers, and fans to ventilate the LRV in case of fire.

LRV fire hazards would be minimized by specifying construction materials with minimum burning rates, smoke generation, and toxicity characteristics. Additional design criteria address emergency responder access, passenger egress standards, and standards for sprinkler systems and standpipe connections for fire response. Adherence to these standards

and federal, state, and local regulations, in conjunction with the low risk of fires at stations, would result in a less than significant impact to safety and security.

Crime and Terrorist Activity

Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing would be used to prevent unauthorized personnel from entering construction areas, especially after hours and/or when construction is dormant. This is especially important when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state.

There is the potential for security issues to occur such as assault or robbery on the proposed project. These concerns would be addressed by applying design considerations and providing law enforcement personnel on the transit system during hours of operation. Every station would be well lit to provide visibility around the entire station day and night, as specified by City requirements and Metro *Design Criteria*.

The stations and LRVs would be equipped with closed-circuit TV systems monitored by Metro personnel. Additionally, emergency call boxes would be available in all stations for passenger use in case of emergency, and LRVs would have an operator that could be contacted by passengers via an intercom system.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 presents a different set of conditions than both the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative because there are four underground stations and the entire alignment is below grade. Some of these altered conditions might include:

- Activity in underground stations and tunnels would be out of the general public view, and less observable by routine neighborhood security/police patrols in the general area, as compared to street level facilities.
- Tunnels may offer non-domiciled persons refuge from the elements.
- Staircases and passageways may create opportunities for criminal activity.
- Tunnels offer a greater consequence to train service should trespassers enter; clearance and concealment issues may arise.
- Limited access to stations and the LRT system results in greater control and ability to monitor activities in an underground system.
- Underground system operation may be more reliable.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less vulnerable to disruptions from public demonstrations and impacts from vehicle-borne improvised explosive devices. By controlling entries, an underground system may continue to function during

public demonstrations and large-scale disturbances at grade level. However, terrorist groups have recently struck at underground rail systems in some of the major capitols of the world, including London and Tokyo.

In addition, underground systems have a greater potential for safety issues related to evacuation needs. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected. For the Fully Underground LRT Alternative – Little Tokyo Variation 1 this would include a complete evacuation plan to mitigate potential safety concerns.

5.5.2 Indirect Impacts – Construction and Operation

Potential indirect impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not have a detrimental or increased impact on public safety or accidents during both construction and LRT operation. A potential indirect impact could be increased ridership created by increased public transportation service for the overall LRT system through the system-wide connections provided by the Regional Connector project. This increased demand could have both beneficial and adverse effects. Transit-oriented developments could create more pedestrian-appropriate and safe environments and/or could cause an increase in the number of people in a defined geographic area, potentially resulting in new conflicts between pedestrians and motorists.

Stations would be appropriately sized to accommodate the anticipated number of passengers. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in the entire LRT facility being placed underground, which would eliminate all conflicts with at-grade roadway and pedestrian infrastructure. In that regard, the proposed alternative and associated design would avoid potential safety effects related to both pedestrian and motorist crossings.

5.5.3 Cumulative Impacts – Construction and Operation

Potential cumulative impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 are qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative, there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed-use developments under consideration. Each of these projects would address safety and security of pedestrians and motorists accessing the developments. From a cumulative perspective, potential impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be mitigated to a less than significant level and would not have a cumulative effect on the safety and security environment in the project area during both construction and LRT operation.

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	OK	Compromised – access to parking garage
Pedestrian Sight Distance	Not applicable	Not applicable	Somewhat compromised due to overpass shading & overpass structural support (abutments and piers)
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection. Also two pedestrian overpasses present just north of intersection on Flower Street; pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection. Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines
Traffic Control Compliance Issues	West leg (6th Street) is an off-ramp from SR 110. Field observations noted speeds higher than predicted because of this	West leg (5th Street) is an on-ramp to SR 110. Field observations noted speeds higher than predicted because of this	Vehicles exiting parking garage access (east leg) must encroach into crosswalk to see oncoming traffic on Flower Street
Special Generators	City National Plaza (office complex)	Bonaventure Hotel Complex CitiCorp Plaza	World Trade Center
Presence of Adequate Lighting	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	Dark location due to shading of bridge overpass; standard luminaires located on all four quadrants of intersection

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	Eastbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street); one-way leg in westbound direction only (2nd Street)
Pedestrian Sight Distance	OK	Slightly compromised due to vegetation on southwest corner of intersection	Slightly compromised due to vegetation on southwest corner of intersection	Intersection is elevated and on top of crest; excellent sight distance for pedestrians on all legs of intersection	OK
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian overpass provided on south leg of intersection near World Trade Center; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	All crosswalks are well marked and signing is appropriate; fairly new intersection construction	No pedestrian crossing allowed on north leg of intersection – prohibited by signage and lack of marked crosswalk
Traffic Control Compliance Issues	None observed	None observed; triple left turns off of north leg of Kosciuszko	None observed; triple left turns off of north leg of Kosciuszko	None observed; designated left turn arrows present for heavy left-turn movements	None observed; designated left turn arrows present for heavy left-turn movements from 2nd Street to S. Olive Street

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Special Generators	World Trade Center	Walt Disney Concert Hall	Walt Disney Concert Hall	Walt Disney Concert Hall	None noted
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	Minor concern for EB vehicle traffic due to existing building on west corner of intersection	OK	OK	Boulevard trees cause minor sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	Minor concern for WB vehicle traffic due to existing building on east corner of intersection	OK	OK	OK
Pedestrian Sight Distance	Poor on west leg due to tunnel exit and one-way hill on west leg of 2nd Street	OK	OK	Not applicable	Not applicable
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings; poor median refuge area on west leg separating tunnel exit from one-way grade on hill	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	None observed	None observed	
Special Generators	None noted	LA Times	LAPD	Caltrans Building	Caltrans Building
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	LRT is transitioning through portal at this location	LRT is transitioning through portal at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	N/A – No north leg to intersection ("T" intersection")	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	OK	OK
Pedestrian Sight Distance	OK	OK	OK	OK	OK
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground / portal area at this location	Not evaluated due to LRT being underground / portal area at this location
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	T-intersection; pedestrian crossings allowed on south leg of intersection	Pedestrian crossings allowed on all four legs; marked with single marked white lines on all legs

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks	None observed – Metro Gold Line track protected by raised curb median island	None observed – intersection is signalized
Special Generators	Little Tokyo Neighborhood	Little Tokyo Neighborhood	Station for existing Metro Gold Line	Station for existing Metro Gold Line	Station for existing Metro Gold Line
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on both southwest and southeast corners	OK – standard luminaires located on all corners of intersection
Traffic Queuing	Existing Metro Gold Line at location - no change from this alternative	Existing Metro Gold Line at location - no change from this alternative	No impact to vehicular traffic; LRT is underground at this location		
Motorist Approach Sight Distance (North Leg[1])	N/A – No north leg to intersection ("T" intersection")	OK	OK		
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK		
Pedestrian Sight Distance	OK	OK	OK		
Crash History	Not evaluated due to existing Metro Gold Line alignment in place	Not evaluated due to existing Metro Gold Line alignment in place	Not evaluated due to LRT being underground at this location		
Crossing Delineation/Signage	T-intersection; pedestrian crossings allowed on south leg of intersection	Pedestrian crossings allowed on three legs; pedestrian crossing is prohibited along east leg	Pedestrian crossings allowed on all four legs of the intersection ; marked with color stamped concrete		

Table 5-3. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (cont)					
Evaluation Factor (per Section 3.0)	**3rd Street**	**Kosciuszko Street**	**Hope Street**	**S. Grand Avenue**	**S. Olive Street**
Traffic Control Compliance Issues	None observed – Metro Gold Line track protected by raised curb median island	None observed – intersection is signalized	None observed		
Special Generators	Nishi Hompa Hongwanji Temple; Fire Station #4; Station for existing Metro Gold Line	Nishi Hompa Hongwanji Temple; Fire Station #4; Station for existing Metro Gold Line	LADWP Maintenance Yard; Fire Station #4; Station for existing Metro Gold Line		
Presence of Adequate Lighting	None observed	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection		

[1] *A leg of an intersection is the street segment that forms one part of the intersection. For example, the north leg would be the street that forms the northern portion of an intersection.*

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 (Figure 5-6) would provide four new stations and a direct connection from 7th Street/Metro Center Station to the Metro Gold Line tracks north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. At 2nd and Central, the tracks would continue underground heading northeast under 1st and Alameda Streets.

A new two-level junction would be constructed underground beneath the 1st and Alameda Street intersection. Trains would rise to the surface north and east of the junction through new portals to connect to the Metro Gold Line heading north to Azusa and east to I-605. One portal containing the northbound and southbound tracks to Azusa would be located northeast of the existing Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the LADWP Maintenance Yard and connect to the existing LRT bridge over US-101, allowing a connection to the Metro Gold Line to Azusa.

The portal would be connected to the 1st and Alameda Street junction by a new cut-and-cover tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center on the northeast corner of 1st and Alameda Streets, and run immediately east of the existing Little Tokyo/Arts District station and tracks.

Two portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line to the San Gabriel Valley. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

1st Street would be widened to the north to accommodate the westbound portal. Widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street; there the new tracks would feed into the existing 1st Street LRT tracks, about a half block west of the 1st Street Bridge.

1st Street would also be widened to the south between Hewitt and Vignes Streets to accommodate the eastbound track portal. Street widening would taper down as it approaches Vignes Street. No modification to the 1st Street Bridge would be necessary. Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT bridge, and construct the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center Station.

5.6.1 Direct Impacts – Construction and Operation

The Fully Underground LRT Alternative – Little Tokyo Variation 2 could affect the pedestrian environment, motorist safety, and emergency response times for emergency service providers during both construction and LRT operation. Concerns identified in Section 4 have been reviewed within the context of this alternative, and key potential issues related to pedestrian and motorist safety have been identified. Table 5-4 lists these potential effects. CEQA guidelines on safety and security regarding pedestrian safety, station accidents and collisions, police and fire response, and criminal activity are addressed in the following sections.

5.6.1.1 Pedestrian and Motorist Safety, Station Accidents, and Collisions

The pedestrian safety assessment along the proposed LRT corridor focused on three separate categories, including:

- Pedestrian safety at station locations
- Pedestrian safety near the trackway
- Pedestrian safety at designated grade crossings

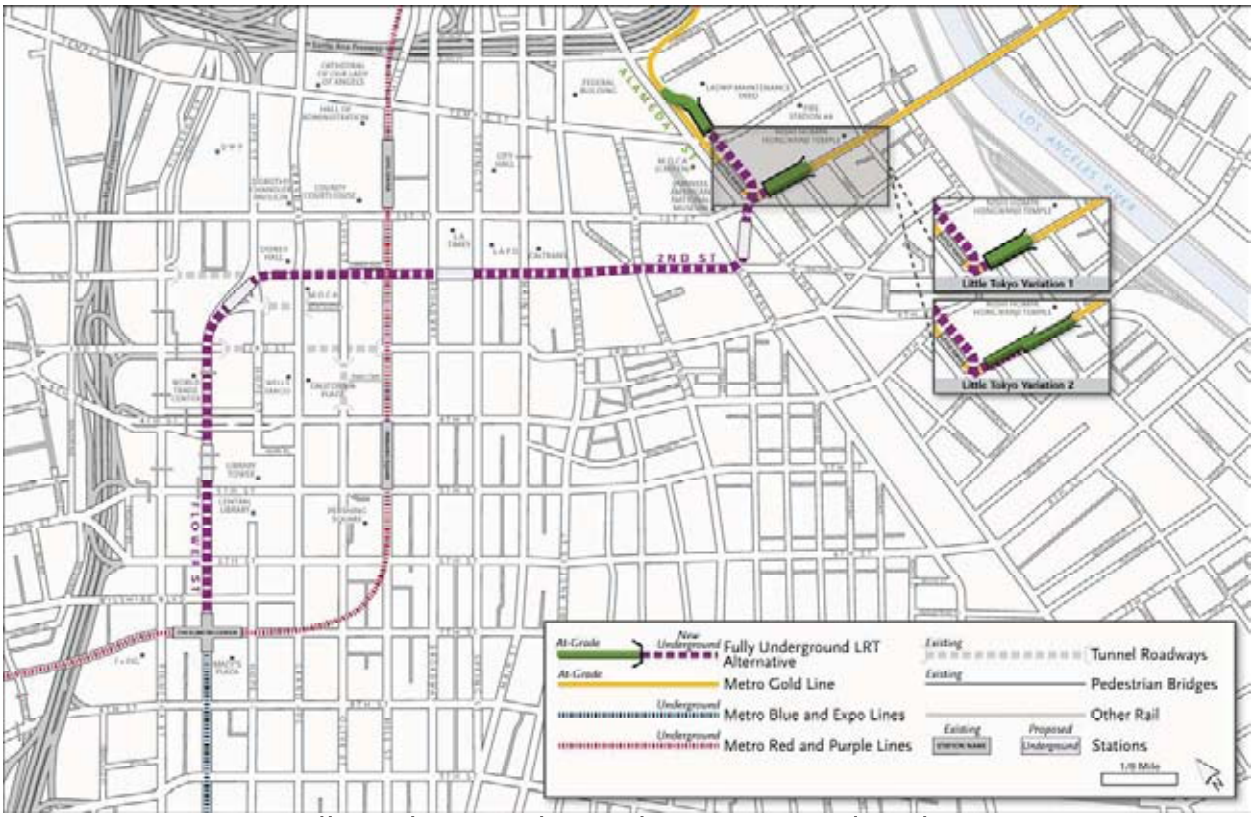

Figure 5-6. Fully Underground LRT Alternative – Little Tokyo Variation 2

The safety considerations identified previously apply primarily to proposed at-grade locations. These concerns do not arise with underground LRT facilities (there are no trackway crossings for pedestrians or vehicles) and the stations can be designed to avoid these concerns (e.g., a design that avoids the need for pedestrians to cross tracks and the potential for collisions with light rail vehicles).

The Fully Underground LRT Alternative – Little Tokyo Variation 2 includes four underground stations along the planned route. These stations would be designed to avoid potential safety hazards and prevent or avoid the need for pedestrians to cross trackways as they enter or depart the station. Additionally, stations would be appropriately sized to accommodate the anticipated number of passengers. These design solutions would reduce this potential impact to a less than significant level.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in the entire LRT facility being placed underground, eliminating conflicts with at-grade roadway and pedestrian infrastructure. In that regard, the proposed alternative and associated design would avoid potential safety effects related to both pedestrian and motorist crossings. The grade-separated nature of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would avoid these potential effects and no impact would occur.

5.6.1.2 Security

Security issues may be related to police and fire response, emergency evacuation and responses, and addressing criminal and terrorist activity. A complete Threat and Vulnerability Assessment in compliance with FTA regulations to mitigate potential safety and security concerns would be conducted for the locally preferred alternative when one is selected.

Police and Fire Response

Standard specifications and traffic work plans would be developed to minimize potential construction impacts on emergency service providers by reducing potential impacts on emergency response times. The project would include coordination with police and fire services during development of construction and operation plans to provide appropriate safety and security of the public using the Metro system, employees, and the surrounding communities.

The LACSD policing contract with Metro would be extended to include the Regional Connector project, and the project would be coordinated and compliant with TSA/DHS. Potential impacts would be reduced to a less than significant level by implementing these measures.

LAFD Station #3 is located at the corner of 1st Street and Fremont Avenue, about 0.25 mile away from a section of the Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment. This portion of the alignment is not anticipated to affect fire response times because it would be underground.

LAFD Station #4 is located at Temple and Garey Streets, less that 0.25 mile away from the proposed 2nd Street/Central Avenue stations. Emergency response times will neither improve nor degrade over existing conditions because: 1) at-grade roadway conditions will essentially remain unchanged from an operational perspective, and 2) the LRT alignment would be fully underground as it passes underneath the congested intersection of 1st and Alameda Streets..

Fire safety in particular is addressed through design considerations. Metro's *Fire/Life Safety Design Criteria* outline specific requirements for fire protection at stations, along the alignment, and within LRVs. Requirements include providing fire alarm control systems at each enclosed station facility and and a public address system at each station.

All LRVs would be equipped with fire extinguishers, and fans to ventilate the LRV in case of fire. LRV fire hazards would be reduced by specifying construction materials with minimum burning rates, smoke generation, and toxicity characteristics.

Additional design criteria address emergency responder access, passenger egress standards, and standards for sprinkler systems and standpipe connections for fire response. Adherence to these standards and federal, state, and local regulations in conjunction with the low risk of fires at stations would result in a less than significant impact to safety and security.

Crime and Terrorist Activity

Depending on the type of construction, and also the construction sequencing, temporary barricades and fencing would be used to prevent unauthorized personnel from entering construction areas, especially after hours and/or when construction is dormant. This is especially important when construction activities expose underground utilities and/or when excavated trenches have been created and left in an open state.

There is a potential for security issues to occur such as assault or robbery on the proposed project. These concerns would be addressed by design considerations and providing law enforcement personnel on the transit system during hours of operation.

Every station would be well lit to provide visibility around the entire station day and night, as specified by City requirements and Metro *Design Criteria*. The stations and the LRVs would be equipped with closed-circuit TV systems monitored by Metro personnel. Additionally, emergency call boxes would be available in all stations for passenger use in case of emergency, and each LRV would have an operator that could be contacted by passengers via an intercom system.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 presents a different set of conditions than both the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative because there are four underground stations and the entire alignment is below grade. Some of these altered conditions might include:

- Activity in underground stations and tunnels would be out of the general public view, and less observable by routine neighborhood security/police patrols in the general area, compared to street level facilities.
- Tunnels may offer non-domiciled persons refuge from the elements.
- Staircases and passageways may create opportunities for criminal activity.
- Tunnels offer a greater consequence to train service should trespassers enter; clearance and concealment issues may arise.
- Limited access to stations and the LRT system results in greater control and ability to monitor activities in an underground system.
- Underground system operation may be more reliable.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less vulnerable to disruptions from public demonstrations and to impacts from vehicle-borne improvised explosive devices. By controlling entries, an underground system may continue to function during public demonstrations and large-scale disturbances at grade level. However, terrorist groups have recently struck at underground rail systems in some of the major capitols of the world, including London and Tokyo.

In addition, underground systems have a greater potential for safety issues related to evacuation needs. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would be conducted for the locally preferred alternative when one is selected. For the Fully Underground LRT Alternative – Little Tokyo Variation 2 this would include a complete evacuation plan to mitigate potential safety concerns.

5.6.2 Indirect Impacts – Construction and Operation

Potential indirect impacts that may be associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not have a detrimental or increased effect on public safety or accidents during both construction and LRT operation. A potential indirect impact could be increased ridership created by increased public transportation service for the overall LRT system through the system-wide connections provided by the Regional Connector project. This increased demand could have both beneficial and adverse effects. Transit-oriented developments could create more pedestrian appropriate and safe environments and/or cause an increase in the number of people in a defined geographic area, potentially resulting in new conflicts between pedestrians and motorists.

As indicated previously, stations would be appropriately sized to accommodate the anticipated number of passengers. In addition, the Fully Underground LRT Alternative – Little Tokyo Variation 2 results in the entire LRT facility being placed underground, eliminating conflicts with at-grade roadway and pedestrian infrastructure. In that regard, the proposed

alternative and associated design would avoid potential safety effects related to both pedestrian and motorist crossings.

5.6.3 Cumulative Impacts – Construction and Operation

Potential cumulative impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 2 are qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed-use developments under consideration. Each of these projects would address safety and security of pedestrians and motorists accessing the developments.

From a cumulative perspective, potential impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be mitigated to a less than significant level and would not have a cumulative effect on the safety and security environment in the project area during both construction and LRT operation.

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	Proximity of overpass piers to curbside may cause sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	OK	Compromised – access to parking garage
Pedestrian Sight Distance	Not applicable	Not applicable	Somewhat compromised due to overpass shading & overpass structural support (abutments and piers)
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2			
Evaluation Factor (per Section 3.0)	**6th Street**	**5th Street**	**4th Street**
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection; Also two pedestrian overpasses present just north of intersection on Flower Street; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian overpass provided on west leg of intersection; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines
Traffic Control Compliance Issues	West leg (6th Street) is an off-ramp from SR 110. Field observations noted speeds higher than predicted because of this	West leg (5th Street) is an on-ramp to SR 110. Field observations noted speeds higher than predicted because of this	Vehicles exiting parking garage access (east leg) must encroach into crosswalk to see oncoming traffic on Flower Street
Special Generators	City National Plaza (office complex)	Bonaventure Hotel Complex CitiCorp Plaza	World Trade Center
Presence of Adequate Lighting	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	Dark location due to shading of bridge overpass; standard luminaires located on all four quadrants of intersection

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	Eastbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street)	Westbound vehicle sight distance slightly limited due to grade of east leg (2nd Street); one-way leg in westbound direction only (2nd Street)
Pedestrian Sight Distance	OK	Slightly compromised due to vegetation on southwest corner of intersection	Slightly compromised due to vegetation on southwest corner of intersection	Intersection is elevated and on top of crest; excellent sight distance for pedestrians on all legs of intersection	OK
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian overpass provided on south leg of intersection near World Trade Center; Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings on three legs & east leg just marked with white lines	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	No pedestrian crossings allowed on north leg and west leg of intersection – prohibited by signage and lack of marked crosswalk	All crosswalks are well marked and signing is appropriate; fairly new intersection construction	No pedestrian crossing allowed on north leg of intersection – prohibited by signage and lack of marked crosswalk
Traffic Control Compliance Issues	None observed	None observed; triple left turns off of north leg of Kosciuszko	None observed; triple left turns off of north leg of Kosciuszko	None observed; designated left turn arrows present for heavy left-turn movements	None observed; designated left turn arrows present for heavy left-turn movements from 2nd Street to S. Olive Street

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Special Generators	World Trade Center	Walt Disney Concert Hall	Walt Disney Concert Hall	Walt Disney Concert Hall	None noted
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	Minor concern for EB vehicle traffic due to existing building on west corner of intersection	OK	OK	Boulevard trees cause minor sight distance concerns for motorists
Motorist Approach Sight Distance (East Leg[1])	OK	Minor concern for WB vehicle traffic due to existing building on east corner of intersection	OK	OK	OK
Pedestrian Sight Distance	Poor on west leg due to tunnel exit and one-way hill on west leg of 2nd Street	OK	OK	Not applicable	Not applicable
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings; poor median refuge area on west leg separating tunnel exit from one-way grade on hill	Pedestrian crossings allowed on all four legs; marked with color stamped concrete & white markings	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only	Pedestrian crossings allowed on all four legs; marked with white crosswalk markings only

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	None observed	None observed	
Special Generators	None noted	LA Times	LAPD	Caltrans Building	Caltrans Building
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on three quadrants of intersection & decorative luminary on remaining quadrant	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection
Traffic Queuing	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	No impact to vehicular traffic; LRT is underground at this location	LRT is transitioning through portal at this location	LRT is transitioning through portal at this location
Motorist Approach Sight Distance (North Leg[1])	OK	OK	OK	N/A – No north leg to intersection ("T" intersection")	OK
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK	OK	OK
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK	OK	OK
Pedestrian Sight Distance	OK	OK	OK	OK	OK
Crash History	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground at this location	Not evaluated due to LRT being underground / portal area at this location	Not evaluated due to LRT being underground / portal area at this location
Crossing Delineation/Signage	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	Pedestrian crossings allowed on all four legs; marked with colored asphalt and decorative imprinted crosswalk markings	T-intersection; pedestrian crossings allowed on south leg of intersection	Pedestrian crossings allowed on all four legs; marked with single marked white lines on all legs

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (cont)

Evaluation Factor (per Section 3.0)	3rd Street	Kosciuszko Street	Hope Street	S. Grand Avenue	S. Olive Street
Traffic Control Compliance Issues	None observed	None observed	Excessive vehicle queuing during peak hours of vehicles backed into adjacent intersections and through crosswalks	None observed – Metro Gold Line track protected by raised curb median island	None observed – intersection is signalized
Special Generators	Little Tokyo Neighborhood	Little Tokyo Neighborhood	Station for existing Metro Gold Line	Station for existing Metro Gold Line	Station for existing Metro Gold Line
Presence of Adequate Lighting	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on both southwest and southeast corners	OK – standard luminaires located on all corners of intersection
Traffic Queuing	Existing Metro Gold Line at location - LRT in transition through portal at this location	Existing Metro Gold Line at location - no change from this alternative	No impact to vehicular traffic; LRT is underground at this location		
Motorist Approach Sight Distance (North Leg[1])	N/A – No north leg to intersection ("T" intersection")	OK	OK		
Motorist Approach Sight Distance (South Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (West Leg[1])	OK	OK	OK		
Motorist Approach Sight Distance (East Leg[1])	OK	OK	OK		
Pedestrian Sight Distance	OK	OK	OK		
Crash History	Not evaluated due to existing Metro Gold Line alignment in place	Not evaluated due to existing Metro Gold Line alignment in place	Not evaluated due to LRT being underground at this location		
Crossing Delineation/Signage	T-intersection; pedestrian crossings allowed on south leg of intersection	Pedestrian crossings allowed on three legs; pedestrian crossing is prohibited along the east leg	Pedestrian crossings allowed on all four legs of the intersection ; marked with color stamped concrete		

Table 5-4. Safety Analysis for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (cont)					
Evaluation Factor (per Section 3.0)	**3rd Street**	**Kosciuszko Street**	**Hope Street**	**S. Grand Avenue**	**S. Olive Street**
Traffic Control Compliance Issues	None observed – Metro Gold Line track protected by raised curb median island	None observed – intersection is signalized	None observed		
Special Generators	Nishi Hompa Hongwanji Temple; Fire Station #4; Station for existing Metro Gold Line	Nishi Hompa Hongwanji Temple; Fire Station #4; Station for existing Metro Gold Line	LADWP Maintenance Yard; Fire Station #4; Station for existing Metro Gold Line		
Presence of Adequate Lighting	None observed	OK – standard luminaires located on all four quadrants of intersection	OK – standard luminaires located on all four quadrants of intersection		

[1] *A leg of an intersection is the street segment that forms one part of the intersection. For example, the north leg would be the street that forms the northern portion of an intersection.*

6.0 POTENTIAL MITIGATION MEASURES

All proposed mitigation measures regarding safety and security would be developed in conformance with Metro's *Rail Transit Design Criteria and Standards, Fire/Life Safety Criteria, Volume IX*. The criteria specifically address fire protection requirements for the design and construction of LRT systems. The criteria identify and discuss fire safety as it corresponds to the following specific design criteria: station and guideway facilities, passenger vehicles, vehicle yard and maintenance facilities, system fire/life safety procedures, communications, rail operations control, and inspection, maintenance and training. The criteria establish minimum requirements that would provide for the protection of life and property from the effects of fire. Proposed safety and security mitigation recommendations would be based on the results of and part of the Threat and Vulnerability Assessment that will be conducted for the locally preferred alternative when one is selected. These security measures may include:

- A closed circuit TV system
- Emergency push-button call system for patrons
- Intrusion detection system
- Dedicated security patrol protocols and procedures
- Employing "Crime Prevention through Environmental Design" principles during design phase

The presence of transit workers in underground stations further dissuades persons from committing offenses. Several underground systems in the United States have successfully employed security technology and patrol methods to mitigate crime conditions in underground systems, resulting in fewer offenses committed in the transit system than in the neighborhoods they traverse.

The potential mitigation measures discussed in the following sections are grouped by those that would apply to construction-related effects and by those that would apply to operation of at-grade facilities or underground portions of a proposed alignment.

6.1 Potential Construction Mitigation Measures

- Provide alternate walkways for pedestrians around construction staging sites in accordance with American with Disability Act (ADA) requirements.
- Sign and properly mark all pedestrian detour locations around staging sites in accordance with the Manual on Uniform Traffic Control Devices "work zone" guidance, and other applicable local and state requirements.
- Coordinate work plans and traffic control measures with emergency responders to prevent effects to emergency response times.

- Metro would develop a Construction Mitigation Program during final design and implement during construction. The Program would guide Metro in communicating to the community and obtaining input from residents and businesses affected during construction. This would included communicating traffic control measures, schedule of activities and duration of operations.

6.2 Potential Operational Mitigation Measures

6.2.1 Specific to At-Grade Conditions

- To reduce potential risk of collisions between LRVs and automobiles on the street portion of the proposed At-Grade Emphasis LRT Alternative, Metro would coordinate with the CPUC, City of Los Angeles and the Los Angeles County traffic control departments, Bureau of Engineering, and the City and County Fire departments, and also comply with the Federal Highway Administration's Manual on Uniform Traffic Control Devices for signing and pavement marking treatments.

- All stations would be lighted to avoid shadows and all pedestrian pathways leading to/from sidewalks and parking facilities would be well illuminated. In addition, lighting would provide excellent visibility for train operators to be able to react to possible conflicts, especially to pedestrians crossing the track.

- Proposed station designs would not include design elements that obstruct visibility or observation nor provide discrete locations favorable to crime; pedestrian access to at-grade stations would be at ground-level with clear sight lines.

- Sidewalk widths and placements would be designed appropriately to accommodate a wide variety of users. In areas directly adjacent to the rail stations: 1) sidewalk widths would be designed with the widest dimensions feasible in conformance with the Los Angeles/Metro's adopted "Land Use/Transportation Policy," and with widths exceeding 10 feet; 2) minimum widths would not be less than those allowed by the State of California Title 24 access requirements, or the Americans with Disability Act design recommendations; 3) accommodating pedestrian movements and flows would take priority over other transportation improvements, including automobile access; and 4) physical improvements would ensure that all stations are fully accessible as defined in the Americans with Disabilities Act.

- A grade-separated pedestrian bridge across Alameda Street, just north of the existing Little Tokyo/Arts District Station, would be constructed to separate pedestrian movements from LRT vehicles and motorized vehicle movements under the At-Grade Emphasis LRT Alternative.

- A grade-separated pedestrian bridge across Alameda Street, just south of the existing Little Tokyo/Arts District Station, would be constructed to separate pedestrian movements from LRT and motorized vehicle movements under the Underground Emphasis LRT Alternative. Also a grade-separated pedestrian bridge across the

Metro Gold Line tracks, just south of the existing Little Tokyo/Arts District Station and east of Alameda Street, would be constructed to separate pedestrian movements from LRT and motorized vehicle movements for the Underground Emphasis LRT Alternative.

- A grade-separated pedestrian bridge across Kosciuszko Street near the proposed 2nd/Hope Street station would be constructed. The proposed pedestrian bridge would reduce potential pedestrian/LRT/vehicle conflicts by providing a separated facility for pedestrians trying to reach the station, especially from the high pedestrian generator Walt Disney Concert Hall (mitigation measure would apply to both the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative).

- Adequate pedestrian queuing and refuge areas and wide crosswalks would be provided in areas immediately around proposed stations to facilitate pedestrian mobility.

6.2.2 Specific to Underground Conditions

- The Metro Fire/Life Safety Committee has developed standard safety-related design criteria to ensure safe and adequate LRT operations in and around LRT underground stations. These include: 1) fire alarm protection within the station area, 2) a minimum of two fire emergency routes from each proposed station, 3) emergency ventilation and lighting, 4) communication systems between adjoining fire agencies, and 5) a methane detection system for each proposed station.

- Building construction for underground stations would not be less than Type I Construction as defined in the Uniform Building Code (UBC). Type I Construction is a category of building construction that sets forth design requirements that provides for safety features such as ventilation, additional egress routes, lighting, etc. Proposed stations having more than two levels below-grade or more than 80 feet to the lowest occupied level from grade would require protected level separation or other protection features to provide safe egress to the exits.

6.2.3 Applicable to both At-Grade and Underground Conditions

- For portions of the alignment where pedestrians and/or motor vehicles must cross the tracks, Metro would prepare grade crossing applications in coordination with the CPUC and local public agencies, such as LADOT, Bureau of Engineering, and the City and County Fire departments.

- All proposed LRT stations and related parking facilities would be equipped with monitoring equipment, which would primarily consist of video surveillance equipment to monitor strategic areas of the LRT stations and walkways, and/or be monitored by Metro security personnel on a regular basis.

- Metro would implement a security plan for LRT operations. The plan would include both in-car and station surveillance by Metro security or other local jurisdiction security personnel.
- Metro would coordinate and consult with the LAFD, LAPD, and LACSD to develop safety and security plans for the proposed alignment, parking facilities, and station areas.
- Light rail vehicles would be provided with front and rear safety fenders to increase light rail vehicle safety and minimize or prevent the potential for pedestrians to contact the vehicle coupler and/or fall under the LRV.
- Fire separations would be provided and maintained in public occupancy areas. Station public occupancy would be separated from station ancillary occupancy by a minimum 2-hour fire-rated wall. The only exception is that a maximum of two station agents, supervisors, or information booths may be located within station public occupancy areas when constructed of approved noncombustible materials and limited in floor area to 100 square feet.
- The diverse needs of different types of traveling public including senior citizens, disabled citizens, low income citizens, would be addressed through a formal educational and outreach campaign. The campaign would target these diverse community members to educate them on proper system use and benefits of LRT ridership.

7.0 CONCLUSIONS

A significant adverse safety and security impact for both construction and future LRT operation would occur under CEQA if an alternative would: 1) create substantial adverse safety conditions, including station accidents, boarding and disembarking accidents, right-of-way accidents, collisions, fires, and major structural failures; 2) substantially limit delivery of community safety services—including police, fire, or emergency services—to locations along the proposed alignment; 3) create the potential for increased pedestrian and/or bicycle safety risks; and/or 4) create the potential for adverse security conditions, including incidents, offenses, and crimes. There are no specific thresholds identified under NEPA.

7.1 No Build Alternative

7.1.1 NEPA Findings

There would be no safety or security impacts related to the No Build Alternative

7.1.2 CEQA Determinations

The No Build Alternative would not result in safety or security impacts.

7.2 TSM Alternative

7.2.1 NEPA Findings

There would be no safety or security impacts related to the TSM Alternative.

7.2.2 CEQA Determinations

The TSM Alternative would not result in safety or security impacts.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Potential safety and security impacts related to construction and operation of the At-Grade Emphasis LRT Alternative would be reduced to a less than significant level through the implementation of mitigation measures. This finding is described more fully in Section 7.3.2.

7.3.2 CEQA Determinations

The At-Grade Emphasis LRT Alternative would likely result in potential impacts to pedestrian safety and overall security issues during both construction and LRT operation; however, these would be mitigated by applying appropriate design criteria and implementing appropriate standards. For example, grade crossings would be equipped with warning devices based on a comprehensive hazard analysis and additional field reviews as part of the legally required CPUC grade crossing application process.

Design considerations that mitigate potential adverse impacts would be identified and incorporated into the project. The Threat and Vulnerability Assessment conducted for the locally preferred alternative when one is selected would also identify specific design features and mitigation measures that would be implemented to avoid potential safety and security concerns. Through comprehensive hazard identification, safety-oriented project design features, and the toolkit of mitigation measures indentified in Section 6.0, the proposed alternative would not result in significant adverse safety or security impacts.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Potential safety and security impacts related to construction and operation of the Underground Emphasis LRT Alternative would be reduced to a less than significant level through the implementation of mitigation measures. This finding is described more fully in Section 7.4.2.

7.4.2 CEQA Determinations

The Underground Emphasis LRT Alternative would likely result in potential impacts to pedestrian safety and overall security concerns during both construction and LRT operation; however, these would be much less intense than potential impacts from the At-Grade Emphasis LRT Alternative. Any potential impacts would be mitigated by applying appropriate design criteria and implementing appropriate standards.

For example, the design would include development of a comprehensive evacuation plan. Design considerations that mitigate potential adverse impacts would be identified and incorporated into the project. The Threat and Vulnerability Assessment conducted for the locally preferred alternative when one is selected would also identify specific design features and mitigation measures that would be implemented to avoid potential safety and security concerns. Through comprehensive hazard identification, safety-oriented project design features, and the toolkit of mitigation measures indentified in Section 6.0, the proposed alternative would not result in significant adverse safety and security impacts.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

Potential safety and security impacts related to construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be reduced to a less than significant level through the implementation of mitigation measures. This finding is described more fully in Section 7.5.2.

7.5.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would likely result in potential impacts to pedestrian safety and overall security concerns during both construction and LRT operation; however, these would be less intense than potential impacts from either

the At-Grade Emphasis LRT or Underground Emphasis LRT Alternatives. Any potential impacts would be mitigated by applying appropriate design criteria and implementing appropriate standards.

For example, design would include development of a comprehensive evacuation plan. Design considerations that mitigate potential adverse impacts would be identified and incorporated into the project. The Threat and Vulnerability Assessment conducted for the locally preferred alternative when one is selected would also identify specific design features and mitigation measures that would be implemented to avoid potential safety and security concerns. Through comprehensive hazard identification, safety-oriented project design features, and the toolkit of mitigation measures indentified in Section 6.0, the proposed alternative would not result in significant adverse safety and security impacts.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

Potential safety and security impacts related to construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be reduced to a less than significant level through the implementation of mitigation measures. This finding is described more fully in Section 7.6.2.

7.6.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would likely result in potential impacts to pedestrian safety and overall security concerns during both construction and LRT operation; however, these would be less intense than potential impacts from either the At-Grade Emphasis LRT or Underground Emphasis LRT Alternatives. Any potential impacts would be mitigated by applying appropriate design criteria and implementing appropriate standards.

For example, design would include development of a comprehensive evacuation plan. Design considerations that mitigate potential adverse impacts would be identified and incorporated into the project. The Threat and Vulnerability Assessment conducted for the locally preferred alternative when one is selected would also identify specific design features and mitigation measures that would be implemented to avoid potential safety and security concerns. Through comprehensive hazard identification, safety-oriented project design features, and the toolkit of mitigation measures indentified in Section 6.0, the proposed alternative would not result in significant adverse safety and security impacts.

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Draft Environmental Impact Report

APPENDIX D

LIST OF DRAFT EIS/EIR RECIPIENTS (UPDATED)

State Clearinghouse Number: 2009031043

Appendix D LIST OF EIS/EIR RECIPIENTS

The following table lists the persons who were sent direct mailings of either a full copy of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) as either a hardcopy or a compact disc, or a hardcopy of the Notice of Availability (NOA).

First Name	Last Name	Title	Organization	EIS/EIR or NOA
Darryl	Garibay		Advanced Parking Systems	EIS/EIR
John	Fowler	Executive Director	Advisory Council on Historic Preservation	EIS/EIR
Masao "Mike"	Okamoto		Asian American Architects and Engineers Association	EIS/EIR
James	Goldstene	Executive Officer	California Air Resources Board	NOA
Pam	Emerson	Los Angeles County Area Supervisor	California Coastal Commission	NOA
Bridgett	Luther	Director	California Department of Conservation	NOA
Jack	O'Connell	Superintendent	California Department of Education	NOA
John	McCamman	Director	California Department of Fish and Game	NOA
Ruben	Grijalva	Director	California Department of Forestry and Fire Protection	NOA
Ron	Diedrich	Acting Director	California Department of General Services	NOA
Lynn	Jacobs	Director	California Department of Housing and Community Development	NOA
Ruth	Coleman	Director	California Department of Parks and Recreation	NOA
Andre	Amy	Regulatory Assistance Officer	California Department of Toxic Substances Control	NOA
Brian	Manor	Associate Environmental Planner	California Department of Transportation	EIS/EIR
Dawn	Kukla	Senior Environmental Planner	California Department of Transportation	NOA

Appendix D List of Recipients

First Name	Last Name	Title	Organization	EIS/EIR or NOA
Mark	Stuart	District Chief	California Department of Water Resources	NOA
Mark	Bassett	Regional Administrator	California Emergency Management Agency	NOA
Linda	Adams	Secretary of EPA	California Environmental Protection Agency	NOA
Kim	Belshe	Secretary	California Health and Human Services	NOA
Carrie	Pourvahidi	Interim Executive Director	California High-Speed Rail Authority	NOA
Alyson	Huber	Chair	California Joint Legislative Audit Committee	NOA
Larry	Myers	Executive Secretary	California Native American Heritage Commission	NOA
Paul	Clanon	Executive Director	California Public Utilities Commission	NOA
Jose A.	Gomez	Assistant VP for Administration and Finance	California State University, Los Angeles	EIS/EIR
James M.	Rosser	Office of the President	California State University, Los Angeles	EIS/EIR
Susan	Bransen	Associate Deputy Director	California Transportation Commission	EIS/EIR
Kimberly	Rodrigues	City Clerk	City of Agoura Hills	NOA
Lauren	Myles	City Clerk	City of Alhambra	NOA
James	Barrows	City Clerk	City of Arcadia	NOA
Gloria	Considine	City Clerk	City of Artesia	NOA
Denise	Radde	City Clerk	City of Avalon	NOA
Vera	Mendoza	City Clerk	City of Azusa	NOA
Alejandra	Avila	City Clerk	City of Baldwin Park	NOA
Rebecca	Valdez	City Clerk	City of Bell	NOA
Vida	Barone	Interim City Clerk	City of Bell Gardens	NOA

First Name	Last Name	Title	Organization	EIS/EIR or NOA
Debra D.	Bauchop	City Clerk	City of Bellflower	NOA
Byron	Pope	City Clerk	City of Beverly Hills	NOA
Claudia	Saldana	City Clerk	City of Bradbury	NOA
Margarita	Campos	City Clerk	City of Burbank	NOA
Gwen	Peirce	City Clerk	City of Calabasas	NOA
Helen S.	Kawagoe	City Clerk	City of Carson	NOA
Josephine	Triggs	City Clerk	City of Cerritos	NOA
Lynne	Fryman	City Clerk	City of Claremont	NOA
Linda K.	Olivieri	City Clerk	City of Commerce	NOA
Alita	Godwin	City Clerk	City of Compton	NOA
Toni	Taber	City Clerk	City of Covina	NOA
Larry	Galvan	City Clerk	City of Cudahy	NOA
Martin	Cole	City Clerk	City of Culver City	NOA
Glenn	Heald	Management Analyst	City of Culver City	EIS/EIR
Tommye	Cribbins	City Clerk	City of Diamond Bar	NOA
Kathleen	Midstrokke	City Clerk	City of Downey	NOA
Marla	Akana	City Clerk	City of Duarte	NOA
Lorene	Gutierrez	City Clerk	City of El Monte	NOA
Cindy	Mortesen	City Clerk	City of El Segundo	NOA
Maria E.	Marquez-Brookes	City Clerk	City of Gardena	NOA
Ardashes	Kassakhian	City Clerk	City of Glendale	NOA
Kathleen	Sessman	City Clerk	City of Glendora	NOA
Suzanne	Underwood	City Clerk	City of Hawaiian Gardens	NOA
Norb	Huber	City Clerk	City of Hawthorne	NOA
Elaine	Doerfling	City Clerk	City of Hermosa Beach	NOA

First Name	Last Name	Title	Organization	EIS/EIR or NOA
Cheria L.	Paglia	City Manager/City Clerk	City of Hidden Hills	NOA
Rosanna	Ramirez	City Clerk	City of Huntington Park	NOA
Jodi L.	Scrivens	City Clerk	City of Industry	NOA
Yvonne	Horton	City Clerk	City of Inglewood	NOA
Linda	Kimbro	Deputy City Clerk	City of Irwindale	NOA
Sylvia	Baca	City Clerk	City of La Cañada Flintridge	NOA
Grace	Andres	Deputy City Clerk	City of La Habra Heights	NOA
Anne	Haraksin	City Clerk	City of La Mirada	NOA
Vida	Barone	Interim City Clerk	City of La Puente	NOA
Evelyn	Clark	City Clerk	City of La Verne	NOA
Denise	Hayward	City Clerk	City of Lakewood	NOA
Geri	Bryan	City Clerk	City of Lancaster	NOA
Paula	Hartwill	City Clerk	City of Lawndale	NOA
Dawn	Tomita	City Manager/City Clerk	City of Lomita	NOA
Larry	Herrera	City Clerk	City of Long Beach	NOA
Antonio	Villaraigosa	Mayor	City of Los Angeles	NOA
Robert "Bud"	Ovrom	General Manager	City of Los Angeles, Building and Safety	NOA
Richard L.	Benbow	Director	City of Los Angeles, Community Development	NOA
Calvin E.	Hollis	Interim Chief Executive Officer	City of Los Angeles, Community Redevelopment Agency	NOA
Olga	Garay	Executive Director	City of Los Angeles, Cultural Affairs	NOA
Susan	Bok	Senior Transportation Planner	City of Los Angeles, Department of Transportation	EIS/EIR
Calvin	Chow	Transportation Planner	City of Los Angeles, Department of Transportation	EIS/EIR

First Name	Last Name	Title	Organization	EIS/EIR or NOA
James G.	Featherstone	Director	City of Los Angeles, Emergency Management	NOA
Detrich B.	Allen	Director	City of Los Angeles, Environmental Affairs	NOA
Douglas	Barry	Chief	City of Los Angeles, Fire	NOA
Rudolf C.	Montiel	President/CEO	City of Los Angeles, Housing Authority	NOA
Ken	Bernstein	Manager	City of Los Angeles, Office of Historic Resources	NOA
S. Gail	Goldberg	Director of Planning	City of Los Angeles, Planning	NOA
Charlie	Beck	Chief	City of Los Angeles, Police Department	NOA
Tyree	Wieder	Board of Library Commissioners	City of Los Angeles, Public Library	NOA
Enrique C.	Zaldivar	Director	City of Los Angeles, Public Works/Sanitation	NOA
Ed	Ebrahimian	Director	City of Los Angeles, Public Works/Street Lighting	NOA
William A.	Robertson	Director	City of Los Angeles, Public Works/Street Services	NOA
Jon Kirk	Mukri	General Manager	City of Los Angeles, Recreation and Parks	NOA
Rita L.	Robinson	General Manager	City of Los Angeles, Transportation	NOA
H. David	Nahai	Chief Executive Officer/General Manager	City of Los Angeles, Water and Power	NOA
Ellis	Stanley	CEM Director	City of Los Angeles: Emergency Preparation	NOA
Jon	Foreman		City of Los Angeles: Planning	NOA
Vance	Bjorklund	Transit Liaison	City of Los Angeles: Police	NOA
Kris	Werner	Senior Lead Officer	City of Los Angeles: Police	NOA

First Name	Last Name	Title	Organization	EIS/EIR or NOA
Julie	Sauter		City of Los Angeles: Public Works: Bureau of Engineering	NOA
Dung	Tran	Bridge Improvement Program	City of Los Angeles: Public Works: Bureau of Engineering	NOA
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Milford	Donaldson	State Historic Preservation Officer	State Office of Historic Preservation	NOA
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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX DD

GROWTH – INDUCING IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Growth-Inducing Impacts
Technical Memorandum

March 5, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CLACG	City of Los Angeles Council of Governments
FAR	Floor Area Ratio
FTA	Federal Transit Administration
LAPD	Los Angeles Police Department
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
NEPA	National Environmental Policy Act
RCP	Regional Comprehensive Plan
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
TSM	Transportation Management System

1.0 SUMMARY

None of the proposed project alternatives include any housing elements that would directly increase population or employment, or that would substantially change land use and development patterns. The areas along the routes are fully urbanized, making it unlikely that increased regional connectivity would induce housing construction.

The proposed project would provide additional links within the regional transportation network, thereby increasing overall system efficiency, reducing the need to make multiple transfers from one destination to another and increasing ease of travel between the San Gabriel Valley and the Westside or Long Beach. At the corridor level, the Regional Connector Transit Corridor project, combined with supportive public policies, plans, and favorable real estate conditions, could attract transit-supportive development, including employment opportunities, higher-density residential development, and new services and amenities.

The pattern of land development could be affected by greater concentration and intensity of land use activities along the proposed route. This could result in potential secondary land use impacts, most notably close to station locations. The proposed project would not induce growth; the most likely outcome would be an acceleration and/or redistribution of planned growth.

2.0 INTRODUCTION

This technical memorandum addresses the potential population, housing, and employment growth that may occur directly or indirectly due to the project. Although the Regional Connector Transit Corridor project does not include housing units, population could nevertheless increase due to the potential for transit-oriented development. This potential growth is analyzed at local and regional levels.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

3.1.1 NEPA Guidance

Guidelines established by the Council on Environmental Quality (CEQ) regarding implementation of the National Environmental Policy Act (NEPA) require evaluation of all potential environmental consequences of proposed federal activities and programs. This provision includes a requirement to examine the indirect consequences, or secondary impacts that may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 CFR 1508.8). Secondary impacts may include changes in land use, economic vitality, and population density, all of which are elements of growth. NEPA guidelines require the evaluation of reasonably anticipated growth relative to projections of growth from a federally designated Metropolitan Planning Organization (MPO).

3.1.2 Regional Growth Management Plans

Regional growth management plans are developed by the Southern California Association of Governments (SCAG), including the 2008 SCAG Regional Comprehensive Plan (RCP). SCAG is the federally designated MPO for six counties in Southern California (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial).

SCAG's mission is to develop long-range regional plans and strategies that provide for efficient movement of people, goods, and information; enhance economic growth and international trade; and improve the quality of life in the Southern California region. The RCP describes an action plan for the implementation of short-term strategies and strategic, long-term initiatives and guiding principles for sustaining a livable region. The RCP focuses on specific areas of planning or resource management, including land use and housing, open space and habitat, water, energy, air quality, solid waste, transportation, security and emergency preparedness, and the economy. The Land Use chapter of the RCP addresses issues related to growth and land use in the SCAG region and describes guiding principles for development that support the overall goals of the RCP.

The 2008 SCAG Regional Transportation Plan (RTP) examines current and future transportation plans; population, housing, and employment growth; and land use data for the SCAG region to develop projections through the year 2035. The growth projections in the 2008 SCAG RTP are used as guidelines for growth in each jurisdiction. The environmental analysis utilizes these projections to establish the magnitude of impacts related to growth.

In 2004, SCAG initiated a comprehensive growth visioning process called the Southern California Compass, now called the Compass Blueprint (2004). The Compass process seeks to accommodate growth while maintaining mobility, livability, prosperity, and sustainability

goals for residents in the SCAG region.

3.1.3 CEQA Guidance

The California Environmental Quality Act (CEQA) also requires analysis of a project's potential to induce growth. CEQA Guidelines Section 15126.2(d) require that environmental documents "discuss the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Growth-inducing impacts also include removing obstacles to growth and may potentially include changes in the amount and distribution of growth.

According to the CEQA Guidelines, a project would have a significant impact if it would:

- Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

3.2 Standards of Significance

Generally, projects with growth-inducing impacts are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure (e.g., sewer and water facilities, roadways, etc.) or are those that could encourage "premature" or unplanned growth (i.e., "leap-frog" development). Growth-inducing impacts would be considered significant if the proposed project has the potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, extending roads or other infrastructure).

3.3 Project Area

The project would be located in the central downtown area of the City of Los Angeles. The project build alternative alignments would traverse an area that includes several communities within the City of Los Angeles, including the Financial District, Bunker Hill, Civic Center, Little Tokyo, and the Historic Core.

The project area is in the City of Los Angeles Council of Governments (CLACG), a subregion of SCAG, which, in addition to the City of Los Angeles, also includes the City of San Fernando and portions of the unincorporated areas of Los Angeles County. The analysis of direct and indirect regional growth focuses not only on downtown Los Angeles growth, but also on growth in the areas served by the transit lines that would utilize the Regional Connector in Los Angeles County (Long Beach, Pasadena, Culver City, and East Los Angeles).

The analysis of the potential for direct and indirect local growth focuses on the area adjacent to the proposed transit alignment and stations extending ¼ mile to either side.

3.4 Evaluation Methodology

Federal Transit Administration (FTA) guidelines require that regional growth projections be created by the MPO. As mentioned previously, SCAG is the MPO for the project area. In order to evaluate potential growth-inducing impacts, the SCAG 2008 RTP Integrated Growth Forecast will be used as the basis for analysis of impacts. This regional perspective can be helpful in understanding the overall projected increases in population when determining whether a proposed project would induce growth. Population, household, and employment data for the project area are presented in the next section.

4.0 AFFECTED ENVIRONMENT

4.1 Regional Population, Housing, and Employment Growth

As shown in Table 4-1, the existing population for the region is more than 18 million persons. The region is estimated to have a population of more than 24 million persons, with 10.2 million persons employed by 2035—an increase of approximately 26 percent.

The population and employment in Los Angeles County are projected to increase by 1.8 million people and 542,574 jobs between 2008 and 2035. This represents an estimated average annual increase of approximately 69,953 persons and 20,095 jobs. The fastest growing area is Imperial County, which is estimated to grow at a rate of approximately 2.7 percent annually; the slowest is Orange County, with a growth rate of less than 1 percent (0.5) annually. Imperial County is also projected to have the fastest growth in employment, with an estimated annual increase of 3.7 percent. Los Angeles County is estimated to experience the slowest rate of job growth with an annual rate of 0.4 percent.

Table 4-1. Regional Population, Households, and Employment from 2008-2035

County	2008 Population	2035 Population	2008 Households	2035 Households	2008 Employment	2035 Employment
Imperial	186,041	320,448	51,987	102,878	66,703	132,551
Los Angeles	10,449,883	12,338,620	3,298,886	4,003,501	4,498,598	5,041,172
Orange	3,210,499	3,653,990	1,015,502	1,118,490	1,698,090	1,981,901
Riverside	2,112,571	3,596,680	675,135	1,183,097	728,067	1,413,522
San Bernardino	2,095,180	3,133,801	612,123	972,561	766,044	1,254,749
Ventura	841,675	1,013,733	268,967	330,189	361,942	463,227
SCAG Region	**18,054,174**	**24,057,292**	**5,922,600**	**7,710,716**	**8,118,444**	**10,287,122**

Source: Southern California Association of Governments 2008 Final Adopted Integrated Growth Forecast, May 2008.

Along with increases in population and job growth, the region is estimated to add approximately 1.7 million households, for a total of 7.7 million. Imperial and Riverside Counties are estimated to grow most rapidly at an annual rate of 3.6 percent and 2.8 percent, respectively. Los Angeles County is estimated to increase households at a rate of 0.8 percent annually and Orange County is estimated to have the lowest annual growth rate at 0.4 percent.

4.2 Local Population, Housing, and Employment Growth

This section provides population, housing, and employment growth estimates for the collection of census tracts that comprise the project area. For comparison purposes, this section also includes data from the City of Los Angeles and the City of Los Angeles Council of Governments (CLACG). CLACG includes the City of Los Angeles, the City of San Fernando, and portions of unincorporated Los Angeles County.

Table 4-2 shows population growth projections at the local level. The project area's population is estimated to increase by approximately 3,200 persons by 2035, with an annual average increase of less than 1 percent (0.51). This would be a greater growth rate than either the CLACG subregion or the City of Los Angeles.

Table 4-2. Local Area Population Growth 2008-2035

Area	2008	2035	2008-2035 Population Change	2008-2035 Annual Average % Change
CLACG	4,099,008	4,509,435	410,427	0.37
City of Los Angeles	4,016,324	4,415,773	399,449	0.37
Project Area /a/	19,912	23,123	3,211	0.51

Source: Southern California Association of Governments 2008 Final Adopted Integrated Growth Forecast, May 2008.
/a/ *The project area is comprised of the following census tracts: 2060.30, 2060.40, 2062, 2073, 2074, 2075, 2077.10.*

Table 4-3 shows the expected household growth for the project area, City of Los Angeles, and CLACG subregion. The City of Los Angeles is estimated to increase by 274,285 households and would comprise approximately 21 percent of the region's total households. The project area is estimated to increase by 2,552 households, which would be a minimal share of the City of Los Angeles' total, and would occur at a similar rate (0.77 percent) compared to the City (0.76 percent) and the CLACG subregion (0.75 percent).

Table 4-3. Local Area Household Growth 2008-2035				
Area	2008	2035	2008-2035 Household Change	2008-2035 Annual Average % Change
CLACG	1,361,906	1,638,822	276,916	0.75
City of Los Angeles	1,342,291	1,616,576	274,285	0.76
Project Area	9,654	12,306	2,552	0.77

Source: Southern California Association of Governments 2008 Final Adopted Integrated Growth Forecast, May 2008.

Table 4-4 includes employment growth for the project area, City of Los Angeles, and CLACG subregion. The table shows that the project area is expected to gain approximately 12,630 new jobs by 2035. This would be an annual rate of change of approximately 0.26 percent. The annual rate of growth for the project area would be similar to that of the City of Los Angeles, but lower than the CLACG subregion rate.

Table 4-4. Local Area Employment Growth 2008-2035				
Area	2008	2035	2000-2008 Employment Change	2008-2035 Annual Average % Change
CLACG	1,839,988	2,037,473	197,485	0.40
City of Los Angeles	1,879,666	1,994,137	114,471	0.23
Project Area	169,328	181,962	12,634	0.26

Source: Southern California Association of Governments 2008 Final Adopted Integrated Growth Forecast, May 2008.

The Cumulative Impacts Technical Memorandum identifies developments and other transit projects in downtown Los Angeles anticipated to be completed by 2018. These include major renovation projects, new construction of both public and private buildings, transportation infrastructure projects, and utility projects. The estimates developed by the City of Los Angeles and the CLACG would reflect these anticipated projects.

5.0 IMPACTS

Growth inducing effects would be considered significant if a proposed project has the potential to induce substantial population growth in an area either directly or indirectly.

5.1 No Build Alternative

The No Build Alternative would include all existing highway and transit services and facilities, the committed highway and transit projects in Metro's 2009 Long Range Transportation Plan (LRTP), and the committed highway and transit projects in SCAG's 2008 RTP. By the projection year of 2035, the Metro Expo Line to Santa Monica, Metro Purple Line to Westwood, Metro Crenshaw Line, Metro Green Line to the South Bay and LAX, and Metro Gold Line to Azusa and the San Gabriel Valley will have opened, and a number of bus services will have been reorganized and expanded to provide connections with these new rail lines. The transit network within the project area will otherwise be largely the same as it is now.

5.1.1 Direct Impacts

Much of the project area is characterized by urban streets and dense land uses, including high-rise office buildings that dominate the downtown landscape. Under the No Build Alternative, past trends would likely continue and a substantial permanent change to the physical environment of the project area would not occur. However, because the downtown area is essentially the commercial center of the City of Los Angeles, it is projected that development would continue according to current trends. The No Build Alternative would not result in new homes or businesses, and therefore, would not directly induce growth.

5.1.2 Indirect Impacts

The desirable location and current development trends in the project area indicate that development would occur without the proposed project and that the trend for conversion of office buildings into condominiums or rental apartments, particularly in the downtown area, would continue. As such, the No Build Alternative would not indirectly induce growth.

5.1.3 Cumulative Impacts

Since the No Build Alternative would not directly or indirectly cause growth inducing impacts, there would be no cumulative impacts from this alternative.

5.2 Transportation Systems Management (TSM) Alternative

Under the TSM Alternative, only minor transit infrastructure investment would occur, including (but not limited to) two new express shuttle bus lines linking 7th Street/Metro Center Station and Union Station. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. The buses may also have traffic signal priority

similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles.

Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. These new shuttles would also have associated structures (bus stops and signage). In addition, the same infrastructure investments that would occur under the No Build Alternative would occur under the TSM Alternative.

5.2.1 Direct Impacts

Under the TSM Alternative, only minor transportation improvements would occur. The TSM Alternative would accommodate an existing transportation need, but would not add any new housing or significantly expand transportation infrastructure. Therefore, the TSM Alternative would not directly induce growth.

5.2.2 Indirect Impacts

Minor bus improvements such as the TSM Alternative do not typically result in the types of transit-oriented growth that tends to occur near fixed-transit stations. As such, the TSM Alternative would not provide opportunities for secondary development. Although some growth would likely occur based on past development trends, it is unlikely that it would result from such minor transportation improvements. Therefore, the TSM Alternative would not indirectly induce growth.

5.2.3 Cumulative Impacts

Since the TSM Alternative would not directly or indirectly cause growth inducing impacts, there would be no cumulative impacts from this alternative.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis Light Rail Transit (LRT) Alternative extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces to at-grade north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The double track alignment continues along 2nd Street to Main Street, where it splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway).

The alignment then heads east on Temple Street, realigns into a dual-track configuration just east of Los Angeles Street, and connects to the Metro Gold Line north of the Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that would traverse the Regional Connector, an automobile underpass and proposed pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to reduce potential pedestrian/train and automobile/train conflicts. To implement this alternative, the existing

number of traffic lanes and on-street parking on 2nd, Main, Los Angeles, and Temple Streets would be reduced.

This alternative includes three proposed stations located near Flower Street and 5th Street; under Bunker Hill; and one couplet station with a northbound platform at Los Angeles and 1st Streets, and a southbound platform at Main and 1st Streets.

5.3.1 Direct Impacts

An important objective of the proposed project is to meet existing transportation demand and accommodate potential increased demand due to regional growth. The proposed project would provide a linkage in the regional transportation network, thereby increasing overall system efficiency. The At-Grade Emphasis LRT Alternative does not include a housing element that would directly increase population or employment and it would not substantially change land use and development patterns at the regional scale. Therefore, this alternative would not directly induce population growth.

At the regional level, the proposed project would reduce the need to make several transfers from one destination to another, resulting in increased efficiency of travel between the San Gabriel Valley and the Westside or Long Beach. The areas along these routes are fully urbanized so it would be unlikely that the increased regional connectivity would induce housing construction.

5.3.2 Indirect Impacts

At the corridor level, the Regional Connector project, combined with supportive public policies, plans, and favorable real estate conditions, could attract transit-supportive development, including employment opportunities, higher-density residential development, and new services and amenities. The pattern of land development could be affected by a greater concentration and intensity of land use activities along the proposed route and particularly along the station areas, making secondary land use impacts most notable close to stations.

Experience gained from existing Metro projects such as the Purple and Red Lines suggests that developers in the Los Angeles area are interested in creating transit- and pedestrian-oriented mixed-use development, and that these types of developments can be very successful. The experience in other cities with similar transit infrastructure also supports this idea. However, policies supportive of the desired type of development must usually be in place.

Even with no change in public policy, some changes in land use may potentially occur as a result of the proposed project; however, these changes would largely represent a redistribution of growth rather than an increase. Downtown Los Angeles and Little Tokyo are currently densely developed. The transit corridor stations could attract transit-supportive land

uses to these areas. These uses could be developed in existing or new buildings on vacant lots close to the stations.

It is likely that the proposed project would enhance the attractiveness of the corridor for living or conducting business. The project could improve transit accessibility for people desiring to come to destinations within the project area and for area residents or others bound for other regional locations.

Employment opportunities may increase in the project area, and these opportunities would be enhanced by the light rail project. The proposed project would provide new job opportunities, particularly during construction, and new access to local employment opportunities for all communities within or connected to the project corridor. Short-term construction-related jobs created by the proposed project and long-term employment opportunities created by improved access would be a benefit to the entire community.

Under the At-Grade Emphasis LRT Alternative, the indirect impacts on neighborhoods would generally be positive. Station areas could become centers of neighborhood activity and investment and, therefore, could serve to boost neighborhood social cohesion and improve economic conditions for commercial buildings within the corridor and, in particular, those adjacent to the stations. The Regional Connector could also encourage additional growth of existing street level retail uses in both downtown and Little Tokyo. This new accessibility could also act as a catalyst for using underutilized space in commercial buildings.

The At-Grade Emphasis LRT Alternative would not result in direct business displacement and, therefore, would not undermine the economic base of these communities. Commercial properties near stations would have a reasonable potential to increase in value - a potential secondary effect.

A low potential exists for the project to cause secondary adverse impacts to historic properties. This could occur through redevelopment at or near station areas that are adjacent to historic properties. Such development may potentially introduce new buildings at a scale and appearance that would be out of character with the historic properties, or may result in the demolition of historic buildings to accommodate new development. On the other hand, underutilized historic buildings in the corridor may increase in desirability due to their proximity to the proposed project. This could be considered a beneficial secondary impact if development is undertaken with the goal of complementing the historic setting of these resources.

Potential indirect growth-inducing effects may result from the micro-scale growth or development near proposed stations. These potential effects, described in more detail in sections 5.3.2.1 through 5.3.2.3, would be due to implementation of local and state land use

policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors.

The At-Grade Emphasis LRT Alternative's potential to indirectly induce growth is speculative at this time. The At-Grade Emphasis LRT Alternative would not remove any barriers to growth, nor would it otherwise directly or indirectly induce growth.

5.3.2.1 Flower /6th/5th Streets Station

The trend of converting office buildings into condominiums or rental apartments, particularly in the downtown area, would likely continue. The construction of new condominiums and rental apartments would also likely continue, especially on vacant land in the station areas. Under the At-Grade Emphasis LRT Alternative, convenient and faster transit access to central downtown provided by the project could accelerate these trends.

The area immediately surrounding the proposed Flower /6th/5th Street station is currently comprised of large office towers, the Los Angeles Central Library, and large hotels. It is also very dense, with little or no vacant land. While construction of the Regional Connector in downtown could have some effect on business locations because of the change in arrival and departure patterns of transit riders, it would be unlikely to significantly alter development plans within this proposed station area. Any changes in projected land use patterns would likely be a redistribution of expected growth, potentially resulting in a greater concentration of uses near the proposed transit station.

5.3.2.2 2nd/Hope Streets Station

The proposed 2nd/Hope Street station would also be located in central downtown. Existing land uses in the vicinity of this station area include the Colburn School of Performing Arts, parcels currently used as parking lots proposed for redevelopment as a part of the Grand Avenue Redevelopment Project, the Walt Disney Concert Hall, and residential developments. Land use in the Bunker Hill area is governed by the Central City Community Plan, which shows that the General Plan land use designation for the proposed station area permits commercial and multi-family residential land uses at an average Floor Area Ratio (FAR) of 6:1. In addition, the Central City Community Plan specifies that the FAR on an individual parcel may not exceed 13:1, consistent with previously established regulations for the underlying height district.

Further, the Downtown Specific Plan contemplates linking Bunker Hill with the existing transit network. While it is possible that new development would locate near the station area, it would be unlikely that the Regional Connector would induce growth into the Bunker Hill area beyond what is currently expected and planned.

5.3.2.3 Main/1st Street and Los Angeles/1st Street Stations

The proposed Main/1st Street and Los Angeles/1st Street stations would function as a couplet, with trains on Main Street traveling southbound only and trains on Los Angeles Street traveling northbound only. The proposed Main/1st Street station area is surrounded primarily by civic uses, including City Hall, City Hall East, Caltrans District 7 Headquarters, the new Los Angeles Police Department (LAPD) Administration Building, and the Kyoto Grand Hotel. Opportunities for redevelopment are limited from Main Street to the west because potential development would be constrained by existing buildings.

The area surrounding the proposed Los Angeles/1st Street station would likely experience some secondary effects due to the Regional Connector. Although the area is dominated by civic uses, several vacant parcels or surface parking lots are located within ¼ mile of the station area. In addition, Alameda and San Pedro Streets located to the east of the project site include industrial areas that in some cases have already begun converting to residential and commercial uses. Under the At-Grade Emphasis LRT Alternative, this trend would likely continue and could be accelerated.

The proposed Main/1st and Los Angeles/1st Street stations are located near Little Tokyo. Faster and more convenient access to central downtown provided by the At-Grade Emphasis LRT Alternative could accelerate existing residential development trends. Commercial development could also increase as a result of the proposed stations. Services intended for residents of Little Tokyo and downtown workers could also locate near the stations; this would allow service providers to take advantage of the access the new stations would provide. In many cases the trend for adaptive reuse of obsolete industrial, warehouse, and other office structures as residences could help to preserve currently vacant structures in the station areas that might otherwise deteriorate.

5.3.3 Cumulative Impacts

Since the At-Grade Emphasis LRT Alternative would not directly or indirectly cause growth inducing impacts, there would be no cumulative impacts from this alternative.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative extends from the 7th Street/Metro Center Station north along Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with a new underground station near 2nd and Hope Streets to provide access to Bunker Hill.

A second underground station would be located either between Broadway and Spring Street or between Main and Los Angeles Streets. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction,

and a proposed overhead pedestrian bridge structure would eliminate most potential conflicts between pedestrians and trains. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets.

5.4.1 Direct Impacts

The direct impacts associated with the Underground Emphasis LRT Alternative would be the same as those under the At-Grade Emphasis LRT Alternative. For this analysis, refer to Section 5.3.1 of this technical memorandum.

5.4.2 Indirect Impacts

The indirect impacts associated with the Underground Emphasis LRT Alternative would be similar to those under the At-Grade Emphasis LRT Alternative. The proposed station locations are slightly different for this alternative than those described for the At-Grade Emphasis LRT Alternative. The specific station locations proposed for the Underground Emphasis LRT Alternative are described in more detail in sections 5.4.2.1 through 5.4.2.3.

5.4.2.1 Flower /5th/4th Street Station

The area immediately surrounding the proposed Flower /5th/4th Street station is very dense with little or no vacant land and currently comprised of large office towers, the Los Angeles Central Library, and large hotels. While the construction of the Underground Emphasis LRT Alternative in downtown could have some effect on business locations because of the change in arrival and departure patterns of transit riders, it would be unlikely to significantly alter development plans within this proposed station area.

5.4.2.2 2nd/Hope Street Station

Impacts associated with the proposed 2nd/Hope Streets station would be similar to the At-Grade Emphasis LRT Alternative.

5.4.2.3 2nd Street Station - Broadway Option

The proposed station located at Broadway and 2nd Street would be in an area currently characterized by a mix of office uses and some underutilized parcels. In general, conversion of vacant or underutilized parcels to commercial or residential uses has become more frequent in this area. Due to the close proximity to central downtown, this site would likely experience growth in either housing or commercial development. This development would likely be accelerated or redistributed as a result of the proposed project.

As part of this proposed station area, Metro is proposing to acquire a surface parking lot and part of the planned Federal Courthouse property on the northwest corner of Broadway and 2nd Street. It is likely that Metro would make the remainder of the parcel available for development at a later date and that the potential development would be consistent with the compact style of transit-oriented development. However, any development that would occur

on that parcel would be subject to additional environmental review. Nonetheless, the most likely secondary impact of this proposed station location would be the possible acceleration of already anticipated growth.

5.4.2.4 2nd Street Station - Los Angeles Street Option

The proposed 2nd Street station - Los Angeles Street Option would be located adjacent to the Kyoto Grand Hotel and the "Block 8" residential and retail development currently under construction. Located to the west of the proposed station area are civic uses, such as City Hall and City Hall East, and government buildings, including the proposed LAPD office and the Caltrans District 7 headquarters.

Several vacant parcels or surface parking lots are located within ¼ mile of the proposed station area. In addition, Alameda and San Pedro Streets (located to the east of the project site) include industrial areas that in some cases have already begun converting to residential and commercial uses. This area is already experiencing development of residential uses and it is expected these trends would continue.

Several surface parking lots in the area could be redeveloped as either housing or commercial uses to serve the downtown population and residents of Little Tokyo. It is likely that the proposed project would accelerate future growth and result in a redistribution of land use patterns, resulting in compact higher-density development in the proposed station area. In addition to this potential for redevelopment of vacant parcels, a portion of the surface parking lot located at the southeast corner of Los Angeles and 2nd Streets would be acquired by Metro as part of this proposed station. It would be likely that Metro would make the remainder of the parcel available for development at a later time. However, any development that would occur on that parcel would be subject to additional environmental review.

5.4.2.5 Portal Area

The portal area is the location at which the proposed alignment would exit the underground tunnel, continue at-grade, and connect to the existing Metro Gold Line. Proximity to the downtown area and recent improvements such as the Geffen Museum of Contemporary Art, the Savoy housing complex, and the Gold Line extension have increased development activity in the area of the proposed portal for the Underground Emphasis LRT Alternative.

Residences have been recently introduced in the area, greatly changing its overall character from an industrial to a residential neighborhood. Construction of new condominiums and rental apartments would likely continue, especially on vacant land in the station area.

For this alternative, Metro would propose to acquire a portion of the portal area for construction and possibly create a pedestrian overpass. The parcel is currently developed with commercial uses. After construction, the future availability of this parcel of land that Metro would have acquired and the existing and proposed development in the area indicate

that acceleration of currently anticipated growth may be a likely secondary impact at the portal area.

Possibilities for future use of this land range from plaza/open space with landscaping, to commercial development similar to what is there now, to more intense transit-oriented use - perhaps including parking. Any future use of this property would undergo the city development approval process, including environmental review, and Metro would ensure extensive input from the community to ensure that any proposed future use is compatible with and supportive of community goals.

In summary, our evaluation indicates secondary growth effects might occur in this area. However, this acceleration of currently anticipated growth would not be likely to result in substantial population growth in the area as a result of the project and therefore, this potential impact would be less than significant.

5.4.3 Cumulative Impacts

The Underground Emphasis LRT Alternative would not directly cause growth inducing impacts, and might indirectly result in some effects only at the eastern portal area. This localized indirect effect would be less than significant and in combination with other potential future developments would not result in a cumulatively considerable effect.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment extends from the 7th Street/Metro Center Station north below Flower Street with a new underground station north of 5th Street. At 3rd Street, the alignment would extend east and a new underground station would be constructed near 2nd and Hope Streets to provide access to Bunker Hill.

From Bunker Hill, the alignment would continue east beneath 2nd Street. A third underground station would be located between Broadway and Spring Street. The alignment would continue under the Little Tokyo District and a fourth underground station would be constructed at the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. The alignment would emerge to at-grade connections with the existing Gold Line tracks via two portals: north of Temple Street and adjacent to and east of Alameda Street for the north-south line and within 1st Street east of Alameda Street for the east-west line.

5.5.1 Direct Impacts

Potential direct impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same as those under Underground Emphasis LRT Alternative. For that analysis, refer to Section 5.4.1 of this technical memorandum.

5.5.2 Indirect Impacts

Potential indirect impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same as those under the Underground Emphasis LRT Alternative for the following station areas:

- Flower Street/5th/4th Street station
- 2nd/Hope Street station
- 2nd Street/Broadway station

For the impact analyses of these station areas, refer to Sections 5.4.2.1, 5.4.2.2, and 5.4.2.3 of this technical memorandum.

5.5.2.1 2nd Street/Central Avenue Station

The area surrounding the proposed 2nd Street/Central Avenue station is located within the block to the south and west of the existing Metro Gold Line Little Tokyo/Arts District Station, which would not be in service under this alternative. It is likely that some development would occur near the proposed station as a result of the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, due to the close proximity of the existing Metro Gold Line station, it is difficult to determine what portion of potential growth would have occurred anyway.

In addition, Alameda and San Pedro Streets to the east of the proposed station site include industrial areas that have already begun converting to residential and commercial uses. , This trend would likely continue and could only be accelerated if the Fully Underground Alternative – Little Tokyo Variation 1 is constructed.

In summary, our evaluation indicates secondary growth effects might occur in this area. However, this acceleration of currently anticipated growth would not be likely to result in substantial population growth in the area as a result of the project and therefore, this potential impact would be less than significant.

5.5.3 Cumulative Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would not directly cause growth inducing impacts, and might indirectly result in some effects only near the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue. This localized indirect effect would be less than significant and in combination with other potential future developments would not result in a cumulatively considerable effect.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 extends from the 7th Street/Metro Center Station north in a cut-and-cover tunnel below Flower Street. A new underground station would be located north of 5th Street. At 3rd Street, the underground tunnel would extend east and a new underground station would be constructed near 2nd and Hope Streets to provide access to Bunker Hill. This segment of tunnel would be constructed using either the cut-and-cover method or the sequential excavation method.

From Bunker Hill, a tunnel excavated by tunnel boring machine would continue east beneath 2nd Street. A third underground station would be located between Broadway and Spring Street. The tunnel would continue under the Little Tokyo District and a fourth underground stacked station would be constructed at the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. The alignment would emerge to at-grade connections with the existing Gold Line tracks via three portals: north of Temple Street and adjacent to and east of Alameda Street for the north-south line and staggered portals within 1st Street east of Alameda Street for the east-west line.

5.6.1 Direct Impacts

The direct impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be the same as those under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.6.2 Indirect Impacts

The indirect impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be the same as those under the Fully Underground LRT Alternative – Little Tokyo Variation 1 for all the station areas. For this analysis, refer to Section 5.5.2 of this technical memorandum.

5.6.3 Cumulative Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not directly cause growth inducing impacts, and might indirectly result in some effects only near the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue. This localized indirect effect would be less than significant and in combination with other potential future developments would not result in a cumulatively considerable effect.

6.0 POTENTIAL MITIGATION MEASURES

6.1 No Build Alternative

The No Build Alternative would not include new infrastructure, homes, or businesses; therefore, there would be no direct or indirect impact on growth-inducing factors and no mitigation measures would be required.

6.2 Transportation Systems Management (TSM) Alternative

The TSM Alternative would not include housing or permanent infrastructure improvements that could induce growth; therefore, there would be no direct or indirect impact on growth-inducing factors and no mitigation measures would be required.

6.3 At-Grade Emphasis LRT Alternative

6.3.1 Direct Impacts

The At-Grade Emphasis LRT Alternative would not include any housing and, therefore, would not directly induce growth. No mitigation measures would be required.

6.3.2 Indirect Impacts

The At-Grade Emphasis LRT Alternative would likely influence patterns of growth along the transit corridor, most notably in the proposed station areas. The most likely outcome would be an acceleration and/or redistribution of planned growth. The At-Grade Emphasis LRT Alternative would not indirectly induce growth. No mitigation measures would be required.

6.4 Underground Emphasis LRT Alternative

6.4.1 Direct Impacts

The Underground Emphasis LRT Alternative would not include any housing and, therefore, would not directly induce growth. No mitigation measures would be required.

6.4.2 Indirect Impacts

The Underground Emphasis LRT Alternative would likely complement patterns of growth along the transit corridor, most notably in the proposed station areas. The most likely outcome would be an acceleration and/or redistribution of planned growth. The Underground Emphasis LRT Alternative would not indirectly induce growth. No mitigation measures would be required.

6.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

6.5.1 Direct Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would not include any housing and, therefore, would not directly induce growth. No mitigation measures would be required.

6.5.2 Indirect Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would likely complement patterns of growth along the transit corridor, most notably in the proposed station areas. The most likely outcome would be an acceleration and/or redistribution of planned growth. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would not indirectly induce growth. No mitigation measures would be required.

6.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

6.6.1 Direct Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not include any housing and, therefore, would not directly induce growth. No mitigation measures would be required.

6.6.2 Indirect Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would likely complement patterns of growth along the transit corridor, most notably in the proposed station areas. The most likely outcome would be an acceleration and/or redistribution of planned growth. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not indirectly induce growth. No mitigation measures would be required.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

Under the No Build Alternative, no more transit infrastructure investment would occur beyond those planned for and funded in the 2009 LRTP. Although additional rail lines (Metro Expo Line to Santa Monica, Metro Purple Line to Westwood, Metro Crenshaw Line, Metro Green Line to the South Bay and LAX, and Metro Gold Line to Azusa and the San Gabriel Valley) will have opened and a number of bus services will have been reorganized and expanded to provide connections with these new rail lines, the transit network within the project area would otherwise be largely the same as it is now.

Accordingly, under the No Build Alternative there would be minimal construction in the project area associated with additional transit infrastructure investment. As such, no secondary impacts would occur. Therefore, no direct or indirect adverse impacts associated with secondary growth are expected under the No Build Alternative.

7.1.2 CEQA Determination

Based on the CEQA thresholds of significance (Section 3.1.3), the No Build Alternative would not have a significant impact associated with growth inducement because it would not include construction of any housing or infrastructure. No mitigation measures are required.

7.2 Transportation Systems Management (TSM) Alternative

7.2.1 NEPA Findings

Only minor transportation improvements would occur under the TSM Alternative. The TSM Alternative would accommodate an existing transportation need, but would not add any new housing or significantly expand transportation infrastructure. In addition, the TSM Alternative would not add the type of permanent infrastructure that facilitates changes in land use patterns and density of development. Therefore, no direct or indirect growth-inducing impacts would occur.

7.2.2 CEQA Determination

The TSM Alternative would not include the addition of any new housing or expanded infrastructure. Therefore, no growth-inducing impacts would occur. No mitigation measures are required.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would be located within a densely developed urban setting and would not extend into undeveloped areas that may induce changes. Potential indirect growth-inducing effects may result from the micro-scale growth or development near proposed stations. These effects would be due to implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors.

Potential indirect growth would likely be similar under all build alternatives. However, the At-Grade Emphasis LRT Alternative's potential to indirectly induce growth is speculative at this time. The At-Grade Emphasis LRT Alternative would not remove any barriers to growth, nor would it otherwise directly or indirectly induce growth.

7.3.2 CEQA Determinations

Under CEQA, growth-inducing impacts would be considered significant if the proposed project has the potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, by extending roads or other infrastructure). The proposed project intends to meet the existing and future transit needs of the project area, would be located within a densely developed urban setting, and would not extend into undeveloped areas that may induce changes.

Potential indirect growth-inducing effects could result from the micro-scale growth or development near proposed stations due to implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors. However, this potential indirect growth is speculative at this time. No direct or indirect growth-inducing impacts are expected.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Impacts related to growth-inducement would be similar to those under the At-Grade Emphasis LRT Alternative. No direct or indirect growth-inducing impacts are expected with the exception of the potential to accelerate currently anticipated growth at and near the parcel surrounding the eastern portal. This potential indirect effect would be less than significant.

7.4.2 CEQA Determinations

Impacts related to growth-inducement would be similar to those under the At-Grade Emphasis LRT Alternative. No direct or indirect growth-inducing impacts are expected with

the exception of the potential to accelerate currently anticipated growth at and near the parcel surrounding the eastern portal. This potential indirect effect would be less than significant.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

Impacts related to growth-inducement would be similar to those under the Underground Emphasis LRT Alternative. No direct or indirect growth-inducing impacts are expected with the exception of potentially accelerating currently anticipated growth near the eastern end of the alignment. This potential indirect effect would be less than significant.

7.5.2 CEQA Determinations

Impacts related to growth-inducement would be similar to those under the Underground Emphasis LRT Alternative. No direct or indirect growth-inducing impacts are expected with the exception of potentially accelerating currently anticipated growth near the eastern end of the alignment. This potential indirect effect would be less than significant.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

Impacts related to growth-inducement would be similar to those under the Fully Underground LRT Alternative – Little Tokyo Variation 1. No direct or indirect growth-inducing impacts are expected with the exception of potentially accelerating currently anticipated growth near the eastern end of the alignment. This potential indirect effect would be less than significant.

7.6.2 CEQA Determinations

Impacts related to growth-inducement would be similar to those under the Fully Underground LRT Alternative – Little Tokyo Variation 1. No direct or indirect growth-inducing impacts are expected with the exception of potentially accelerating currently anticipated growth near the eastern end of the alignment. This potential indirect effect would be less than significant.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX E

PURPOSE AND NEED REPORT

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Purpose and Need Report

April 23, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

AA	Alternatives Analysis
AVTA	Antelope Valley Transit Authority
CALTRANS	California Department of Transportation
CBD	Central Business District
CRA	Community Redevelopment Agency
DASH	Downtown Area Short Hop
DFD	Design For Development
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
HRT	Heavy Rail Transit
JANM	Japanese American National Museum
LADOT	Los Angeles Department of Transportation
LOS	Level of Service
LRT	Light Rail Transit
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MOCA	Museum of Contemporary Art
MPO	Metropolitan Planning Organization
OCTA	Orange County Transportation Authority
PEIR	Preliminary Environmental Impact Report
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments

SCRRA	Southern California Regional Rail Authority
SR	State Route

1.0 INTRODUCTION

This report describes the purpose and need for transportation investments in the Regional Connector Transit Corridor project area. The project area is located at the crossroads of the region's transportation system. However, there is currently a gap in the light rail system in downtown Los Angeles between the 7th Street/Metro Center Station and Union Station that forces riders to make transfers to reach many destinations.

1.1 Purpose of the Project

The purpose of this project is to improve the region's public transit service and mobility by connecting the light rail service of the Metro Gold Line to the Metro Blue Line and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

The Regional Connector is a transit project planned by the Los Angeles County Metropolitan Transportation Authority (Metro) with the goal of improving travel times, reducing transfers, reducing traffic congestion, improving air quality, and creating a sustainable light rail transit system that serves people throughout the region as well as in downtown Los Angeles. The vision is to connect the spokes of the regional system and provide a "one seat ride" from Long Beach to Azusa and from East Los Angeles and the San Gabriel Valley to Santa Monica.

There are currently no direct trains for Metro Blue Line light rail passengers from Long Beach travelling to the Metro Gold Line to Pasadena or East Los Angeles. These passengers must transfer to the Metro Red or Purple Lines for travel between 7th Street/Metro Center Station and Union Station. At Union Station, passengers must transfer again, moving to platforms on different levels, to reach the Metro Gold Line. When the Metro Expo Line from Culver City to the 7th Street/Metro Center Station opens in 2011 its riders will also need to transfer at 7th Street/Metro Center Station to reach the Gold Line.

The Regional Connector would extend the shared Metro Blue/Expo Line tracks from their present terminus at 7th Street/Metro Center Station to a junction with the Metro Gold Line near the Little Tokyo/Arts District Station with continuing service to Union Station, Pasadena, East Los Angeles, and beyond. This would provide a one-seat ride for Metro Blue Line passengers travelling from Long Beach to Pasadena. Metro Expo Line passengers would also be able to ride from Washington/National Station in Culver City to East Los Angeles without transferring.

The Regional Connector would also provide increased transit coverage of the downtown area with new stations serving the Civic Center, Bunker Hill, Historic Core, Little Tokyo, and Financial Core along its route from 7th Street/Metro Center Station to the Metro Gold Line.

See Figure 1-1 for a map of the project area and Figure 1-2 for an overview map of the Metro Rail system, including projects currently under construction.

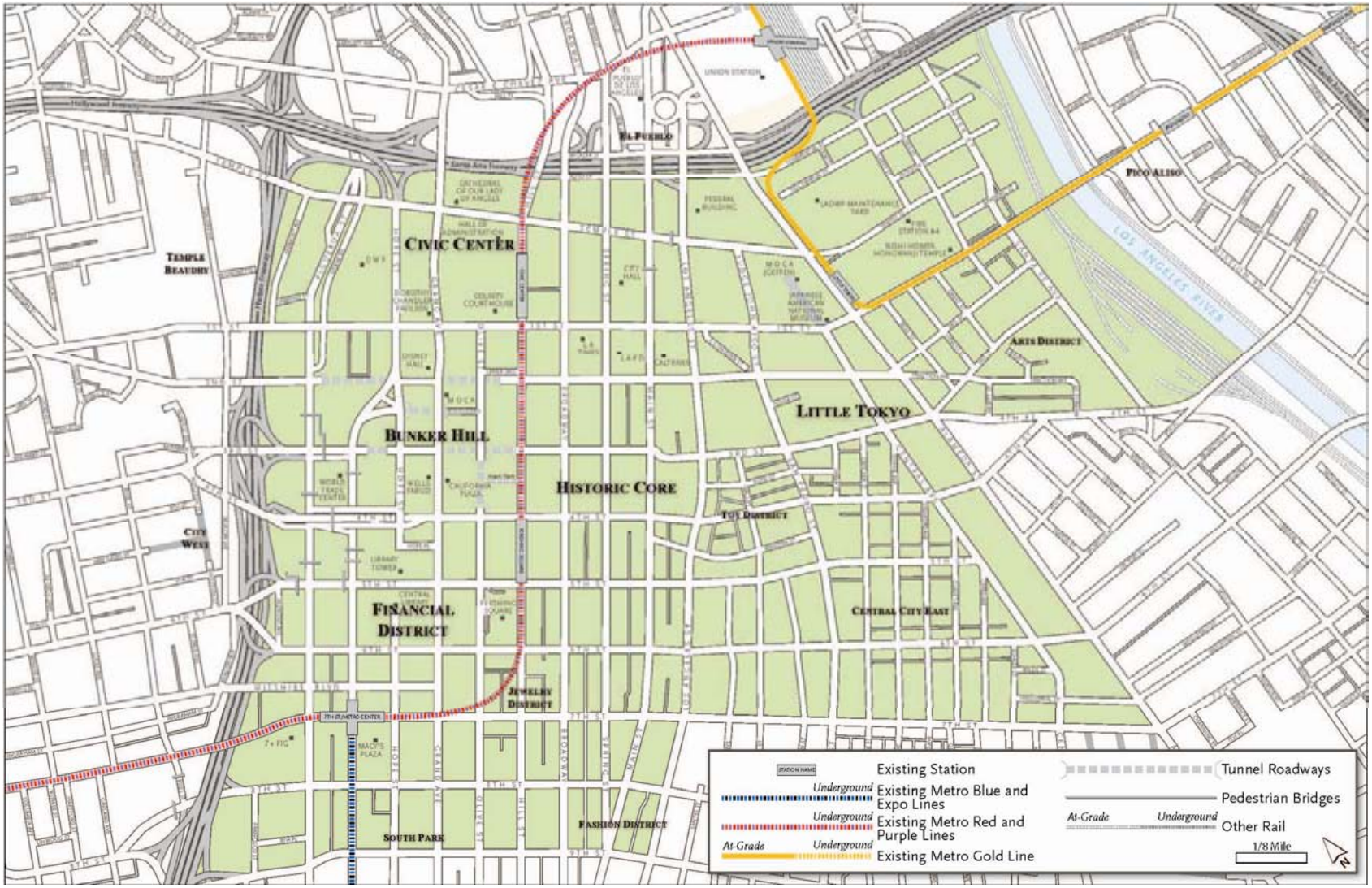

Figure 1-1. Project Area

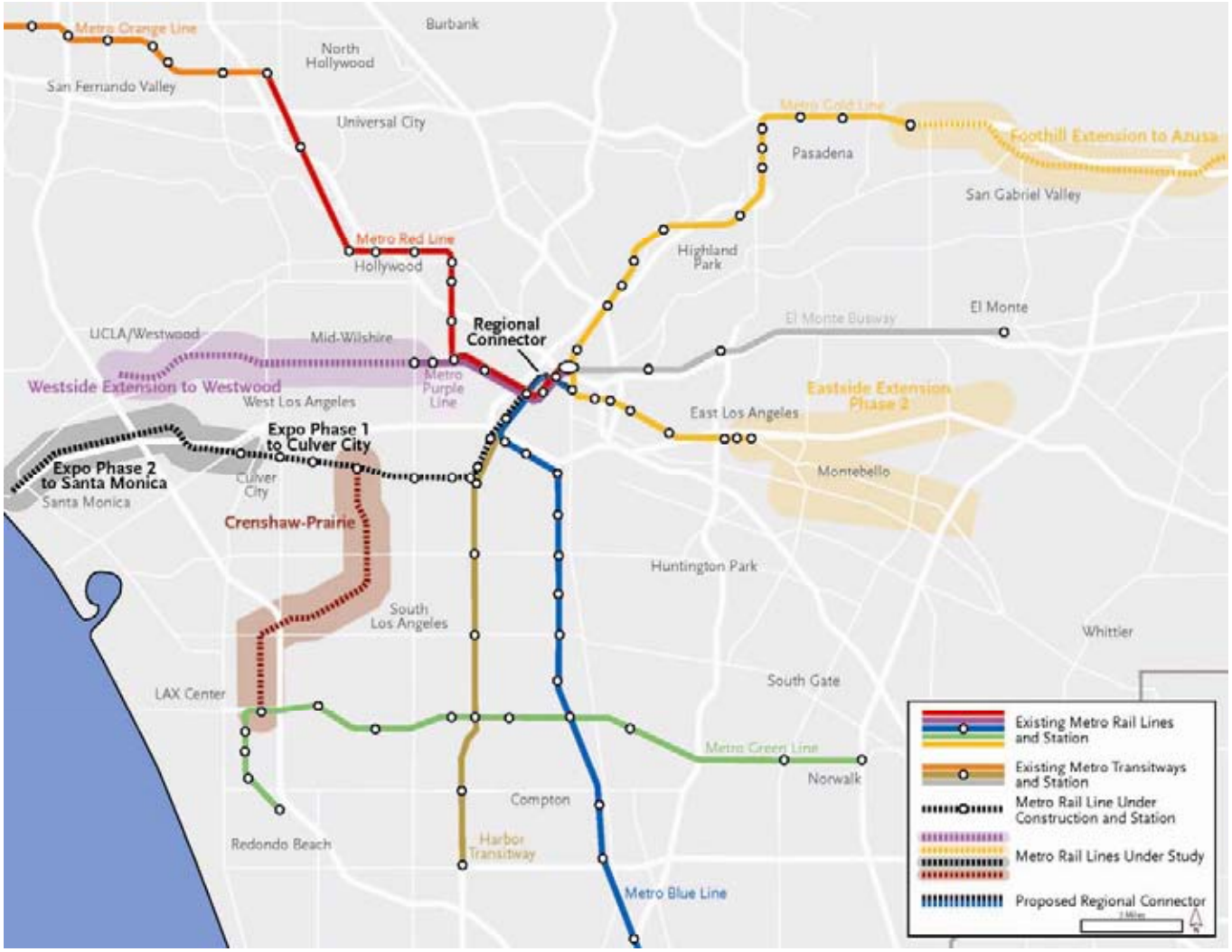

Figure 1-2. Regional Metro Rail Lines (2035)

2.0 BACKGROUND

2.1 Location

The project area is located in downtown Los Angeles. It is bounded on the west by State Route (SR) 110 (Harbor Freeway); on the north by US 101 (Hollywood Freeway); on the south by 7th and 9th Streets; and on the east by Alameda Street between 7th and 4th Streets and the Los Angeles River between 4th Street and US 101.

The project area is the largest regional employment center in Los Angeles County, and is densely developed with multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and high-rise office towers. The corridor crosses several distinct community areas including the dense urban core of the Financial District; the residential high rises and regional entertainment centers of Bunker Hill; the Civic Center with a concentration of federal, state, and local government offices; residential and retail uses located in the historic structures of the Historic Core; and the culturally unique, mixed uses of Little Tokyo.

Given the density of employment within the project area, downtown Los Angeles has the highest concentration of transit service of any area in the County. Regional bus and commuter rail operators have routes that service the project area during peak hours from Los Angeles, Orange, San Bernardino, and Ventura Counties. Both Metro and the Los Angeles Department of Transportation (LADOT) operate local bus service throughout the day.

The southwest portion of the project area at the 7th Street/Metro Center Station is served by the Metro Blue Line to Long Beach and the Metro Expo Line to Culver City. The eastern edge of the project area (Union Station and the Little Tokyo/Art District Station) is served by the Metro Gold Line which currently connects Pasadena to East Los Angeles. These regional lines are connected by a variety of bus lines and the short east-west Metro Red Line but multiple transfers are required for longer north-south or east-west trips through the project area.

Due to its central location at the heart of the regional transit system, investments in the Regional Connector Transit Corridor project area have the potential to affect schedule reliability of the entire system. As the Metro Expo Line and Metro Gold Line to East Los Angeles are completed, this lack of regional connectivity will become even more apparent.

2.2 History

Rail transit in Los Angeles dates to 1872, when Southern Pacific began construction on a passenger rail line from downtown to San Pedro, with the intent of eventually monopolizing the regional transportation system. By the 1920s, the Southern Pacific and Pacific Electric systems had nearly 800 cars in service and hundreds of miles of tracks. Los Angeles Railway also operated a local streetcar system serving the downtown core and the nearby

neighborhoods, which carried the bulk of Los Angeles' urban ridership. Notable busy lines included the Aiso Street service to Boyle Heights, the Temple and 2nd Street cable cars on Bunker Hill, and the Angels Flight funicular railway. Pacific Electric's Hollywood, Glendale, and San Fernando Valley trains entered the one-quarter-mile long Belmont Tunnel at the tail end of their trips to the Subway Terminal Building at 4th and Hill Streets in downtown Los Angeles.

Despite the extensive track and power infrastructure, Los Angeles' rail transportation system would last only four more decades. Americans traded streetcars for private automobiles with record speed and moved to neighborhoods beyond the railroads' reach. Rail transit's final zenith came during World War II, when fuel, metal, and rubber rationing briefly forced millions of Americans back onto streetcars to get to their jobs.

With the end of the war came a period of economic and industrial prosperity and the pent-up demand for new automobiles could finally be met. With few rail riders remaining and new diesel bus technology offering a cheap substitute for streetcar service, cash-strapped transit operators nationwide began canceling routes and removing tracks. The Los Angeles system closed entirely, with the last train making its trip from downtown to Long Beach in 1963.

Freed by the heightened mobility that private cars offered, people began working in increasingly suburbanized settings, and the old downtown core plunged into decline for several decades. In recent years, with traffic congestion mounting, the mobility that supported geographically-dispersed job and housing patterns has become increasingly constrained. Longer commute times, ever-climbing gas prices and increased concern about vehicle greenhouse gas emissions leading to climate change have prompted many Los Angeles residents to seek a return to the transit-friendly urban form of decades past. Downtown Los Angeles has seen a recent surge in development and many residents are rediscovering the forgotten urban core.

During the mid-1980s, the Los Angeles County Transportation Commission and Southern California Rapid Transit District began piecing together the railroad rights-of-way abandoned decades earlier with the intent of bringing rail transit back to Los Angeles.

Today, the Metro Rail system consists of over 79 track miles and downtown Los Angeles is once again served by a radial network of rail transit lines. The Metro Red Line has assisted in the resurgence of the downtown area, including the project area, by improving accessibility and facilitating movement between various districts.

In addition, the Southern California Regional Rail Authority has gradually purchased its own right-of-way and developed a 512-mile commuter rail system over the course of the past two decades, linking commuters throughout the region to their downtown jobs.

2.3 Past Studies

Early studies from 1988 to 1993 focused on extending the light rail line from Long Beach to Los Angeles (Metro Blue Line) through downtown to Pasadena. A light rail line from downtown west to Santa Monica (Metro Expo Line) was not yet planned at the time and the light rail Metro Gold Line Eastside Extension was first fully approved as an extension of the Metro Red Line, a heavy rail subway system that was re-scoped to the currently operating Metro Gold Line Eastside Extension light rail system. Therefore these earlier studies did not account for the benefits of a cross-county east-west light rail service, and instead focus on the north-south route from Long Beach to Pasadena. The Regional Connector, however, would provide the benefits of both routes. The later studies from 2004 onward, including the recent Alternatives Analysis (AA) (Appendix H), focus on both the north-south and east-west routes, as described in the following subsections.

2.3.1 Pasadena – Los Angeles Light Rail Transit Project EIR

After the study was completed in 1993, the Board of Directors delayed the pursuit of the segment between 7th Street/Metro Center Station and Union Station due to funding constraints. The Pasadena-Los Angeles Light Rail Transit Project, now the Metro Gold Line, was constructed and began operations in 2003. The Metro Gold line ran from the Sierra Madre Villa Station in Pasadena to Union Station until an extension to East Los Angeles opened in 2009 allowing for continued operations between Pasadena, Union Station and East Los Angeles. As an interim solution for not having a direct light rail connection between the Long Beach and Pasadena lines, passengers must transfer to the Metro Red and Purple Lines to travel from Union Station to 7th Street/Metro Center.

It was specifically indicated in the study that a direct light rail connection is possible between Union Station and 7th Street/Metro Center Station to reduce transfers between the Metro Red, Purple, Gold and Blue Lines.

2.3.2 Blue Line Connection Preliminary Planning Study

In 1993, Metro completed a preliminary planning study to analyze alternatives for connecting the Long Beach Blue Line, already in operation, to the Pasadena Blue Line (now the Metro Gold Line), which was not yet under construction at that time. Although the Metro Gold Line provides a viable service as stand-alone transit from downtown Los Angeles to Pasadena, a potential capacity problem for the Metro Red Line was identified, as it was the sole rail connection between Union Station and the 7th Street/Metro Center Station. Metro officials recognized that building a connection between the Long Beach and Pasadena light rail lines would alleviate the capacity issues, and increase the overall usefulness of the system.

2.3.3 Los Angeles Eastside Corridor Final Supplemental EIR/EIS

At the time of the Blue Line Connection Preliminary Planning Study, an extension of the Metro Red Line to Boyle Heights was also being considered. The preferred alternative was a 3.1-mile long heavy rail transit (HRT) subway with four stations. After funding concerns in the mid-late 90's, all planned corridor projects were halted and re-evaluated in 1998.

In February 2002, Metro approved the Metro Gold Line Eastside Extension, using LRT in lieu of the previously identified HRT Metro Red Line Eastside Extension. The extension opened for revenue service in November 2009 with twice as many stations and twice a long as the original planned project. Running from Union Station to the Atlantic Station in East Los Angeles, this six-mile, eight-station extension traverses Alameda Street, 1st Street, Indiana Street, and 3rd Street. A new bridge connects Union Station to the eastern edge of downtown in Little Tokyo by crossing south over the US 101 freeway to the intersection of Alameda and Temple Streets. The route runs at grade on the eastern side of Alameda Street from Temple Street to 1st Street. An at-grade station at 1st and Alameda Streets (Little Tokyo/Arts District Station) is located at the northeast corner of the intersection.

This project reaches the eastern edge of the project area, but does not complete the gap across downtown Los Angeles to the transit lines that extend south and west.

2.3.4 Mid-City/Exposition Transit Corridor EIS/EIR

Also part of the re-scoping of projects, the Metro Expo Line was identified as a new light rail transit system providing service from Santa Monica to a shared terminus with the Metro Blue Line at 7th Street/Metro Center Station in downtown Los Angeles. The project was approved in 2005. A first phase from downtown Los Angeles to Culver City is currently under construction. A second phase extending to Santa Monica was approved in early 2010 and is expected to be in operation by 2015. This project reaches the southern edge of the project area and will bring additional transit riders to downtown, but it does not complete the gap across the project area to Union Station.

2.3.5 Regional Light Rail Connector Study

Based on new alignment opportunities created by the approval and construction of the Metro Gold Line Eastside Extension and the under construction Metro Expo Line, Metro completed an engineering feasibility study in 2004 to identify potential alignment, station and configuration alternatives for a new light rail transit (LRT) connection between the Metro Blue, Expo and Gold Lines. The new alternatives connected the Metro Gold Line in the vicinity of the Little Tokyo/Arts District Station at 1st and Alameda Streets to the 7th Street/Metro Center Station.

Forty-one initial alternatives were developed and initial screening reduced the number of alternatives to 16. The screening was based on alignment characteristics, service area, cost,

complexity of engineering, and other similar criteria. No public input process was performed, and no preferred alternative was identified in this study.

2.3.6 Regional Connector Transit Corridor Alternatives Analysis Report

Building on the findings of the Regional Light Rail Connector Study, the Alternatives Analysis (AA) Report, initiated in June 2007 and completed in January 2009 identified 36 conceptual alternatives for study. Initial environmental analysis, engineering, and public outreach activities including an FTA Early Scoping notice, were performed to assist preliminary study of the alternatives. The screening processes during the AA study produced two final recommended build alternatives, along with a No Build Alternative and TSM Alternative, which were subsequently carried into the EIS/EIR scoping process. The full AA Report is incorporated into this Draft EIS/EIR as Appendix H.

2.3.7 Adoption of the Regional Connector Transit Corridor Project

The Regional Connector Transit Corridor project was authorized by the Metro Board of Directors to proceed into the Draft EIS/EIR phase in February 2009. Regional plans and funding measures that identify the Regional Connector include the Southern California Association of Governments (SCAG) Regional Transportation Plan, the Metro Long Range Transportation Plan, and Measure R.

2.3.7.1 SCAG Regional Transportation Plan

SCAG's *2008 Regional Transportation Plan* includes the Regional Connector as a strategic transit system expansion project with implementation expected prior to 2035. As the designated Metropolitan Planning Organization (MPO) for Los Angeles, Riverside, San Bernardino, Ventura, Orange, and Imperial Counties, SCAG provides coordination between transit projects across the Southern California region.

2.3.7.2 Metro Long Range Transportation Plan

Metro's *2009 Long Range Transportation Plan* includes the Regional Connector among the projects planned for implementation by 2035 (possible opening date of 2019). The other projects outlined in the plan are also included in the baseline year 2035 conditions assumed for the regional transportation analysis presented in this Draft EIS/EIR.

2.3.7.3 Measure R

In November 2008, Los Angeles County voters approved a half-cent sales tax (Measure R) that will be used to fund approximately $40 billion worth of transportation projects in Los Angeles County over the next 30 years. Due to the uncertainty of the passage of Measure R during the development of the AA, projects identified in Measure R were not included in the AA Report, as they had not yet been identified as funded in the *Long Range Transportation Plan*. With the passing of Measure R, identified funded projects to be completed and operational by 2035

are incorporated in the analysis conducted for this Draft EIS/EIR, as part of the No Build Alternative.

3.0 PROJECT AREA DEMOGRAPHICS

3.1 Data Sources and Methodology

Demographics in the project area were examined to establish a baseline for assessing the potential benefits of adding improved transit service. Data presented in this section were obtained from the Southern California Association of Governments (SCAG, 2009) and the U.S. Census Bureau (2000). Data are representative of demographic conditions at the time of data-gathering and are used as the basis of evaluation in the Draft EIS/EIR.

The project area is currently undergoing significant changes in terms of housing and demographics. Within the last five years, new market-rate condominium towers have been completed, historic buildings have been converted to loft housing, and new entertainment centers have been approved for construction, bringing renewed interest to downtown. These activities continue to bring about demographic changes that may not be reflected in data from 2005 or earlier.

Some data was not available or not relevant for certain portions of the project area, so field reconnaissance was substituted for the missing data. The project area encompasses portions of several census tracts requiring block-level data to get an accurate representation of each neighborhood. Some tracts are relatively homogeneous which allows data for the whole tract to represent the portions. Other tracts have different characteristics throughout, and attempting to represent one neighborhood with data from the entire tract would be inaccurate. For this characterization of the project area it is more meaningful to show that available census data is not applicable and substitute field reconnaissance rather than inaccurately represent portions of the project area.

For these reasons, the data presented here may be slightly different than the data presented in the Environmental Justice and the Community and Neighborhoods Technical Memoranda.

3.2 Population and Employment

The Regional Connector project area covers 2 square miles, or 0.04 percent of the 4,752 square miles of the County. The total residential population of the project area is 19,396, or 0.19 percent of the total County population. The average population density within the project area is 9,968 per square mile, 3.76 times that of the County.

Despite its small size and residential population, the Regional Connector project area offers 3.82 percent of the County's total employment of 171,750 jobs. Employment density in the project area is 85,875 employees per square mile which is more than 85 times the County-wide employment density.

Table 3-1 summarizes the project area and County population and employment information for 2008. Population and employment growth are discussed further with respect to transit dependency in Section 3-4.

Table 3-1. Population and Employment

Demographics	Project Area	L.A. County	Percent of County
Population	19,396	10,449,838	0.19%
Population Density (people/sq. mi.)	9,698	2,573	NA
Total Employment	171,750	4,498,598	3.82%
Employment Density (jobs/sq. mi.)	85,875	1,108	NA

Source: SCAG, 2008

3.3 Project Area Ethnicity

According to the most recent Census data, the project area has higher proportions of Asian and African-American residents than the County. African-American residents compose 28.5 percent of the population of the project area, compared with 9.6 percent of the County; they reside in the project area primarily east of Hill Street and south of 1st Street.

Asian residents, who live primarily between 1st Street and 5th Street, compose 23.8 percent of the project area, compared with 11.9 percent of the County.

According to the most recent census data, the project area has significantly lower compositions of White and Hispanic populations when compared to the County.

Table 3-2 shows the racial and ethnic breakdown of the project area. Figures 3-1 through 3-6 illustrate the population's racial and ethnic distribution throughout the project area.

3.4 Transit Dependency

Transit dependent populations are those groups that rely on public transit to meet their mobility and access needs to a greater degree than the general population. Within the project area, transit dependent populations include low income households, seniors, and zero car households

Table 3-2. Racial and Ethnic Composition				
Demographics	Project Area		Total LA County	
	Number	%	Number	%
Race				
Total Population	19,396	100%	9,519,338	100%
White	5,564	28.7%	4,622,759	48.6%
Black/African American	5,534	28.5%	916,907	9.6%
American Indian	206	1.1%	68,471	0.7%
Asian	4,612	23.8%	1,134,263	11.9%
Pacific Islander/Hawaiian	40	0.2%	27,221	0.3%
Some other race	2,433	12.5%	2,262,925	23.8%
Two or more races	1,007	5.2%	486,792	5.1%
Ethnicity				
Total Population of Project Area	19,396	100%	9,519,338	100%
Hispanic or Latino (regardless of race)	4,700	24.2%	4,242,213	44.6%

Source: U.S. Census Bureau, Summary File 3, 2000; SCAG 2008

Residents in the project area are categorized within the US Census Data as either below or above the poverty level. In 2000, there were 3,575 households in the project area below the poverty level. Income projections to 2035 for the project area are currently unavailable.

Based on the 2000 data, 38% of the households in the project area are below the poverty level.

Table 3-3. Project Area Income Status		
Demographics	Project Area	Percent (%)
Total Households	9,648	100
Households Below Poverty Level	3,575	38.2

U.S. Census Bureau, Table P92, 2000

According to data presented in Table 3-4, only 6.1 percent of the population in the project area is age 18 or younger, compared to 29.4 percent of the population of the County. The project area also has a higher percentage of elderly residents (19.6 percent) compared to the County (9.7 percent).

Table 3-4. Population Age				
Age	Project Area	Percent (%)	L.A. County	Percent (%)
18 and under	1,188	6.1	2,798,604	29.4%
65 and over	3,795	19.6	926,670	9.7%

Source: U.S. Census Bureau, Summary File 3, 2000; SCAG, 2005

The young and the elderly have a higher propensity for using public transportation, since these groups are less likely to have driver's licenses or access to private automobiles.

Project area residents use transit more than people in other areas of the County. Eleven percent of the households (or 1,121 households) with people age 16 and older who both live and work in the project area commute via public transportation, compared to seven percent of the entire County.

Figure 3-7 shows the distribution of public transportation users within the project area. They tend to live in areas where there are high percentages of zero-vehicle households, as shown in Figure 3-8. A much higher proportion of households in the project area lack vehicle access (67 percent) than in the County as a whole (12 percent).

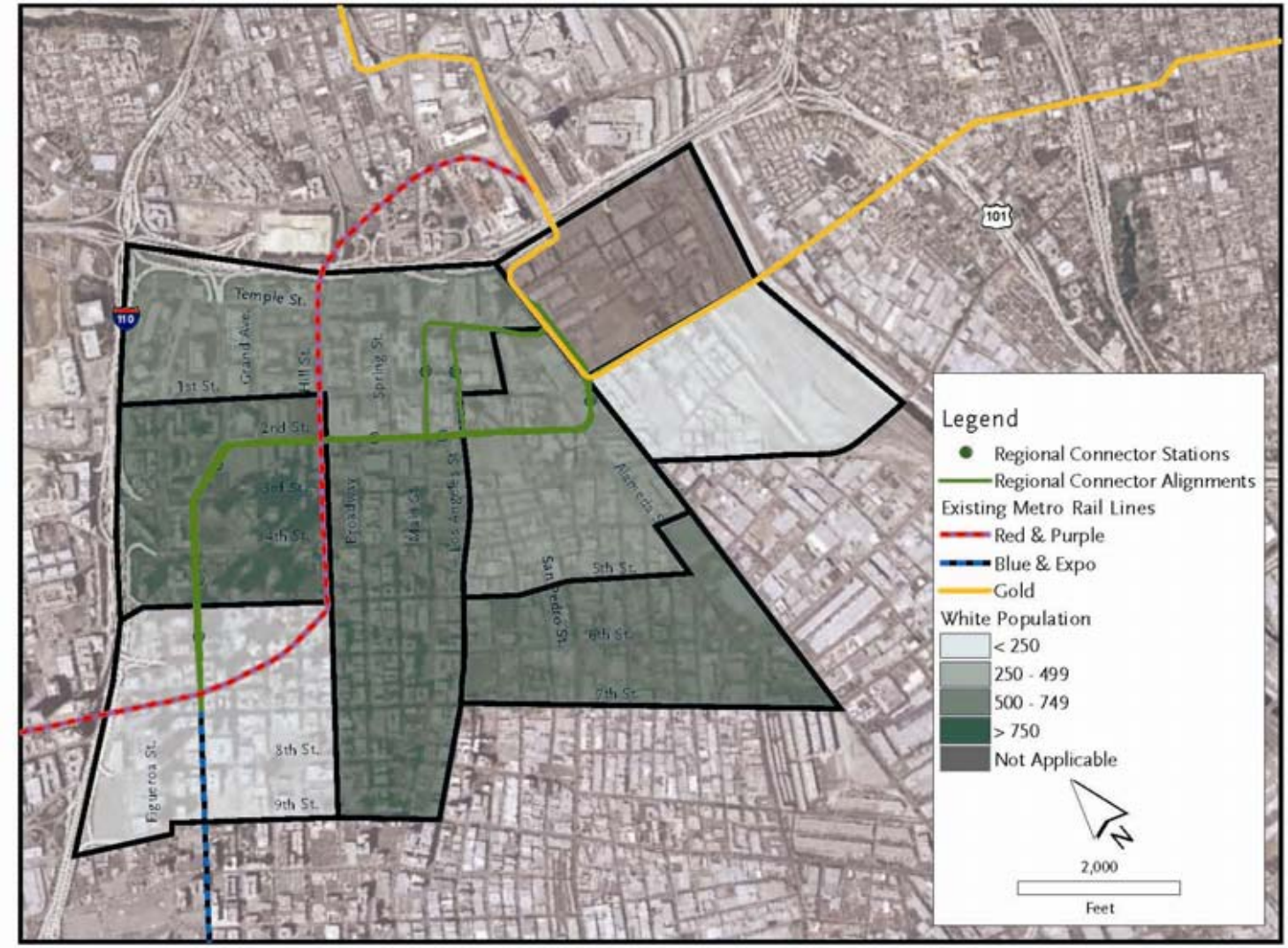

Figure 3-1. Ethnicity, White Population in Project Area

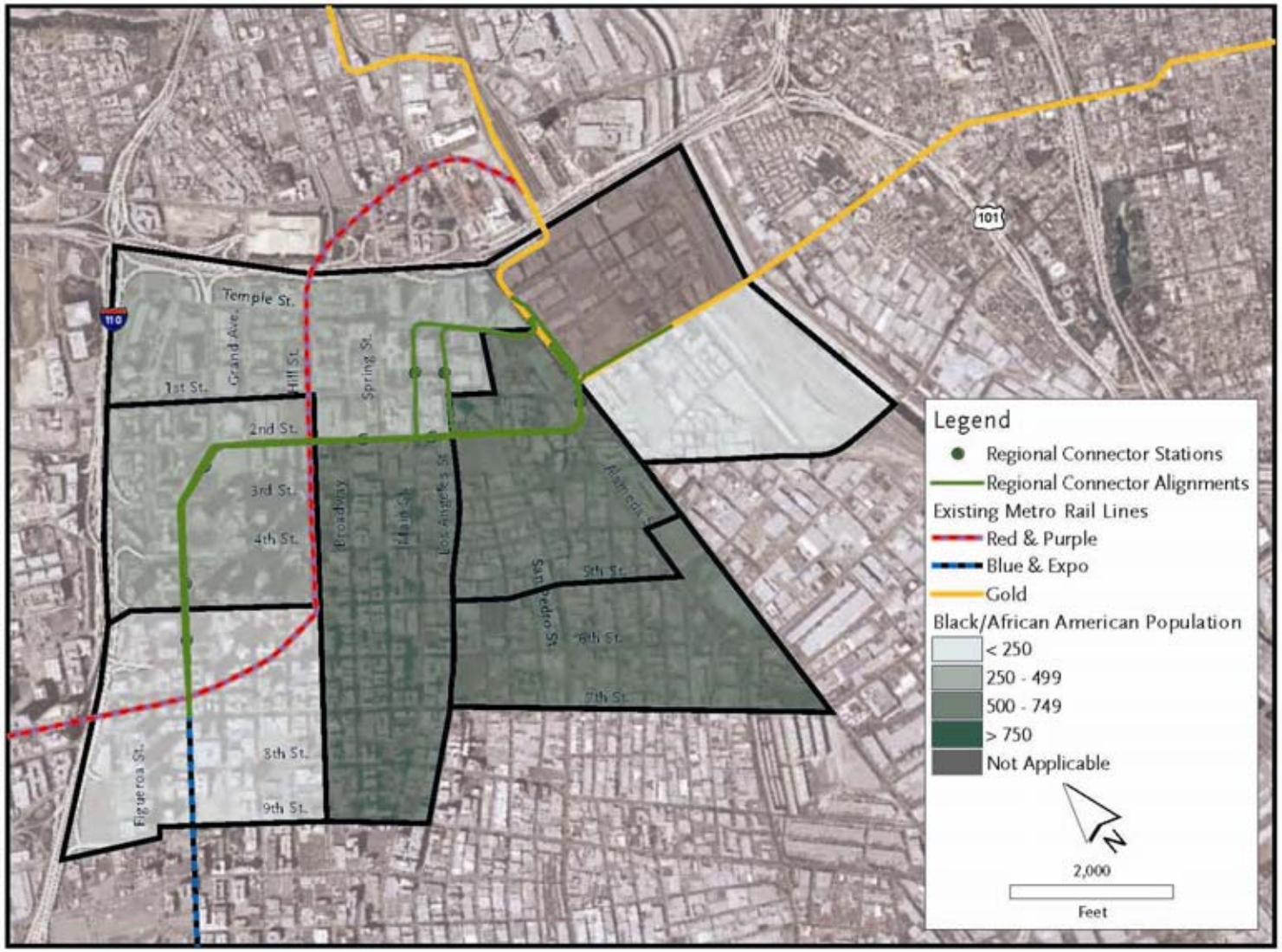

Figure 3-2. Ethnicity, Black/African-American Population in Project Area

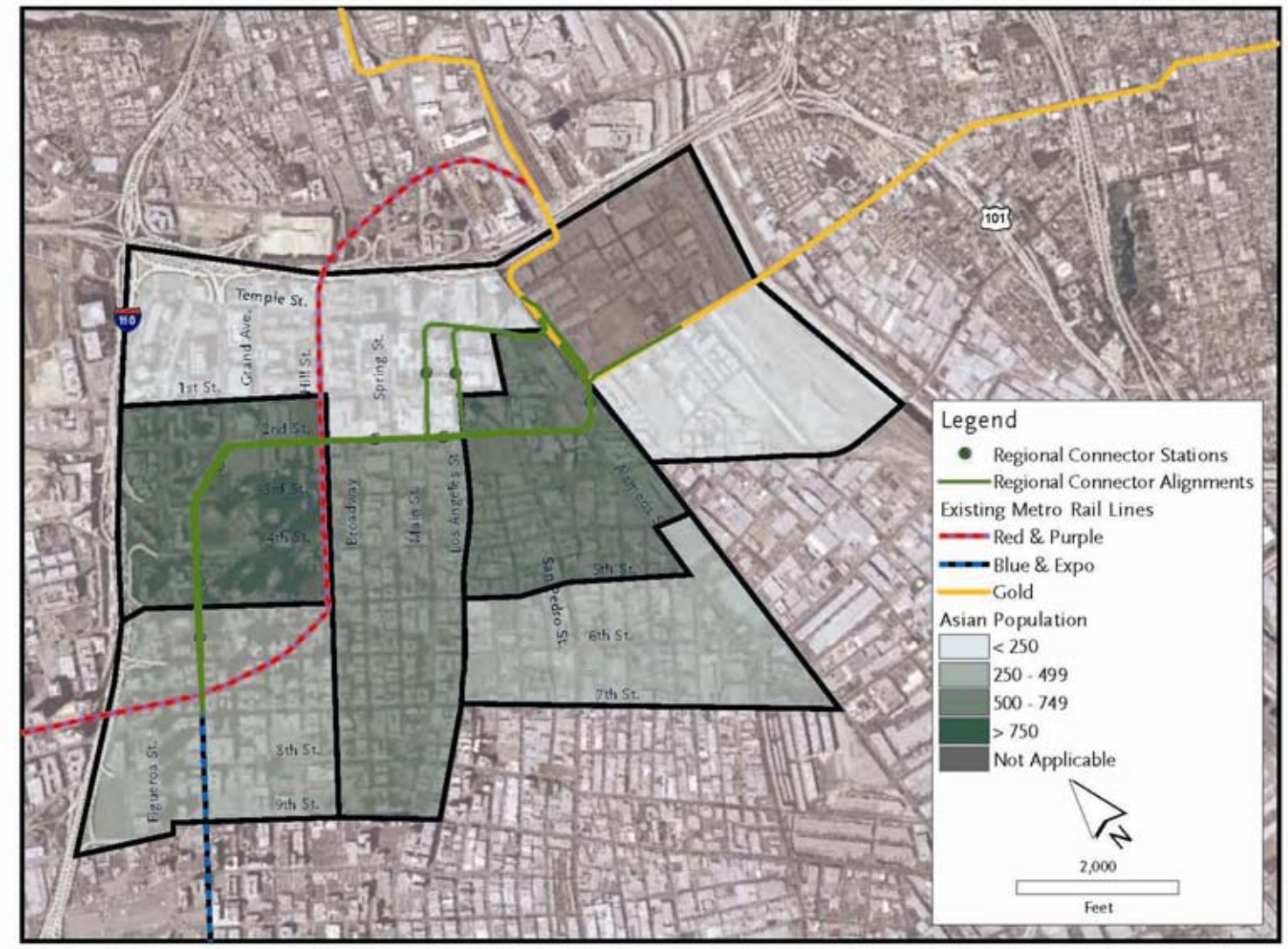

Figure 3-3. Ethnicity, Asian Population in Project Area

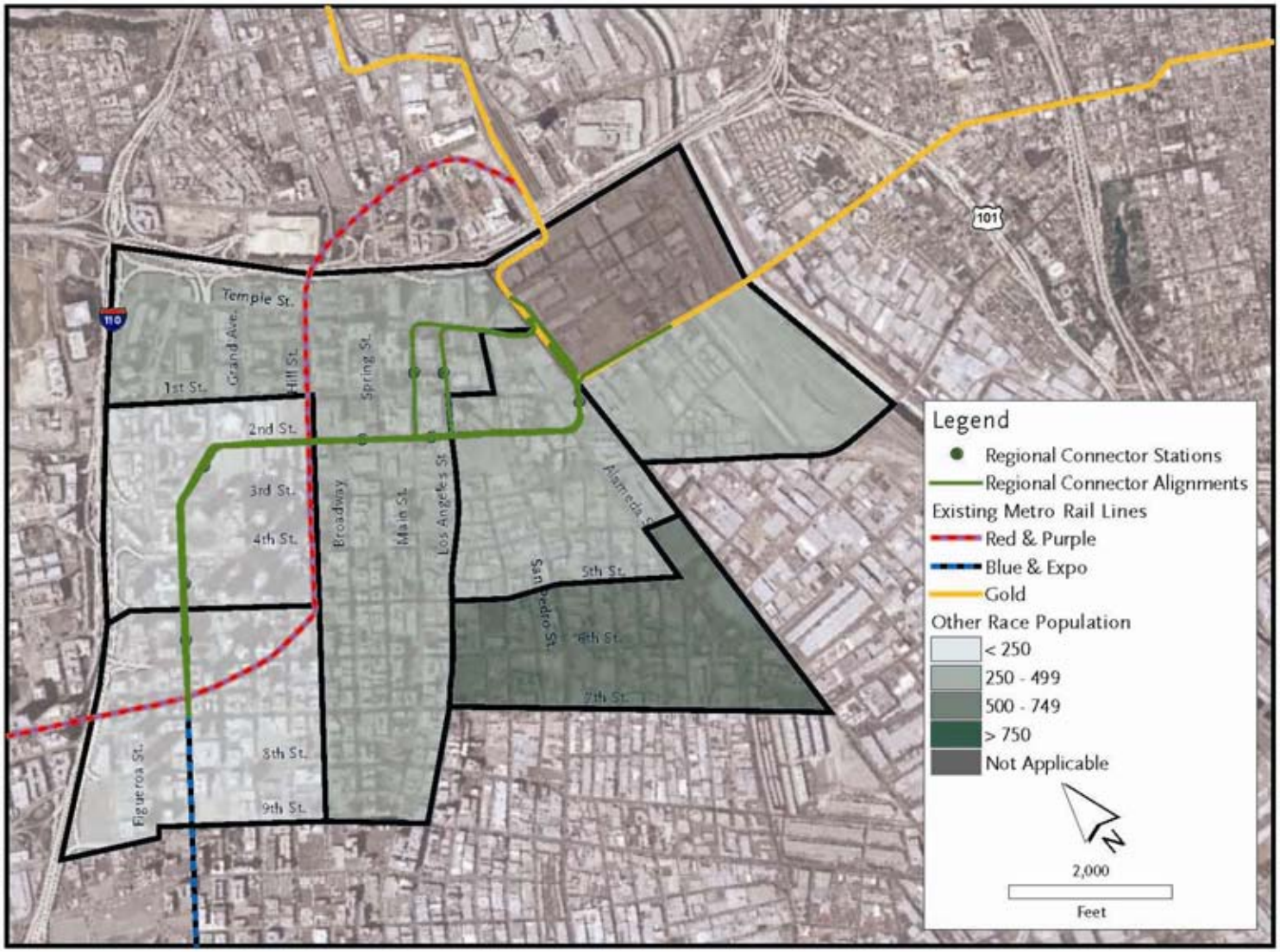

Figure 3-4. Ethnicity, Other Races Population in Project Area

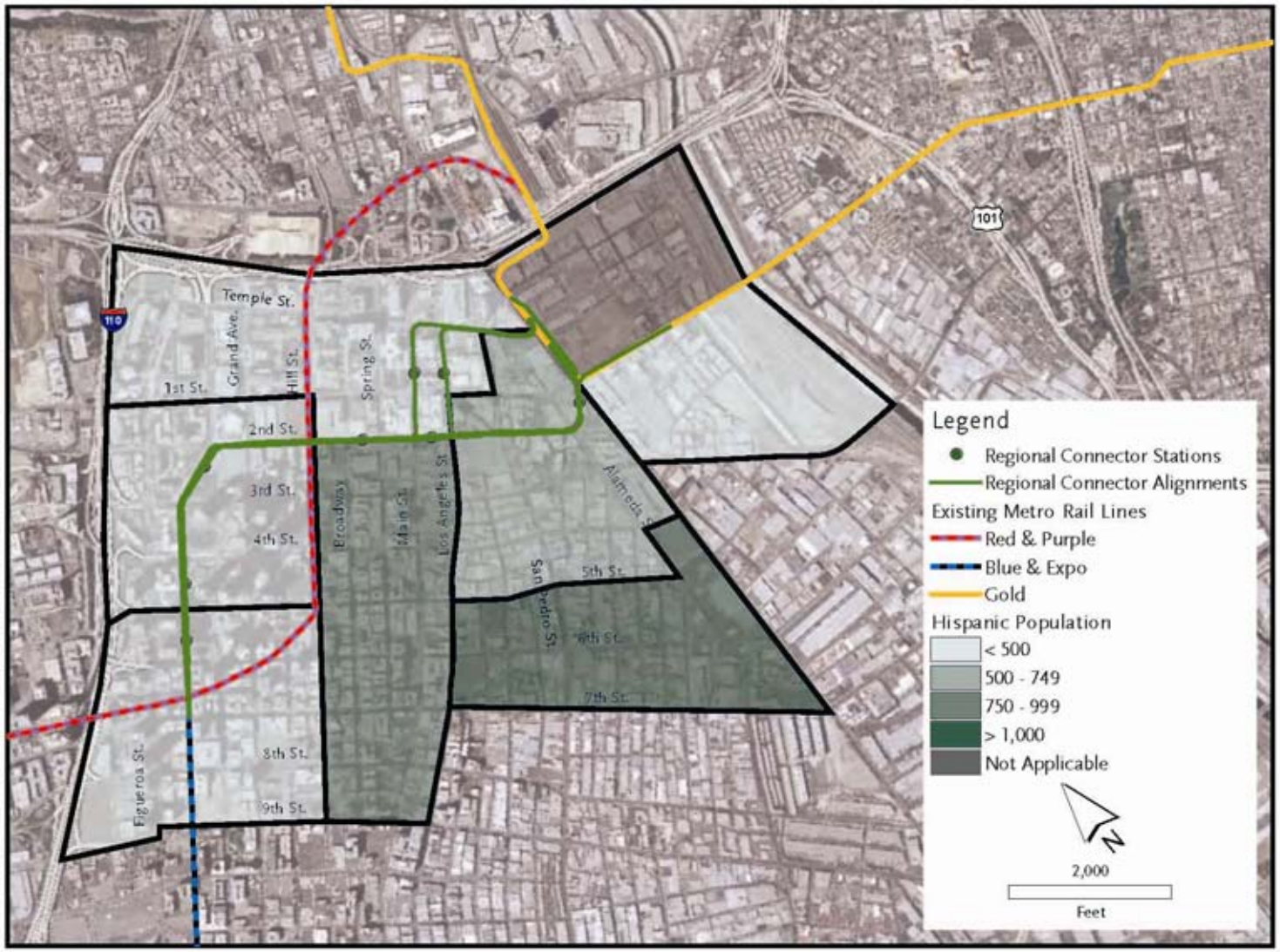

Figure 3-5. Ethnicity, Hispanic Population in Project Area

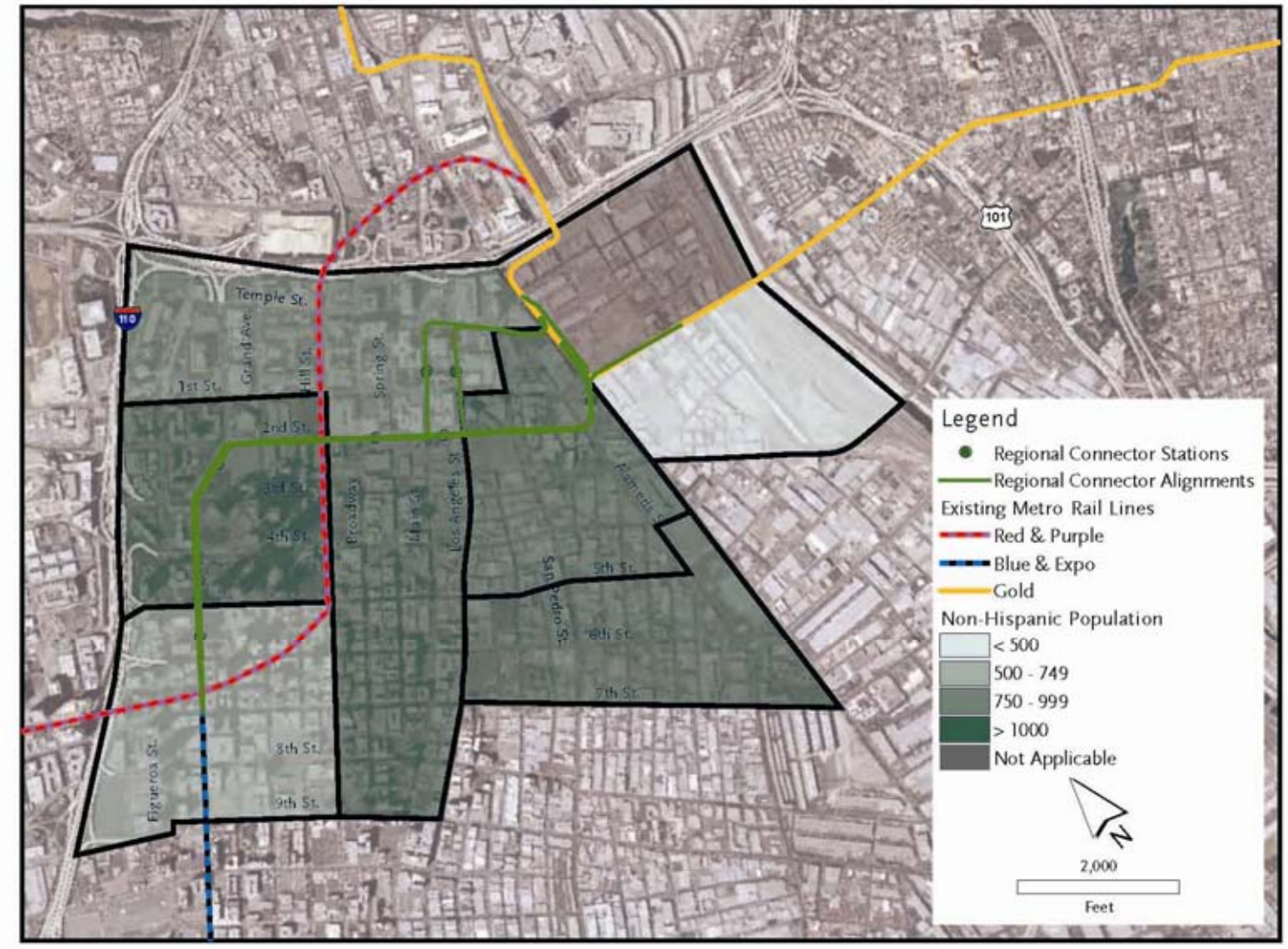

Figure 3-6. Ethnicity, Non-Hispanic Population in Project Area

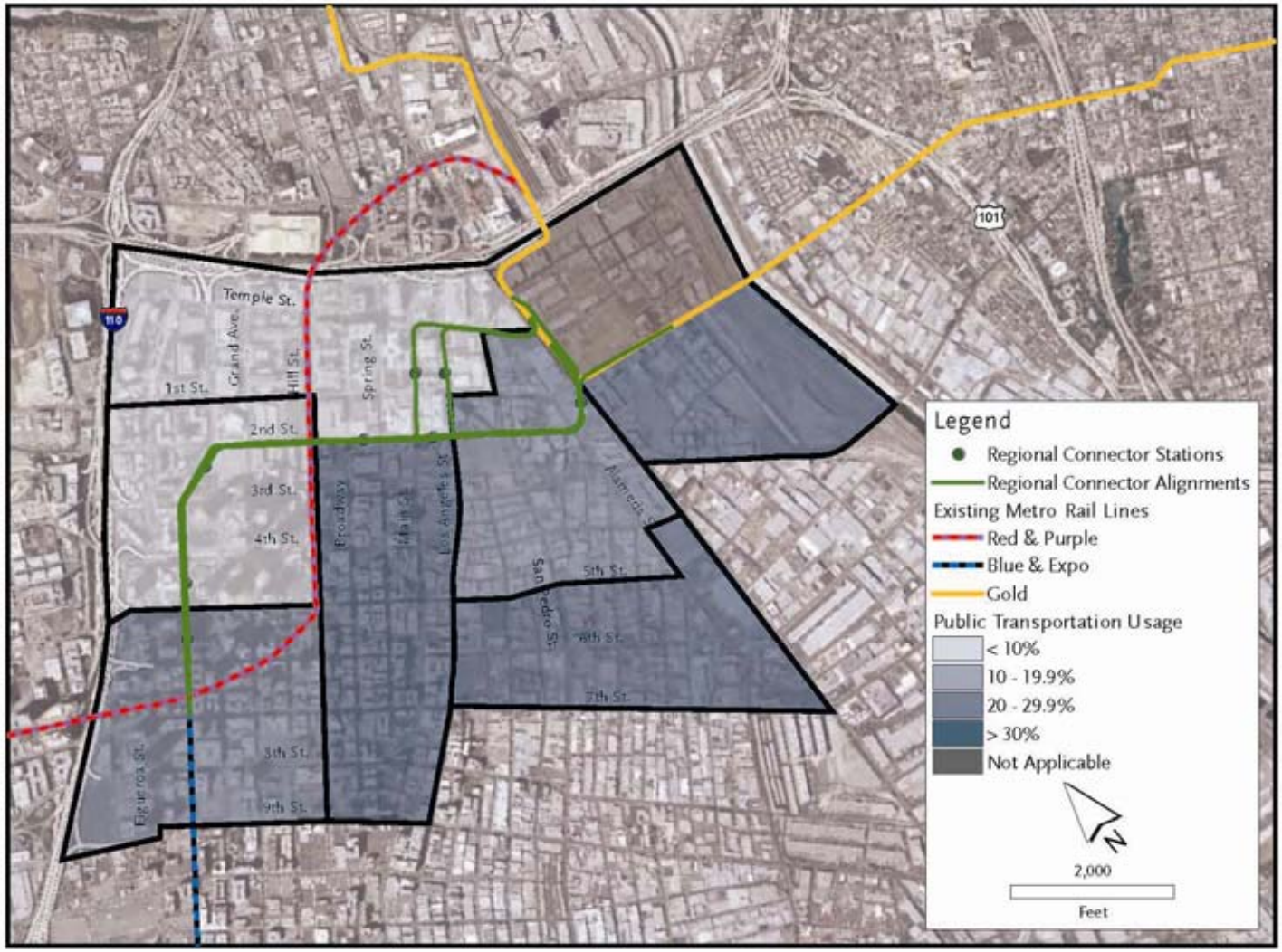

Figure 3-7. Public Transportation Users in Project Area

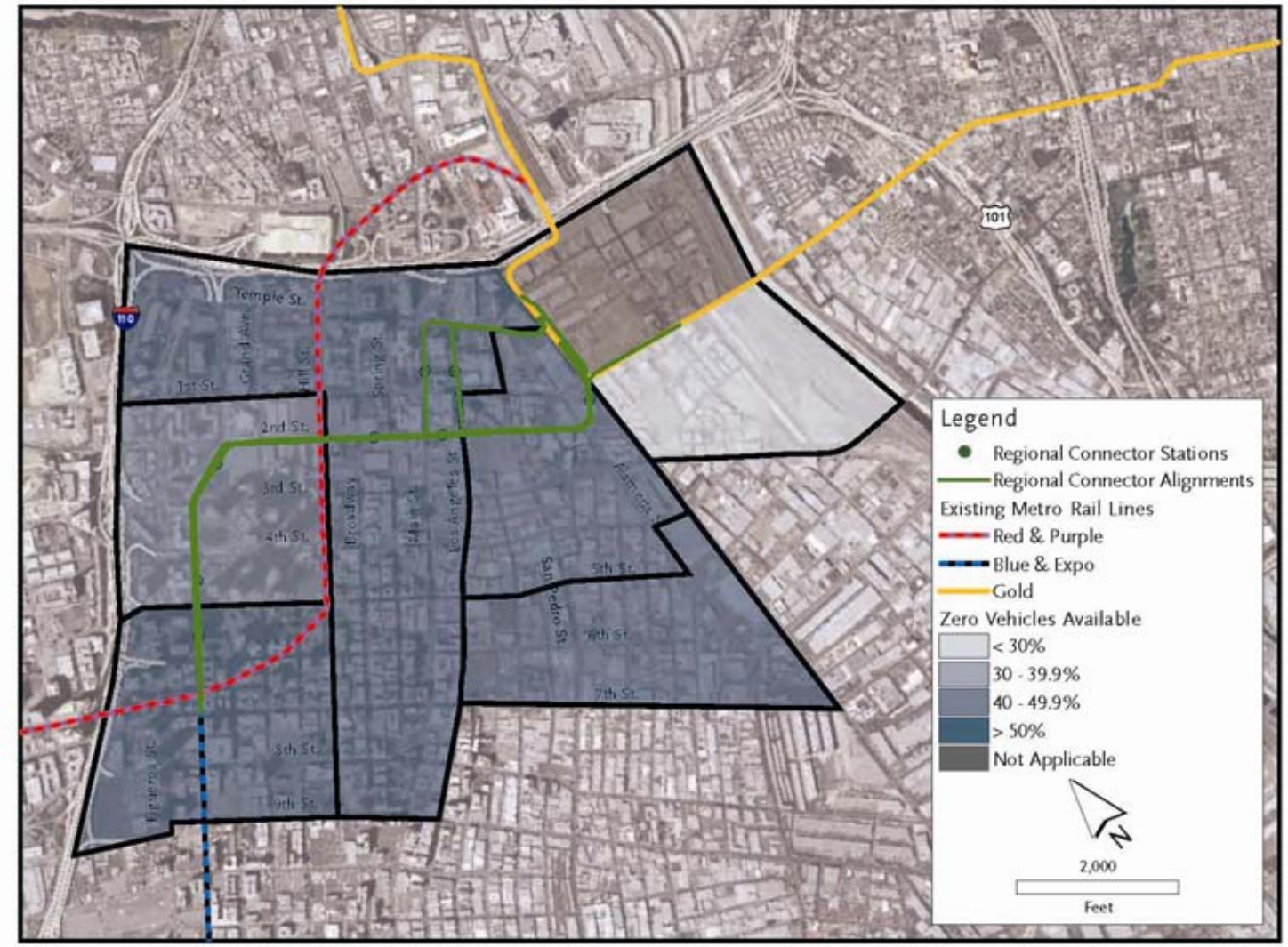

Figure 3-8. Households with No Available Car in Project Area

4.0 PUBLIC TRANSPORTATION FACILITIES AND SERVICES

4.1 Project Area Public Transit Context

Downtown has the highest concentration of transit service of any area in the County. At present, ten transit operators provide service along 110 bus routes and four Metro Rail lines within the project area, as illustrated in Figure 4-1. There is also heavy pedestrian activity throughout the project area. The bus and rail lines branch out in all directions from the project area to many destinations in Los Angeles County. Freeway express service also allows riders to reach destinations in Orange, San Bernardino, and Ventura Counties during peak commute hours.

4.2 Transportation Facilities and Services in the Project Area

4.2.1 Metro Rail

Metro provides rail service to the project area with the Metro Red Line from Union Station to North Hollywood, the Metro Purple Line from Union Station to Wilshire Center, the Metro Blue Line from the 7th Street/Metro Center Station to Long Beach, and the Metro Gold Line from East Los Angeles to Pasadena. The rail service consists of 70 rail stations and over 79 track miles.

Service has recently been extended to East Los Angeles through the opening of the Metro Gold Line to East Los Angeles and will be extended to Culver City in 2011 via the Metro Expo Line that is currently under construction. All Metro Rail stations provide connections to additional public transportation options, including Metrolink and Amtrak commuter rail services and bus service provided by Metro and other transit operators. Table 4-1 summarizes existing and future Metro Rail Lines currently under construction in the project area.

Figure 4-1. Metro Service Map for Downtown Los Angeles

Table 4-1. Existing and Future Metro Rail Lines in the Project Area

Line	Mode	Route	Length	Weekday Ridership	Year Completed
Existing Metro Rail Lines					
Red/Purple	HRT	Union Station to North Hollywood, Wilshire/Western	17.4 Miles	139,409	1993-2000
Blue	LRT	7th Street/Metro Center to Long Beach	22 Miles	70,583	1990-1991
Gold	LRT	Sierra Madre Villa to East Los Angeles	19.7 Miles	28,227	2003, 2009 (Eastside Extension)
Future Metro Rail Lines (under construction)					
Expo	LRT	7th Street/Metro Center to Culver City	8.6	27,000	2011

[1] Source of anticipated weekday ridership: BuildExpo.org for projection year 2020

Metro Red Line – This heavy rail transit (HRT) subway line originates from Union Station and travels west (Figure 4-2). The line began operating with service between Union Station and Westlake/MacArthur Park station (5 stations) in 1993. An extension to Wilshire/Western station, which was later renamed the "Metro Purple Line," was completed in 1996. The extension of the Metro Red Line northwest from Wilshire/Vermont station to Hollywood/Vine station with an additional 5 stations opened in 1999. Three more stations were added with the opening of the extension to North Hollywood in 2000.

Figure 4-2. Metro Red Line

Metro Purple Line – This HRT line originated when the Union Station-Wilshire/Western route of the Metro Red Line was renamed the Metro Purple Line in 2006. Service began on this

route in two phases, in 1993 and 1996. As of the 2009 fiscal year, the Red and Purple Lines experienced approximately 139,409 weekday boardings on 17.4 miles of track.

Metro Blue Line – This line opened in 1990 and was the first light rail transit (LRT) system in Los Angeles since the previous rail transit system closed in the 1960s. The 22-mile line has 22 stations and runs from 7th Street/ Metro Center Station south to Long Beach. The Blue Line averaged 70,583 weekday boardings in the 2009 fiscal year.

Metro Gold Line – This LRT line from East Los Angeles to Pasadena has 21 stations, approximately 20 miles of track, and began operating in 2003 from Union Station to Pasadena. In the 2009 fiscal year, the line averaged 28,227 weekday boardings. The Metro Gold Line to East Los Angeles opened in late 2009, making stops in Little Tokyo, Boyle Heights, and East Los Angeles. The six-mile extension features eight new stations and connects with the existing Metro Gold Line to Pasadena without requiring riders to transfer at Union Station. Metro estimates that there will be 23,000 riders each weekday on the Metro Gold Line to East Los Angeles by 2020.

Figure 4-3. Metro Gold Line

Metro Expo Line – The first phase of the Exposition LRT line is expected to open in 2011. The 8.5-mile line will run primarily at grade and serve 11 stations from 7th Street/Metro Center Station in downtown to the intersection of Washington Blvd. and National Blvd. in Culver City. Average weekday ridership is expected to reach 43,600 by 2020 (Metro 2005). A second phase of the Expo Line to Santa Monica is currently in the planning phases.

There are four Metro Rail stations located within the project area. The HRT Metro Red and Purple Line stations are Civic Center Station (Hill Street between Temple and 1st Streets), Pershing Square Station (Hill Street between 4th and 5th Streets), and 7th Street/Metro Center Station (7th Street between Figueroa and Hope Streets, and Flower Street between Wilshire Blvd. and 8th Street). The 7th Street/Metro Center Station serves as a transfer point to the LRT Metro Blue Line as well. The LRT Little Tokyo/Arts District Station (Alameda Street between Temple and 1st Streets) is the newest station that opened in late 2009 as part of the Metro Gold Line to East Los Angeles.

4.2.2 Bus Service

Since downtown Los Angeles is a regional employment hub, there are numerous bus operators serving the area. These operators include:

- Antelope Valley Transit Authority (AVTA)
- City of Gardena (Gardena Municipal Bus Lines)
- City of Santa Clarita Transit
- City of Santa Monica (Big Blue Bus)
- Foothill Transit
- City of Los Angeles Department of Transportation (LADOT)
- Los Angeles County Metropolitan Transportation Authority (Metro)
- City of Montebello (Montebello Bus Lines)
- Orange County Transportation Authority (OCTA)
- City of Torrance (Torrance Transit)

Figure 4-4. Metro Bus

With the exception of Metro, LADOT, Montebello Bus Lines, City of Santa Monica, and Gardena Municipal Bus Lines, these transit operators run mostly peak commute (rush) hour, peak-direction commuter bus service in and out of the project area. LADOT provides both long-distance freeway commute service as well as frequent Downtown Area Short Hop (DASH) service along short, mostly circular shuttle routes within the downtown area. In addition to public transit services, several high-rise office building landlords within the project area offer shuttle bus service to Union Station for their tenants.

The majority of bus transit service in the project area, as well as the Los Angeles region, is provided by Metro, which operates a number of short and long-distance radial lines, as well as cross-town service, express service, and limited overnight service. The combined number of transit vehicle boardings and alightings in the project area on Metro buses alone totals 174,000 on a typical weekday. The 86,000 weekday boardings account for 15.2 percent of the 569,046 bus boardings system-wide.

Metro's bus transit services vary considerably in speed and capacity. The most basic routes provide line-haul service to and from downtown along arterial streets. Heavily-traveled routes often have overlaid limited-stop or Metro Rapid bus service.

Metro Rapid bus service includes traffic signal priority, short headways, and limited stops, which increase corridor average bus speeds by about 3-4 mph compared to local service, which typically operates in the 9-12 mph range. Metro currently provides Rapid service into the Regional Connector project area from major intersections along busy routes, including Beverly Blvd. (during peak hours only), Wilshire Blvd., Whittier Blvd., South Broadway, Hawthorne Blvd, Pico Blvd., and Central Avenue, Long Beach Blvd, Garvey Avenue, Cesar Chavez Avenue, and San Fernando Rd.

The majority of the publicly-provided commuter services originating east of downtown use the El Monte Busway. Constructed in 1976, these high capacity bus-carpool lanes parallel the San Bernardino Freeway (I-10) between the City of El Monte and downtown. Similarly, the commuter buses coming from points south and southeast of downtown primarily use the Harbor Transitway, completed in 1996, which runs along the median of SR-110 between Artesia Blvd. and Adams Blvd. Several transit operators use these facilities, and Metro also operates the Silver Line service, which runs on both facilities.

Busway stations are located in freeway medians which are uninviting to pedestrians and usually not immediately adjacent to activity centers. The busway stations are convenient to commuters who arrive on feeder bus lines or use adjacent park and ride lots. However, light rail stations are usually better situated to enhance neighborhood activity.

4.2.3 Commuter Rail

Commuter rail service to downtown is provided primarily by Metrolink and Amtrak, with connections to Metro Rail service at Union Station, located one-tenth-mile outside of the project area. Most passengers arriving at Union Station on Metrolink are bound for the central business district and presently use the Metro Red Line, DASH buses, or employer-provided shuttles to complete their trips. Some passengers may use the Regional Connector if it reduces trip times or transfers.

Metrolink has operated under the Southern California Regional Rail Authority (SCRRA) since 1992, serving the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Metrolink provides 512 miles of service (including tracks shared with Amtrak) to 55 stations on seven routes. Average weekday ridership on Metrolink trains from October through December 2009 was over 40,000 daily boardings, with the majority of trips (57.5 percent) beginning or ending at Union Station.

Amtrak is an inter-city rail system providing passengers at Union Station with regional, statewide, and nationwide service.

4.3 Performance of the Travel System

Southern California is faced with multiple mobility challenges that hinder the region's ability to effectively meet additional travel demand. One of the most pressing issues is population growth. The County alone is expected to increase by 2.3 million people, nearly twice the population of the City of San Diego, to a total of 12.3 million people by 2035. This expected population growth will lead to increased travel demand throughout the region.

The transportation network includes 9,000 lane-miles of freeway, more than 42,000 lane-miles of arterials, and several large public transit service providers (SCAG 2008). Yet growth of the transportation system has not kept pace with population growth and increases in transportation demand. As the population in the region doubled from 1960 to 2000, highway miles increased by less than 30 percent (SCAG 2008). The congestion caused by insufficient transportation lanes affects both personal travel and goods movement. The majority of the congestion is from travel on the highways and local arterial network regardless of transportation mode. If the current trend persists, travel delays are expected to rise to 5.7 million person hours by 2035, more than double currently experienced delays, which will deeply affect highway productivity (SCAG 2008).

If inadequately addressed, these challenges could hamper future population growth, economic development, commuter safety, existing infrastructure, goods movement, air quality, and other environmental conditions. If no action is taken to improve transportation mobility, SCAG estimates that daily person hours of delay would increase from 2.2 million hours under the 2000 Base Year to 5.7 million hours under the 2035 Baseline.

To define and address mobility issues, SCAG developed regional performance indicators that help in understanding the problem, setting goals for improvement, and measuring progress towards the goals. The following section describes regional performance indicators and baseline estimates of performance. By providing more attractive alternatives to the automobile, improving transit connections to and through the downtown Los Angeles area becomes one part of a larger, comprehensive strategy to meet regional travel demand.

4.3.1 Traffic Volumes and Operating Conditions

Performance of intersections is measured by "level of service" (LOS) (Table 4-2). All of the key intersections currently operate at LOS D or better during both the AM and PM peak hours. Only the Figueroa Street and Wilshire Boulevard intersection is operating at LOS F in the PM peak hour (Figure 4-5). By 2035, up to 28 intersections in the project area will be at LOS E or F in the PM peak hour without transit improvements in the project area (Figure 4-6).

Freeways within the project area already operate at LOS F during peak hours and, if not addressed, this trend is expected to worsen through the year 2035. Nearly all areas of the County experience freeway congestion during peak hours. However, the congestion on

freeways within the project area is among the worst and occurs during both the morning and evening rush hour periods, as illustrated in Figure 4-7.

In addition to congestion at intersections and on the freeways, many of the key roadway segments are also projected to operate at LOS D or worse in 2035 in the absence of transit improvements in the project area. In particular, most of the segments along Alameda and 3rd Street are projected to be at LOS F.

For a complete description of the traffic operating conditions analysis, see the Transportation Technical Memorandum (Appendix L).

Table 4-2. Level of Service Definitions

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	FREE FLOW. No vehicle waits longer than one red light and no green light phase is fully used.
B	0.601 - 0.700	REASONABLY FREE FLOW. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	STABLE FLOW. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	APPROACHING UNSTABLE FLOW (acceptable for urban conditions). Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	UNSTABLE FLOW (practical capacity). Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FORCED OR BREAKDOWN FLOW. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. There are tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, Highway Capacity Manual, 2000.

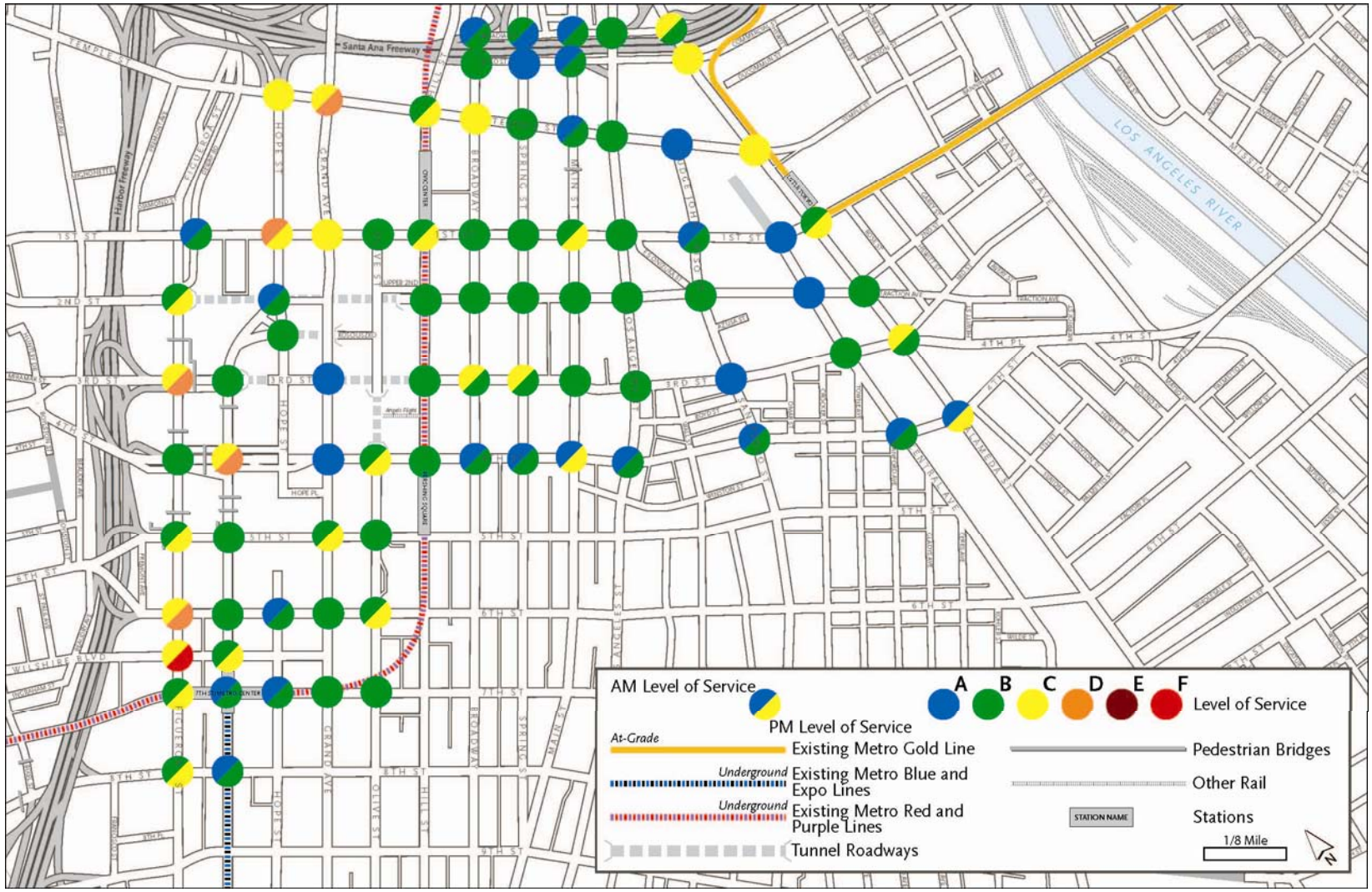

Figure 4-5. Existing Level of Service in Project Area

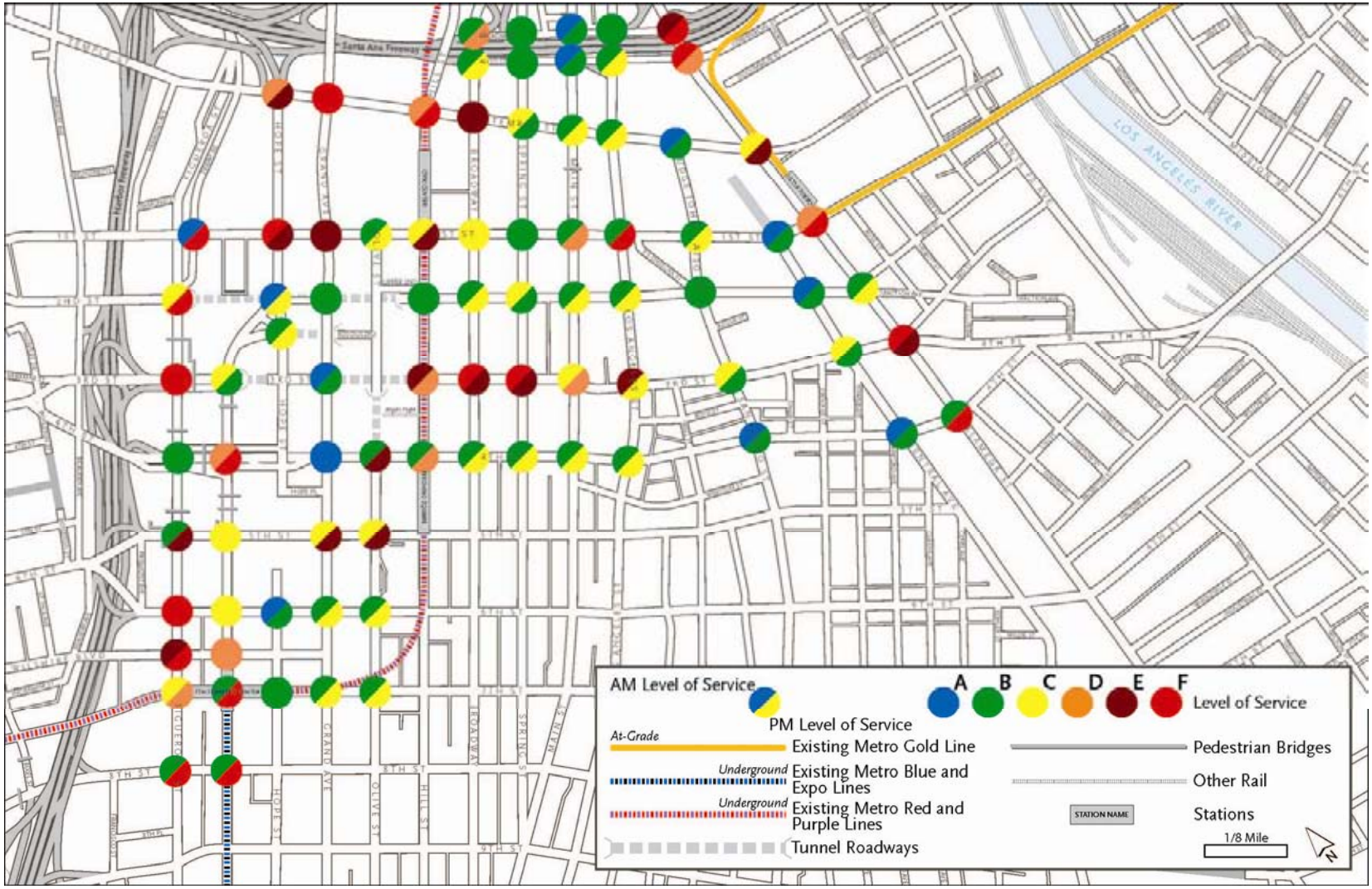

Figure 4-6. Predicted Level of Service in Project Area Without Transit Improvements (2035)

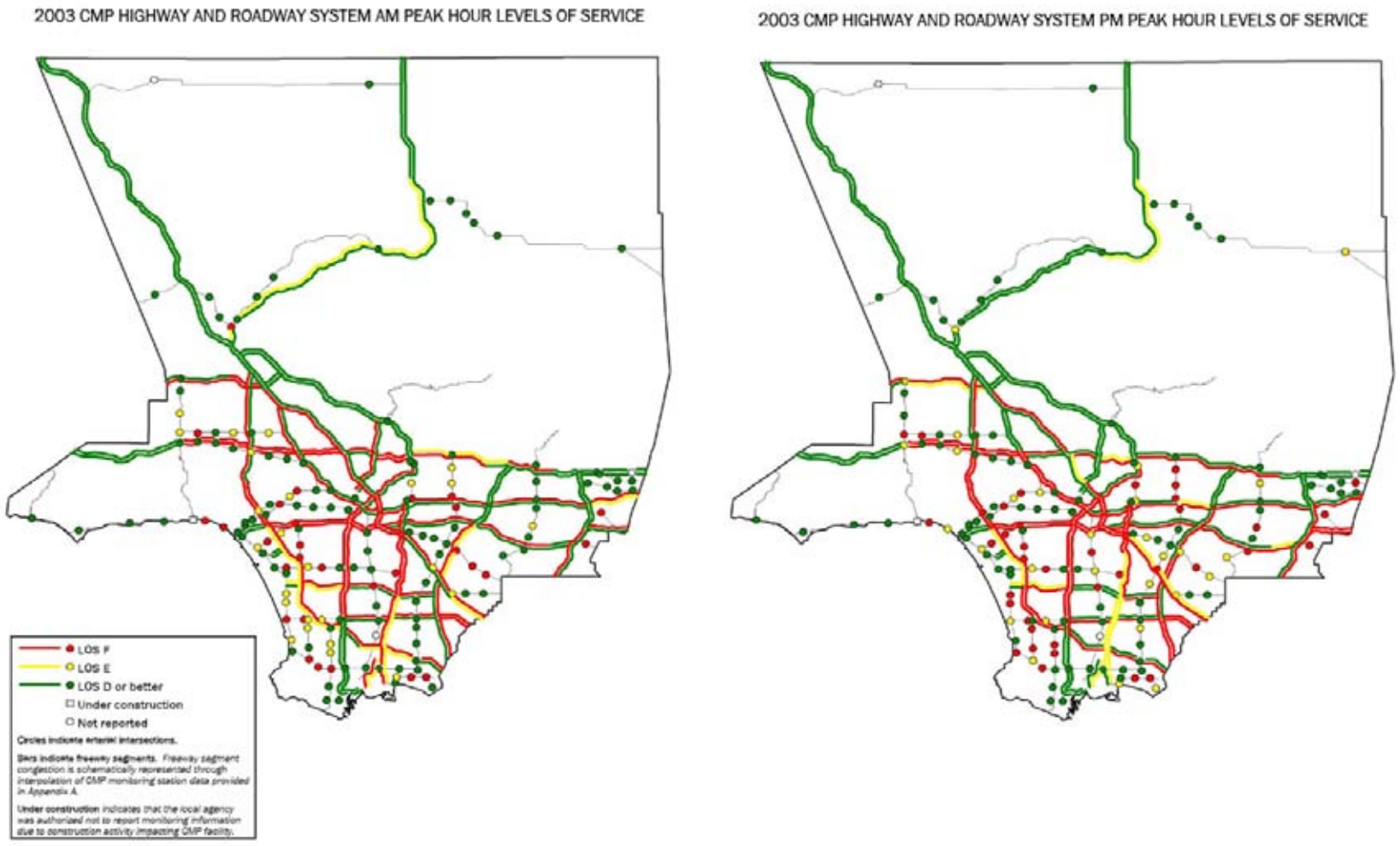
2003 CMP HIGHWAY AND ROADWAY SYSTEM AM PEAK HOUR LEVELS OF SERVICE
2003 CMP HIGHWAY AND ROADWAY SYSTEM PM PEAK HOUR LEVELS OF SERVICE
LOS F
LOS E
LOS D or better
Under construction
Not reported
Circles indicate arterial intersections.
Bars indicate freeway segments. Freeway segment congestion is schematically represented through interpolation of CMP monitoring station data provided in Appendix A.
Under construction indicates that the local agency was authorized not to report monitoring information due to construction activity impacting CMP facility.
2004 Congestion Management Program for Los Angeles County

Figure 4-7. Freeway Levels of Service

4.3.2 Transit Operating Conditions

Bus service runs in a grid pattern through the downtown area, with most lines terminating at the periphery after having passed through. Nearly all streets within the project area have bus service during peak hours.

On several routes, headways shrink to less than five minutes during rush hour, and some stops are served by over a dozen lines. Some of the most heavily transit-served streets in the project area are 1st Street, the 4th Street/5th Street couplet, Hill Street, Broadway, the Main Street/Spring Street couplet, and the Grand Street/Olive Street couplet. Downtown streets with the highest bus ridership include Broadway, Hill Street, Spring Street, Main Street, Flower Street, and Grand Avenue.

Of the numerous bus routes serving downtown, over 30 pass within one block of both Union Station and the 7th Street/Metro Center Station, the termini of the Regional Connector corridor. There are 51 bus lines, mostly operated by Metro, with over 174,000 daily passenger boardings and alightings within the project area. Table 4-3 shows the bus lines provided by each bus operator, and the frequency of available service for each bus route.

The four busiest Metro bus lines serving the downtown area all originate in West Los Angeles or Santa Monica. The Metro bus lines with the highest number of boardings within the project area serve areas east and south of downtown. This supports the Westside, the Eastside, and South Los Angeles as primary origins and destinations for current bus passengers traveling in and out of the project area. See Table 4-4 for a summary of Metro bus transit ridership by line and direction.

Of the 38 Metro bus lines that pass within a block of both Regional Connector termini (Union Station and 7th Street/Metro Center Station) only a small percentage of the total ridership on these lines boards within the project area. This could indicate that riders are reluctant to transfer between modes (Table 4-5).

Most of the lines paralleling the Regional Connector route (serving both Union Station and the 7th Street/Metro Center Station) originate from points east of downtown, and five of them use the El Monte Busway. Most of the lines function primarily as peak hour commuter buses. Compared to other Metro bus lines in the project area, these routes do not carry as many riders which may be attributable to their lack of off-peak service.

Metro operates 125 bus stops within the project area. The five busiest Metro bus stops, each with 3,400 - 6,300 daily boardings, are located along Hill Street and Broadway between 5th and 7th Streets (Table 4-6). All of these stops are within one-quarter mile of the existing Pershing Square Station. If the Regional Connector includes stations near Broadway, Hill, and Spring Streets, it will enable transfers between the LRT system and the busiest north-south bus corridors in the area.

Most of the other busy Metro bus stops in the project area are located in the Financial Core and Civic Center areas, both of which will be served by the Regional Connector. Additionally, other transit operators have bus stops within the project area, although their ridership data were not available at this level of detail for this Draft EIS/EIR.

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
AVTA	785	Freeway Express Bus	4AM-6AM, 3PM-6PM	20 mins	Palmdale/Lancaster
BBB	10 Express	Freeway Express Bus	6AM-8PM	15 mins	Santa Monica
Gardena	1	Freeway Express Bus	5AM-12AM	15 mins	Gardena/Lawndale
Foothill	481	Freeway Express Bus	6AM-9AM, 3PM-6PM	20 mins	El Monte/Wilshire Center
Foothill	493	Freeway Express Bus	5AM-8AM, 2PM-8PM	10 mins	Phillips Ranch/Diamond Bar/Puente Hills Mall Transit Center
Foothill	497	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	Chino/Industry
Foothill	498	Freeway Express Bus	5AM-8AM, 2PM-7PM	7 mins	Covina/Azusa
Foothill	499	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	San Dimas
Foothill	699	Freeway Express Bus	4AM-8AM. 2PM-7PM	9-12 mins	Montclair

Table 4-3. Existing Bus Service in the Project Area

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Foothill	Silver Streak	Freeway Express Bus	24 Hours	10 mins	Montclair
LADOT	CE 409	Freeway Express Bus	6AM-9AM, 4PM-6PM	15 mins	Sylmar/Sunland/Tujunga/Montrose/Glendale
LADOT	CE 413	Freeway Express Bus	7AM-9AM, 4PM-6PM	25 mins	Van Nuys/North Hollywood/Burbank
LADOT	CE 419	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Chatsworth/Northridge/Granada Hills/Mission Hills
LADOT	CE 422	Freeway Express Bus	5AM-9AM, 4PM-8PM	8 mins	Hollywood/San Fernando Valley/Agoura Hills/Thousand Oaks
LADOT	CE 423	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Encino/Woodland Hills/Agoura Hills/Thousand Oaks/Newbury Park
LADOT	CE 430	Freeway Express Bus	6AM-7AM, 5PM-6PM	30-50 mins	Brentwood/Pacific Palisades
LADOT	CE 431	Freeway Express Bus	7AM-9AM, 5PM-6PM	30 mins	Westwood/Rancho Park/Palms
LADOT	CE 437	Freeway Express Bus	7AM-9AM, 4PM-6PM	15-30 mins	Venice/Marina del Rey/Culver City

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
LADOT	CE 438/444	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Redondo Beach/Hermosa Beach/Manhattan Beach/El Segundo
LADOT	CE 448	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Rancho Palos Verdes/Torrance/Lomita/Wilmington Harbor City
LADOT	CE 534	Freeway Express Bus	7AM-8AM, 4PM-5PM	30 mins	Century City/Westwood
LADOT	DASH A	Circulator Bus	7AM-7PM	7 mins	Little Tokyo/City West
LADOT	DASH B	Circulator Bus	6AM-7PM	8 mins	Chinatown/Financial District
LADOT	DASH C	Circulator Bus	7AM-7PM	7 mins	Financial District/South Park
LADOT	DASH D	Circulator Bus	6AM-7PM	5 mins	Union Station/South Park
LADOT	DASH E	Circulator Bus	7AM-7PM	5 mins	City West/Fashion District
LADOT	DASH F	Circulator Bus	7AM-7PM	10 mins	Financial District/Exposition
LADOT	DASH CH	Circulator Bus	6AM-6PM	6 mins	City Hall Shuttle
LADOT	DASH DD	Circulator Bus	Weekend Only	20 mins	Downtown Discovery

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
LADOT	DASH MBH	Circulator Bus	7AM-9AM, 3PM-6PM	10 mins	Metrolink/Bunker Hill
Metro	2/302	Local/Limited Stop Bus	24 Hours	4-10 mins	Pacific Palisades via Sunset Blvd.
Metro	4	Local Bus	24 Hours	9-15 mins	Santa Monica via Santa Monica Blvd.
Metro	10	Local Bus	5AM-12AM	7-15 mins	West Hollywood via Temple Street and Melrose Avenue
Metro	14	Local Bus	24 Hours	12-25 mins	Beverly Hills via Beverly Blvd.
Metro	16/316	Local/Limited Stop Bus	4AM-1AM	2-6 mins	Century City via 3rd Street
Metro	18	Local Bus	24 Hours	3 mins	Wilshire Center – Montebello via 6th Street and Whittier Blvd.
Metro	20	Local Bus	24 Hours	4 mins	Santa Monica via Wilshire Blvd.
Metro	26/51/52/352	Local/Limited Stop Bus	24 Hours	4 mins	Hollywood – Compton – Artesia Blue Line via Avalon Blvd.
Metro	28	Local Bus	5AM-1AM	8 mins	Century City via Olympic Blvd.

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	30/31	Local/Limited Stop Bus	24 Hours	30-50 mins	Pico-Rimpau – Monterey Park via Pico Blvd. and E 1st Street
Metro	33/333	Local/Limited Stop Bus	24 Hours	6-16 mins	Santa Monica via Venice Blvd.
Metro	35/335[1]	Local/Limited Stop Bus	4AM-1AM	5-12 mins	Fairfax/Washington via Washington Blvd.
Metro	37	Local Bus	24 Hours	6-12 mins	Fairfax/Washington via Adams Blvd.
Metro	38	Local Bus	24 Hours	10-15 mins	17th/Broadway – Fairfax and Washington via Jefferson Blvd.
Metro	40	Local Bus	24 Hours	6-15 mins	South Bay Galleria via Hawthorne Blvd., Crenshaw Blvd., and ML King Blvd.
Metro	42/42A	Local Bus	24 Hours	9-16 mins	LAX via MLK Blvd., Stocker Street, and La Tijera Blvd.
Metro	45	Local Bus	24 Hours	4-10 mins	Lincoln Heights – Rosewood via Broadway
Metro	48	Local Bus	5AM-11PM	7-18 mins	Avalon Green Line via Main Street and S. San Pedro Street

[1] Trips into Project Area operate after 7PM.

Table 4-3. Existing Bus Service in the Project Area

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	53	Local/Limited Stop Bus	24 Hours	6-20 mins	CSU Dominguez Hills via Central Avenue
Metro	55/355	Local/Limited Stop Bus	24 Hours	4-12 mins	Imperial Blue/Green Line via Compton Avenue
Metro	60	Local Bus	24 Hours	3-7 mins	Artesia Blue Line via Long Beach Blvd.
Metro	62	Local Bus	5AM-11PM	15-27 mins	Hawaiian Gardens via Telegraph Rd.
Metro	66/366	Local/Limited Stop Bus	4AM-1AM	1-10 mins	Wilshire Center - Montebello via 8th Street and Olympic Blvd.
Metro	68/84	Local Bus	24 Hours	7-10 mins	Eagle Rock Blvd. – Cypress Avenue – Montery Park via Cesar Chavez Avenue
Metro	70	Local Bus	24 Hours	10-12 mins	El Monte via Marengo St & Garvey Avenue
Metro	71	Local Bus	4AM-1AM	12-30 mins	Cal State LA via Wabash Avenue & City Terrace Dr.
Metro	76	Local Bus	24 Hours	7-15 mins	El Monte – Downtown LA via Valley Blvd.
Metro	78/79/378	Local/Limited Stop Bus	5AM-1AM	5-15 mins	Arcadia via Huntington Dr. and Las Tunas Dr.

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	81	Local Bus	5AM-1AM	3-10 mins	Eagle Rock - Exposition Park via Figueroa Street
Metro	83	Local Bus	24 Hours	8-10 mins	Eagle Rock via York Avenue
Metro	90/91	Local Bus	5AM-12AM	16-30 mins	Sunland via Glendale Avenue, Foothill Blvd.
Metro	92	Local Bus	24 Hours	10-20 mins	Burbank Station via Glenoaks Blvd., Brand Blvd., Glendale Blvd.
Metro	94	Local Bus	5AM-1AM	10-14 mins	Sun Valley via Hill Street & San Fernando Rd.
Metro	96	Local Bus	5AM-8PM	20 mins	Sherman Oaks via Griffith Park Dr. and Riverside Dr.
Metro	439	Freeway Express Bus	5AM-9PM	30-45 mins	Aviation Green Line via Culver City
Metro	442	Freeway Express Bus	6AM-8AM, 4PM-6PM	25-30 mins	Hawthorne via Harbor Transitway, Manchester Blvd., and La Brea Avenue
Metro	445	Freeway Express Bus	5AM-7PM	30 mins	San Pedro via Harbor Transitway, 1st Street, and Pacific Avenue
Metro	450X	Freeway Express Bus	6AM-9AM, 4PM-6PM	12-20 mins	South Bay Express via Harbor Transitway

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	460	Freeway Express Bus	5AM-12AM	19-28 mins	Disneyland via Harbor Transitway, I-105, and I-5
Metro	484	Freeway Express Bus	5AM-12AM	5 mins	Pomona via El Monte Busway and Valley Blvd.
Metro	485	Freeway Express Bus	5AM-12AM	12-15 mins	Altadena via El Monte Busway, Oak Knoll Avenue, and Lake Avenue
Metro	487/489	Freeway Express Bus	6AM-9PM	16-30 mins	El Monte – Downtown LA | Temple City – Downtown LA
Metro	490	Freeway Express Bus	5AM-11PM	10 mins	Pomona via El Monte Busway and Ramona Blvd.
Metro	704	Rapid Bus	6AM-8PM	8-10 mins	Santa Monica Blvd. Rapid
Metro	714	Rapid Bus	6AM-9AM, 3PM-6PM	10-20 mins	Beverly Blvd. Rapid
Metro	720	Rapid Bus	4AM-1AM	3-12 mins	Wilshire Blvd. - Whittier Blvd. Rapid
Metro	728	Rapid Bus	5AM-8PM	8-15 mins	Olympic Blvd. Rapid
Metro	730	Rapid Bus	5AM-9PM	10 mins	Pico Rimpau via Pico Blvd.

Table 4-3. Existing Bus Service in the Project Area					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	740	Rapid Bus	5AM-8PM	10-15 mins	Hawthorne Blvd. Rapid
Metro	745	Rapid Bus	5AM-8PM	4-15 mins	South Broadway Rapid
Metro	753	Rapid Bus	5AM-10PM	10 mins	Imperial/Wilmington Station via Central Avenue
Metro	760	Rapid Bus	5AM-8PM	10-15 mins	Long Beach Blvd. Rapid
Metro	770	Rapid Bus	6AM-6PM	10 mins	Garvey Avenue - Cesar Chavez Avenue Rapid
Metro	794	Rapid Bus	5AM-10PM	10-14 mins	Sylmar Station via San Fernando Rd., Brand Blvd.
Metro	Blue Line	Light Rail	5AM-12AM	5 mins	Long Beach via South Los Angeles, Willowbrook, and Compton
Metro	Gold Line	Light Rail	5AM-12AM	7 mins	Pasadena and East Los Angeles
Metro	Red/Purple Line	Heavy Rail	5AM-12AM	5 mins	Wilshire Center and North Hollywood
Metro	Silver Line	Transitway	24 Hours	1 mins	Harbor Gateway and El Monte
Montebello	40	Local Bus	5AM-10PM	8 mins	Montebello and Whittier via Beverly Blvd.
Montebello	50	Local Bus	5AM-12AM	30 mins	Whittier and La Mirada via Washington Blvd.

Table 4-3. Existing Bus Service in the Project Area

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Montebello	341	Limited Stop Bus	7AM-9AM, 4PM-6PM	30 mins	Montebello and Whittier via Beverly Blvd.
Montebello	342	Limited Stop Bus	7AM, 5PM	One Trip	Montebello and Whittier via Beverly Blvd.
OCTA	701	Freeway Express Bus	5AM-6AM, 4PM-5PM	20 mins	Huntington Beach
OCTA	721	Freeway Express Bus	6AM-9AM, 3PM-6PM	30 mins	Fullerton
Santa Clarita	799	Freeway Express Bus	5AM-7AM, 3PM-7PM	20 mins	Valencia/Santa Clarita
Torrance	1	Freeway Express Bus	6AM-9AM, 4PM-10PM	30 mins	Torrance via Harbor Transitway and Artesia Transit Center
Torrance	2	Freeway Express Bus	7AM-7PM	60 mins	Torrance via Harbor Transitway

Source: Antelope Valley Transit Authority, City of Santa Monica, Foothill Transit, City of Los Angeles Department of Transportation, Los Angeles County Metropolitan Transportation Authority, Montebello Bus Lines, Orange County Transportation Authority, Santa Clarita Transit, Torrance Transit, 2007-2010

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
2/302	East	287	1628	21875
	West	1617	603	
4/304	East	190	1392	20873
	West	1427	449	
10	East	815	1573	13510
	West	1494	842	
14/37	North	747	934	16911
	South	911	685	
16/316	East	171	3798	26731
	West	4406	667	
18	East	2930	4571	26970
	West	3672	2752	
20	East	178	1585	17757
	West	2105	359	
26/51/52/352	East	2175	2865	27640
	West	3254	2982	
28/328	East	55	933	9362
	West	561	42	
30/31	East	1876	1995	16668
	West	1942	1276	

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
33/333	East	102	1088	23209
	West	1131	119	
35/335	East	7	34	9098
	West	56	13	
38	East	0	11	5982
	West	7	0	
40	North	539	1757	17718
	South	1716	440	
42/42A	North	353	850	4904
	South	767	218	
45/46	North	1705	2570	20974
	South	3002	1555	
53	North	477	1867	10588
	South	2004	506	
55/355	North	114	944	10442
	South	887	120	
60	North	1709	3596	17625
	South	3852	1813	
62	East	875	201	4327
	West	287	941	

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
66/366	East	1750	2336	23320
	West	2324	1955	
68/84	North	454	415	9515
	South	216	481	
70	East	1587	200	13518
	West	132	1582	
76	East	1203	169	10744
	West	99	1004	
78/79/378	East	1500	163	11490
	West	10	129	
81	North	1659	1259	17116
	South	1208	1920	
83	North	1048	210	5744
	South	92	840	
90	North	1029	126	6156
	South	61	912	
92	North	670	78	5791
	South	57	812	
94	North	1165	155	6891
	South	80	979	

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
439	North	18	130	954
	South	136	30	
442	North	1	61	220
	South	63	7	
444	North	23	366	2982
	South	277	67	
445	North	17	307	1339
	South	240	33	
446/447	North	20	260	4147
	South	298	69	
450X	Clockwise	257	276	804
460	East	547	31	4333
	West	12	577	
484	East	1090	57	7128
	West	45	1038	
485	North	295	25	2949
	South	31	460	
487/489	East	654	50	3965
	West	35	820	
490	East	757	37	5822

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
	West	34	1027	
714	East	26	428	3924
	West	385	52	
720	East	1628	2708	38393
	West	3050	2104	
728	East	71	841	8638
	West	702	193	
730	East	91	779	5096
	West	771	117	
740	North	174	1305	9264
	South	1365	158	
745	North	253	2041	8048
	South	1880	259	
753	North	80	744	3116
	South	509	44	
760	North	528	1672	8675
	South	1592	506	
770	East	757	42	9494
	West	30	811	
794	North	895	57	6306

Table 4-4. Metro Bus Ridership, Fiscal Year 2010 (1st Quarter)				
Line	Direction	Average Daily Boardings within Project Area	Average Daily Alightings within Project Area	Line Ridership
	South	51	810	
	TOTAL	86435	87698	569046
Total Boardings and Alightings in Project Area			174133	

Source: Los Angeles County Metropolitan Transportation Authority, 2009
Note: no ridership data for Metro routes 96 & 489

Table 4-5. Metro Bus Ridership on Lines Passing Within One Block of Both Union Station and 7th Street/Metro Center Station, Fiscal Year 2010 (1st Quarter)			
Line	Average Daily Boardings within Project Area	Average Daily Boardings for Entire Line	Route Description
20	667	17757	Santa Monica via Wilshire Blvd.
26/51/52/352	1728	27640	Hollywood - Compton - Artesia Blue Line via Avalon Blvd.
33/333	532	23209	Santa Monica via Venice Blvd.
40	425	17718	Montebello and Whittier via Beverly Blvd.
42/42A	336	4904	LAX via MLK Blvd., Stocker Street, and La Tijera Blvd.
60	360	17625	Artesia Blue Line via Long Beach Blvd.
66/366	321	23320	Wilshire Center - Montebello via 8th Street and Olympic Blvd.
68/84	928	9515	West LA - Montebello via Washington Blvd. and

Table 4-5. Metro Bus Ridership on Lines Passing Within One Block of Both Union Station and 7th Street/Metro Center Station, Fiscal Year 2010 (1st Quarter)			
Line	**Average Daily Boardings within Project Area**	**Average Daily Boardings for Entire Line**	**Route Description**
			Cesar Chavez Avenue
70	420	13518	El Monte via Garvey Avenue
78/79/378	846	11490	Arcadia via Huntington Dr. and Las Tunas Dr.
81	130	17116	Eagle Rock - Exposition Park via Figueroa Street
439	127	954	Aviation Green Line via Culver City
442	25	220	Hawthorne via Harbor Transitway, Manchester Blvd., and La Brea Avenue
444	279	2982	Rancho Palos Verdes via Harbor Transitway and Hawthorne Blvd.
445	234	1339	San Pedro via Harbor Transitway, 1st Street, and Pacific Avenue
446	279	4147	San Pedro via Harbor Transitway, Avalon Blvd., and Pacific Avenue
450X	141	804	South Bay Express via Harbor Transitway
460	210	4333	Disneyland via Harbor Transitway, I-105, and I-5
484	283	7128	Pomona via El Monte Busway and Valley Blvd.
485	74	2949	Altadena via El Monte Busway, Oak Knoll Avenue, and Lake Avenue
487/489	237	3965	Sierra Madre Villa Gold Line via El Monte Busway
490	182	5822	Pomona via El Monte Busway and Ramona Blvd.

Table 4-5. Metro Bus Ridership on Lines Passing Within One Block of Both Union Station and 7th Street/Metro Center Station, Fiscal Year 2010 (1st Quarter)			
Line	**Average Daily Boardings within Project Area**	**Average Daily Boardings for Entire Line**	**Route Description**
704	282	12710	Santa Monica Blvd. Rapid
728	196	8638	Olympic Blvd. Rapid
740	360	9264	Hawthorne Blvd. Rapid
745	326	8048	South Broadway Rapid
760	689	8675	Long Beach Blvd. Rapid
770	667	9494	Garvey Avenue - Cesar Chavez Avenue Rapid
		Total	11284

Source: Los Angeles County Metropolitan Transportation Authority, 2009

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	**North/South Street**	**Average Daily Boardings**	**Average Daily Alightings**
6th	Broadway	5980	6739
7th	Broadway	6384	5636
5th	Broadway	5930	4516
7th	Hill	3390	4338
5th	Hill	4108	3790
9th	Broadway	1247	2707

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
1st	Hill	2682	3280
5th	Spring	2229	2152
5th	Grand	2230	3151
6th	Hill	1153	3206
7th	Flower	3449	1659
7th	Spring	1656	1262
6th	Hope	1906	2533
1st	Broadway	2355	2804
8th	Broadway	3221	3436
7th	Main	1097	1856
8th	Hill	1098	1148
3rd	Broadway	1694	1079
7th	Olive	2797	1244
4th	Broadway	1382	1336
5th	Olive	2245	525
7th	San Pedro	1375	1339
3rd	Hill	824	1232
Temple	Broadway	1192	742
5th	Los Angeles	1067	590
Temple	Hill	738	936

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
7th	Grand	931	1578
8th	Hill	1098	1148
Temple	Spring	785	943
8th	Spring	439	378
9th	Main	890	931
6th	Main	405	764
7th	Hope	421	1021
7th	Alameda	948	1124
1st	Spring	733	974
6th	Spring	649	489
6th	Central	853	751
7th	Maple	747	757
7th	Figueroa	243	1028
7th	Central	471	518
6th	Los Angeles	525	1320
5th	Flower	972	295
4th	Hill	678	489
5th	Wall	1016	261
4th	Spring	18	209
9th	Hill	245	406

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
7th	Los Angeles	418	350
8th	Olive	537	268
6th	Grand	192	741
6th	San Pedro	288	568
9th	Olive	217	396
6th	Wall	209	485
3rd	Grand	215	736
Wilshire	Flower	469	356
9th	Grand	202	331
6th	Alameda	351	364
5th	San Pedro	515	221
Temple	Grand	211	522
General Thaddeus	Olive	583	276
8th	Flower	386	309
1st	Hope	350	311
8th	Grand	230	226
1st	Main	258	234
3rd	Spring	91	140
Wilshire	Figueroa	253	352
6th	Gladys	77	303

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
8th	Main	23	131
7th	Towne	117	157
7th	Ceres	28	159
1st	Judge John Aiso	256	296
9th	Hope	234	280
7th	Gladys	125	43
5th	Central	135	71
1st	Olive	318	44
8th	Figueroa	130	113
5th	Towne	216	66
1st	Los Angeles	112	224
9th	Figueroa	73	172
Temple	Figueroa	130	155
7th	Francisco	66	98
Aliso	Spring	131	6
6th	Towne	66	212
Aliso	Los Angeles	121	7
6th	Kohler	139	240
5th	Figueroa	35	172
Temple	Los Angeles	76	91

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
1st	Grand	18	126
6th	Flower	89	94
3rd	Main	12	5
Winston	Main	50	6
Division 1 Layover		4	4
Temple	Judge John Aiso	74	100
4th	Flower	65	22
1st	San Pedro	256	296
2nd	Spring	44	42
Temple	Main	21	69
Wilshire	Hope	8	142
5th	Main	592	491
2nd	Grand	22	110
Diamond	Figueroa	7	47
James M Wood	Francisco	15	21
Temple	Hope	45	10
3rd	Flower	39	35
3rd	Figueroa	13	42
2nd	Olive	159	49
2nd	Main	13	85

Table 4-6. Average Daily Boardings and Alightings at Metro Bus Stops Within The Project Area, Fiscal Year 2010 (1st Quarter)			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
4th	Figueroa	54	63
2nd	Figueroa	7	33
6th	Maple	109	96
9th	Flower	5	4
2nd	Hill	69	41
8th	Francisco	6	5
Maple Lot		759	442

Source: Los Angeles County Metropolitan Transportation Authority, 2009

4.3.3 Regional Objectives

SCAG is responsible for regional transportation planning for six counties within Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In May of 2008, SCAG released its Regional Transportation Plan (RTP) entitled "Making the Connections." This document provides a basic policy and program framework to improve the transportation system and integrate it with the population growth patterns for the region through 2035.

Making the Connections is a performance-based plan with the following goals:

- Maximize mobility and accessibility,
- Ensure safety and reliability,
- Preserve our transportation system,
- Maximize productivity of our system,
- Protect the environment,

- Encourage land-use and growth patterns that complement our transportation system, and
- Maximize security through improved system monitoring, rapid recovery planning, and coordination with other agencies.

SCAG developed performance indicators and measures to quantify the goals and evaluate progress towards achieving the goals. Table 4-7 lists the performance indicators, associated measures, and final projected outcomes. The outcomes are estimated for the Plan as a whole for 2035, and not for individual projects.

If no action is taken, performance in the region will worsen. SCAG projects that between Base Year 2000 and 2035:

- Average travel speed will reduce by 12.5 percent from 31.0 miles per hour (mph) to 27.1 mph.
- Daily person-hours of delay will increase by over 100 percent from 5.9 million hours to 12.6 million hours.
- Average daily delay per person will increase by 58 percent from 20.0 minutes to 31.5 minutes.
- The percentage of peak period evening work trips completed within 45 minutes for autos will decrease from 74 percent to 73 percent; for public transit, it will decrease from 43 percent to 42 percent.

Table 4-7. Performance Indicators, Measures, and Outcomes of 2035 Goals

Performance Indicator	Performance Measure		Plan 2035	Base Year 2003	Baseline 2035
Mobility	Average Daily Speed (Miles per Hour)		29.5	31.0	27.1
	Average Daily Delay (Daily Person Hours in millions)		10.4	5.9	12.6
Accessibility	Percent PM peak period	Autos	76%	74%	73%

Table 4-7. Performance Indicators, Measures, and Outcomes of 2035 Goals

Performance Indicator	Performance Measure		Plan 2035	Base Year 2003	Baseline 2035
	work trips within 45 minutes of home	Transit	45%	43%	42%
Reliability	Percent variation in travel time	6AM-7AM	14%	16%	N/A
		7AM-8AM	20%	22%	
		8AM-9AM	21%	23%	
		3PM-4PM	23%	25%	
		4PM-5PM	23%	26%	
		5PM-6PM	25%	28%	
		6PM-7PM	23%	25%	
Safety	Daily accident rates per million persons	Fatalities	0.27	0.28	0.31
		Injuries	17.5	16.9	17.8
		Property Damage	30.5	29.0	30.8
Productivity	Roadway capacity – vehicles per hour/lane (Lost Lane Miles)	AM peak	232	288	N/A
		PM peak	348	434	
Sustainability	Total cost per capita to sustain current system performance		Plan 2035 estimates the transportation system will perform better in safety, preservation but worse in delay per capita		

Table 4-7. Performance Indicators, Measures, and Outcomes of 2035 Goals

Performance Indicator	Performance Measure		Plan 2035	Base Year 2003	Baseline 2035
Preservation	Percent of bridges and roadways requiring rehabilitation	Roadways	28%	11%	N/A
		Bridges	24%	6%	
Environmental	Emissions generated by travel (over Baseline 2030)	CO	6-8% reduction		
		PM10	6-8% reduction		
		Exhaust PM10	8-11% reduction		
Environmental Justice	Benefit vs. Burden by quintiles – Auto Percentage of Tax Paid and Time Savings (Quintile 1=lowest income, Quintile 5=highest income)		Plan 2035 estimates:		
			Expenditure	Time Savings	
		1	9%	11%	
		2	13%	15%	
		3	18%	21%	
		4	24%	25%	
		5	36%	27%	
	Benefit vs. Burden by quintiles – Local Transit Percentage of Tax Paid and Time Savings (Quintile 1=lowest income, Quintile 5=highest income)		Plan 2035 estimates:		
			Expenditure	Time Savings	
		1	9%	37%	
		2	13%	28%	

Table 4-7. Performance Indicators, Measures, and Outcomes of 2035 Goals

Performance Indicator	Performance Measure		Plan 2035	Base Year 2003	Baseline 2035
		3	18%		19%
		4	24%		11%
		5	37%		5%

Source: SCAG 2008 RTP

The transit improvements within the Regional Connector project corridor would contribute to alleviating the mobility problem in the region and to achieving the Destination 2035 goals. It would do this by:

- Extending the reach and connectivity of all but one of Metro's operational and under-construction LRTs;
- Broadening the range of downtown destinations reachable with one transfer from the Metro Red and Metro Purple Lines;
- Alleviating congestion on the downtown bus network; and
- Increasing the availability of direct service to multiple destinations in Los Angeles County for passengers arriving on intercity services at Union Station.

The area from which Regional Connector ridership is expected to be drawn includes several freeways and major intersections that have significant traffic congestion and long delays. The improved convenience of transit improvements in the Regional Connector Transit Corridor would encourage use of a public transit alternative that would reduce daily vehicle trips, miles traveled, and congestion on the region's roadways.

Transit improvements within the Regional Connector Transit Corridor would also augment public transportation service originating in areas with high population densities and households dependent on public transit. This would increase potential ridership, thereby increasing the project benefits and making it more cost-effective. In addition, the Regional Connector's service area covers the County's most highly-concentrated employment area and a major cultural, entertainment, and tourist destination.

5.0 NEED FOR REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

In evaluating the mobility and travel conditions within the project area several issues emerge that reveal a need to provide improved transit connections and service across downtown Los Angeles. These needs include:

- Growth in population and employment will continue to draw both local and regional residents to the project area creating demand for transit services.
- Transit system expansions to the radial network centered on downtown Los Angeles will continue to funnel riders into the unconnected core creating concerns related to insufficient Red Line capacity for connecting riders, overcrowded station platforms, and regional system schedule reliability.
- Transit dependent populations within the project area include low income households, significant populations of very old persons, and a high percentage of zero car households.
- Travel demand data highlights the congested nature of the downtown core, the high percentage of commuters that come from outside of the project area, and the built up nature of the project area that prevents expansion of the road network.
- Transit usage requires multiple transfers for cross-town trips for both local and regional riders increasing travel times.
- Local land use plans and policies support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian friendly design in downtown communities.

5.1 Growth and Increased Demand for Transit Services

One of the most pressing issues affecting the region's ability to effectively meet travel demands is population growth. Los Angeles County alone is expected to increase 18 percent to a total of 12.3 million people by 2035. Within the project area, population growth is expected to exceed 31 percent (Table 5-1). Along with increased population, employment within the project area is also expected to increase 7 percent by 2035 (Table 5-1). This expected growth will lead to increased travel demand throughout the region.

Employment in the project area is higher than the population (Table 5-1) which indicates that most of the people who work in the project area do not also live there and must come into the area from the surrounding region. As shown in Figure 5-1 and 5-2, the areas of highest

population density are not in the same locations as the areas of highest employment density. This geographical difference between where people live and where they work creates a transportation need. Improvements to transit services in downtown Los Angeles will be needed to bring workers from areas of high population and low employment density to the project area, where the highest concentration of employment opportunities is located. Figures 5-3 and 5-4 show that this condition is not expected to change in the projection year 2035.

In addition to regional commuters, the increase in population within the project area will continue to create a need to provide a variety of transit options within downtown Los Angeles. Transit improvements that increase mobility within the project area will benefit this increased population as well.

Table 5-1. Population, Household, and Employment Growth

Area of Growth	2008	2035 Forecast	Percent Change 2008-2035 (%)
Population			
Project Area	19,396	25,417	31.0
LA County	10,449,838	12,338,620	18.1
Households			
Project Area	9,648	13,054	35.3
LA County	3,298,886	4,003,501	21.4
Employment			
Project Area	171,750	184,567	7.4
LA County	4,498,598	5,041,172	12.1

Source: SCAG, 2008 data and 2035 projections.

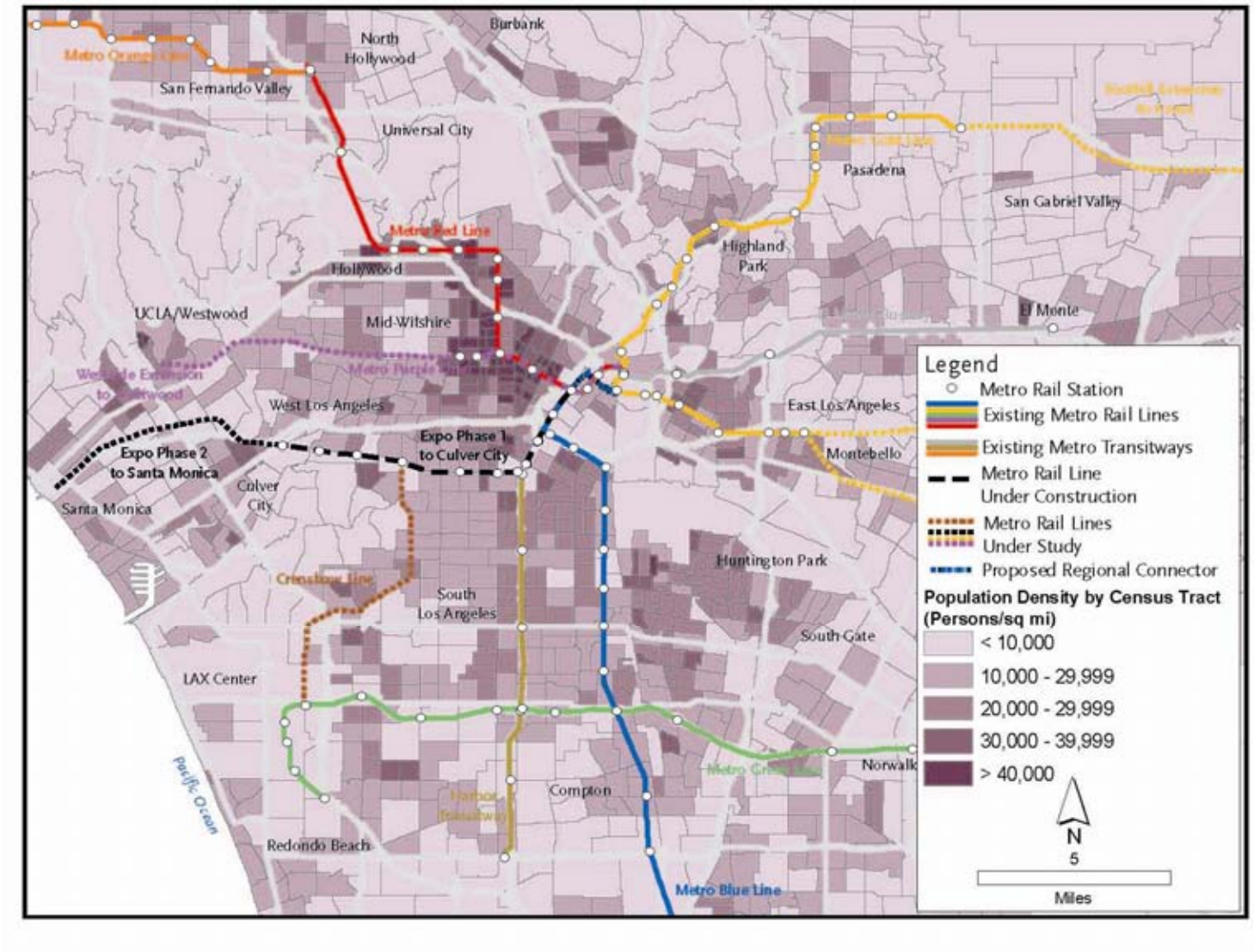

Figure 5-1. Regional Population Density (2005)

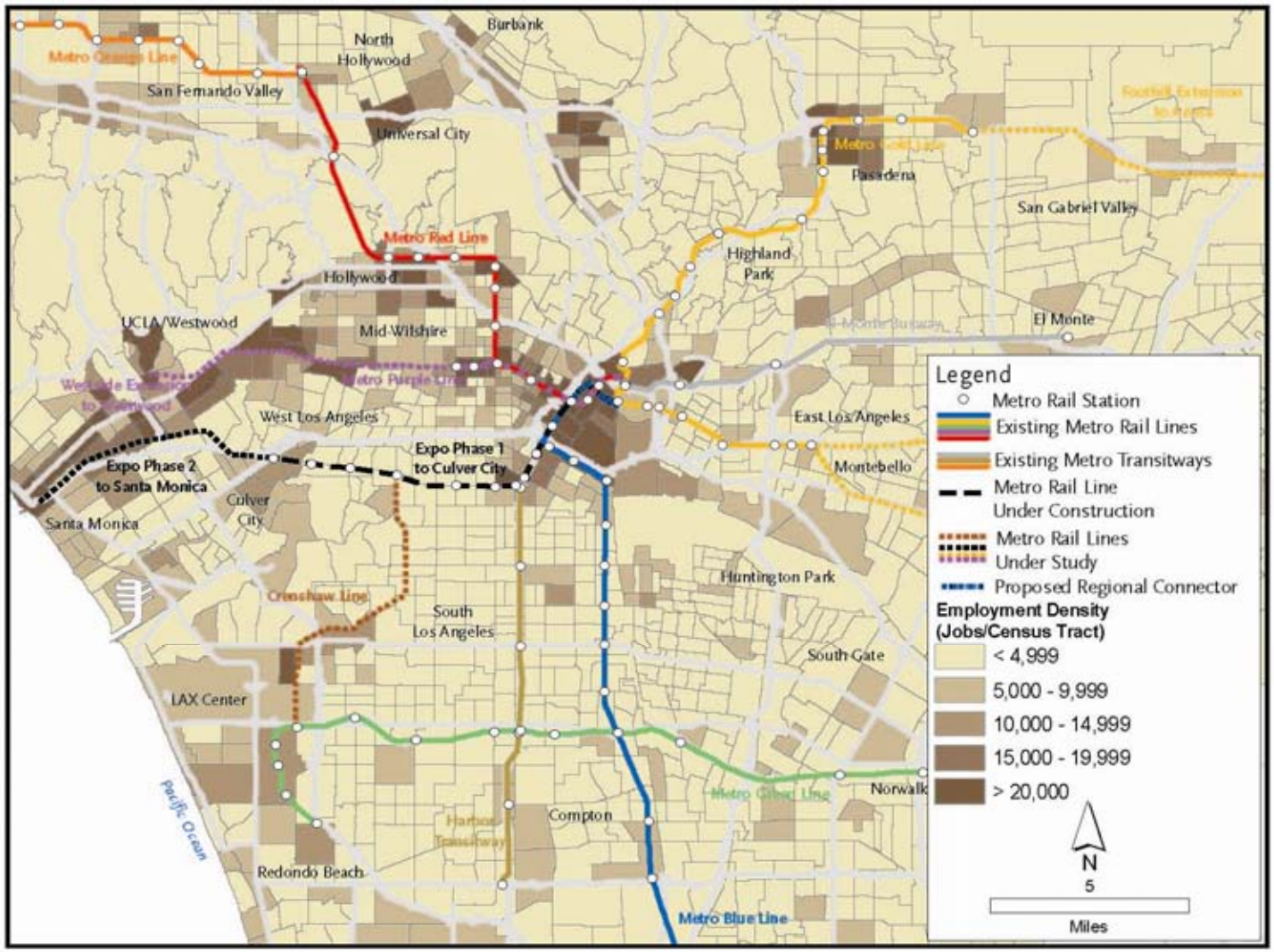

Figure 5-2. Regional Employment Density (2005)

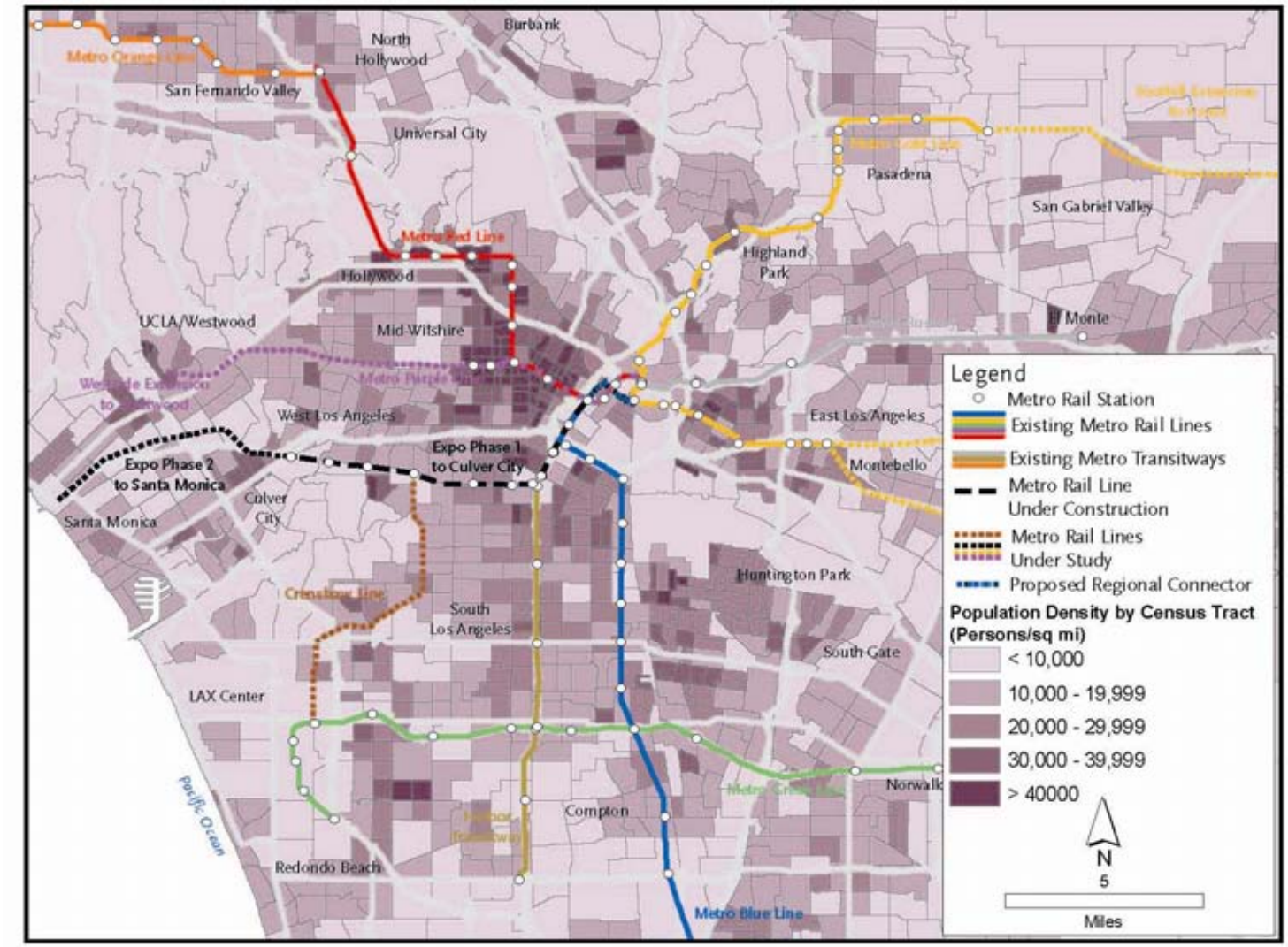

Figure 5-3. Projected Regional Population Density (2035)

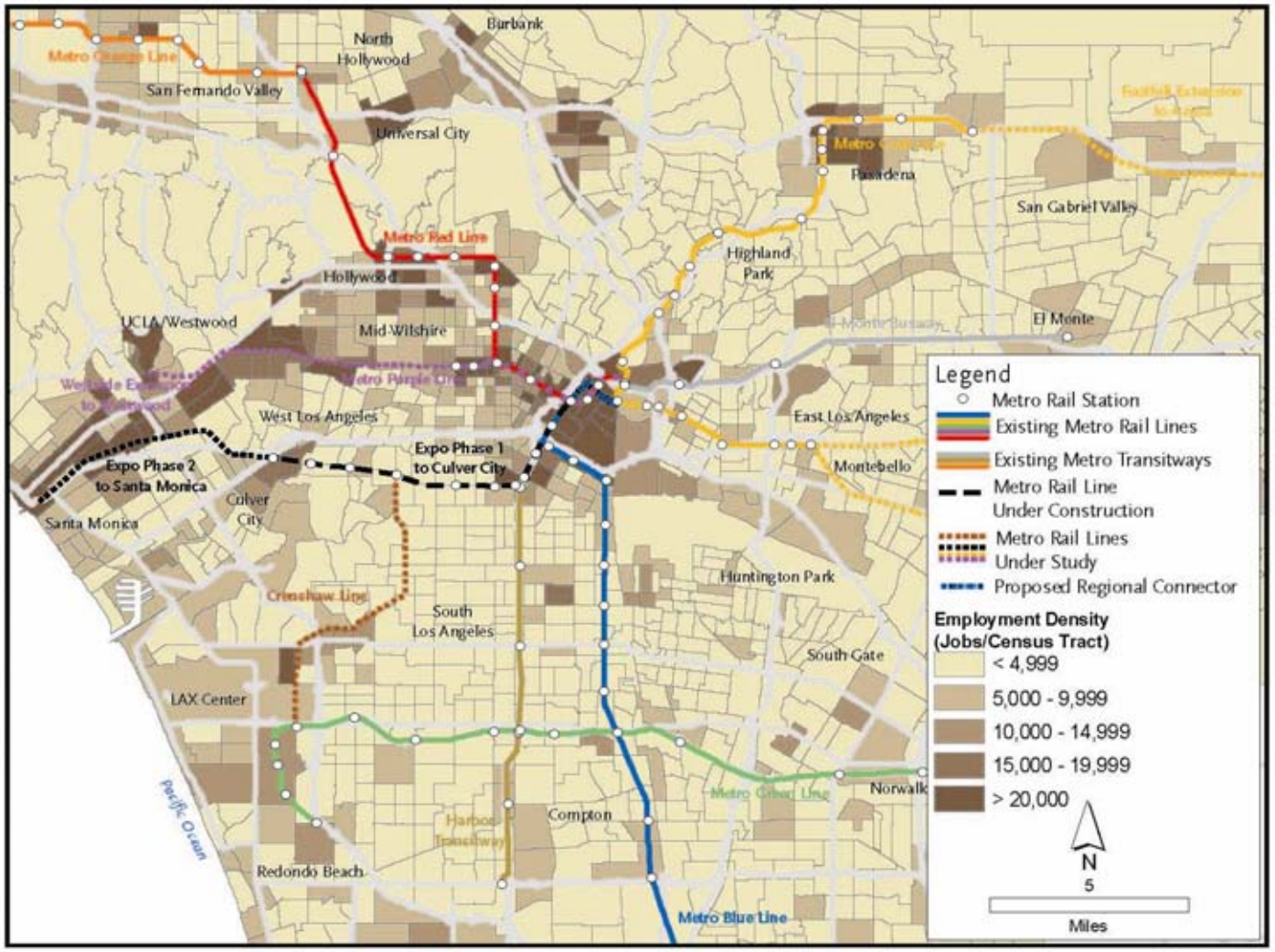

Figure 5-4. Projected Regional Employment Density (2035)

Census tracts with the largest populations (greater than 2000 people) are found within the project area east of Main Street between 1st Street and 7th Street and east of San Pedro Street between Temple Street and 1st Street According to SCAG projections, in 2035, slightly less growth is expected in the project area compared to the whole County. The population in the project area is expected to grow by about 30 percent from about 19,396 in 2008 to 25,417 people in 2035.

The largest growth in the project area is projected in two locations:

- The area bounded by SR-110, Hill Street, 1st Street, and 3rd Street, which will increase from between 1,500 to 1,999 people to over 2,000 people; and
- The area bounded by Hill Street, Main Street, 7th Street, and 9th Street, which will increase from 1,000 to 1,499 people to 1,500 to 1,999 people.

Projected population is based on fairly conservative estimates made by SCAG in 2008. Figures 5-5 and 5-6 show the distribution of existing and projected total population within the project area.

Several planned high-rise residential projects in the project area contribute to the high level of expected growth. These include the Park Fifth condominium project at 5th and Hill Streets, the Block 8 condominium and rental project under construction between 2nd, 3rd, San Pedro, and Los Angeles Streets, and the 8th & Grand condominium and retail project at 8th Street and Grand Avenue.

The total number of households is also projected to increase 27 percent from about 10,300 in 2008 to 13,000 in 2035, which is higher than the 21 percent projected for the County.

The employment base is projected to increase by about 7 percent from over 171,700 individuals in 2008 to over 184,500 in 2035. Current and projected employment within the project area are both between three and four percent of total County employment.

Figure 5-7 shows the distribution of employment in the project area in 2005. At that time, total employment in a majority of the census tracts within the project area was over 5,000, with areas of highest concentration (greater than 12,500 jobs) in three locations:

- The area bounded by SR-110, Flower Street, 7th Street, and 9th Street;
- The area bounded by SR 110, Hill Street, US 101, and 1st Street; and
- Part of the area bounded by Hill Street, Alameda Street, US 101, and 2nd Street

A large employment base indicates that a significant number of workers commute within, into, and out of the project area. Figure 5-8 shows the projected distribution of employment in 2035.

Providing public transportation to densely-populated areas can increase ridership by making transit more accessible to a larger population. The areas of highest population density are found in two locations within the project area:

- The area bounded by 1st Street, 3rd Street, SR 110, and Hill Street; and
- The area south of 5th Street and east of Hill Street

Figure 5-9 shows the distribution of population densities according to the 2000 census. The highest employment density exists in the project area in the area bounded by US-101, 3rd Street, SR 110, and Hill Street (Figure 5-10).

Average population density is projected to grow to roughly 12,700 persons per square mile, and average employment density is expected to be over 92,000 employees per square mile. Figures 5-11 and 5-12 show projected 2035 population and employment densities.

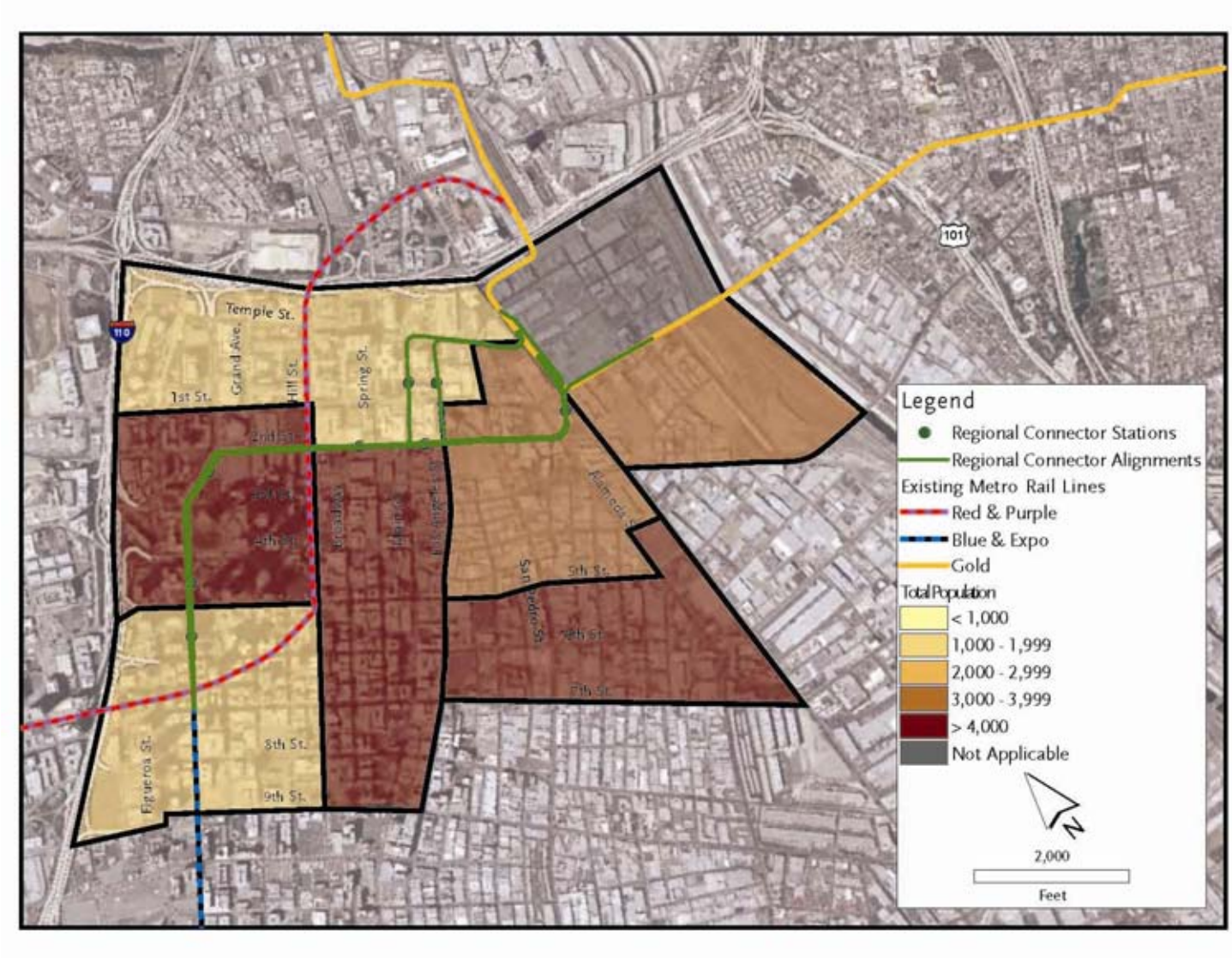

Figure 5-5. Population in Project Area (2005)

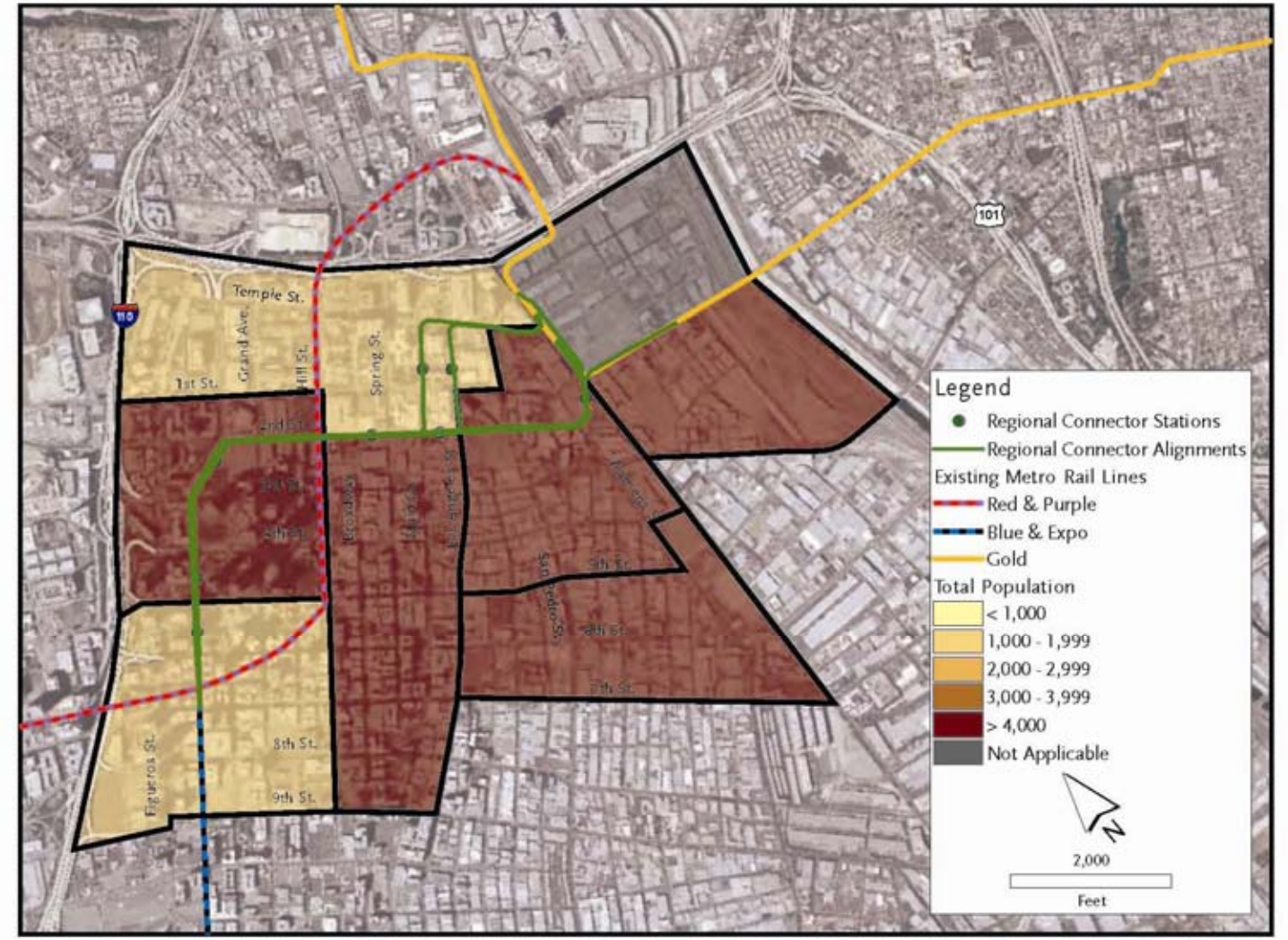

Figure 5-6. Projected Population in Project Area (2035)

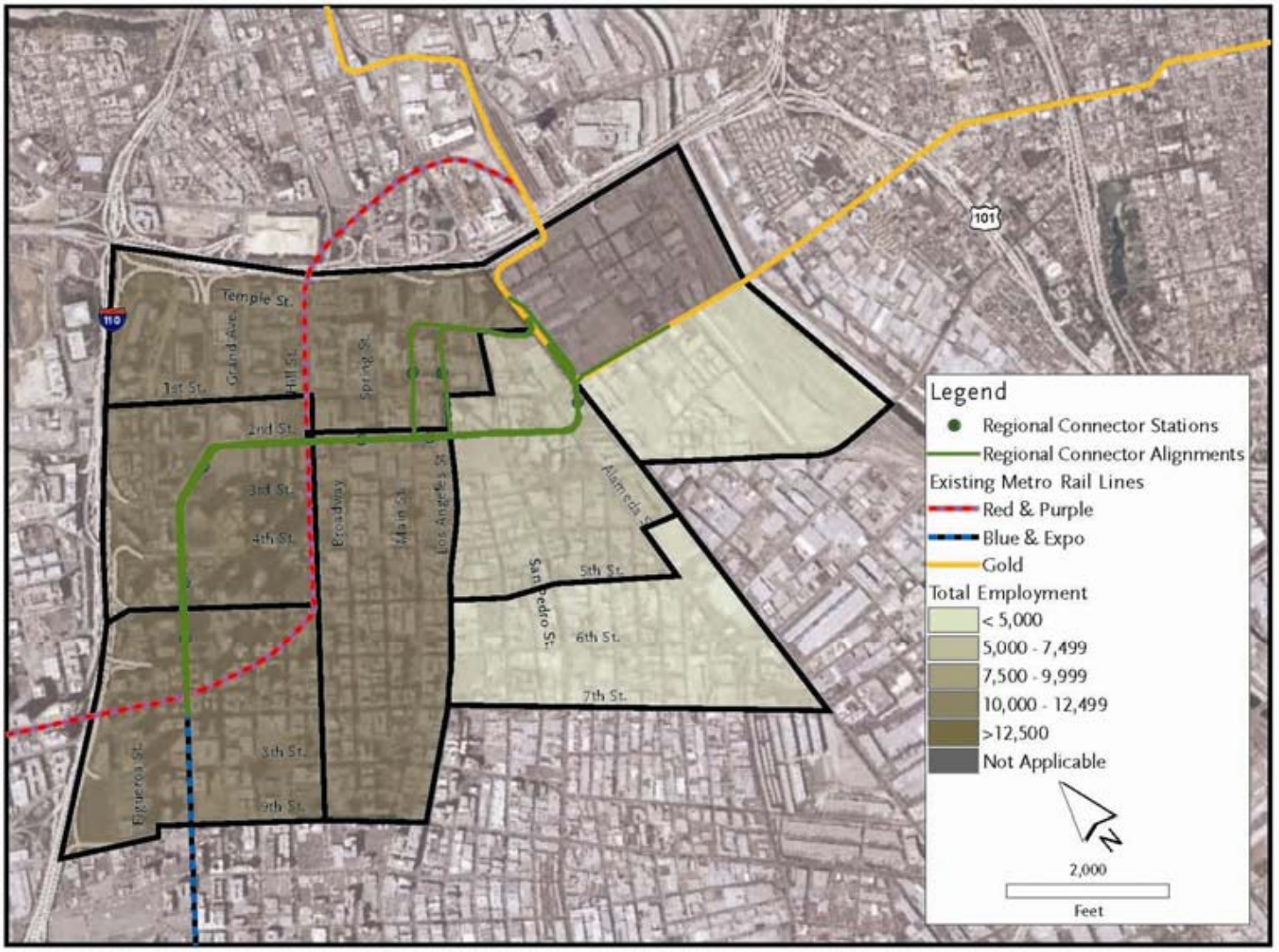

Figure 5-7. Employment in Project Area (2005)

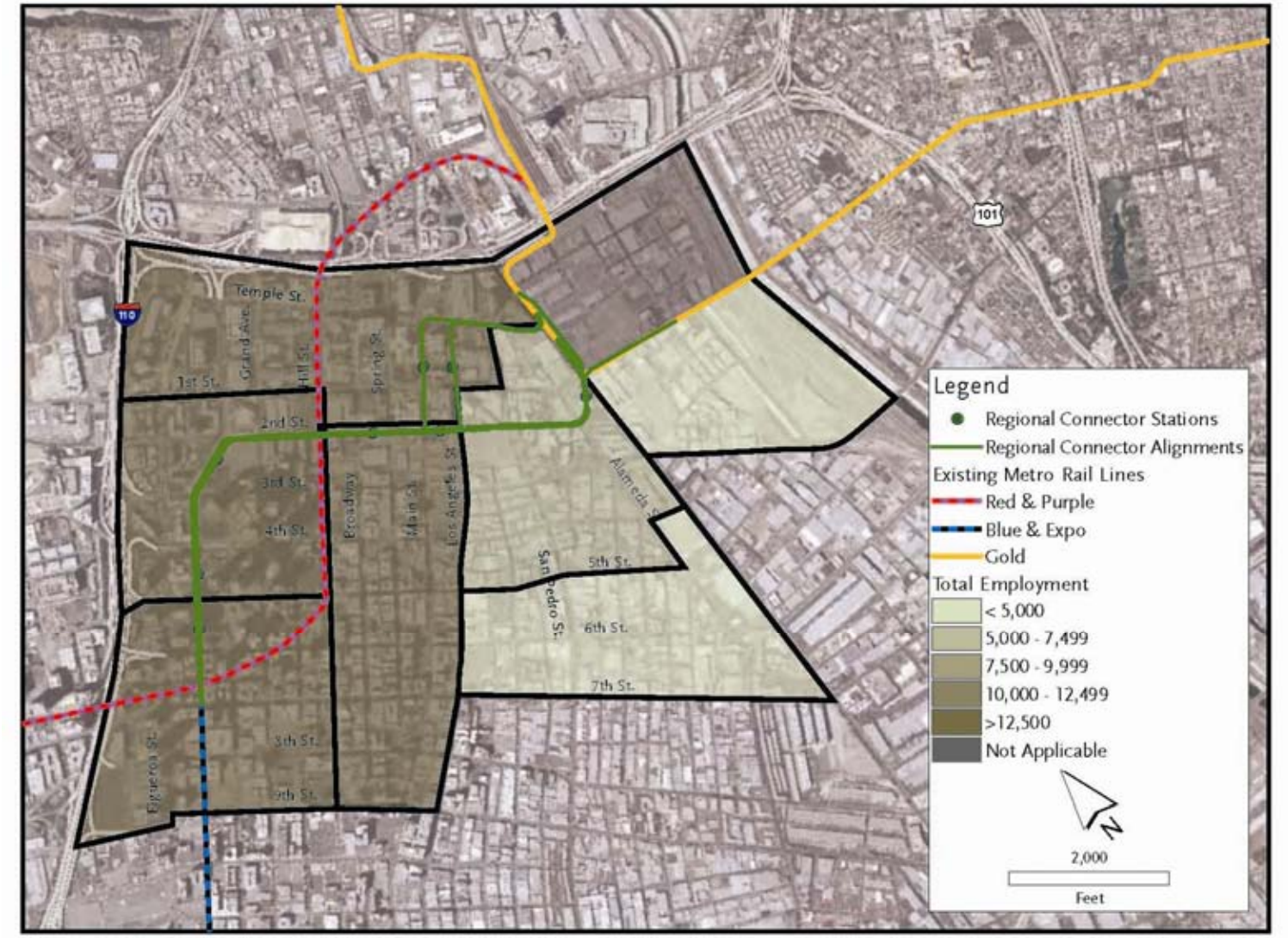

Figure 5-8. Projected Employment in Project Area (2035)

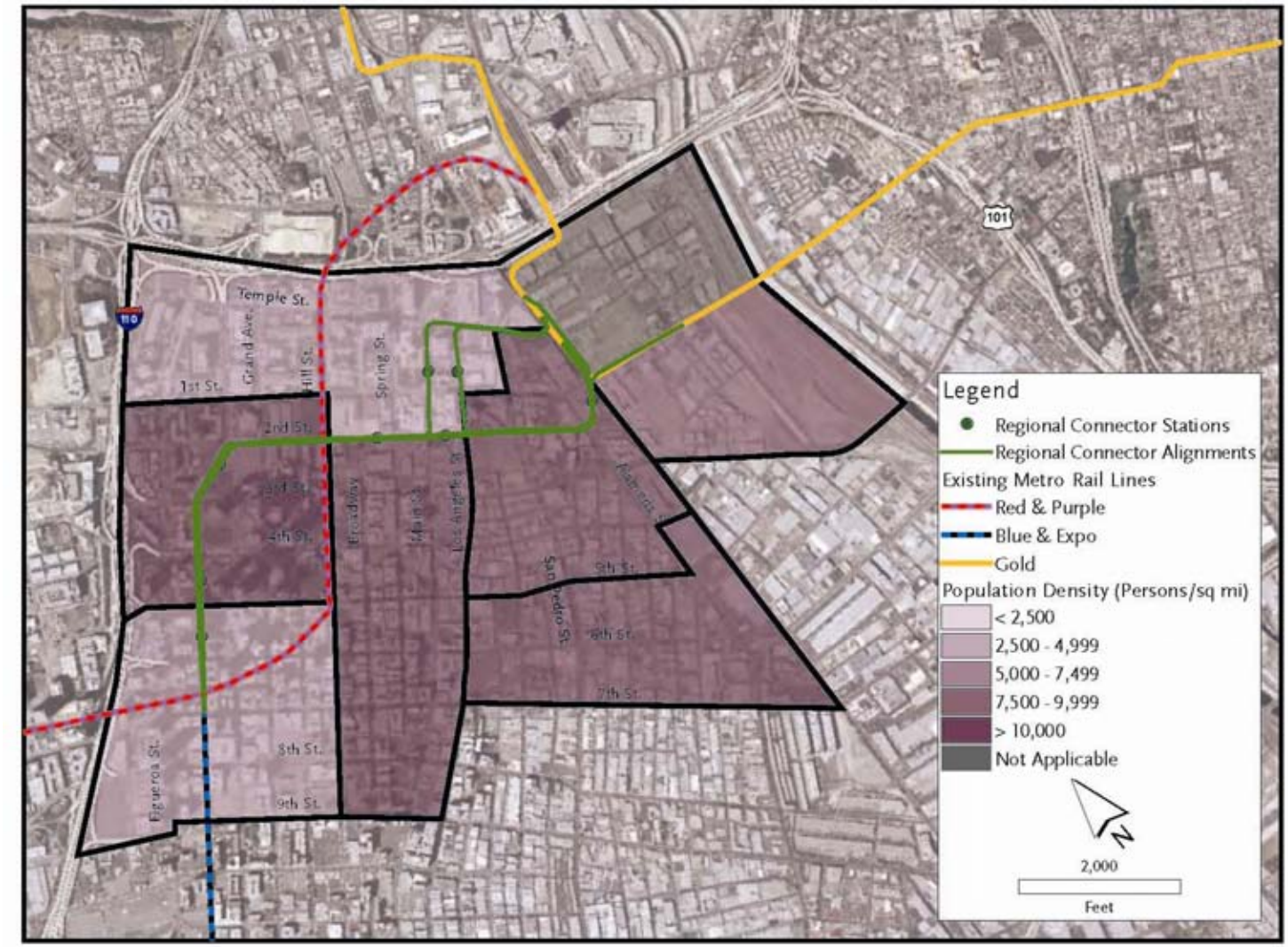

Figure 5-9. Population Density in Project Area (2005)

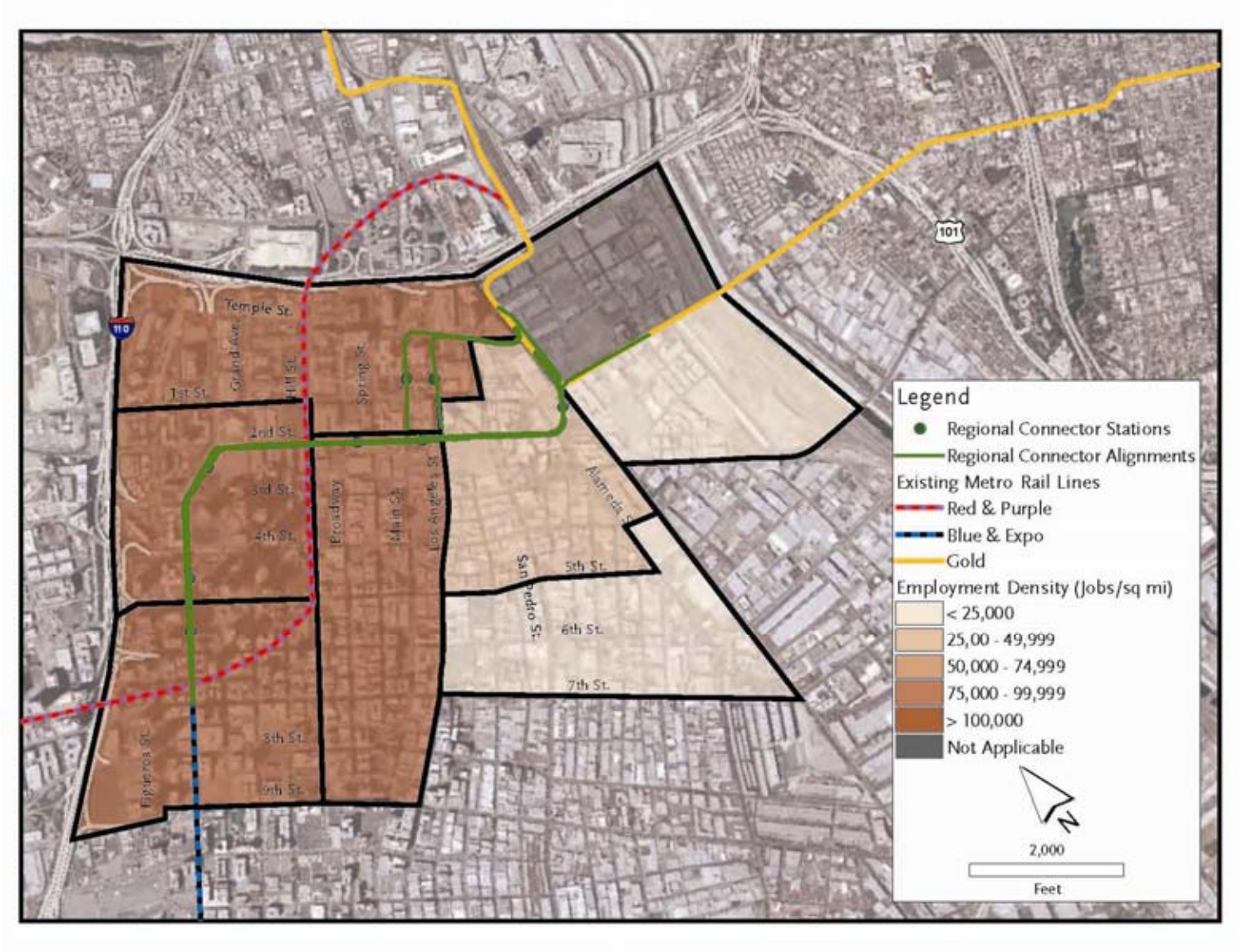

Figure 5-10. Employment Density in Project Area (2005)

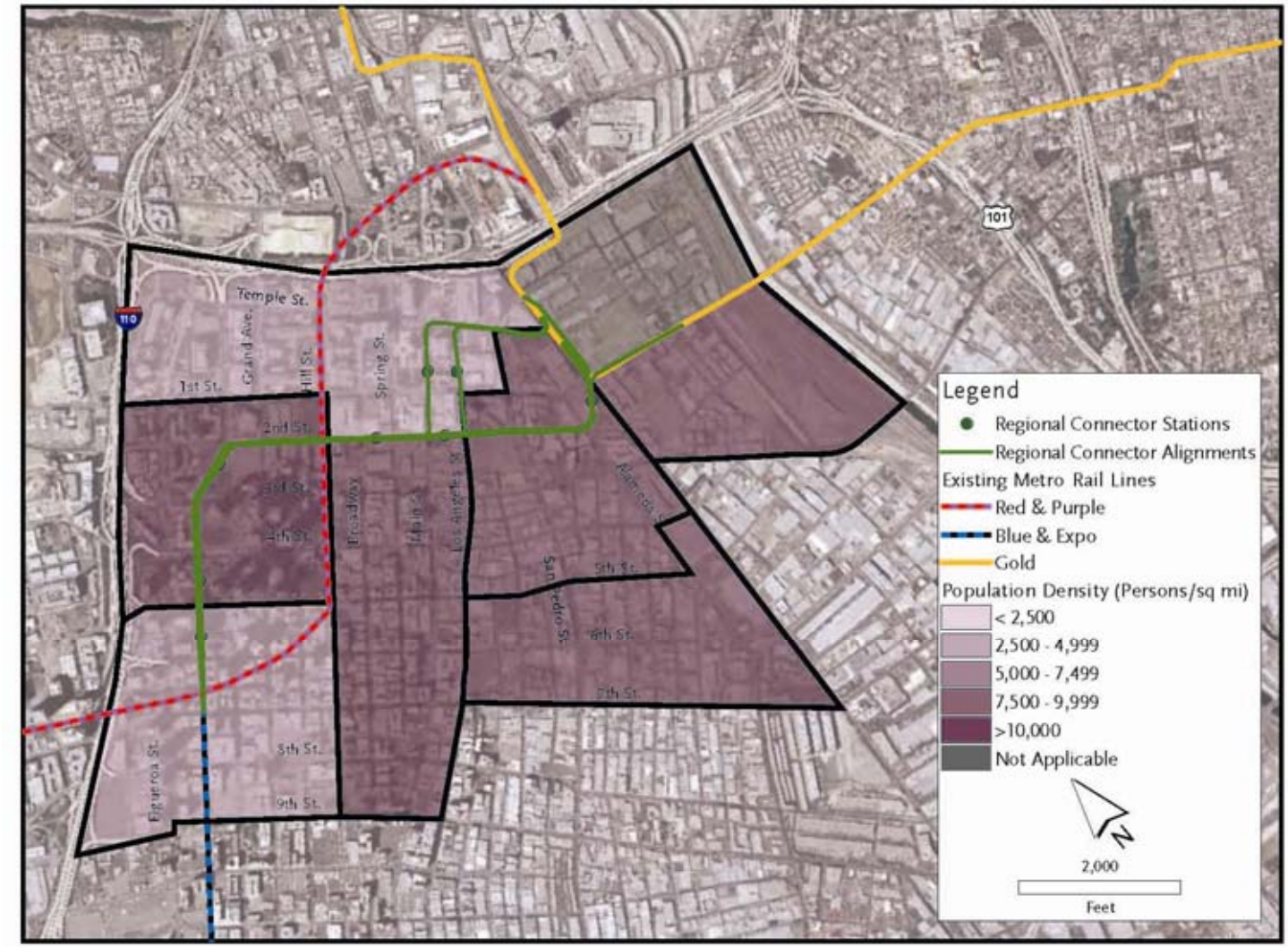

Figure 5-11. Projected Population Density in Project Area (2035)

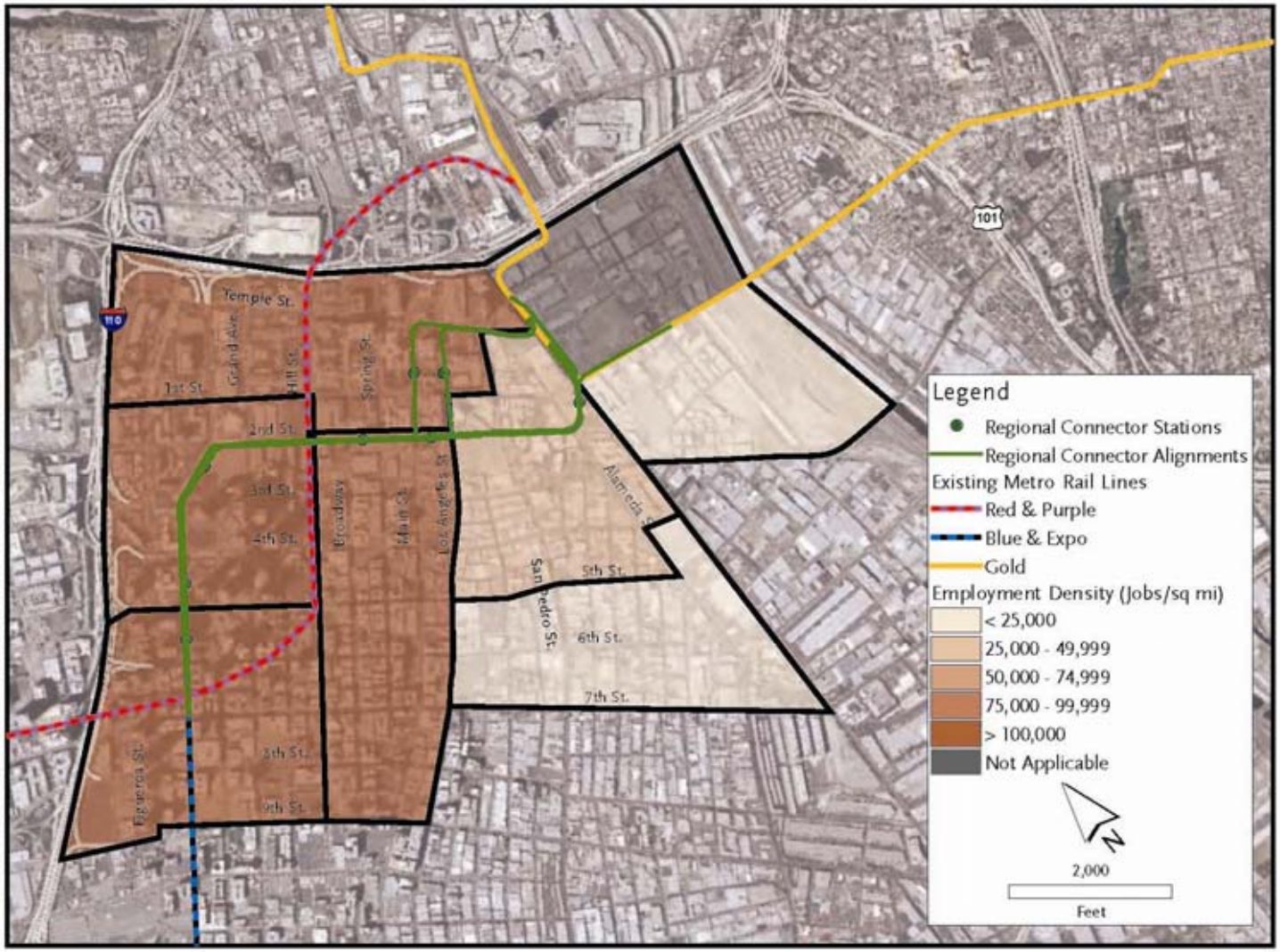

Figure 5-12. Projected Employment Density in Project Area (2035)

5.2 Regional Transit System Expansion

By 2035, the Metro rail system will have been expanded to the north and east with extensions to the Gold Line and to the west with extensions to the Purple and Expo Lines and the addition of the Crenshaw Line. This radial network centered on downtown Los Angeles will continue to funnel riders into the central city core.

Central downtown Los Angeles is a top destination for trips originating outside of the project area from both the east and west. For example, over 50,000 daily trips (approximately 25 percent of external trip destinations) are made for work from the greater eastside to central Los Angeles.

The project area is located in the crossroads of the region's transportation system. Transit riders that arrive at either the 7th Street/Metro Center Station or Union Station generally continue on to other destinations. For example, nearly three quarters of the passengers riding on the Metro Gold Line from Pasadena to Union Station transfer to the Metro Red Line for continued service into other parts of the City.

As additional service comes on line, additional riders to downtown will contribute to crowding on the platforms at these stations that serve as main transfer points to other destinations. At the 7th Street/Metro Center Station, Metro Red and Purple Line passengers wishing to use the Flower Street escalators must share the crowded passageways leading to the Metro Blue Line platform. Metro Expo Line passengers would add to the crowds on the existing Metro Blue Line platform. As riders from these lines transfer to the Metro Red and Purple Lines on the lower platform overcrowding is a concern there as well.

Additional service to downtown will increase the number of riders needing to transfer to the Red Line to continue to their ultimate destinations. This creates a concern related to insufficient Red Line capacity for connecting riders. Additional travel delays could be introduced for individuals if they are unable to get onto a particular Red Line train due to overcrowding.

The gap in rail service between the 7th Street/Metro Center Station and Union Station creates issues for riders who must transfer to the Red Line or other modes to continue their trips and contributes to overcrowding on main transfer station platforms. These issues will increase as new routes are brought into service.

Current transit usage in the region is the highest in Central Los Angeles, with additional areas of moderate transit usage in the Westside, Hollywood, Pasadena, the South Bay, and Pasadena, as shown in Figure 5-13. Transit usage is projected to increase in these areas by 2035. The highest transit usage areas are found along the existing Metro Red Line and Metro Purple Line corridors. There is also high transit usage in the Westside area where there are many students who are reliant on public transportation. It should be noted that Figure 5-13

shows the number of persons taking transit to work, and actual ridership is higher because patrons use transit for other types of trips as well. Also, the year 2000 census data predates many portions of the Metro Rail system, and transit ridership has risen in these areas since the initiation of service.

Additional transit opportunities created by the Regional Connector for commuters on the Metro Blue and Gold lines are expected to increase the number of trips along the corridors of both. The Regional Connector will alleviate congestion on the already heavily-used Metro Red and Purple Lines by eliminating the need for Metro Blue and Gold line commuters to transfer through them.

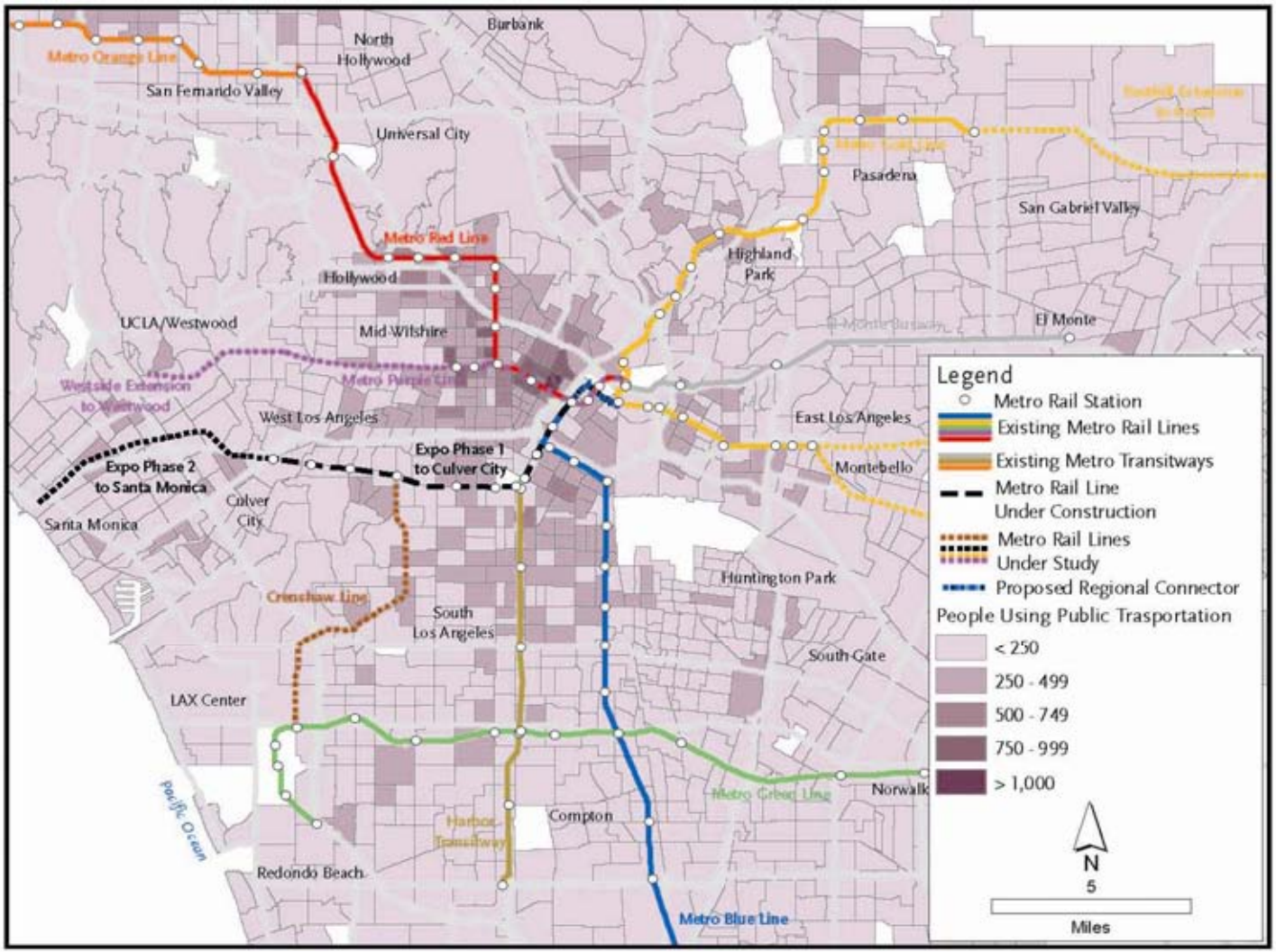

Figure 5-13. Regional Work-bound Transit Trips (2000)

5.3 Transit Dependent Populations

Transit dependent populations are those groups that rely on public transit to meet their mobility and access needs to a greater degree than the general population. Within the project area, transit dependent populations include low income households, seniors, and zero car households (Table 5-2).

Low-income households were defined by the US Census Bureau in 2005 as those below the poverty threshold with an annual average salary of $12,755 for a two-person household. Low-income households represented about 38 percent of the total households in the project area. This high proportion of low-income households underscores the need for public transit.

Senior residents within the Project Area are more likely to depend on public transit because of an inability to drive or lack of private vehicle accessibility. Almost 20 percent of the project area population is seniors. Young people, under 18 years of age, may also be considered transit dependent for similar reasons. Approximately 6 percent of the population in the project area is under the age of 18.

Over two thirds of the households in the project area have no car. Eleven percent of employed residents age 16 and over rely on public transit for their commuting needs. When comparing vehicle accessibility and public ridership patterns in the project area, the trends suggest that even households with one or more cars have a higher propensity to use public transportation than similar households elsewhere in the County.

Table 5-2. Transit Dependent Demographic Information

Demographic	Project Area	Percent (%) of Project Area	LA County	Percent (%) of County
Population	19,396	NA	10,010,315	NA
Under 18 years	1,188	6.1	2,798,604	27.9
Over 65 years	3,795	19.6	926,670	9.2
Households	9,648	NA	3,298,210	NA
No vehicle households	6,505	67.4	671,214	20.3
Use public transportation	1,121	11.6	254,091	7.7
Households below poverty level	3,575	37.0	1,481,896	44.9

Source: SCAG, 2005 data and 2030 projections and U.S. Census Data Summary Files 1 and 3, 2000

Some of the project area's transit-dependent population lives within convenient walking distance (one-quarter to one-half mile) of the Regional Connector termini, while much of the rest of the area will be able to easily access the corridor and potential stops along the corridor.

The project area can be characterized as more transit-dependent than the County as a whole because of its dense population, proportionately low income levels, number of households with zero vehicles, and public transportation users. A significant portion of the County's transit riders live and/or work within the project area; this is projected to increase through 2035.

Transit dependent populations are particularly impacted by deficiencies in the transit system. The gap in the light rail system between the 7th Street/Metro Center Station and Union Station that creates travel delays affects these populations disproportionately.

Figure 5-14 shows the distribution of low-income households in 2005. Census tracts within the project area that have greater than 1,000 low-income households were:

- The area bounded by SR-110, Hill Street, 1st Street, and 3rd Street; and
- The area bounded by Hill Street, Alameda Street, 5th Street, and 7th Street.

Figure 5-15 shows the distribution of residents age 65 and over in the project area. The senior population is highest west of Hill Street and south of 1st Street. Figure -16 shows the distribution of residents age 18 and under in the project area. The youth population is found primarily in the southern part of the project area, south of 5th Street.

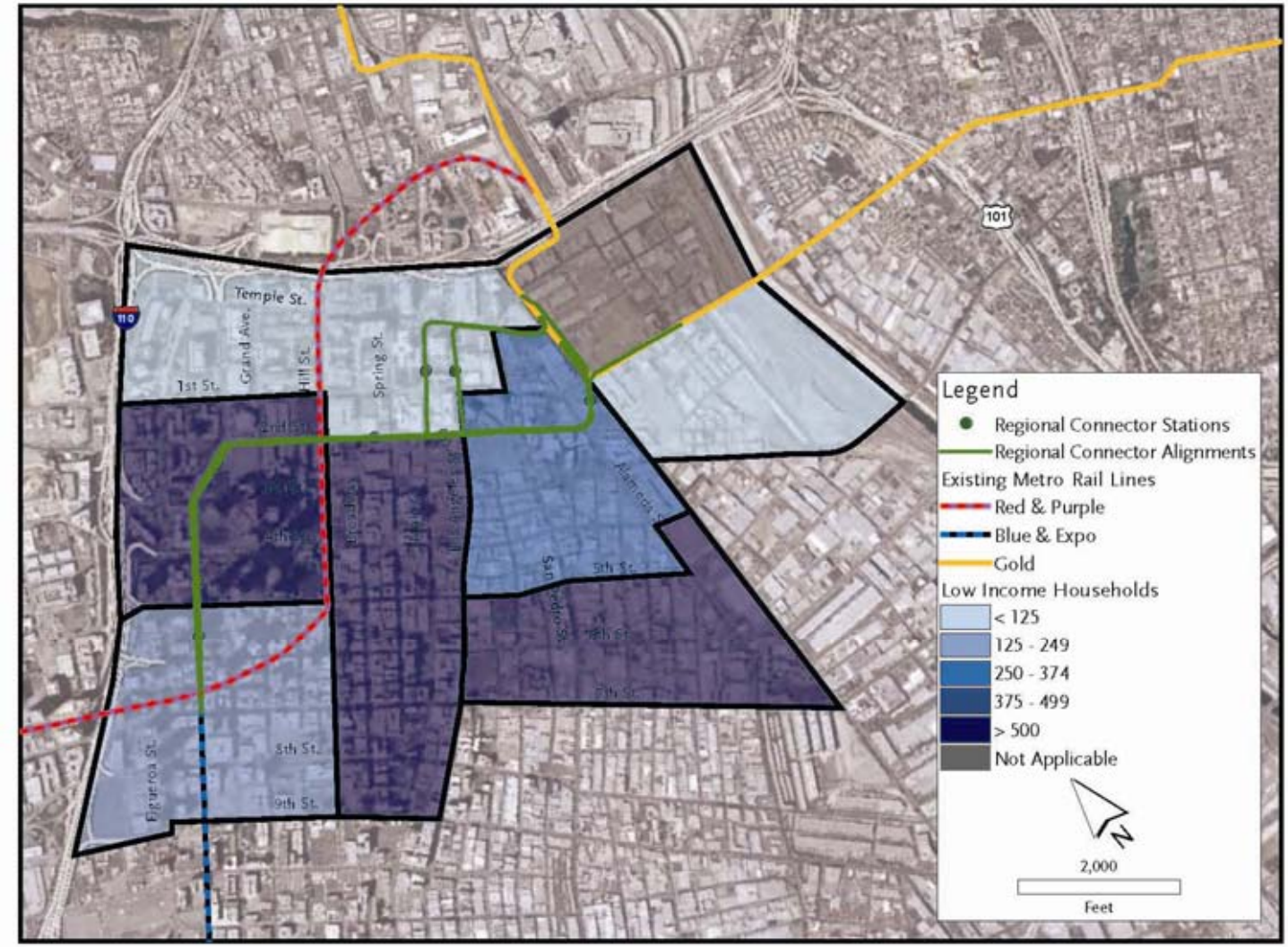

Figure 5-14. Distribution of Low Income Households in Project Area (2006)

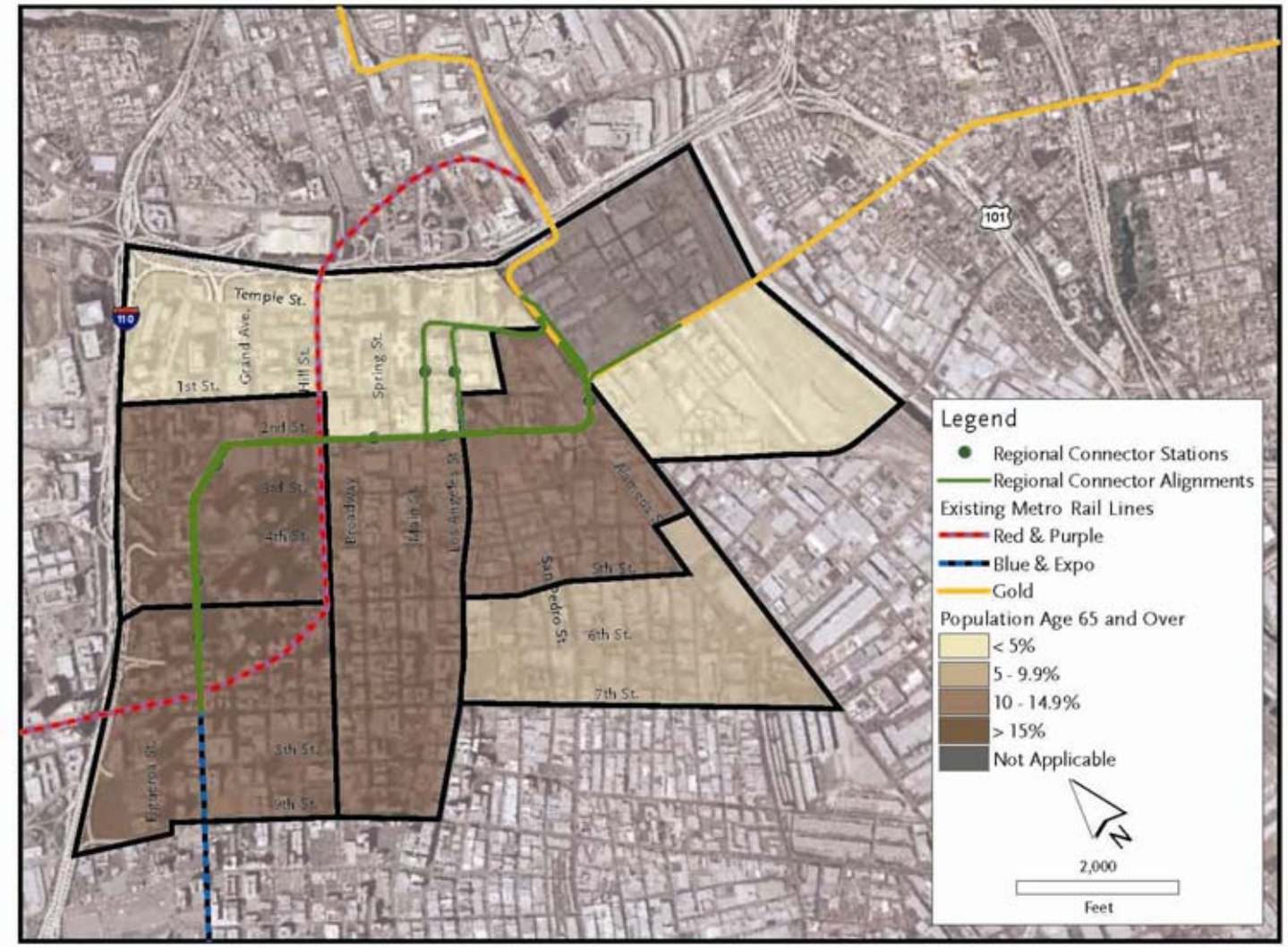

Figure 5-15. Distribution of Population Age 65 and Over in Project Area

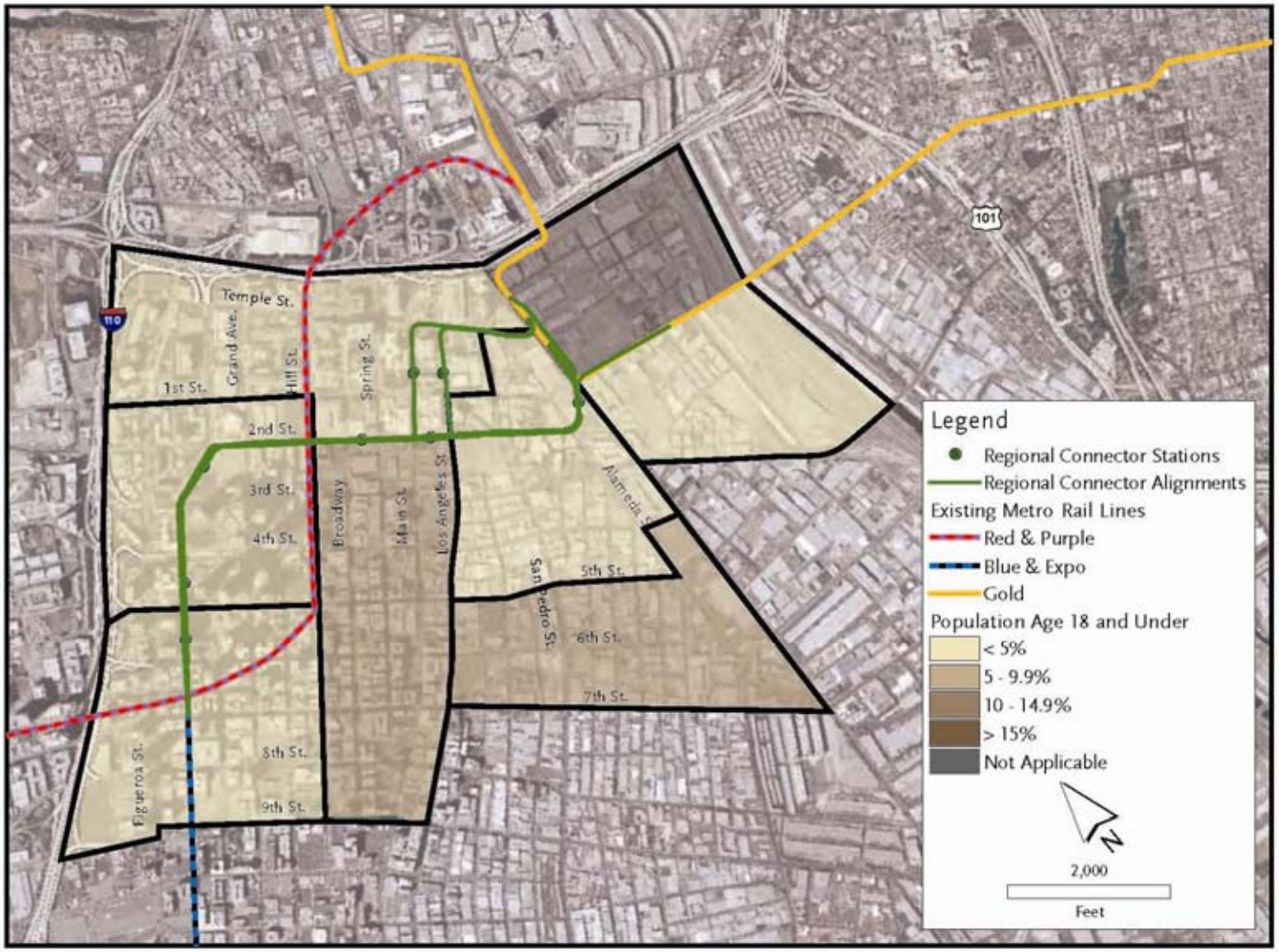

Figure 5-16. Distribution of Population Age 18 and Under in Project Area

5.4 Travel Demand

The majority of the congestion within the project area and the region is from travel on the highways and local arterial network regardless of transportation mode. If the current trend persists, travel delays are expected to rise to 5.7 million person hours by 2035, more than double currently experienced delays, which will deeply affect highway productivity (SCAG 2008).

Bus service runs in a grid pattern through the downtown area, with most lines terminating at the periphery after having passed through. Nearly all streets within the project area have bus service during peak hours. Transit service within the project area is highly dependent on the condition of the surface streets and connections to the freeway system.

Performance of intersections is measured by LOS. LOS D is a "fair" level of service with potential delays at the intersection between 35 and 55 seconds; LO F represents intersection failure with backups preventing movement out of the intersection. LOS is a measure of how congested an area is which helps to identify areas that need transportation improvements.

All of the key intersections currently operate at LOS D or better during both the AM and PM peak hours. Only the Figueroa Street and Wilshire Boulevard intersection is operating at LOS F in the PM peak hour. By 2035, up to 28 intersections in the project area will be at LOS E or F in the PM peak hour without transit improvements in the project area.

Demand for transit service in the project area is also high. There are 51 bus lines, mostly operated by Metro, with over 174,000 daily passenger boardings and alightings within the project area. On several routes, during rush hour the time between buses on a particular line shrinks to less than five minutes, and some stops are served by over a dozen lines.

Without transit improvements in the project area, service for all transportation modes within the project area will continue to decline.

5.5 Transit Usage

Downtown Los Angeles has long been considered a major destination for employment, education, and services; it is now experiencing a resurgence as a center for entertainment and the arts, and increasingly, residential living. However, travel to and from activity centers both in the project area and in the surrounding region often require more than one transfer. Examples of key activity centers include the University of Southern California, downtown Long Beach and Culver City, Old Town Pasadena, Chinatown, Los Angeles Coliseum, or the Los Angeles County Museum of Natural History.

The ridership benefits of increasing trip speeds have been demonstrated in Los Angeles by the Metro Rapid program. The 2002 Demonstration Program Final Report noted that the

implementation of the rapid bus service led to 23-29 percent improvement in trip speeds, an increase from 9mph to 12mph. While this difference may seem small, ridership on the Wilshire/Whittier corridor increased by 42 percent as a result.

According to Metro's 2004 Metro Rail Onboard Survey, 42 percent of Metro Gold Line riders indicated that they rode two trains on their one-way trips, and seven percent rode three trains. Since Union Station is the only current rail-to-rail transfer point on the Metro Gold Line, these results suggest that a large portion of Metro Gold Line riders are transferring to the Metro Red Line to complete their trips.

The transfer between the Metro Red or Purple Line and the Metro Gold Line at Union Station can take up to 20 minutes, and the platforms are approximately a four-minute walk apart. The transfer between the Metro Red or Purple Lines and the Metro Blue Line at 7th Street/Metro Center can also take up to 20 minutes.

The combination of these combined travel delays is a disincentive to riders wishing to travel in an east-west direction. As the number of transfers required increases, the number of people who will attempt a particular transit trip declines (Table 5-3).

Table 5-3. Train/Bus Use per Trip

Train or Bus	All Lines
1 Train	53%
2 Trains	38%
3 Trains	7%
4 Trains	2%
1 Bus/Train	22%
2 Bus/Train	34%
3 Bus/Train	25%
4+ Bus/Train	19%

Source: 2004 Metro Rail Onboard Survey

Metro's 2004 Metro Rail Onboard Survey indicates that relatively few Metro Gold Line riders currently continue beyond 7th Street/Metro Center Station toward Long Beach on the Metro Blue Line. The current bus ridership indicates that this is likely due to too many transfers

being needed. With the opening of the Metro Expo and Metro Gold Line to East Los Angeles it is likely that double transfers will increase due to the east-west travel demands.

5.6 Land Use Plans and Policies

Local land use plans and policies support increased transit alternatives, linking the regional system through downtown, and transit and pedestrian friendly design in downtown communities.

5.6.1 Regional Plans

In May of 2008, SCAG released its Regional Transportation Plan (RTP) entitled "Making the Connections". This document provides a basic policy and program framework to improve the transportation system and integrate it with the population growth patterns for the region through 2035.

5.6.2 Studies

Mobility issues throughout the region and the identified need to join the unconnected segments of the light rail system have been documented in several past studies, including the *Pasadena—Los Angeles Light Rail Transit Project Environmental Impact Report* (1993), the *Blue Line Connection Preliminary Planning Study* (1993), and the *Regional Light Rail Connector Study* (2004).

The *Pasadena - Los Angeles Light Rail Transit Project Environmental Impact Report* identified a need to connect the 7th Street/Metro Center Station with Union Station in 1993. However, this segment was not constructed with the development of the Metro Gold Line due to funding constraints.

Also in 1993, the *Blue Line Connection Preliminary Planning Study* identified a potential capacity problem for the Metro Red Line, as it was the sole rail connection between Union Station and the 7th Street/Metro Center Station.

5.6.3 Policies and Guidelines

Local land use plans and policies support the development of additional transit service within the project area. The City's General Plan establishes a number of goals and corresponding policies that support the development of public transit.

5.6.3.1 County of Los Angeles General Plan

The County's General Plan establishes a number of goals and corresponding policies that support the development of public transit.

- Goal C-1: An accessible circulation system that ensures the mobility of people and goods throughout the County.
    - Policy C1.1: Expand the availability of transportation options throughout the County
    - Policy C1.2: Encourage a range of transportation services at both the regional and local levels, especially for transit dependent populations.
    - Policy C1.3: Secure an affordable countywide transportation system for all users.
    - Policy C1.4: Maintain transportation right-of-way corridors for future transportation.
- Goal C-2: An efficient circulation system that effectively utilizes and expands multi-modal transportation options.
    - Policy C2.1: Support the linking of regional transportation systems.
    - Policy C2.2: Expand transportation options throughout the County.

5.6.3.2 Downtown Design Guidelines

The Community Redevelopment Agency of the City of Los Angeles (CRA) has drafted design guidelines for all new developments within downtown Los Angeles. These guidelines provide incentives for residential development by modifying code requirements such as density limits for projects that meet a number of criteria including providing accessible transportation with emphasis on walking, biking, and transit other than autos.

With the overall goal of creating a livable downtown, guidelines focus on providing the following:

- A broad range of housing types;
- Accessible transportation with emphasis on walking, biking, and transit other than autos;
- Shops and services within walking distance to housing;
- Safe, visually-pleasing and walkable streets;
- Parks and other gathering places near to shops and services; and
- Public recreational open space within walking distance to home.

The guidelines set forth specific standards for design and construction, including use of sustainable materials and practices, preserving historically- and culturally-significant buildings, and supporting environmental and aesthetic resources. The guidelines ultimately call for developers to consider pedestrians and not cars in their design process. The objective is to create a cohesive transition along blocks while creating inviting and open spaces that encourage pedestrian traffic. As outlined above, increasing public transit options is one way to meet this objective.

5.6.3.3 Little Tokyo Planning & Design Guidelines

The Little Tokyo Community Planning and Design Guidelines also promote pedestrian- and transit-friendly designs which support cohesiveness through the corridor while maintaining cultural integrity.

As a result of recent resurgence and popularity in the Little Tokyo district of downtown, a set of design guidelines was created with the intent of encouraging individual expression and continuity of the surrounding environment through building and street design, while enhancing elements and aesthetics that are significant to the Japanese-American Community. In addition to the preservation of existing physical and cultural spaces, the guidelines identify specific standards for new developments and streetscapes in order to maintain continuity throughout. Street dedication requirements, such as those in place for new development east of Alameda Street between Temple Street and 1st Street, promote pedestrian- and transit-friendly designs which support cohesiveness through the corridor while maintaining cultural integrity. This, in turn, will enhance pedestrian activity and increase the attractiveness of walking and transit use in the area.

5.6.3.4 CommuteSmart®

Metro provides services through CommuteSmart® to help people find alternatives to a single-person car commute such as carpooling, vanpooling, park-and-ride, and public transit. CommuteSmart® also assists employers to set up rideshare programs, create incentives for commuting, and perform ongoing assessments and training. Improvement of public transit options while promoting the use of public transit would increase ridership more than either done alone.

6.0 POTENTIAL TRANSIT MARKETS

Potential transit markets are two-fold for the Regional Connector:

- The activity centers and major destinations that include public and private uses, density of population and employment, and major travel patterns that traverse the project area;
- Travel patterns through the project area, since the Regional Connector would link over 50 miles of Metro LRT service from Pasadena to Long Beach, and from Culver City to the Eastside and everywhere in between.

This Draft EIS/EIR will result in projections of ridership generated by people moving within the project area and through the project area to get to and from homes, jobs, services, and entertainment.

Key advantages for the Regional Connector presented by the project area are the easy bus connections provided by the dense transit network, convenient regional and intercity rail interface, and the location of activities and services within walking and biking distance of each other.

6.1 Activity Centers and Destinations

Several activity centers exist within the project area. These include Educational, Recreational, Business/Industrial and Commercial centers.

Downtown has long been considered a major destination for employment and services; it is experiencing a resurgence as a center for entertainment and the arts, and increasingly, residential living.

6.1.1 Bunker Hill

The Bunker Hill District is located generally between First Street on the north, Hill Street on the east, Third Street on the south, and Figueroa Street on the west. Major downtown destinations located within Bunker Hill include the Walt Disney Concert Hall, Museum of Contemporary Art (MOCA) and several high-rise office towers, senior and market-rate housing, hotels and commercial/retail centers. Bunker Hill offers over 3,200 residential units mainly in mid- and high-rise buildings.

Large development projects planned for this area include Civic Park and the Grand Avenue Development Project, which will transform this area into a regional arts, entertainment, and residential destination. The Grand Avenue Development is a $3 billion project that includes

3.6 million square feet of development with 449,000 square feet of retail. It is currently planned for 2,600 housing units, almost doubling the existing number of units in the area.

6.1.2 Civic Center

Bordering Bunker Hill to the northeast is the Civic Center, which serves as a hub for City, County, State, and Federal government with the second-largest concentration of civic buildings in the country. The Cathedral of Our Lady of the Angels, the Ahmanson Theater, Mark Taper Forum, and the Dorothy Chandler Pavilion are other major destinations in this district.

Civic Center is undergoing active redevelopment. The new headquarters for the state Department of Transportation (Caltrans) District 7 has recently been completed, development of the new Los Angeles Police Department Headquarters is underway, and construction of a U.S. Federal Courthouse is soon to begin.

6.1.3 Little Tokyo

East of Civic Center is Little Tokyo, which serves as the center of the largest Japanese-American community in the continental United States. The Japanese American National Museum and The Geffen Contemporary at MOCA are located here, along with a lively shopping district.

The popularity of Little Tokyo is evidenced by the active residential development underway, with recently completed and current projects adding more than 2,000 residential units. Significant developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo Arts District Station of the Metro Gold Line. Early concepts from developers identified high-density combination of office and housing with strong connections to the adjacent Metro Gold Line Eastside Expansion.

6.1.4 Toy District

The Toy District is a 12-block shopping area with over 500 retail businesses located south of Little Tokyo and north of Central City East. Development here is centered on mixed-use. The proposed Medallion building, one of several projects currently under construction, will provide 192 residential lofts and over 200,000 square feet of retail space.

6.1.5 Financial Core

The Financial Core District is located south of Bunker Hill and is dominated by high-rise office buildings. The Central Library, built in 1926, destroyed by fire in 1986, and rebuilt, expanded, and re-opened in 1993 is located here. Other landmarks in this district include the Millennium Biltmore Hotel (built in 1923) and Pershing Square (dating back as far as 1866 as a park).

The proposed 2.7-million square-foot, four-phase Metropolis mixed-use development will be located in the southwestern end of the Financial District. Phase I of this project, which began construction in 2008, will provide 360 residential units. Park Fifth is another major planned 76-story high-rise development across from Pershing Square and will include over 700 condos and a 200-room hotel.

6.1.6 Historic Core

To the east of the Financial Core is the Historic Core District, containing a large concentration of historic and architecturally-significant buildings, including the Bradbury Building (built in 1893). The Grand Central Market (dating back to 1917 as an open-air market) and the Broadway Historic Theater District (with theaters dating back to the early 1900s) are destinations in this district.

Development here is focused on conversion of old neglected buildings into lofts and apartments. The Historic Core experiences high volume retail sales on Broadway Street, which is a largely sidewalk-oriented retail district. Due to the shortage of parking in the area, the retail district is reliant on public transit to bring patrons to the neighborhood.

6.1.7 Jewelry District

The largest jewelry district in the U.S. and second largest in the world is located southwest of the Historic Core, where 5,000 businesses generate billions of dollars in revenue.

Development in this area includes the proposed construction of 875 condominium units at 8th Street and Grand Avenue. Like the Historic Core, parking is in short supply and the district attracts a high volume of retail sales.

6.1.8 Central City East

The Central City East District is located south of the Toy District and consists primarily of commercial uses, including wholesale buildings and warehouses. The Flower Market, produce, fish and food processing industries as well as import/export businesses employ nearly 20,000 people in this area. Housing in this district consists mainly of the 6,500 single-room occupancy hotel units. This area is also important in providing social services, including alcohol treatment, mental health services, and job training.

6.1.9 Outside of the Project Area

Other important downtown development projects outside of the project area include the recently-opened LA Live, a 4-million square foot complex of retail, restaurants, office, theater, hotel, parking, and residential space adjacent to the Staples Center.

6.1.10 Regional Activity Centers and Destinations

Due to the improved linkages provided by the Regional Connector, LRT will be enhanced throughout the region thereby attracting new ridership on existing lines.

Key regional activity centers that will attract riders to ride seamlessly through the project area to get destinations that, today, require more than one transfer, include:

- University of Southern California via Metro Expo Line
- Los Angeles Trade Technical College via Metro Blue Line
- Downtown Long Beach via Metro Blue Line
- Downtown Culver City via Metro Expo Line
- Crenshaw District via Metro Expo Line
- Downtown Pasadena via Metro Gold Line
- Old Town Pasadena via Metro Gold Line
- South Pasadena via Metro Gold Line
- Chinatown via Metro Gold Line
- City of Compton via Metro Blue Line
- Highland Park via Metro Gold Line
- Boyle Heights via Metro Gold Line
- Arts District via Metro Gold Line
- East Los Angeles Civic Center via Metro Gold Line
- East Los Angeles College via Metro Gold Line
- Los Angeles Coliseum via Metro Expo Line
- Los Angeles County Museum of Natural History via Metro Expo Line
- Watts via Metro Blue Line

6.2 Local Redevelopment Plans and Transit Improvements

Many of the communities in the project area are focusing on redevelopment projects to meet increasing residential and commercial demands. Several large commercial centers or mixed-use developments have been identified within the project area. These centers are typically ideal locations for public transit services due to the large number of patrons and opportunity to alleviate inbound and outbound traffic congestion.

Following are some of the current CRA projects in the project area:

- Downtown Streetcar – This transportation infrastructure project creates a 3 mile (approx) circulator using modern streetcar technology to connect the Broadway Corridor to LA Live and the Grand Avenue Project.
- Bunker Hill Design for Development – This project would amend the 1971 Design for Development (DFD) and increase the maximum floor area ratio in the Bunker Hill Redevelopment Area from 5.0 to 6.0. This would in turn allow 20 percent more square footage than the current DFD. The project is currently in the Environmental Impact Report (EIR) phase.
- Park Fifth – An EIR is currently being prepared for a new high-rise residential building on 5th Street between Hill and Olive Streets, proposed as the tallest U.S. residential structure west of Chicago. The project will contain market-rate condominium units, a five-star hotel, and ground floor commercial space.
- 8th & Grand – This is a condominium project with ground floor restaurants and retail located on 8th Street between Grand Avenue and Olive Street The project was approved by the CRA Board and the City Council in 2006.
- Medallion Phase I – Located at 334 S Main St this first of two phase project will create a mixed use development including apartments, commercial space, public parking and a mid-block paseo and central courtyard.
- Little Tokyo Business Incentive Program – This program provides financial assistance to business owners/tenants in the Little Tokyo area. It includes a façade improvement program and as well as a business loan program.
- Metropolis Project – Located on the southwest corner of 8th and Francisco Streets, this recently-approved development will add 2.8 million square feet of new condominium, office, hotel, and retail space.
- Grand Avenue Project – This project consists of a full-scale redesign of Grand Avenue as well as the addition of a 16-acre park in the Civic Center.

- Angelus Plaza Project – This project involves renovation of all units in the Angelus Plaza senior housing project. It will renovate over 1,000 affordable housing units on the site.

- Central Avenue Art Park - Development of a community park on City-owned surface parking lots, adjacent to the First Street Historic District, Geffen Museum of Contemporary Art (MOCA), Japanese American National Museum (JANM), and the Go For Broke Foundation.

- New Genesis Apartments - This affordable housing project includes efficiency residential units as well as ground-floor commercial retail space and supportive services offices, replacing the existing Genesis Hotel with new construction.

- Los Angeles Sports and Entertainment District/L.A. Live! – Large portions of this project are open as of this writing, but some are still under development. This project creates a major sports and entertainment destination just south of the Financial District, surrounding the existing Los Angeles Convention Center and Staples Center. Additional auditoriums and theaters, as well as retail and office space, have recently been added. Condominium and rental apartment buildings are presently under construction. This redevelopment project is located one block south of the project area, within one-quarter mile of the Pico Avenue on the Metro Blue and Expo Lines. The Regional Connector LRT alternatives directly connect the Metro Gold Line and Eastside Expansion lines to the complex.

- Downtown Women's Center Relocation/Expansion – This project will remove the existing Downtown Women's Center on San Pedro Street between 4th and 5th Streets in order to make way for The Medallion. The City will renovate its Renaissance Building as the new Women's Center, and will provide an additional 75 permanent housing units and eight day rest beds for homeless women. CRA is currently reviewing development plans for the relocation/expansion project.

- Residential Hotels Rehabilitation Program – Under this plan, CRA will acquire approximately 30 single-room occupancy hotels, lease them to non-profit housing operators, and preserve the units as low-income housing. CRA cites public ownership as a means of cleaning up crime-ridden slum hotel areas within the project area.

Additionally, CRA is preparing development plans for the Central Industrial District, located in the southeast portion of the project area. The City does not have any Specific Plan areas within the project area; however there are three in the downtown area that border the project area:

- Alameda District (North of the project area) covers Union Station and the surrounding parcels.
- Los Angeles Sports and Entertainment District (South of the project area) includes the L.A. Live development, Staples Center, the Convention Center, and surrounding parcels slated for high-density development.
- Central City West (West of the project area) covers the area immediately west of the 110 freeway.

6.3 Air Quality and Environmental Sustainability

The City is one of the most congested metropolitan areas in the nation and has been designated as a federal non-attainment area for air quality. The growing concern over global climate change and poor air quality is a predominant concern for Southern California. The use of fossil fuels for transportation generates large amounts of carbon dioxide (a greenhouse gas) emissions, which continue to disrupt progress toward improved air quality. Vehicle-related emissions account for over one-third of all air pollutants in the County (SCAG 2006).

During the 1990s, the County saw a significant increase in transit use. In 2002, SCAG reported that the City ranked 7th in the nation in public transit usage (SCAG 2002). These changes are due in large part to investments in the regional public transportation system.

Investments in public transportation can contribute to alleviating the air quality challenges faced by the region and mitigating the negative effects suffered by Southern California residents. The Regional Connector will contribute to improved mobility by increasing the speed and convenience of the rail system, thereby providing a more viable alternative to the automobile. As a result, projected degradation of air quality will be reduced (at a minimum) or reversed (at a maximum) through reduced automobile-related greenhouse gas emissions in the region.

6.4 Travel Demand and Patterns

Historic growth patterns have resulted in a multi-centered region with multiple transportation corridors converging in the project area. The transportation network includes 9,000 lane-miles of freeway, more than 42,000 lane-miles of arterials, and several large public transit service providers (SCAG RTP 2004). Yet growth of the transportation system has not kept pace with population growth and increases in transportation demand. As the population in the region doubled from 1960 to 2000, highway miles increased by less than 30 percent (SCAG RTP 2004). The congestion caused by insufficient transportation lanes affects both personal travel and goods movement. The majority of the congestion is from travel on the highways and local arterial network regardless of transportation mode. If the current trend persists, travel delays are expected to rise to 5.4 million person hours by 2035, more than

double currently experienced delays, which will deeply affect highway productivity (SCAG PEIR 2004). Expanding the public transportation system will provide more choices for commuters and potentially reduce travel demand and patterns on major highway and arterial systems.

The project area is at the central core of activity for the County. The project area is ranked very high as a destination zone for people coming from outside of the project area. For instance, over 50,000 daily trips (approximately 25 percent of external trip destinations) are made for work from the greater Eastside, to Central Los Angeles. The Central Business District (CBD) is also one of the top attractors of trips from the Westside. In 2006, of the more than 53,000 daily person trips from the project area to other parts of Central Los Angeles, 11,000 were on public transit.

Among passengers riding on the Metro Gold Line from Pasadena to Union Station, nearly three-quarters transfer to the Metro Red Line for continued service into other parts of the City. Figures 1-36 and 1-37 illustrate travel patterns to and from the project area.

6.5 Summary of Public Transit Markets

The project area is located in the crossroads of the region's transportation system because of historic development and population growth patterns. It contains the highest concentration of jobs in the County. Improving access to and through the project area is a vital part of a larger strategy for meeting the economic, social, and environmental goals of the region.

Areas with large and growing populations represent a large public transit market because of high travel demands on already-congested public transit, roads, and freeways. As described in Section 1.8.4, the total population in the project area is projected to increase by almost 16 percent by 2035, increasing the population density. High population densities can increase potential ridership on public transit.

Increasing economic development and employment opportunities in the project area also increases the size of the public transit market. Employment is expected to increase by about 7 percent by 2035. This will increase demands for public transit from commuters wishing to avoid travel in private vehicles during peak traffic hours on roads and freeways.

Improving public transit connectivity in the project area offers opportunities to increase ridership through access to regional transit markets. Balanced local land use and transportation policies can reduce auto travel and support more pedestrian-friendly, mixed-use and transit-oriented developments throughout the region.

Public transit provides an alternative means of personal mobility, supports increases in demands to alternatives to private transportation, and contributes to improving the quality of life in metropolitan communities.

Transit facilities, services and centers are best when they are customer-friendly, community-oriented and well-designed. A network of transit-based centers and corridors, supported by in-fill development, maximizes the use of existing infrastructure, supports transit ridership, reduces automobile air pollution and preserves natural areas. These improvements will help improve the region's economic vitality, quality of life, and environment.

7.0 GOALS AND OBJECTIVES

Based on the project purpose, Metro developed evaluation criteria. Metro applied the following goals and objectives in evaluating potential alternatives for the Regional Connector Corridor Project. These goals and objectives reflect Metro's mission to meet public transportation and mobility needs for transit infrastructure while also being a responsible steward of the environment and being considerate of affected agencies and community members when planning a fiscally responsible project.

Transportation goal:

- Improve mobility and accessibility both locally and regionally – Develop an efficient and sustainable level of mobility within Los Angeles County to accommodate planned growth and a livable environment

- Improve regional system functionality by minimizing transfers, improving travel times, maximizing ridership, and increasing transit accessibility

Environmental goal:

- Support efforts to improve environmental quality – Develop a project that minimizes adverse environmental impacts while providing environmental benefits, including providing air quality benefits

Land use goal:

- Support community planning efforts – Support the progression of the regional center area as an integrated destination and a dynamic livable area accommodating project growth in a sustainable manner

- Support adopted land use and transportation plans

Implementation goal:

- Provide a safe and secure alternative transportation system – Develop a project that is safe for riders, pedestrians, and drivers while meeting region's need for security

- Support public involvement and community preservation – Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Toyko, the Arts District, Bunker Hill, Civic Center, and the Historic District

Financial goal:

- Provide a cost effective transportation system – Develop a project that provides sufficient regional benefits to justify the investment

- Achieve a financially feasible project – Develop a project that maximizes opportunity for funding and financing that is financially sustainable

8.0 CONCLUSIONS

The purpose of this project is to improve the region's public transit service and mobility by connecting the light rail service of the Metro Gold Line to the Metro Blue Line and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

In addition to mobility benefits, the location of the Regional Connector project has the potential to improve the livability of the entire Los Angeles County region. Improved mobility to and through downtown Los Angeles has the potential to boost economic development and improve social justice by providing better access to employment. Improved transit connectivity will increase transit ridership which will also generate environmental benefits through reduced vehicle trips and less roadway congestion. The Regional Connector project sits at an ideal location where the region could realize tremendous benefits.

Since the completion of studies on the Metro Blue Line to Pasadena performed in 1993 and 1994, the Metro Rail system has grown substantially, with rail lines in operation and under construction extending over 80 track-miles within Los Angeles County. Currently, the Metro Red and Metro Purple subway lines serve as an interim connection between the Metro Blue Line at 7th Street/Metro Center and the Metro Gold Line at Union Station, but the transfers involved are time-consuming, contribute to crowding on the subway platforms and trains, and may dissuade passengers from riding. This may become more noticeable as the newly opened Metro Gold Line Eastside Extension (2009) becomes more widely used as well as when the Metro Expo Line opens in 2011, as it will share the Blue Line tracks at 7th Street/Metro Center Station and add to existing crowds.

The Regional Connector will improve service for communities locally and across the region, allowing greater mobility and accessibility while supporting the revitalization of downtown. New stations will provide greater coverage of the downtown area, thus enhancing the convenience of the existing rail and bus system.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX EE

ENVIRONMENTAL JUSTICE

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Environmental Justice
Technical Memorandum

December 13, 2011

Prepared for

Los Angeles County Metropolitan Transportation Authority

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State Clearinghouse Number: 2009031043

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ACRONYMS

AA	Alternatives Analysis
ACS	American Community Survey
BID	Business Improvement Strategy
CEQA	California Environmental Quality Act
CNG	Compressed Natural Gas
CRA/LA	Community Redevelopment Agency of Los Angeles
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gas
HHS	Health and Human Services
JANM	Japanese American National Museum
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAHSA	Los Angeles Homeless Services Authority
LAP	Language Assistance Plan
LEP	Limited English proficiency
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LTCC	Little Tokyo Community Council
LTSC	Little Tokyo Service Center

LTWG	Little Tokyo Working Group
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MOCA	Museum of Contemporary Art
NEPA	National Environmental Policy Act
OCTA	Orange County Transit Authority
OPR	Office of Planning and Research
PPP	Public Participation Plan
SB 375	State Bill 375
SR	State Route
SRO	Single Room Occupancy Establishment
TAHA	Terry A. Hayes Associates, LLC
TBM	Tunnel Boring Machine
TPSS	Traction Power Substation
TSM	Transportation Management System
USDOT	US Department of Transportation
VMT	Vehicle Miles Traveled

1.0 SUMMARY

Projects receiving federal funding must be reviewed for potential impacts to minority and low-income communities. Executive Order 12898 enacts this federal requirement regarding environmental justice. Other communities of concern include the elderly and communities of limited English proficiency (LEP). Given that the Regional Connector Transit Corridor project area is primarily comprised of minority and low-income communities, the potential exists for disproportionate adverse impacts to these communities.

In general, the build alternatives would provide greater regional connectivity and additional light rail transit in or adjacent to predominantly minority and low-income areas. Increased regional connectivity would have a beneficial impact to minority communities in regards to job and recreation access. In addition, the reduced number of transfers would result in travel time benefits for all transit riders, including low-income and transit dependent populations. These results would be consistent with Metro's policies as presented in the 2009 *Long Range Transportation Plan* (LRTP) and meet the criteria of the Federal Transit Administration's (FTA) *Title VI Circular*.

Public outreach to minority, low-income, and LEP populations in the project area has been extensive and comprehensive. In addition to standard scoping meetings and public hearings, stakeholder meetings have been conducted. A Little Tokyo Working Group (LTWG) was formed to oversee specific concerns of residents and business owners in Little Tokyo. In addition, per the LTWG's request, Metro is funding an independent contractor to review the draft environmental impact statement (EIS) and environmental impact report (EIR) and to help the Little Tokyo community understand and formulate mitigations where appropriate. This contractor will provide insight on potential environmental justice issues, particularly during construction, and will represent LTWG's concerns regarding impacts and mitigations. Appendix A is a letter from the Little Tokyo Community Council thanking Metro for their outreach to and work with the community for developing the Fully Underground LRT Alternative – Little Tokyo Variation 1 in response to community concerns.

The alternatives under consideration for the Regional Connector are: the No Build Alternative, the Transportation System Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2.

The No Build Alternative would only include transit investments already planned in the Metro *2009 Long-Range Transportation Plan* (LRTP). The No Build Alternative would maintain the current level of bus and rail transit access in the project area. The No Build Alternative would not result in increased regional connectivity of the light rail system. As a result, equitable access to jobs and services may not be available to low-income and minority populations in the project area (particularly Little Tokyo).

In addition, transfer costs (in terms of travel time) would remain the same. Traffic congestion throughout the region is anticipated to increase. Like automobile traffic, current transit services would be impacted by this congestion. This effect would occur throughout the project area and the Los Angeles region, and would not occur disproportionately in Little Tokyo. Therefore, the No Build Alternative would not result in direct, indirect, or cumulative disproportionate adverse impacts with respect to transit service equity.

The TSM Alternative would maintain local bus and rail transit in the project area and add new shuttle bus lines that would serve Little Tokyo and low-income communities in the project area. The TSM Alternative would not increase connectivity to regional mass transit as much as the build alternatives; therefore, low-income and minority populations in the project area may not have improved access to jobs and services. Traffic congestion throughout the region is anticipated to increase. Like automobile traffic, current transit services would be impacted by this congestion. This effect would occur throughout the project area and the Los Angeles region, and would not occur disproportionately in Little Tokyo. Therefore, the TSM Alternative would not result in direct, indirect, or cumulative disproportionate adverse impacts with respect to transit service equity.

The At-Grade Emphasis LRT Alternative would extend light rail tracks from the underground 7th Street/Metro Center Station to the Metro Gold Line at a 3-way junction north of the Little Tokyo/Arts District Station on Alameda Temple Streets. This alternative would not reduce the existing bus network in the project area. Beneficial impacts to transit equity would be anticipated.

Increased regional connectivity would reduce transit transfers and travel time. This would result in benefits to all transit riders, including minority and low-income communities. Increased regional connectivity would add access to major employment centers, including all civic employers downtown. Little Tokyo could suffer the following disproportionate adverse impacts under this alternative: parking loss, access to public facilities during operations, safe pedestrian crossing for residents and visitors, and construction-related impacts. Mitigation measures would address these concerns so that the project would result in no disproportionate adverse impacts.

The Underground Emphasis LRT Alternative would extend north from the 7th Street/Metro Center Station along Flower Street, travel east under 2nd Street, and emerge at an at-grade connection just southwest of the intersection of 1st and Alameda Streets. This alternative would not reduce the existing bus network in the project area. Beneficial impacts to transit equity would be anticipated.

Increased regional connectivity would reduce transit transfers and travel time. This would result in benefits to all transit riders, including minority and low-income communities. Increased regional connectivity would add access to major employment centers, including all civic employers downtown. Little Tokyo could suffer the following disproportionate adverse impacts under this alternative: parking loss, access to public facilities during operations, safe pedestrian crossing for residents and visitors, and construction-related impacts. Mitigation measures would address these concerns so that the project would result in no disproportionate adverse impacts.

Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would extend north from the 7th Street/Metro Center Station along Flower Street then travel east under 2nd Street and under the intersection of Alameda Street and 1st streets. From there, tracks would emerge at an at-grade connection to the existing Metro Gold Line, north and east of intersection of Alameda and 1st Streets. These alternatives would not reduce the current bus system in the project area. Beneficial impacts to transit equity would be anticipated.

Increased regional connectivity would reduce transit transfers and travel time. This would result in benefits to all transit riders, including minority and low-income communities. Increased regional connectivity would add access to major employment centers, including all civic employers downtown.

Little Tokyo could suffer the following disproportionate adverse impacts under this alternative: parking loss during construction, access to public facilities during operations, safe pedestrian crossing for residents and visitors, and construction-related impacts. Mitigation measures would address these concerns so that the project would result in no disproportionate significant adverse impacts. The Little Tokyo Community Council (LTCC) has written to Metro to indicate that it supports the Fully Underground Variation 1 Alternative as being most consistent with community needs while addressing community concerns.

The California Environmental Quality Act (CEQA) does not contain thresholds of significance specific to environmental justice. CEQA does, however, contain criteria applicable to low-income communities. None of the proposed alternatives would displace affordable housing thus necessitating construction of replacement housing elsewhere. Project alternatives would not result in any significant impacts under a CEQA analysis. Consequently, no mitigation measures under CEQA are considered.

2.0 INTRODUCTION

Environmental justice deals with potentially disproportionate impacts to minority and low-income communities. This section describes key socioeconomic indicators in the project area that influence the assessment of environmental justice concerns. This memo discusses federal and state environmental justice regulations and provides a comparative demographic profile of the region, project area and proposed stations areas. In addition, this analysis includes a summary of outreach made to communities sensitive to environmental justice concerns. This memo concludes with an assessment of potential disproportionate adverse impacts to minority, low-income, elderly, and LEP communities.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 NEPA Guidelines

3.1.1 Federal Regulation

On February 4, 1994, President Bill Clinton signed Executive Order 12898*, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Executive Order 12898 requires federal agencies to seek environmental justice by "identifying and addressing social and economic effects of... programs, policies, and activities on minority populations and low-income populations in the United States" (Federal Register, Volume 59, Number 32). Executive Order 12898 seeks fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of negative environmental consequences resulting from industrial, municipal, or commercial operations or policies. Meaningful involvement means that potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; that the public's contribution can influence the regulatory agency's decision; that the concerns of all participants will be considered in the decision making process; and, that decision-makers will seek out and facilitate the involvement of those potentially affected.

In response to Executive Order 12898, the U.S. Department of Transportation (USDOT) issued the *Order to Address Environmental Justice in Minority Populations and Low-Income Populations* (Federal Register Volume 62, Number 72). This order, issued in April 1995, sets guidelines to ensure that all federally-funded transportation-related programs, policies, or activities that have the potential to adversely affect human health or the environment involve a planning and programming process that explicitly considers effects on minority and low-income populations. As a result of Executive Order 12898, the National Environmental Policy Act (NEPA) requires projects that receive federal funding to engage in an analysis of environmental justice concerns.

Executive Order 13166 requires programs funded by the federal government to develop and implement a system to provide meaningful access for LEP populations as part of their creation. Executive Order 13166 has a two-fold purpose. First, it provides enforcement and implementation of an existing obligation under Title VI of the Civil Rights Act of 1964. Title VI prohibits recipients of federal financial assistance from discriminating based on national origins, such as by failing to provide meaningful access to LEP individuals.

Secondly, Executive Order 13166 sets forth a new obligation that requires all federal agencies to meet the same standards as federal financial assistance recipients. Thus, federal agencies must provide meaningful access to LEP individuals as a part of federally conducted programs. Additionally, each federal agency must develop a plan to provide this access. Meaningful access can include availability of vital documents, printed and internet-based information in one or more languages, and translation services during public meetings that can be part of an official language assistance plan (LAP).

The Age Discrimination Act of 1975 prohibits discriminating against individuals based on age. It prohibits a federally funded program from denying meaningful access or participation to any certain age group.

3.1.2 State and Local Regulation

Following the lead of the federal government, California enacted a series of laws to implement environmental justice, starting in 1999. The Governor's Office of Planning and Research (OPR) has been designated the agency in state government for coordinating environmental justice programs. As part of its new environmental justice coordinator role, OPR must incorporate environmental justice considerations into local government planning decisions. California law requires OPR to coordinate with federal agencies regarding environmental justice and to consider Executive Order 12898.

Metro adopted guidelines and planning policies regarding environmental justice issues in its 2009 Long Range Transportation Plan (LRTP). Metro's 2009 LRTP discusses potential provision of additional transit service in areas with high transit dependency and minority and low-income populations. The 2009 LRTP includes extensive transit investments. The LRTP includes policies sensitive to investment in areas with minority and lower-income populations. The LRTP also discusses investing in transit to support job opportunities for residents in these areas. In addition, Metro files a Title VI compliance report every year.

3.2 CEQA Guidelines

Neither the CEQA statute nor its implementing guidelines refer specifically to the topic of environmental justice. CEQA focuses on identifying and disclosing potential significant impacts to the physical environment, and socioeconomic effects are of secondary importance. CEQA does, however, place major emphasis on the disclosure of environmental changes to all potentially affected communities regardless of socioeconomic status. CEQA recognizes in its guidelines that displacement of a substantial number of affordable housing units would constitute a significant environmental impact and necessitate building replacement housing.

3.3 Methodology

In assessing a transit improvement project's compliance with Executive Orders 12898 and 13166 regarding environmental justice and LEP populations there are three major considerations:

- Whether the project provides transit service equity
- Whether any potential adverse impacts during either construction or operations of the project would be disproportionately borne by low-income and minority communities
- Whether low-income and minority communities have had opportunities to actively participate in the planning of the project in a manner to shape route alignment alternatives, design elements, or other project features that would minimize or avoid impact to their community

This analysis used data from the 2005 to 2007 *American Community Survey (*ACS) by the Census Bureau for population and housing estimates. It used data from the 2000 United States (U.S.) Census

for most demographic and socioeconomic estimates. Although these data are almost ten years old, they are the most comprehensive available. The ACS did not update most demographic or socioeconomic data. This analysis supplemented 2000 U.S. Census Data for the Little Tokyo area with updated demographics provided by the Little Tokyo Service Center.

Consistent with Title IV of the Civil Rights Act of 1964, the USDOT defines "minority" as shown in the following table.

Black	a person having origins in any of the black racial groups of Africa
Hispanic	a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race
Asian	a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent
American Indian	a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition
Native Hawaiian or other Pacific Islander	a person having origins in any of the original peoples of Hawaii, Guam Samoa, or other Pacific Islands

The Federal Highway Administration (FHWA) uses a definition from Title IV of the Civil Rights Act of 1964 to define a "low-income" person as a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines.

HHS poverty guidelines simplify poverty thresholds established by the U.S. Census Bureau. The U.S. Census Bureau uses poverty thresholds primarily in statistical analyses. This analysis used these guidelines as the basis for determining low-income and poverty characteristics.

Table 3-1 shows HHS Thresholds.

Table 3-1. 2000 U.S. Census Poverty Thresholds

Household Size	Income Threshold
One-Person	$8,794.00
Two-Person	$11,239.00
Three-Person	$13,738.00
Four-Person	$17,603.00
Five-Person	$20,819.00
Six-Person	$23,528.00
Seven-Person	$26,754.00
Eight-Person	$29,701.00
Nine-Person	$35,060.00

Source: U.S. Census Bureau, Housing and Household Economic Statistics Division, 2000

4.0 AFFECTED ENVIRONMENT

The proposed project would be located in downtown Los Angeles. However, the proposed project would result in a region-wide, beneficial impact because it would connect most of the rail system in Los Angeles County. Therefore, the affected environment includes the entire region.

4.1 Areas of Potential Impact

4.1.1 County of Los Angeles

Table 4-1 shows certain characteristics of Los Angeles County. As of 2007, approximately 9.9 million persons reside in the County, living in approximately 3.4 million housing units. Approximately 69 percent of the County population is characterized as minority. The largest minority population is Hispanic, making up approximately 45 percent of the total population.

According to the 2000 U.S. Census, approximately 18 percent of households in the County live below the poverty level. LEP persons over the age of five make up 16 percent of Los Angeles County. Of this 16 percent, 12 percent speak only Spanish. The elderly (age 65 and older) make up 9.7 percent of county population. Los Angeles County has an unemployment rate of 12.5 percent (Bureau of Labor Statistics 2009).

4.1.2 City of Los Angeles

Table 4-1 shows certain characteristics of the City of Los Angeles (City). As of 2007, approximately 9.9 million persons reside in the City, living in approximately 3.4 million housing units. Approximately 53 percent of the City's population is characterized as minority. The largest minority population is Hispanic, making up approximately 47 percent of the population. According to the 2000 U.S. Census, approximately 22 percent of households live below the poverty level.

LEP persons over the age of five make up 33 percent of City population. Of this 33 percent, 25 percent speak only Spanish. The elderly (age 65 and older) make up 9.7 percent of City population. The City of Los Angeles has an unemployment rate of 11.7 percent (Bureau of Labor Statistics July 2009).

4.1.3 Project Area

The project area is located entirely within the City of Los Angeles. For the purposes of the environmental justice analysis, the project area contains the following census tracts: 2060.30, 2060.40, 2062, 2073, 2074, 2075, and 2077.10 (see Figure 4-1). The project area houses approximately 18,070 persons, living in 10,340 housing units (see Table 4-2). Minorities make up 83 percent of project area, and approximately 40 percent of the population lives below the poverty level.

Table 4-1. Summary of Characteristics for Los Angeles County and the City of Los Angeles

Characteristic	County of Los Angeles	City of Los Angeles
Total Population (persons) (2007) /a/	9,878,554	3,834,340
Total Housing Units(2007) /a/	3,374,211	1,356,808
Percent population below poverty level (2000) /b/	18%	22%
Median Household income (2000) /b/	$42,189	$36,687
Percent Minority (2000) /b/	69%	53%
Percent Limited English Proficiency, Age ≥ 5 (2000) /b/	16%	33%
Percent of Population over 65 years of Age (2000) /b/	9.7%	9.7%
Unemployment Rate (2009) /c/	12.5%	11.7%

Source: U.S. Census Bureau, 2000 and 2005-2007; Bureau of Labor Statistics, 2009
Notes:
/a/ From the 2005-2007 ACS.
/b/ From the 2000 U.S. Census, Summary File 3.
/c/ From Bureau of Labor Statistics.

The project area contains the communities of Little Tokyo, the Arts District, Boyle Heights, Bunker Hill, Historic Core, Financial District, Toy District, and South Park. Many of these communities contain historic resources, but the communities themselves have undergone significant changes in demographics and character. Most of the communities are predominantly minority and/or low-income. The most visible and concentrated minority community in the project area is Little Tokyo.

The project area is surrounded by predominantly minority and low-income neighborhoods such as South Los Angeles, Pico-Union, Westlake-MacArthur Park, Chavez Ravine, Lincoln Heights, and Chinatown. This analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Furthermore, construction activities would impact Little Tokyo under all build alternatives.

Table 4-2. Summary of the Project Area Characteristics

Characteristic	Value
Total Population (persons) /a/	18,067
Total Housing Units	10,339
Percent Population Below Poverty Level	39%
Percent Minority	83%

Source: U.S. Census Bureau, 2000, Summary File 3
Note:
/a/ Excludes homeless population.

4.1.3.1 Census Tract 2060.30

Census tract 2060.30 is located in the eastern-most part of the project area. Census tract 2060.30 is bounded by Alameda Street on the west, 1st Street on the south, Pleasant Avenue on the east, and US 101 on the north (see Figure 4-1). Census tract 2060.30 includes parts of both Little Tokyo and Boyle Heights. Census tract 2060.30 is characterized by one and two-story buildings. Major corridors in this tract are Alameda Street, 1st Street, and Mission Road. Census tract 2060.30 is primarily industrial/commercial west of the Los Angeles River and residential east of the Los Angeles River. Bus lines serving this area run primarily on 1st Street. The Metro Gold Line Little Tokyo/Arts District Station is located in this tract.

4.1.3.2 Census Tract 2060.40

Census tract 2060.40 is located in the eastern-most part of the project area. Census tract 2060.40 is bounded by State Street on the east, 4th Street on the south, Alameda Street on the west, and 1st Street on the north (see Figure 4-1). Census tract 2060.40 includes the Arts District and part of Boyle Heights. Census tract 2060.40 is characterized by one and two-story buildings. Major corridors in this area are Alameda Street, 1st Street, 4th Street, and Mission Road. Census tract 2060.40 has a mix of residential, commercial, and light industrial uses. Bus transit serving this tract runs primarily on 1st Street. The Metro Gold Line Little Tokyo/Arts District Station is located adjacent to this Census tract.

4.1.3.3 Census Tract 2062

Census tract 2062 is located in the eastern-most part of the project area. Census tract 2062 is bounded by Alameda Street on the east, 5th Street on the south, Los Angeles Street on the west, and 1st Street and Temple Street on the north (see Figure 4-1). Census tract 2062 includes Little Tokyo, part of the Toy District, and part of Skid Row. Census tract 2062 is characterized by tall, multi-story buildings north of 3rd Street and smaller one and two-story buildings south of 3rd Street. Major corridors in this area are Alameda Street, 1st Street, 2nd Street, and Central Avenue. Census tract 2062 has a mix of residential, commercial, and light industrial uses. Bus transit serving tract 2062 runs primarily on 1st and Temple Streets. The Metro Gold Line Little Tokyo/Arts District Station is located adjacent to this tract.

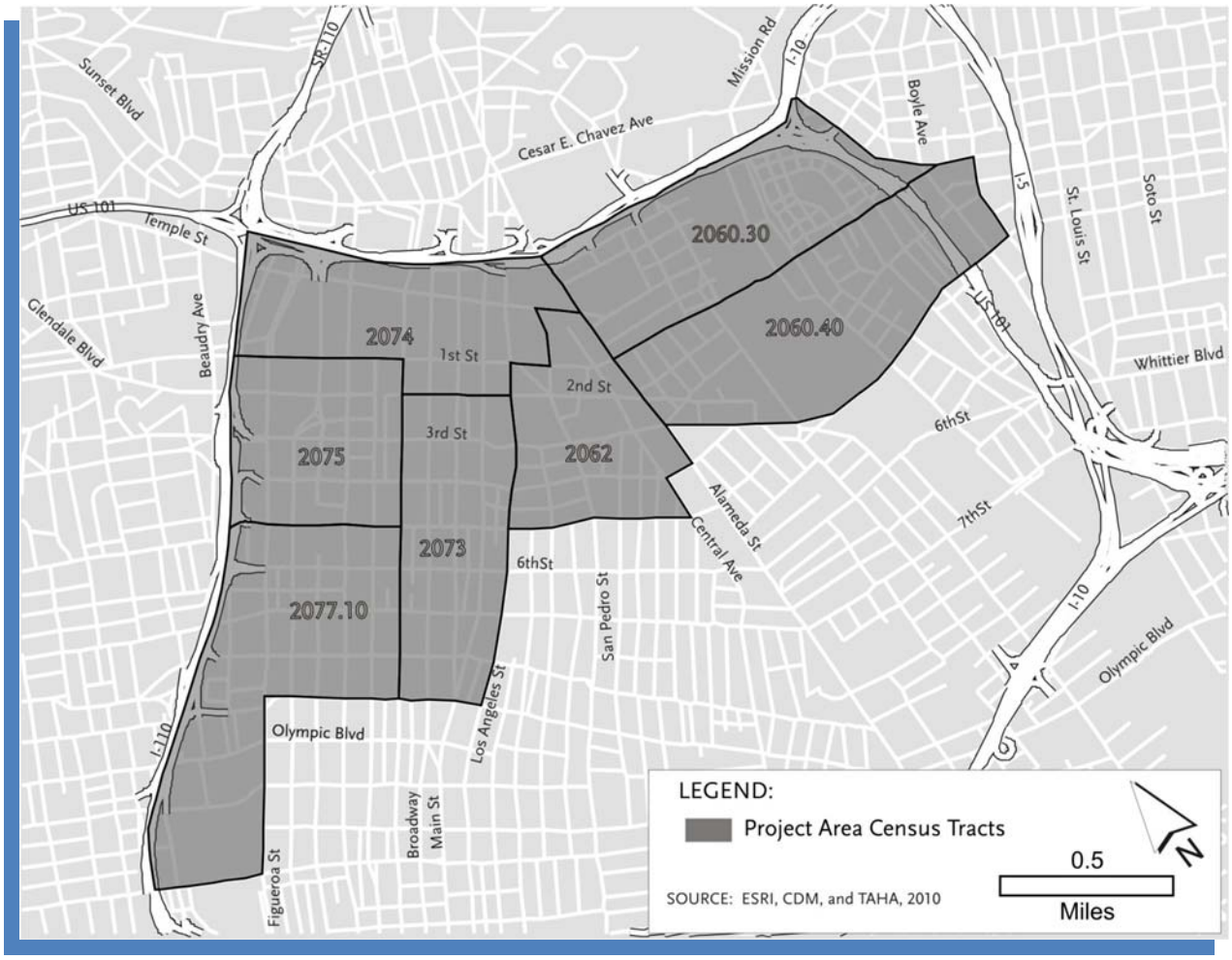


Figure 4-1. Project Area

4.1.3.4 Census Tract 2073

Census tract 2073 is bounded by Los Angeles Street on the east, 9th Street on the south, Hill Street on the west, and 2nd Street on the north (see Figure 4-1). Census tract 2073 includes the Historic Core, a portion of the Fashion District, and a portion of Skid Row. Census tract 2073 is characterized by tall, multi-story buildings. Major corridors in this area are Hill Street, Broadway, Spring Street, and Main Street. Census tract 2073 has a mix of residential, institutional, and commercial uses. Bus transit serving this tract runs along all major corridors. The Metro Pershing Square Station is located within census tract 2073.

4.1.3.5 Census Tract 2074

Census tract 2074 is bounded by Alameda Street, Judge John Aiso Way, and Los Angeles Street on the east, 1st and 2nd Streets on the south, State Route (SR) 110 on the west, and US 101 on the north (see Figure 4-1). Census tract 2074 includes the Civic Center and is characterized by tall, multi-story buildings and parking lots. Major corridors in this area are Hill Street, Broadway, Spring Street, Main

Street, 1st Street and Temple Street. Census tract 2074 has institutional, entertainment, and commercial uses. Bus transit serving this tract runs along all major corridors. The Metro Civic Center Station is located within this tract.

4.1.3.6 Census Tract 2075

Census tract 2075 is bounded by Hill Street on the east, 5th Street on the south, SR 110 on the west, and 1st Street on the north (see Figure 4-1). Census tract 2075 includes the Bunker Hill District and a portion of the Financial District. Census tract 2075 is characterized by mid-rise and high-rise commercial office towers. Major corridors in this area are Figueroa Street, Grand Avenue, Flower Street, Olive Street, 3rd Street, 4th Street, and 5th Street. Census tract 2075 has a mix of residential, institutional, and commercial uses. Bus transit in this tract runs along all major corridors. The Metro Pershing Square and Civic Center Stations are located adjacent to census tract 2075.

4.1.3.7 Census Tract 2077.10

Census tract 2077.10 is bounded by Hill Street on the east, 9th Street and Pico Boulevard on the south, SR 110 on the west, and 5th Street on the north (see Figure 4-1). Census tract 2077.10 includes portions of both the Financial and South Park districts. Census tract 2077.10 is characterized by tall skyscrapers, other multi-story buildings, and large entertainment venues including the Staples Center, L.A. Live and the Los Angeles Convention Center.

Major corridors in this area are Figueroa Street, Flower Street, Grand Avenue, Olympic Boulevard, 7th Street, Wilshire Boulevard, and 6th Street. Census tract 2077.10 has a mix of residential and commercial uses. Bus transit in this tract runs along all major corridors. The 7th Street/Metro Center Station is located within census tract 2077.10.

4.2 Demographics of the Project Area

Table 4-3 shows that approximately 80 percent of the population in the project area belongs to a minority group. Hispanic or Latinos make up 35 percent of the population in the project area. Asians are the second largest minority group and make up 26 percent of the population. Whites and Blacks or African American populations make 19 percent and 17 percent of the population respectively. Figure 4-2 shows the demographic character of the project area. The demographic character of census tracts in the project area is as follows:

- Census Tract 2060.30. Census tract 2060.30 includes part of Boyle Heights. According to the 2000 U.S. Census, 92 percent of the census tract population is minority. The minority group with the largest representation is Hispanics or Latinos (78 percent).

- Census Tract 2060.40. Census tract 2060.40 includes the Arts District and part of Boyle Heights. According to the 2000 U.S. Census, 88 percent of the census tract population is minority. The minority group with the largest representation is Hispanics or Latinos (80 percent).

- Census Tract 2062. Census tract 2062 includes the community of Little Tokyo. According to the 2000 U.S. Census, 88 percent of the census tract population is minority. The minority

groups with the largest representation in census tract 2062 are Blacks or African Americans (36 percent), Asians (31 percent), and Hispanics or Latinos (19 percent).

- Census Tract 2073. According to the 2000 U.S. Census, 73 percent of the census tract population is minority. The minority groups with the largest representation 2073 are Blacks or African Americans (35 percent), Hispanics or Latinos (21 percent), and Asians (14 percent).

- Census Tract 2074. Census tract 2074 includes a resident population of seven persons and a population of approximately 1,100 persons in jails (institutionalized group-living in census terms. According to the 2000 U.S. Census, 68 percent of the population is minority. The minority groups with the largest representation are Blacks or African Americans (34 percent) and Hispanics or Latinos (29 percent).

- Census Tract 2075. According to the 2000 U.S. Census, 76 percent of the census tract population is minority. The minority groups with the largest representation in are Asians (52 percent) and Hispanics or Latinos (12 percent).

- Census Tract 2077.10. According to the 2000 U.S. Census, 90 percent of the census tract population is minority. The minority groups with the largest representation are Hispanics or Latinos (51 percent) and Asians (31 percent).

4.2.1 Little Tokyo Historic District

Little Tokyo is a commercial and residential district located in the northeastern portion of downtown Los Angeles. It has served as a Japanese community center for decades. Little Tokyo is one of three remaining "Japan Towns" in the United States (the other two are in San Francisco and San Jose). Before World War II, Little Tokyo was the largest Japanese-American community.

Little Tokyo once encompassed a larger area than today. Little Tokyo currently consists of the blocks bounded by Los Angeles Street to the west, Alameda Street to the east, 1st Street to the north, and 3rd Street to the South. Little Tokyo is adjacent to the Arts District, Civic Center, and the Toy District (see Figure 4-3). Little Tokyo is located within census tract 2062.

Little Tokyo has existed since the early 1900s and has included residential and commercial uses. During World War II and Japanese internment, Little Tokyo was abolished and renamed Bronzeville. Bronzeville was comprised primarily of African-Americans and Hispanics. Upon the return of interned Japanese, Little Tokyo was revitalized as a Japanese-American community, though not on a pre-war scale. In 1970, Little Tokyo was designated a redevelopment area by the Community Redevelopment Agency of the City of Los Angeles (CRA/LA).

With the assistance of the CRA/LA, Little Tokyo became the entry point for Japanese corporations into Southern California. Japanese business influence led to further changes in the social, political, physical, and economic environment of Little Tokyo. Little Tokyo was declared a National Historic Landmark in 1995 and a Preserve America Community in 2008.

Table 4-3. Project Area Demographic Character

Race/Ethnicity in Census Tract/Project Area (Persons)										
White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian & Pacific Islander	Other Race	Two or More Races	Hispanic or Latino	Total Minority	Largest Racial/Ethnic Group in Census tract	Percent of Census tract Population that is Minority
Census Tract 2060.30										
70	28	25	62	14	0	0	699	828	Hispanic or Latino (78%)	92%
Census Tract 2060.40										
170	56	16	404	0	0	22	2,723	3,221	Hispanic or Latino (80%)	95%
Census Tract 2062										
418	1,232	21	1,074	0	0	56	666	3,049	Black or African American (36%)	88%
Census Tract 2073										
1,017	1,320	49	539	0	12	69	806	2,787	Black or African American (35%)	73%
Census Tract 2074 /a/										
350	371	0	49	0	0	7	317	744	Black or African American (34%)	68%

Table 4-3. Project Area Demographic Character (continued)

Race/Ethnicity in Census Tract/Project Area (Persons)										
White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian & Pacific Islander	Other Race	Two or More Races	Hispanic or Latino	Total Minority	Largest Racial/Ethnic Group in Census tract	Percent of Census tract Population that is Minority
Census Tract 2075										
961	267	8	2,109	9	37	146	496	3,072	Asian (52%)	76%
Census Tract 2077.10										
143	82	0	423	0	5	22	705	1,237	Hispanic or Latino (51%)	90%
Project Area										
3,129	3,356	119	4,652	23	54	322	6,412	14,938	Latino or Hispanic (35%)	83%

Source: U.S. Census Bureau, Summary File 3, 2000
Note:
/a/ Census tract 2074 has a single-family residential population of seven persons. It has an additional institutionalized group-living population of 1,087 persons. For demographic character of this Census tract, the institutionalized group-living population was included.

Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region. It is the home of the Japanese American Cultural and Community Center, the Japanese American National Museum (JANM), the Go For Broke Monument, and the Nisei Week festival. Little Tokyo is home to several religious institutions significant to the Japanese-American community including the Koyasan and Los Angeles Hompa Hongwanji Buddhist Temples. Little Tokyo has a large number of Japanese restaurants and other retail stores. Japanese businesses are particularly concentrated around the Japanese Village Plaza on the block bounded by 1st Street, Central Avenue, 2nd Street, and San Pedro Street.

According to the Little Tokyo Service Center (LTSC), the current population of Little Tokyo is approximately 2,300 persons. The demographic character of Little Tokyo is approximately 45 percent Japanese, 34 percent Korean, 5 percent Chinese, 4 percent Hispanic or Latino, 2 percent Black or African American, 1 percent other Asian, 8 percent White, and 1 percent other (LTSC 2009).

4.3 Socioeconomic Character of the Project Area

The project area is characterized by a diverse demographic. However, economically, the project area houses a mostly low-wage workforce. In 2000, the median household income in the project area was approximately $15,630 (see Table 4-4). The median household income in the project area is substantially lower than both the City's ($36,687) and the County's ($42,189). In the project area, 39 percent of the population lives below poverty thresholds defined in Table 4-1. Additionally, approximately 60 percent of the population has no access to a vehicle. Thus, the resident population is highly transit-dependent (see Table 4-4). The socioeconomic character of census tracts comprising the project area is as follows:

- Census Tract 2060.30. According to the 2000 U.S. Census, the median income for census tract 2060.30 is $24,821, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). Thirty three percent of the population in census tract 2060.30 lives below the poverty level compared to 22 percent in the City and 18 percent in the County. 38 percent of the population of census tract 2060.30 is transit dependant.

- Census Tract 2060.40. According to the 2000 U.S. Census, the median income for census tract 2060.40 is $22,143, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). Thirty six percent of the population in census tract 2060.40 lives below the poverty level compared to 22 percent in the City and 18 percent in the County. Thirty seven percent of the population of census tract 2060.40 is transit dependent.

- Census Tract 2062. Census tract 2062 includes the community of Little Tokyo. According to the 2000 U.S. Census, the median income for census tract 2062 is $10,959, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). Fifty seven percent of the population in census tract 2062 lives below the poverty level compared to 22 percent in the City and 18 percent in the County. Seventy one percent of the population of census tract 2062 is transit dependent.

- Census Tract 2073. According to the 2000 U.S. Census, the median income for census tract 2073 is $8,125, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). Forty eight percent of the population in census tract 2073 lives below the poverty level compared to 22 percent in the City and 18 percent in the County. Eighty five percent of the population of census tract 2073 is transit dependent.

- Census Tract 2074. Census tract 2074 includes a residential population of seven persons and a population of approximately 1,100 persons in jails (institutionalized group-living in census terms). This analysis used only the residential population. According to the 2000 U.S. Census, the median income for census tract 2074 is $6,250, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). The entire resident population of census tract 2074 lives below the poverty level and is transit dependant.

- Census Tract 2075. According to the 2000 U.S. Census, the median income for census tract 2075 is $25,721, which is less than the median income for the City and County ($36,687 and $42,189 respectively). The median income is the highest of any census tract in the project area. Nineteen percent of the population in census tract 2075 lives below the poverty level compared to 22 for the City and 18 percent for the County. Forty two percent of the population of census tract 2073 is transit dependent.

- Census Tract 2077.10. According to the 2000 U.S. Census, the median income for census tract 2077.10 is $11,442, which is substantially less than the median income for the City and County ($36,687 and $42,189 respectively). Forty two percent of the population in census tract 2077.10 lives below the poverty level compared to 22 percent in the City and 18 percent in the County. Seventy six percent of the population of census tract 2077.10 is transit-dependent.

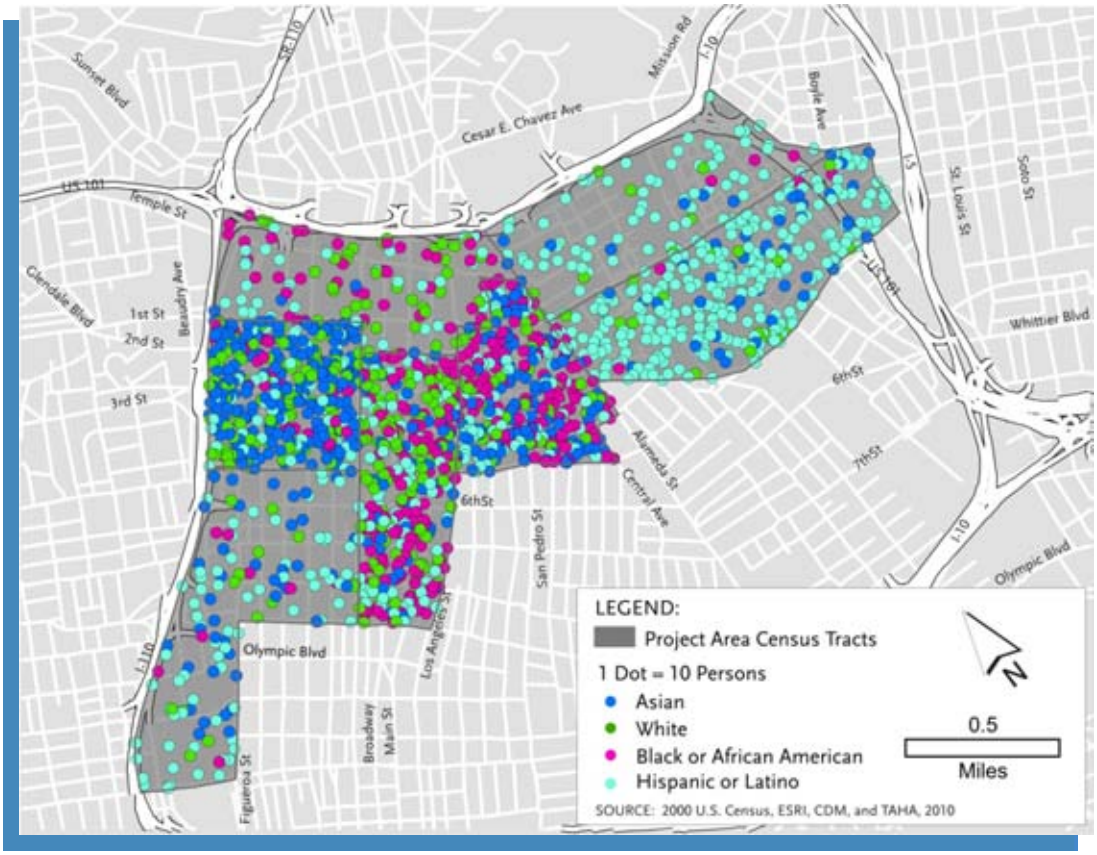


Figure 4-2. Demographic Density in the Project Area

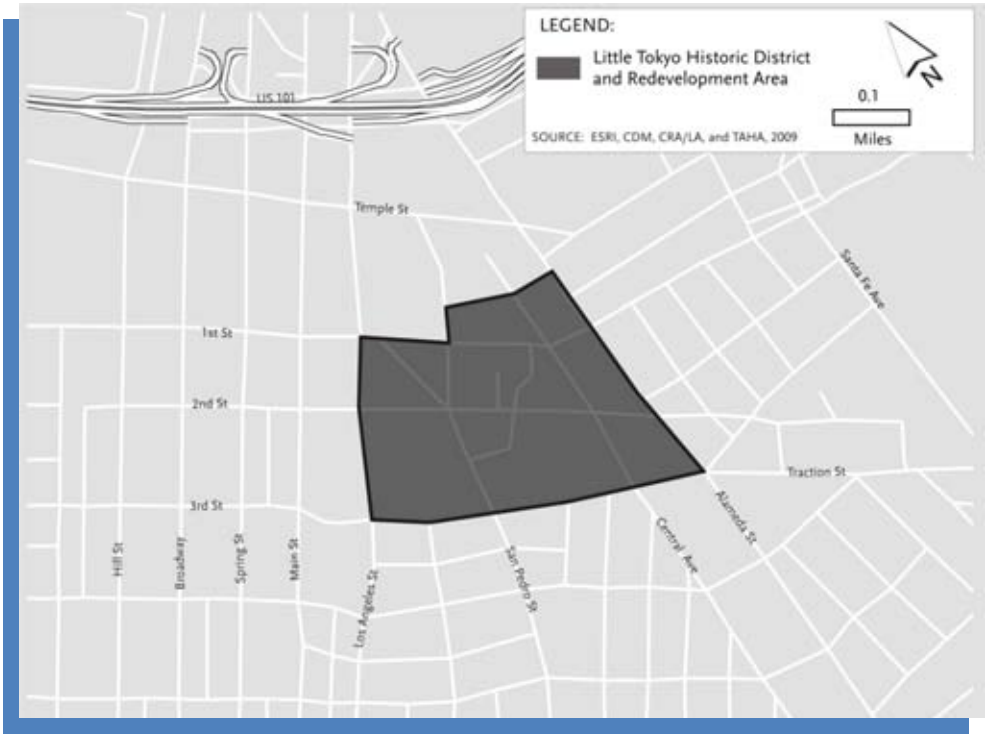


Figure 4-3. Little Tokyo Historic District and Redevelopment Area

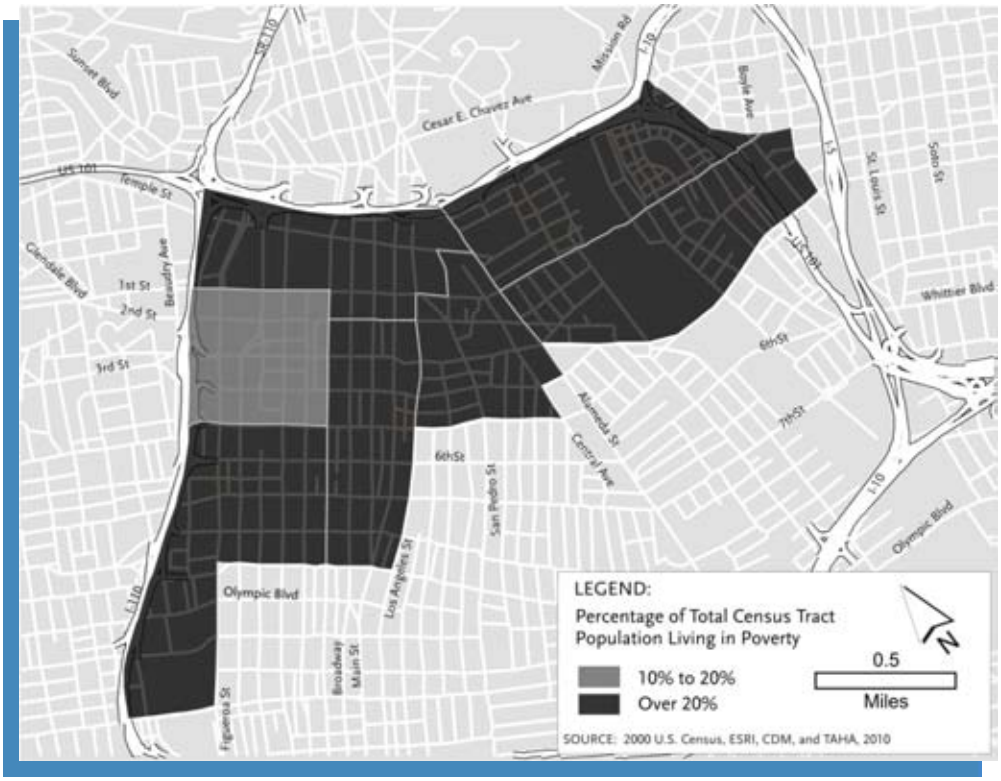


Figure 4-4. Poverty Distribution in the Project Area

Table 4-4. Project Area Socioeconomic Character

Socioeconomic Character	Census tract 2060.30	Census tract 2060.40	Census tract 2062	Census tract 2073	Census tract 2074 /a/	Census tract 2075	Census tract 2077.10	Project Area
Median Household Income	$24,821	$22,143	$10,959	$8,125	$6,250	$25,721	$11,442	$15,637
Percentage Population Living Below Poverty Level /b/	33%	36%	57%	48%	100%	19%	42%	39%
Percent of Total Population that is Transit-Dependent	38%	37%	71%	85%	100%	42%	76%	60%

Source: U.S. Census Bureau, Summary File 3, 2000
Notes:
/a/ Census tract 2074 has a single-family residential population of seven persons. It has an additional institutionalized group-living population of 1,087 persons. For socioeconomic character of this Census tract, the institutionalized group-living population was excluded.
/b/ Poverty status is based on thresholds as shown in Table 4-1.

4.3.1 Homeless Population

Downtown Los Angeles is home to a major homeless and transient population. The U.S. Census Bureau does not include homeless people in its population calculations. The Los Angeles Homeless Services Authority (LAHSA) conducts homeless counts in its jurisdiction. The project area encompasses part of Skid Row, a fifty-block area home to 5,130 homeless persons. This area is home to approximately seven percent of the homeless population of Los Angeles County (LAHSA, 2007).

The project area contains many shelters that serve homeless and transient populations. The area offers five shelters (some year-round), 14 single-room occupancy establishments (SROs), and nine homeless service providers. Resources for the homeless population within the project area shown in Table 4-5 and Figure 4-5.

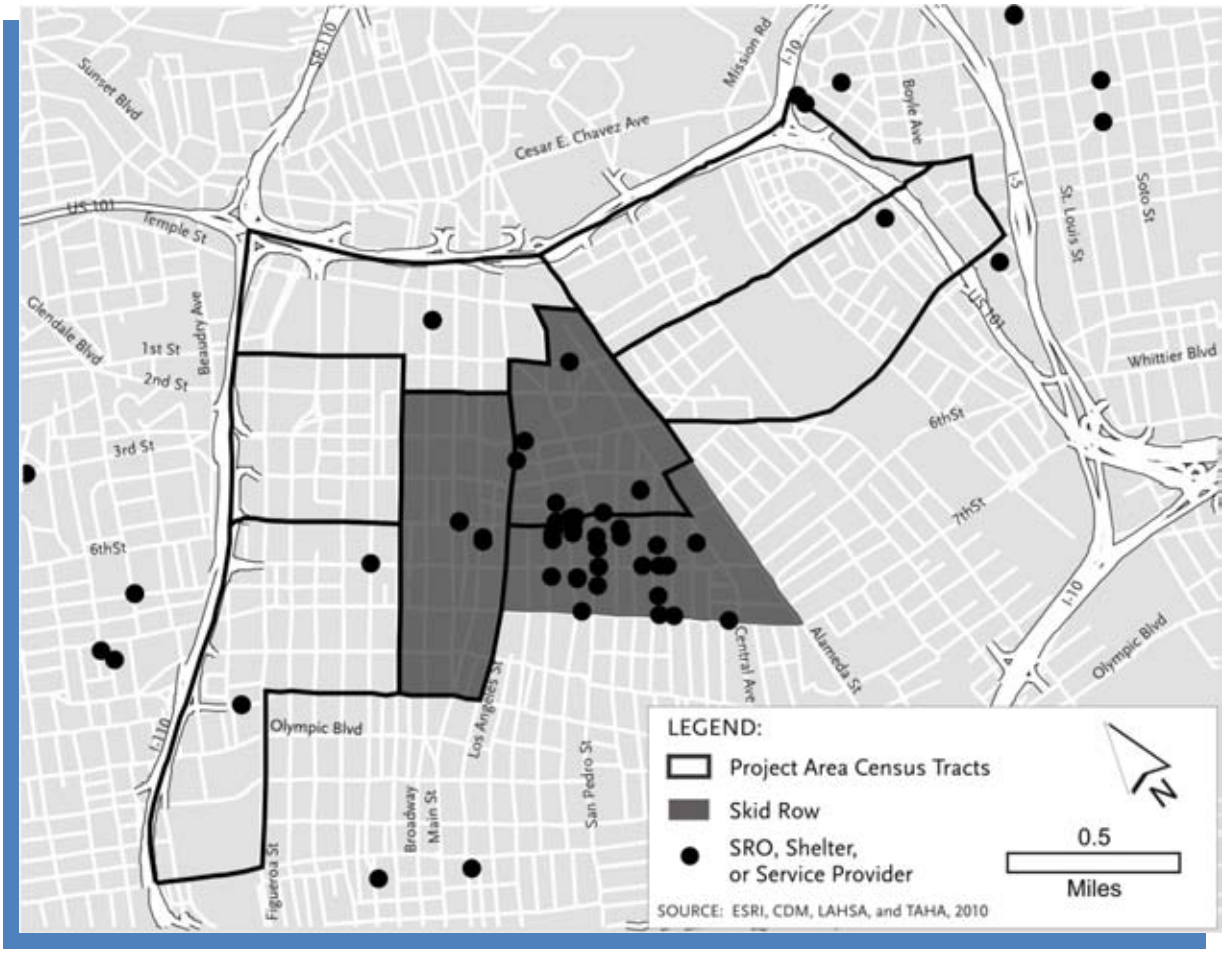
Eight of 14 SROs are located in census tract 2062. Most are located at the southern boundary of the census tract in the central part of Skid Row. Five of nine service providers in the project are located in census tract 2073.

Table 4-5. Homeless and Transient Population Shelters, SROs, and Service Providers Located in the Project Area

Name	Address	No. of Units/Beds	Availability	Project Area Location (Census tract)
Shelters				
Emmanuel Baptist Mission - Bible Program In-House Residency	530 E. 5th Street	N/A	Emergency	2062
Los Angeles Mission - Anne Douglas Center of the Los Angeles Mission	310 Winston Street	N/A	Transitional	2062
Los Angeles Mission - Overnight Beds for Men	303 E. 5th Street	N/A	Emergency	2073
Proyecto Pastoral	171 S. Gless Street	45	Emergency	2060.40
La Posada	1320 Pleasant Ave	10	Emergency	2060.30
SROs				
Year Round Overnight Emergency Shelter	832 W. James M. Wood Blvd	6	Emergency	2077.10
Zahn New Emergency Housing Program	832 W. James M. Wood Blvd	64	Emergency	2077.10
Year Round Overnight Emergency Shelter	403 E. 5th Street	100	Emergency	2062
Panama Hotel	403 E. 5th Street	221	Emergency	2062
LTSC - Far East Building	347 E. First Street	16	Permanent	2062
Brownstone	425 E. 5th Street	48	Permanent	2062
Southern	412 E. 5th Street	55	Permanent	2062
Harold Hotel	323 E. 5th Street	58	Permanent	2073
Florence Hotel	310 E. 5th Street	61	Permanent	2062
Leonide Hotel	512-516 S. Main St	66	Permanent	2073
Fred Jordan Missions - Men's Christian Discipleship	445 S. Towne Ave	36	Transitional	2062

Table 4-5. Homeless and Transient Population Shelters, SROs, and Service Providers Located in the Project Area (continued)

Name	Address	No. of Units/Beds	Availability	Project Area Location (Census tract)
JWCH Institute	515 6th Street	45	Transitional	2077.10
Golden West Transitional Housing	417 E. 5th Street	61	Transitional	2062
Casa Olivares	1208 Pleasant Ave	150	Transitional	2060.30
Service Providers				
Assistance for Skid Row Families	207 S. Broadway	N/A	Year-Round	2074
Day Labor Program	516 S. Main Street	N/A	Year-Round	2073
Downtown Women's Center	325 S. Los Angeles St	N/A	Year-Round	2073
Employment Program	516 S. Main Street	N/A	Year-Round	2073
Family Transition Program	207 S. Broadway	N/A	Year-Round	2074
Golden West Hotel Life Skills Program	417 E. 5th Street	N/A	Year-Round	2062
LTSC Emergency Care Givers	231 E. 3rd Street	N/A	Year-Round	2062
Street Works	516 S. Main Street	N/A	Year-Round	2073
Weingart Access Center	506 S. Main Street	N/A	Year-Round	2073



Source: Community Redevelopment Agency of Los Angeles, 2008 and TAHA, 2010

Figure 4-5. Location of Homeless Services in the Project Area and Skid Row

4.4 Age Distribution in the Project Area

Table 4-6 shows age distribution in the project area population. Residents in the age range of 35-49 make up 26 percent of the population. Approximately 25 percent of the project area population is 65 years or older (3,390 persons) compared to approximately 10 percent in the City and County. Figure 4-6 shows the age distribution in the project area. The age distribution in census tracts comprising the project area is as follows:

- Census Tract 2060.30. According to the 2000 U.S. Census, 4 percent of the population in census tract 2060.30 is elderly compared to 10 percent in the City and County. The age group most represented in census tract 2060.30 is age 22 to 34, which accounts for 31 percent of the population.

- Census Tract 2060.40. According to the 2000 U.S. Census, 13 percent of the population in census tract 2060.40 is elderly compared to 10 percent in the City and County. The age group most represented in census tract 2060.40 is age 35 to 49, which accounts for 21 percent of the population.

- Census Tract 2062. Census tract 2062 includes the community of Little Tokyo. According to the 2000 U.S. Census, 22 percent of the population in census tract 2062 is elderly compared to 10 percent in the County and City. The age group most represented in census tract 2062 is ages 35 to 49, which accounts for 40 percent of the population.

- Census Tract 2073. According to the 2000 U.S. Census, 20 percent of the population in census tract 2073 is elderly compared to 10 percent in the City and County. The age group most represented in census tract 2073 is ages 50 to 64, which accounts for 31 percent of the population.

- Census Tract 2074. According to the 2000 U.S. Census, Census tract 2074 does not have an elderly population. The age group most represented in census tract 2074 is ages 22 to 34, which accounts for 62 percent of the population.

- Census Tract 2075. According to the 2000 U.S. Census, 33 percent of the population in census tract 2075 is elderly compared to 10 percent in the City and County. This tract has the highest percentage of elderly residents of any in the project area.

- Census Tract 2077.10. According to the 2000 U.S. Census, 35 percent of the population in census tract 2077.10 is elderly compared to 10 percent in the City and County. The elderly are the best represented age group in this tract.

Table 4-6. Age Distribution

Age Groups in Census tract/Project Area (Persons)								
Ages 0-5	Ages 6-15	Ages 16-21	Ages 22-34	Ages 35-49	Ages 50-64	Ages 65 and Over	Largest Age Group Present in Census tract	Percent of Census tract Population that is Elderly (Ages 65 and Over)
Census tract 2060.30								
134	143	66	278	153	92	32	Ages 22-34 (31%)	4%
Census tract 2060.40								
280	618	261	647	705	436	444	Ages 35-49 (21%)	13%
Census tract 2062								
12	143	29	566	1,382	557	778	Ages 35-49 (40%)	22%
Census tract 2073								
137	32	96	485	1,093	1,184	777	Ages 50-64 (31%)	20%
Census tract 2074								
0	0	25	683	278	108	0	Ages 22-34 (62%)	0%
Census tract 2075								
53	21	277	1,290	602	443	1,347	Ages 65 and Over	33%
Census tract 2077.10								
100	72	69	334	223	94	488	Ages 65 and Over	35%
Project Area								
716	1,029	823	4,283	4,436	2,914	3,866	Ages 35-49 (25%)	21%

Source: U.S. Census Bureau, Summary File 3, 2000

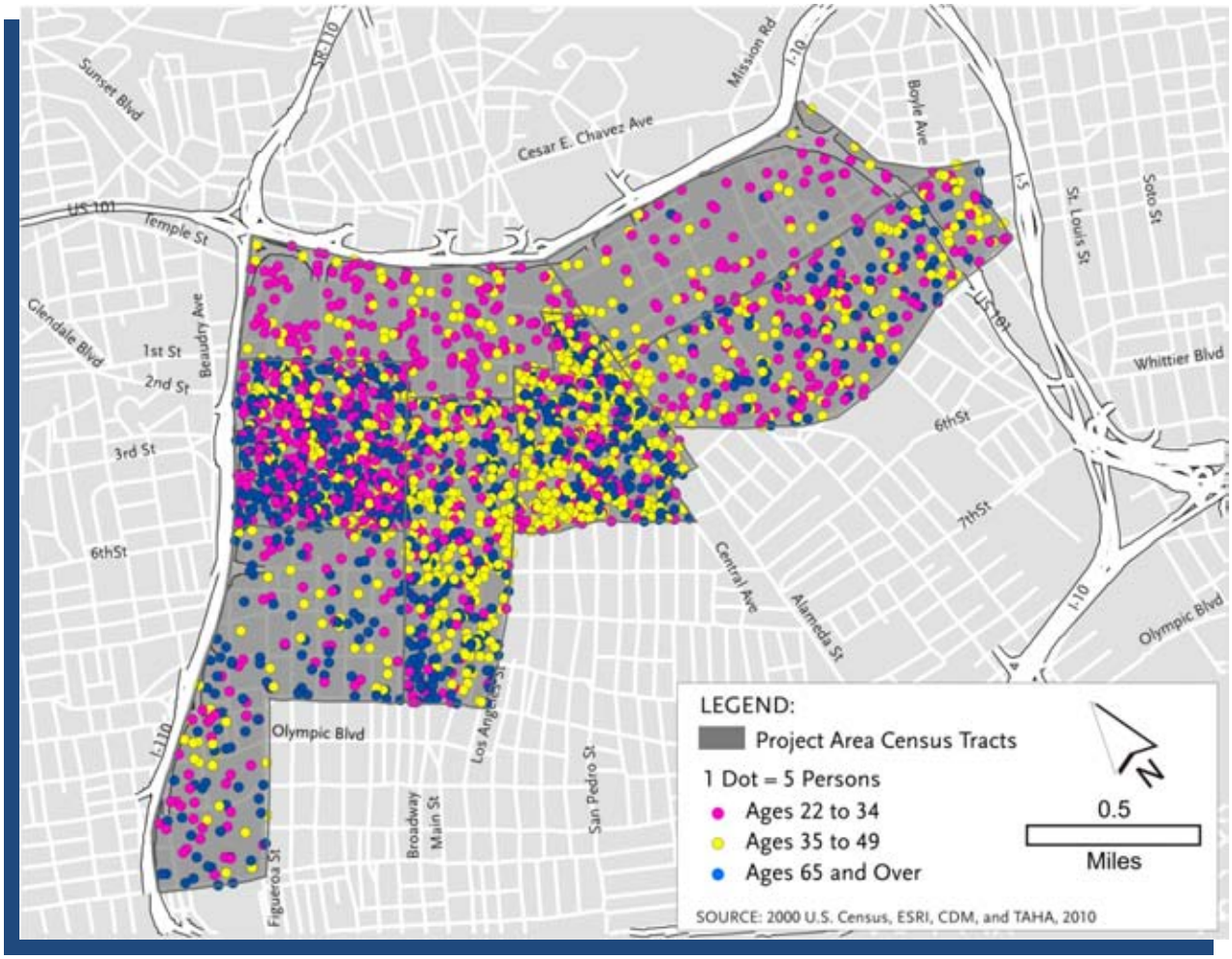


Figure 4-6. Age Distribution for Most Prominent Age Groups in the Project Area (Ages 22 to 34, 35 to 49, and 65 and Older)

4.5 Limited English Proficiency (LEP) Populations in the Project Area

Approximately 30 percent of households in the project area are linguistically isolated. This means that all members in the household over age five either speak English poorly or not at all. The percentage of LEP population in the project area is substantially higher than the County (16 percent) but lower than the City (33 percent).

Approximately 63 percent of the linguistically isolated population (1,804 persons) in the project area speaks an Asian or Pacific Island language. Approximately 35 percent (971 persons) speak Spanish. The geographic distribution of linguistically isolated households in the project area is shown in Figure 4-7. The LEP characteristic of each census tract in the project area is as follows (See Table 4-7):

- Census Tract 2060.30. According to the 2000 U.S. Census, 34 percent of households in census tract 2060.30 are linguistically isolated. The largest percentage of LEP households in this Census tract speak Spanish.

- Census Tract 2060.40. According to the 2000 U.S. Census, 42 percent of the households in census tract 2060.40 are linguistically isolated. The largest percentage of LEP households in this census tract speak Spanish.

- Census Tract 2062. Census tract 2062 includes the community of Little Tokyo. According to the 2000 U.S. Census, 42 percent of the households in census tract 2062 are linguistically isolated. The largest percentage of LEP households in this census tract speak an Asian or Pacific Island language.

- Census Tract 2073. According to the 2000 U.S. Census, 18 percent of the households in census tract 2073 are linguistically isolated. The largest percentage of LEP households in this census tract speak Spanish.

- Census Tract 2074. Census tract 2074 does not include any households that are linguistically isolated.

- Census Tract 2075. According to the 2000 U.S. Census, 31 percent of the households in census tract 2075 are linguistically isolated. The largest percentage of LEP households in this census tract speak an Asian or Pacific Island language.

- Census Tract 2077.10. According to the 2000 U.S. Census, 55 percent of the households in census tract 2077.10 are linguistically isolated). The largest percentage of LEP households in this census tract speak an Asian or Pacific Island language.

4.6 Public Participation

Executive Order 12898 requires meaningful public participation in the project development process. Meaningful involvement means that potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health, that the public's contribution can influence the regulatory agency's decision, that the concerns of all participants will be considered in the decision making process, and that the decision-makers will seek out and facilitate the involvement of those potentially affected.

In addition, Executive Order 13166 requires LEP persons be given meaningful access to the project development process. This would require providing materials and information in other languages as needed.

Table 4-7. Household Linguistic Isolation

Linguistically Isolated /a/				Not Linguistically Isolated /b/	Percentage of Census tract Households Linguistically Isolated	Language Spoken by Largest LEP Population in Census tract
Spanish	Asian/Pacific Island	Other Languages	Total			
Census tract 2060.30						
92	0	0	92	176	34%	Spanish
Census tract 2060.40						
408	64	0	472	652	42%	Spanish
Census tract 2062						
0	465	0	465	635	42%	Asian/Pacific Island
Census tract 2073						
258	244	44	546	2,406	18%	Spanish
Census tract 2074						
0	0	0	0	7	0%	N/A
Census tract 2075						
160	758	41	959	2,095	31%	Asian/Pacific Island
Census tract 2077.10						
53	273	0	326	264	55%	Asian/Pacific Island
Project Area						
971	1,804	85	2,860	6,235	31%	Asian/Pacific Island

Source: U.S. Census Bureau, Summary File 3, 2000
Note:
/a/ A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well." In other words, all members 14 years old and over have at least some difficulty with English.
/b/ Non linguistically isolated households include households where members who speak another language other than English speak English well to very well.

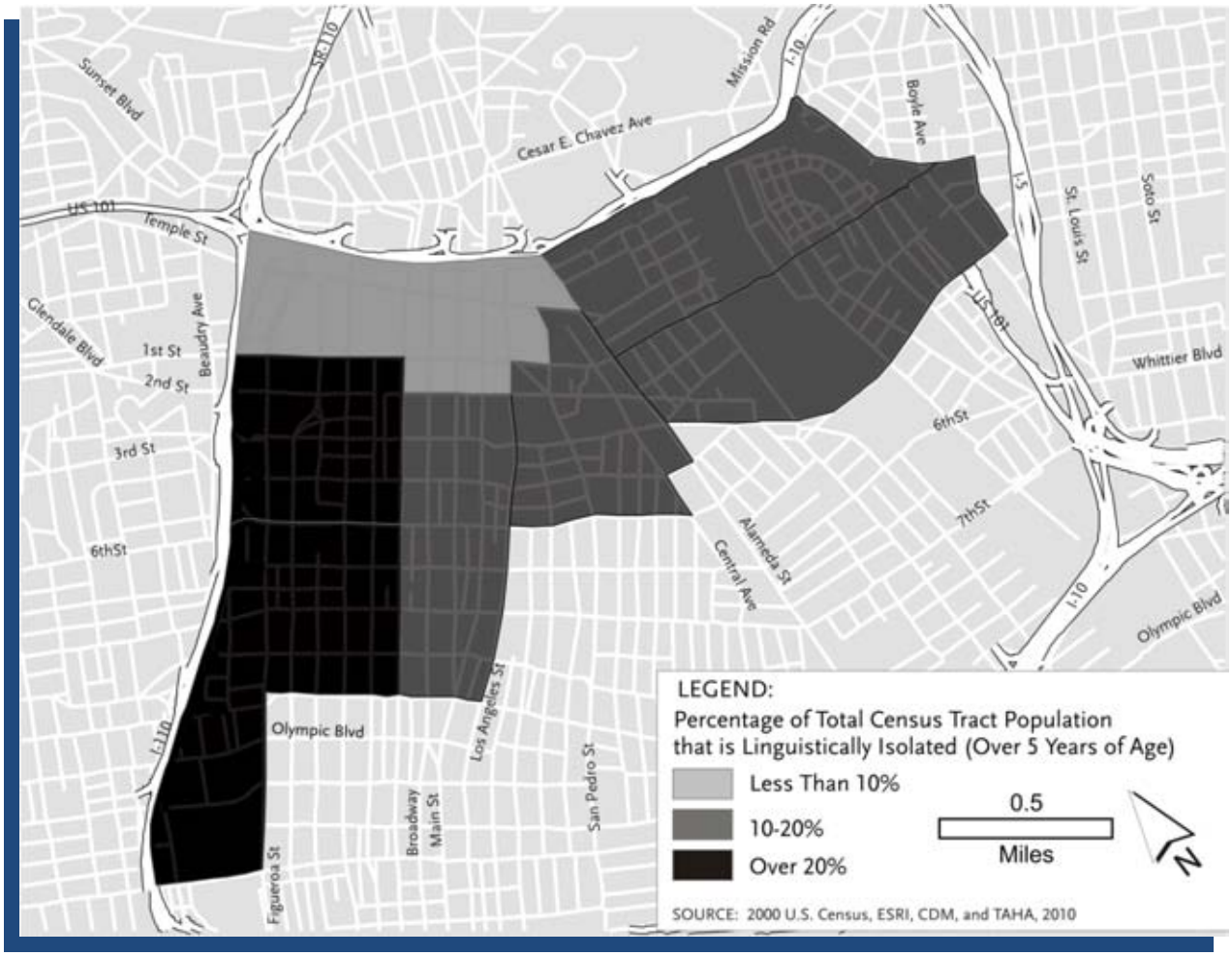


Figure 4-7. LEP Population Distribution in the Project Area

4.6.1 Alternatives Analysis Outreach

Metro has provided opportunities for public input since the beginning of the project development process. During the alternatives analysis (AA) phase of the project, Metro held two formal early scoping meetings as follows:

- November 6, 2007 – Los Angeles Central Library, Bunker Hill, Los Angeles
- November 7, 2007 – Japanese American National Museum, Little Tokyo, Los Angeles

One hundred seventeen persons attended these meetings, and Metro received 88 comments.

Metro presented a project update to the community on the following dates:

- February 26 and October 21, 2008 – Japanese American National Museum, Little Tokyo, Los Angeles
- February 28 and October 16, 2008 – Los Angeles Central Library, Bunker Hill, Los Angeles

One hundred and fourteen persons attended the February 2008 meetings, and 109 persons attended the October 2008 meetings. Metro received 57 comments from the February 2008 meetings and 51 comments from the October 2008 meetings.

Notices of these meetings were published in the *Los Angeles Downtown News* (English-language), *Los Angeles Garment and Citizen* (English/Spanish-language), and *Rafu Shimpo* (Japanese-language). Over 500 notices were mailed out with information about the meetings.

Metro held additional stakeholder meetings throughout the AA phase. Stakeholders include the LTCC, the LTSC, the Downtown Neighborhood Council, various Business Improvement Districts (BIDs), Bringing Back Broadway, and the Higgins Building Home Owners Association, among others.

4.6.2 Draft EIS/EIR Outreach

To ensure meaningful public participation during the project development process, Metro developed the Community Outreach and Public Participation Plan (PPP). The PPP includes policies relating to the following:

- Identifying stakeholders
- Establishing communication protocols
- Tracking public input
- Scheduling public involvement opportunities
- Generating publicity
- Identifying methods for disseminating information

The PPP is flexible and can be modified as public involvement progresses. The PPP reaches out to communities well beyond the proposed alignments, reflecting the region-wide impact this project could have.

Metro held four public scoping meetings. Metro gave notice of these meetings by sending 1,543 notices and 721 e-mails to residences and businesses in project area. Notices were published in the *Los Angeles Times*, *Daily Trojan*, *Pasadena Star News*, *Los Angeles Downtown News* (English-language), *Los Angeles Garment and Citizen* (English/Spanish-language), *La Opinión* (Spanish Language), and *Rafu Shimpo* (Japanese-language). The public scoping meetings were held as follows:

- March 30, 2009 – University of Southern California, South Los Angeles, Los Angeles
- March 31, 2009 – Lake Avenue Church, City of Pasadena

- April 1, 2009 – Japanese American National Museum, Little Tokyo, Los Angeles
- April 2, 2009 – Los Angeles Central Library, Bunker Hill, Los Angeles

Metro conducted public scoping meetings in an open house format, which allowed attendees the opportunity to review project information prior to the start of the presentation and comment period. Metro project team members attended the meetings to address public questions related to the project. Metro provided Spanish translators at all meetings and Japanese translators at the April 1st meeting.

Following the open house period, Metro gave a presentation regarding the purpose of the scoping meeting and the proposed project. Metro placed emphasis on the importance of community participation and noted comments could be made in person at the scoping meetings or by telephone, fax, postal mail, or e-mail. Following the presentation, the public had the opportunity to make verbal comments. A court reporter transcribed the public's comments.

Metro moderated public comments, providing two minutes for speakers who had submitted speaker cards and four minutes for speakers that required translation services. After the comment portion, staff remained to field additional questions or comments. Approximately 175 persons attended the four scoping meetings. Metro conducted a 49-day scoping period for receiving public comments, which was longer than the required 45-day period. Metro received a total of 127 comments from the public as letters, e-mails, comment cards, or oral testimony.

Metro held additional community update meetings during November 2009. Like the public scoping meetings, Metro gave notice of community update meetings through a variety of media and in multiple languages. Meetings involved an open house period, a presentation, and an opportunity for attendees to comment orally or in writing. These meetings were held as follows:

- November 5, 2009 – Lake Avenue Church, City of Pasadena
- November 7, 2009 – Wurlitzer Building, Historic Core, Los Angeles
- November 10, 2009 – Los Angeles Central Library, Bunker Hill, Los Angeles
- November 12, 2009 – Japanese American National Museum, Little Tokyo, Los Angeles

Metro also held additional meetings with stakeholders. The stakeholders included the LTCC, LTSC, and BIDs, among other groups.

4.6.3 Public Outreach in Little Tokyo

Little Tokyo is important because it is the only identified minority portion of the project area. The area has historic character and symbolic importance to Japanese-Americans. In the PPP, Metro set up a task force responsible for outreach to Little Tokyo. As a result, Metro held several meetings in Little Tokyo. Table 4-8 shows the schedule of meetings.

During alternatives analysis of the proposed project, Metro held a scoping meeting at the Japanese American National Museum (November 7, 2007) and two community update meetings (February 26 and October 21, 2008). During the draft EIS/EIR phase, Metro held a scoping meeting (April 1, 2009)

and three update community meetings (one on August 5, 2009 and two on November 12, 2009) in Little Tokyo. Metro has held meetings with Little Tokyo stakeholders including the LTCC, LTSC, the Japanese American National Museum (JANM), and the Japanese Chamber of Commerce of Southern California.

Metro established the Little Tokyo Working Group (LTWG), which is comprised of stakeholders in Little Tokyo and the Arts District. The LTWG is a regularly-scheduled forum that allows closer examination of community concerns related to the Regional Connector project. The group typically meets bi-weekly or as needed. Metro attends the meetings along with members of the environmental consultant team. The LTWG will function through the final EIS/EIR process. Although the LTWG gathers several stakeholders in one place, it is not intended to take the place of meetings with individual stakeholders. Appendix A is a letter from the Little Tokyo Community Council thanking Metro for their outreach to and work with the community and for developing the Fully Underground LRT Alternative – Little Tokyo Variation 1 in response to community concerns.

Metro sought to ensure participation by LEP populations near Little Tokyo. Accordingly, it published notices of meetings in the *Rafu Shimpo*, a local Japanese-language newspaper, and the *Los Angeles Garment and Citizen*, and English/Spanish-language newspaper. During the community meetings in Little Tokyo, Metro provided presentation materials in English, Spanish, and Japanese and provided translation services in Spanish and Japanese. Metro employed street canvassing to distribute information about meetings to pedestrians and businesses in Little Tokyo.

Appendix B shows a matrix of stakeholder meetings and presentation materials.

4.6.4 Comments Regarding Environmental Justice

Of 127 comments received during the scoping process, 20 directly related to environmental justice issues. Most comments focused on potential impacts to Little Tokyo. Issues of concern included the following:

- Impacts to local businesses during construction
- Access to local businesses and to Little Tokyo in general during construction
- Loss of parking during construction and operations
- Safety at the 1st Street/Alameda Street intersection
- Displacement of more businesses in Little Tokyo/Loss of space
- Community cohesion

Project impacts related to these concerns are discussed in the following section.

Table 4-8. Public Outreach in Little Tokyo

Meeting	Date	Location
General Community Meetings		
Early Scoping Meeting (AA Phase)	11/07/2007	JANM
Community Update Meeting #1 (AA Phase)	02/26/2008	JANM
Community Update Meeting #2 (AA Phase)	10/21/2008	JANM
Scoping Meeting (Draft EIS/EIR)	04/01/2009	JANM
Community Update Meeting #1(Draft EIS/EIR)	08/05/2009	JANM
Community Update Meeting #2 (Draft EIS/EIR) (two meetings the same day)	11/12/2009 2:00PM and 6:30PM	JANM
Stakeholder Meetings		
Go For Broke	05/11/2009	
Japanese American National Museum	07/14/2009; 12/16/2009	
Japanese Chamber of Commerce of Southern California	08/18/2009	
Little Tokyo Business Association	12/10/2009	
Little Tokyo Community Advisory Committee	9/16/2009	
Little Tokyo Community Council	02/19/2008; 03/12/2008; 04/02/2008; 05/13/2008; 05/20/2008; 04/28/2009; 05/05/2009; 07/13/2009; 07/22/2009; 08/13/2009; 8/25/2009; 9/22/2009	
Little Tokyo Service Center	11/20/2007; 05/13/2008; 10/13/2009	
Little Tokyo Working Group	9/17/2009; 10/01/2009; 10/15/2009; 11/19/2009; 12/17/2009	
Geffen Contemporary at Museum of Contemporary Art (MOCA)	8/25/2009	
Savoy Home Owners Association	9/29/2009; 11/30/2009	

Source: Metro, Final Alternatives Analysis Report, December 2008; The Roberts Group, 2010

5.0 IMPACTS

5.1 No Build Alternative

Under the No Build Alternative, transit infrastructure investment would be limited to improvements planned in the 2009 Metro LRTP. By 2035, several new Metro rail lines will exist and bus services will have been reorganized and expanded to connect with these rail lines. The transit network within the project area will otherwise be largely the same as it is now.

5.1.1 Transit Service Equity

Transit lines from several service providers currently serve the project area. Providers of transit include Metro, the City of Los Angeles Department of Transportation (LADOT), Foothill Transit, the Orange County Transit Authority (OCTA), and Montebello Bus Lines. The project area is served by the Metro Blue Line to Long Beach, the Metro Red Line to North Hollywood, the Metro Purple Line to Wilshire/Western, and the Metro Gold Lines to Pasadena and East Los Angeles. The Metro Gold Lines stop in Little Tokyo. The No Build Alternative would maintain the current level of bus and rail transit access in the project area.

The No Build alternative would not increase connectivity to regional public transit; therefore, low-income and minority populations in the project area may not have equitable access to jobs and services. This is particularly true of populations in Little Tokyo. Traffic congestion throughout the region is anticipated to increase. Like automobile traffic, current transit services would be impacted by this congestion. This effect would occur throughout the project area and the Los Angeles region, and would not occur disproportionately in Little Tokyo. Therefore, the No Build Alternative would not result in direct, indirect, or cumulative disproportionate adverse impacts with respect to transit service equity.

5.1.2 Traffic Congestion

Traffic congestion is expected to increase in the project area region. All communities, regardless of socioeconomic or minority status, would be affected. Downtown Los Angeles and Little Tokyo would remain common destinations for commuters in vehicles. Some congestion relief would occur under the No Build Alternative with transit improvements planned in the Metro 2009 LRTP. The No Build Alternative would not divert a disproportionate concentration of congestion to the Little Tokyo area. The No Build Alternative would not have direct, indirect, or cumulative disproportionate adverse impacts to traffic congestion.

5.1.3 Parking

On-street parking conditions are not anticipated to substantially change under the No Build Alternative. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts related to parking are anticipated.

5.1.4 Displacement and Relocation

The No Build Alternative would not displace businesses or populations in the project area. No direct, indirect, or cumulative disproportionate adverse impacts associated with displacements are anticipated.

5.1.5 Community and Neighborhoods

The No Build Alternative would not involve street closures or result in disproportionate adverse impacts to community cohesion, access, or exclusion. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts associated with communities are anticipated.

5.1.6 Visual Resources and Aesthetics

The No Build Alternative would not change visual elements that currently exist in the project area. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to visual resources and aesthetics are anticipated.

5.1.7 Air Quality

The No Build Alternative includes transit projects that would reduce regional criteria pollutant emissions. However, increased congestion would increase emissions. As a result, minority and low-income populations in the project area would be adversely impacted. Adverse air quality impacts associated with increased congestion would be spread over the entire region. All communities, regardless of minority status or income, would be affected. Therefore, no direct, indirect, or cumulative disproportionate impacts to air quality are anticipated.

5.1.8 Noise and Vibration

Transit projects would not be constructed in the project area under the No Build Alternative. Therefore, no direct, indirect, or cumulative disproportionate impacts associated with noise and vibration are anticipated.

5.1.9 Geotechnical/Subsurface/Seismic/Hazardous Materials

Transit project would not be constructed in the project area under the No Build Alternative. Therefore, no direct, indirect, or cumulative disproportionate impacts associated with geotechnical/subsurface/seismic/hazardous materials are anticipated.

5.1.10 Water Quality

The project area is heavily urbanized and covered largely by impervious surfaces. The No Build Alternative would not result in additional water runoff that could impact water quality in the project area. No direct, indirect, or cumulative disproportionate adverse impacts to water quality are anticipated.

5.1.11 Energy

Under the No Build Alternative, increased Vehicle Miles Traveled (VMT) would result in increased automobile fuel consumption throughout the project area and region. The region would be adversely impacted, but the impact would not fall disproportionately on the project area. No direct, indirect, or cumulative disproportionate adverse impacts related to energy are anticipated.

5.1.12 Climate Change

There would be emissions associated with construction and operation of transit projects under the No Build Alternative, but the effects would be regional, not localized. Transit projects would not be

constructed in the project area. No direct, indirect, or cumulative disproportionate adverse impacts associated with climate change are anticipated.

5.1.13 Historic, Archaeological, and Paleontological Resources

Construction of transit projects in the project area would not occur under the No Build Alternative. Thus, this alternative would not disturb archaeological or paleontological resources or alter historic or architectural resources. No direct, indirect, or cumulative disproportionate adverse impacts to historic, archaeological, or paleontological resources are anticipated.

5.1.14 Parklands and Other Community Facilities

Parklands and community facilities would not be acquired under the No Build Alternative. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to parklands or other community facilities are anticipated.

5.1.15 Economic Vitality and Employment Opportunities

Transit projects would not be constructed in the project area under the No Build Alternative. Economic vitality could change in Little Tokyo due to trends unrelated to this project alternative. No direct, indirect, or cumulative disproportionate adverse impacts to economic vitality and employment opportunities are anticipated.

5.1.16 Safety and Security

Transit projects would not be constructed in the project area. No direct, indirect, or cumulative disproportionate adverse impacts to safety and security are anticipated.

5.1.17 Construction Impacts

Transit projects would not be constructed in the project area. No direct, indirect, or cumulative disproportionate adverse impacts from construction are anticipated.

5.2 Transportation Systems Management (TSM) Alternative

The TSM Alternative would link the 7th Street/Metro Center Station and Union Station with two new express shuttle bus lines. These buses would run frequently, especially during peak hours. The buses may also have traffic signal priority like the Metro Rapid system. Signal priority is a traffic signal control system that grants longer green lights to oncoming transit vehicles. Bus stops would be located every two to three blocks to maximize transit access to the surrounding area. New bus stops and signage would be added. Additionally, like under the No Build Alternative, other, unrelated transit projects would be constructed in the region.

5.2.1 Transit Service Equity

Transit lines from several service providers currently serve the project area. Providers of transit include Metro, the City of Los Angeles Department of Transportation (LADOT), Foothill Transit, the Orange County Transit Authority (OCTA), and Montebello Bus Lines. The TSM Alternative would maintain local bus and rail transit in the project area and add new shuttle bus lines that would serve Little Tokyo and low-income communities in the project area.

The TSM Alternative would not increase connectivity to regional mass transit as much as the build alternatives, including the Locally Preferred Alternative; therefore, low-income and minority populations in the project area may not have improved access to jobs and services. Traffic congestion throughout the region is anticipated to increase. Like automobile traffic, current transit services would be impacted by this congestion. This effect would occur throughout the project area and the Los Angeles region, and would not occur disproportionately in Little Tokyo. Therefore, the TSM Alternative would not result in direct, indirect, or cumulative disproportionate adverse impacts with respect to transit service equity.

5.2.2 Traffic Congestion

The TSM Alternative would enhance the link between Union Station and the 7th Street/Metro Center Station. To a limited extent, the enhanced connection would increase transit ridership on connecting rail lines and reduce vehicle trips into the downtown area. A modest, beneficial impact to traffic congestion is anticipated.

There may be increased delays for vehicular traffic if new buses are given signal priority. The downtown area is characterized by short block segments and interaction between intersections. Thus, the Little Tokyo community would not be disproportionately impacted by the TSM Alternative. No direct, indirect, or cumulative disproportionate adverse impacts to traffic congestion are anticipated.

5.2.3 Parking

5.2.3.1 Direct Impacts

The TSM Alternative would result in the permanent loss of up to 24 on-street parking spaces. Parking spaces would be lost from installation of new bus stops on 2nd Street between Hill Street and Central Avenue. Up to twelve of the lost spaces would be found in Little Tokyo where the community has expressed concern over parking loss. Disproportionate adverse impacts related to parking in Little Tokyo are anticipated.

5.2.3.2 Indirect Impacts

There would be no indirect disproportionate adverse impacts to parking under the TSM Alternative.

5.2.3.3 Cumulative Impacts

There would be no cumulative disproportionate adverse impacts to parking under the TSM Alternative.

5.2.4 Displacement and Relocation

The TSM Alternative would not displace businesses or populations in the project area. No direct, indirect, or cumulative disproportionate adverse impacts associated with displacements are anticipated.

5.2.5 Community and Neighborhoods

The TSM Alternative would not involve changes, such as street closures, resulting in disproportionate effects to community cohesion, access, and exclusion. Construction of new bus stops and signage would not impact the viability of neighborhoods. Up to 24 parking spaces would be displaced on 2nd Street, and this may introduce the perception of a negative effect on nearby businesses. However, this

would be an insignificant amount of parking loss, compared to the amount of readily available off-street parking and other curb parking in the area. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to community cohesion or access are anticipated.

5.2.6 Visual Resources and Aesthetics

The TSM Alternative would not introduce visual elements inconsistent with the current aesthetic of Little Tokyo or the project area. New bus stop shelters and signage would be similar to existing ones and would not block building frontages. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to visual resources and aesthetics are anticipated.

5.2.7 Air Quality

The TSM Alternative would enhance the link between Union Station and the 7th Street/Metro Center Station. To a limited extent, the enhanced connection would increase transit ridership on connecting rail lines and reduce vehicle trips into the downtown area. A modest beneficial impact to regional criteria pollutant emissions is anticipated. Increased transit traffic could lead to increased travel times for vehicle traffic. Adverse air quality impacts associated with increased congestion would be spread over the entire region. All communities, regardless of minority status or income, would be affected. Therefore, no direct, indirect, or cumulative disproportionate impacts to air quality are anticipated.

5.2.8 Noise and Vibration

The TSM Alternative would introduce new bus service in the project area. Bus activity would have to more than double to noticeably increase bus-related noise. Noise and vibration from increased bus activity in the project area would be similar to existing levels. Therefore, no direct, indirect, or cumulative disproportionate impacts from noise and vibration are anticipated.

5.2.9 Geotechnical/Subsurface/Seismic/Hazardous Materials

Construction of bus shelters under this alternative would result in minimal excavation of soil. Therefore, no direct, indirect, or cumulative disproportionate impacts associated with geotechnical/subsurface/seismic/hazardous materials are anticipated.

5.2.10 Water Quality

The project area is heavily urbanized and covered largely by impervious surfaces. The TSM Alternative would not result in additional water runoff that could impact water quality in the project area. No direct, indirect, or cumulative disproportionate adverse impacts to water quality are anticipated.

5.2.11 Energy

Construction under the TSM Alternative would use minimal amounts of energy. New buses would run on Compressed Natural Gas (CNG), which would result in a one percent increase in energy consumption. This alternative would reduce regional VMT. Beneficial impacts to energy consumption from reduced VMT are anticipated in the project area.

5.2.12 Climate Change

The TSM Alternative would add two new bus lines to the project area. Effects from emissions of new buses would result regionally, not locally. The TSM Alternative would be consistent with State Bill (SB)

375 because it increases regional transportation capacity and decreases emissions from passenger vehicles. No direct, indirect, or cumulative disproportionate adverse impacts associated with climate change are anticipated.

5.2.13 Historic, Archaeological, and Paleontological Resources

The TSM Alternative would introduce new bus service in the project area. Buses would not differ from existing area transit. No direct, indirect, or cumulative disproportionate adverse impacts to historic, archaeological, or paleontological resources are anticipated.

5.2.14 Parklands or Other Community Facilities

The TSM Alternative would not have adverse impacts on parklands and community facilities. New buses would operate on existing right-of-ways and involve minimal infrastructure construction. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to parklands or other community facilities are anticipated.

5.2.15 Economic Vitality and Employment Opportunities

The TSM Alternative would introduce new shuttle service in the project area. New shuttle service would increase transportation access to Little Tokyo. As such, beneficial impacts to economic vitality and employment opportunities are predicted.

5.2.16 Safety and Security

5.2.16.1 Direct Impacts

The TSM Alternative would add two bus lines to the project area. The TSM Alternative could potentially change street crossing times in Little Tokyo and impact safety for elderly pedestrians. However, these effects would be spread throughout the entire project area. In addition, Metro would coordinate with LADOT regarding the signalization of shuttle service in Little Tokyo. Metro would conduct a pedestrian education program in Little Tokyo focusing on transit safety for the new shuttles. Disproportionate adverse impacts to safety and security are not anticipated.

5.2.16.2 Indirect Impacts

This alternative would not result in disproportionate adverse impacts to safety or security.

5.2.16.3 Cumulative Impacts

This alternative would not result in cumulative disproportionate adverse impacts to safety or security.

5.2.17 Construction Impacts

Construction under the TSM Alternative would be minimal (stops and signage). Construction methods would not be unique. Bus stops would use the existing right-of-way. Street closures would be unnecessary, so mobility would not be limited. Table 5-1 shows potential disproportionate construction-related impacts for the proposed TSM Alternative. Disproportionate impacts associated with parking during construction are not anticipated. No other direct, indirect, or cumulative disproportionate adverse construction-related impacts are anticipated.

Table 5-1. Summary of Construction Impacts for the TSM Alternative

Topic	Impact Determination	Disproportionate Impact	EJ Mitigation	EJ Impact After Mitigation
Traffic, Circulation, and Parking	Not Adverse	Not Adverse	None	Not Adverse
Land Use and Development	Not Adverse	Not Adverse	None	Not Adverse
Displacement and Relocation	Not Adverse	Not Adverse	None	Not Adverse
Community & Neighborhood Impacts	Not Adverse	Not Adverse	None	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Not Adverse	None	Not Adverse
Air Quality	Not Adverse	Not Adverse	None	Not Adverse
Noise and Vibration	Not Adverse	Not Adverse	None	Not Adverse
Ecosystems/Biological Resources	Not Adverse	Not Adverse	None	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Not Adverse	Not Adverse	None	Not Adverse
Water Resources	Not Adverse	Not Adverse	None	Not Adverse
Energy	Not Adverse	Not Adverse	None	Not Adverse
Climate Change	Not Adverse	Not Adverse	None	Not Adverse
Historic, Archaeological & Paleontological	Not Adverse	Not Adverse	None	Not Adverse
Parklands or Other Community Facilities	Not Adverse	Not Adverse	None	Not Adverse
Economic and Fiscal	Not Adverse	Not Adverse	None	Not Adverse
Safety & Security	Not Adverse	Not Adverse	None	Not Adverse

Source: TAHA, 2010

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would start tracks at the 7th Street/Metro Center Station, head north under Flower Street, resurface north of 4th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street and split into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway).

The alignment would then head east on Temple Street, realign into a dual track configuration just east of Los Angeles Street, and connect to Metro Gold Line tracks in a 3-way junction north of the Little Tokyo/Arts District Station on Alameda Street. An automobile underpass and pedestrian overpass will be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts. Traffic lanes and parking on 2nd Street would be reduced.

5.3.1 Transit Service Equity

Transit lines from several service providers currently serve the project area. Providers of transit include Metro, the LADOT, Foothill Transit, the OCTA, and Montebello Bus Lines. The At-Grade Emphasis LRT Alternative would create new transit stations in the project area, increasing access to the project area. This alternative would increase regional mobility for minority and low-income communities. Increased regional connectivity would reduce transit transfers. This would have a beneficial economic impact to elderly and low-income communities.

Increased regional connectivity would enhance access to major employment centers, including to civic employers in downtown. This alternative would not create a new station in Little Tokyo, but would connect to the Metro Gold Line, which currently serves Little Tokyo. This alternative would have direct, beneficial impacts to transit equity.

5.3.2 Traffic Congestion

The At-Grade Emphasis LRT Alternative would significantly impact traffic at several intersections. During AM peak hours, 17 intersections would experience significant congestion compared to the No Build Alternative. Of these 17 intersections, four are in Little Tokyo. During PM peak hours, 26 intersections would experience significant congestion compared to the No Build Alternative. Four of these 26 intersections are in Little Tokyo. Despite a potentially significant increase in traffic congestion in the project area, the congestion would not be concentrated in Little Tokyo. Therefore, no disproportionate impacts to traffic congestion are anticipated.

5.3.3 Parking

5.3.3.1 Direct Impacts

The At-Grade Emphasis LRT Alternative would result in the permanent loss of up to 51 on-street parking spaces, 29 on-street loading spaces and 77 pay-to-park spaces. Of these, 33 pay to-park spaces, 23 on-street parking spaces, and five on-street loading spaces are in Little Tokyo. Both on- and off-street parking is limited in Little Tokyo. The Little Tokyo community has expressed concern over potential loss of parking. Disproportionate adverse impacts to parking availability for Little Tokyo are anticipated.

5.3.3.2 Indirect Impacts

The removal of parking spaces under the At-Grade Emphasis LRT Alternative could adversely impact businesses in the project area. Business revenue could drop if vehicular access to businesses is reduced. New transit would provide increased pedestrian access to businesses, which may offset some adverse impact. However, disproportionate impacts are anticipated within the Little Tokyo community area.

5.3.3.3 Cumulative Impacts

The At-Grade Emphasis LRT Alternative would result in the permanent displacement of 128 parking spaces (including 51 on-street parking spaces), 56 of them in Little Tokyo. The community has expressed concern over potential loss of parking. Many older businesses in the project area do not provide as many parking spaces as code requires. Thus, surface lots are an important community resource in the project area.

Transit projects compensate for loss of parking because they reduce vehicle traffic and the demand for parking. This alternative would increase non-automobile, transit access to the project area. Therefore, the proposed At-Grade Emphasis LRT Alternative would partially offset potential adverse impacts to parking. Still, disproportionate cumulative impacts to parking are expected within the Little Tokyo community.

5.3.4 Displacement and Relocation

The At-Grade Emphasis LRT Alternative would not displace businesses or result in the loss of jobs in Little Tokyo. No direct, indirect, or cumulative disproportionate adverse impacts associated with displacements are anticipated.

5.3.5 Community and Neighborhoods

5.3.5.1 Direct Impacts

The At-Grade Emphasis LRT Alternative would not result in street closures. The parcels or portions of parcels that would be permanently displaced are currently vacant or occupied by civic uses or paid parking lots. Partial takes of civic parcels would displace primarily ornamental landscape elements. Therefore, takes would not reduce the amount of public services, open space, or building space that is available to the community.

This alternative would not adversely impact the cohesion or identity of Little Tokyo. However, this alternative would displace several on-street parking spaces in Little Tokyo. Increased access to and mobility within the project area would be a beneficial impact to the project area. This increased access through transit would offset some loss of parking. However, disproportionate impacts to community and neighborhood cohesion are expected.

The Alameda Street underpass at Temple Street would provide enough frontage road to continue to permit deliveries to the Japanese American National Museum (JANM) along Alameda Street. Bus loading areas on Alameda Street in front of the museum would be removed. Other bus loading spaces would be available adjacent to the museum on 1st Street. Other bus loading spaces could be created.

The Go For Broke Monument is located south of the proposed alignment along Temple Street. While the At-Grade Emphasis LRT Alternative would remove parking spaces in the parking lot adjacent to the Monument, the Monument would not be displaced. After mitigation measures are employed, no direct adverse impacts to culturally-significant community and neighborhood facilities are anticipated.

5.3.5.2 Indirect Impacts

A loss of parking under the At-Grade Emphasis LRT Alternative could result in indirect disproportionate impacts because the majority of displaced parking would be in Little Tokyo. Increased transit access in the project area may partially offset the loss of parking, but Little Tokyo would be adversely impacted. Local businesses that rely on paid parking lots and on-street parking could be adversely impacted. The community of Little Tokyo has expressed concern over parking loss and the corresponding effect on businesses. Indirect disproportionate adverse impacts to this minority community are anticipated.

5.3.5.3 Cumulative Impacts

Approximately 12 new land development construction projects are anticipated in the project area between now and 2014. An additional 54 new land development construction projects are anticipated between 2014 and 2018. Twelve major renovation projects are anticipated between now and 2014, and eight are expected between 2014 and 2018. Several projects would occur in Little Tokyo or the close vicinity and would involve the removal of public paid-parking lots. Thus, parking loss under the At-Grade Emphasis LRT Alternative would contribute cumulatively to parking loss in Little Tokyo. Loss of parking would result in cumulative disproportionate adverse impacts.

5.3.6 Visual Resources and Aesthetics

The At-Grade Emphasis LRT Alternative would run underground through the Financial District and at-grade in Bunker Hill, Civic Center, and on the periphery of Little Tokyo. New visual elements like pedestrian bridges, catenary poles and overhead wires and stations would be created in the project area. Two major visual elements of the At-Grade Emphasis LRT Alternative, the Alameda Street underpass at Temple Street and the potential pedestrian bridge at Temple Street and Alameda Street, would be located adjacent to Little Tokyo. This would result in a disproportionate visual impact.

5.3.7 Air Quality

Under the At-Grade Emphasis LRT Alternative, VMT would decrease by approximately 673,000 miles. A beneficial impact to criteria pollutant emissions is anticipated.

5.3.8 Noise and Vibration

The operation of the At-Grade Emphasis LRT Alternative would have moderate noise impacts on two sensitive receptors. These receptors are not located in Little Tokyo, so no disproportionate adverse impact from noise is expected. No direct, indirect, or cumulative disproportionate adverse impacts from vibration are anticipated.

5.3.9 Geotechnical/Subsurface/Seismic/Hazardous Materials

Under the At-Grade Emphasis LRT Alternative, there is the potential for intrusion of subsurface gases in the underground portion of the alignment. Mitigation measures would address these impacts. The At-Grade Emphasis LRT Alternative is located underground beneath the Financial District and Bunker

Hill, and is not located underground in Little Tokyo. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts associated with geotechnical/subsurface/ seismic/hazardous materials are anticipated.

5.3.10 Water Quality

The project area is heavily urbanized and covered largely by impervious surfaces. The At-Grade LRT Alternative would not result in additional water runoff that could impact water quality in the project area. No direct, indirect, or cumulative disproportionate adverse impacts to water quality are anticipated.

5.3.11 Energy

This alternative would reduce VMT in the project area by approximately 673,000 miles, which would be a beneficial impact in the project area. Energy usage for new rail lines and stations would result in a less than one percent increase in consumption in the Los Angele Department of Water and Power (LADWP) service area. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to energy consumption are anticipated. In fact, a beneficial impact to energy consumption from reduced VMT is anticipated in the project area.

5.3.12 Climate Change

Under the At-Grade Emphasis LRT Alternative, Greenhouse Gas (GHG) emissions in 2035 would decrease compared to the No Build Alternative and increase compared to existing 2009 emissions due to regional growth between 2009 and 2035 unrelated to the project. These effects would be regional and not localized. The At-Grade Emphasis LRT Alternative would be consistent with SB 375 in increasing regional transportation capacity and decreasing emissions from passenger vehicles. No direct, indirect, or cumulative disproportionate adverse impacts associated with climate change are anticipated.

5.3.13 Historic, Archaeological, and Paleontological Resources

The At-Grade Emphasis LRT Alternative would not have direct, indirect, or cumulative disproportionate adverse impacts to historic, archaeological, or paleontological resources.

5.3.14 Parklands or Other Community Facilities

5.3.14.1 Direct Impacts

The At-Grade Emphasis LRT Alternative alignment would run adjacent to a park in the project area (City Hall) but would not impede access to it. The At-Grade Emphasis LRT Alternative would eliminate uncontrolled, mid-block left turns. This could impede access to community facilities on 2nd Street, Los Angeles Street, and Main Street. Disproportionate adverse impacts to community facilities could occur but would be partially offset by the increased access provided by the LRT and thus would be less than significant.

5.3.14.2 Indirect Impacts

There would be no indirect disproportionate adverse impacts to parklands or other community facilities.

5.3.14.3 Cumulative Impacts

There would be no cumulative disproportionate adverse impacts to parklands or other community facilities.

5.3.15 Economic Vitality and Employment Opportunities

The At-Grade Emphasis LRT Alternative would enhance transportation access to Little Tokyo. Thus, beneficial impacts to economic vitality are anticipated.

5.3.16 Safety and Security

5.3.16.1 Direct Impacts

This alternative could increase potential conflicts between pedestrians or vehicles and trains. New underground stations could raise security concerns, particularly at night. These safety and security issues are applicable to light rail regardless of the socioeconomic or ethnic status of the surrounding community.

In the Little Tokyo area, Metro would offer to build a pedestrian bridge, across Alameda Street, just north of the Little Tokyo/Arts District Station. This bridge would separate pedestrian movements from LRT and motorized vehicle movements. If the community opts against construction of the pedestrian bridge, Metro would use design to enhance pedestrian safety.

Metro would create pedestrian queuing and refuge areas around proposed stations. Adding wide crosswalks would also facilitate pedestrian mobility. No disproportionate impacts to safety or security are anticipated.

5.3.16.2 Indirect Impacts

There would be no indirect disproportionate adverse impacts to safety and security under the At-Grade Emphasis LRT Alternative.

5.3.16.3 Cumulative Impacts

There would be no cumulative disproportionate adverse impacts to safety and security under the At-Grade Emphasis LRT Alternative.

5.3.17 Construction Impacts

Table 5-2 shows potential construction impacts under this alternative. Table 5-2 shows whether such impacts would be disproportionately adverse.

Construction of the At-Grade Emphasis LRT Alternative would potentially have adverse impacts associated with the following environmental topics:

- Parking and Circulation
- Visual Resources
- Community and Neighborhood Impacts

- Noise and Vibration
- Community Facilities
- Economic and Fiscal

Table 5-2. Summary of Construction Impacts for the At-Grade Emphasis LRT Alternative

Topic	Impact Determination	Disproportionate Impact	EJ Mitigation	Impact After EJ Mitigation
Traffic, Circulation, & Parking	Potentially Adverse	Potentially Adverse for Parking and Circulation	Yes	Not Adverse
Land Use & Development	Not Adverse	Not Adverse	None	Not Adverse
Displacement & Relocation	Potentially Adverse, 2 temporary construction easements	Not Adverse	None	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced	Indirectly Potentially Adverse	Yes	Not Adverse
Visual Resources & Aesthetics	Potentially Adverse, visual disruptions	Potentially Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Not Adverse	None	Not Adverse
Noise & Vibration	Potentially Adverse	Not Adverse	None	Not Adverse
Ecosystems/Biological Resources	Not Adverse	Not Adverse	None	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Potentially Adverse, potential soil erosion, seismically induced settlement, exposure to hazardous materials	Not Adverse	None	Not Adverse
Water Resources	Potentially Adverse, groundwater contamination	Not Adverse	None	Not Adverse
Energy	Not Adverse	Not Adverse	None	Not Adverse
Climate Change	Not Adverse	Not Adverse	None	Not Adverse
Historic, Archaeological & Paleontological	Potentially Adverse	Not Adverse	None	Not Adverse

Table 5-2. Summary of Construction Impacts for the At-Grade Emphasis LRT Alternative (continued)

Topic	Impact Determination	Disproportionate Impact	EJ Mitigation	Impact After EJ Mitigation
Parklands or Other Community Facilities	Potentially Adverse, reduction of access	Potentially Adverse	Yes	Not Adverse
Economic & Fiscal	Potentially Adverse	Indirect-Potentially Adverse	Yes	Not Adverse
Safety & Security	Potentially Adverse	Not Adverse	None	Not Adverse

Source: TAHA, 2010

5.3.17.1 Direct Impacts

Traffic Circulation

Construction of the At-Grade Emphasis LRT Alternative would result in temporary closure of several streets in the project area. In particular, construction of the Alameda Street underpass at Temple Street could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Unlike other street closures, closure of Alameda Street could be long term, unless the cut-and-cover method is used to construct the underpass. Alameda Streets is a major arterial providing access to Little Tokyo.

In addition, 2nd Street would be temporarily closed from Bunker Hill to the western border of Little Tokyo. Traffic would divert to 1st Street, which is already congest in Little Tokyo. Although construction impacts are short-term and intermittent, they would result in disproportionate adverse impacts.

Parking

Construction of the At-Grade Emphasis LRT Alternative would result in temporary displacement of on-street parking. Construction could restrict access to parking lots like the parking lot at the southwest corner of the intersection of Alameda and Temple Streets. This parking lot would be further restricted once Alameda Street is closed for underpass construction. Restricting access to the parking lot and curb parking would have disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Community Facilities

Construction of the At-Grade Emphasis LRT Alternative would temporarily restrict access to the Japanese American National Museum. Access to the museum would be decreased during construction of the Alameda Street underpass and pedestrian bridge. Loading spaces along Alameda Street would be temporarily displaced, and congestion would increase on 1st Street when 2nd Street is

closed. Overall, access to the building would be maintained. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Visual Resources

Most construction of this alternative would occur outside Little Tokyo. However, several large components of construction would occur near Little Tokyo including the Alameda Street underpass and pedestrian bridge. This construction could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Construction equipment and work areas in this area would be larger than most laydown areas in the alignment. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Parklands and Other Community Facilities

During construction of the At-Grade Emphasis LRT Alternative, street closures could restrict access to facilities adjacent to construction sites, such as the Little Tokyo Branch Public Library, MOCA, JANM, and the Go for Broke Monument, in addition to other facilities throughout the project area. Automobile and pedestrian detours would be needed. Annual festivals in the downtown area could also be temporarily affected. Emergency service response times could also be affected by the temporary street closures and detours. Construction impacts would be temporary and short-term, but they would be disproportionate.

5.3.17.2 Indirect Impacts

Community and Neighborhood Impacts

Construction of the At-Grade Emphasis LRT Alternative would result in temporary closure of several streets near Little Tokyo. Though temporary, these closures could restrict access to businesses in Little Tokyo. Impacts to businesses would affect the entire community.

In particular, construction of the Alameda Street underpass and potential pedestrian bridge could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. A closure of Alameda Street here could be particularly long. Alameda Street is one of the main arterials providing access to Little Tokyo. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Economic and Fiscal

Construction of the At-Grade Emphasis LRT Alternative would result in temporary closure of several streets in the project area. Construction of the Alameda Street underpass could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. A closure of Alameda Street here could be particularly long. Alameda Street is one of the main arterials providing access to Little Tokyo.

2nd Street would be closed for construction from Bunker Hill to the western border of Little Tokyo. Traffic would divert to 1st Street, which is already heavily congested in Little Tokyo. Construction impacts could adversely affect the economic viability of some businesses in Little Tokyo. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

5.3.17.3 Cumulative Impacts

One major development is anticipated in Little Tokyo, the Nikkei Center. However, this alternative would not contribute cumulatively to disproportionate adverse impacts.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would extend from the 7th Street/Metro Center Station north along Flower Street. A new station would be constructed north of 5th Street. At 2nd Street, an underground tunnel would extend east. A new underground station would be constructed near 2nd and Hope Streets, providing access to Bunker Hill. Another new underground station would be located either between Broadway and Spring Street or between Main and Los Angeles Streets.

A tunnel would emerge to the surface just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a vehicle underpass and pedestrian overpass would be constructed. This would reduce pedestrian and vehicle conflicts with trains. This alternative would have a single, at-grade crossing at the intersection of 1st and Alameda Streets.

5.4.1 Transit Service Equity

5.4.1.1 Direct Impacts

Several transit lines serve the project area. Transit providers include Metro, the LADOT, Foothill Transit, the OCTA, and Montebello Bus Lines. The Underground Emphasis LRT Alternative would create new transit stations, increasing access to the project area. Additionally, the Underground Emphasis LRT Alternative would increase regional mobility for minority and low-income communities.

Increased mobility includes a reduced number of transit transfers. Having fewer transfers would have a beneficial economic impact to elderly and low-income communities. Increased connectivity would add access to major employment centers, like all civic employers in downtown. The Underground Emphasis LRT Alternative would create a new transit station in Little Tokyo and increase this area's connectivity to the region. Beneficial impacts to transit equity are anticipated.

5.4.1.2 Indirect Impacts

There would be no indirect disproportionate adverse impacts to transit service equity under the Underground Emphasis LRT Alternative.

5.4.1.3 Cumulative Impacts

There would be no cumulative disproportionate adverse impacts to transit service equity under the Underground Emphasis LRT Alternative.

5.4.2 Traffic Congestion

Traffic at few intersections would be significantly impacted by operations of the Underground Emphasis LRT Alternative. In the AM peak hours, three intersections would experience new, significant traffic delays. Of these three intersections, two are located in the vicinity of Little Tokyo.

In the PM peak hours, seven intersections would experience new, significant traffic delays. Of these seven intersections, four would be located in and around Little Tokyo. Significant traffic impacts are

anticipated throughout the project area, but the majority would affect the Little Tokyo area. Therefore, disproportionate adverse impacts to traffic congestion are anticipated.

5.4.3 Parking

5.4.3.1 Direct Impacts

The Underground Emphasis LRT Alternative would permanently remove 148 to 281 pay-to-park parking spaces, 17 on-street parking spaces, and three on-street loading spaces. Of these spaces, 139 (49 to 94 percent of the total parking loss) pay-to-park spaces, ten on-street parking spaces, and the three on-street loading spaces are located in Little Tokyo. Parking opportunities in Little Tokyo are already limited.

The Little Tokyo community has expressed the importance of parking to their community. This alternative would partially offset the loss of parking due to increased transit use. However, disproportionate adverse impacts to parking availability in Little Tokyo are expected.

5.4.3.2 Indirect Impacts

Removal of off-street parking spaces would indirectly impact businesses in Little Tokyo. Business revenue could decrease if vehicular access to businesses is reduced. New transit would provide increased pedestrian access to businesses and may offset some adverse impacts from decreased vehicular access. However, disproportionate impacts associated with loss of parking are expected.

5.4.3.3 Cumulative Impacts

The Underground Emphasis LRT Alternative would result in permanent displacement of 149 parking spaces in Little Tokyo. The Little Tokyo community has expressed concerns regarding loss of parking space. Many older businesses in the project area do not provide as many parking spaces as code requires. Thus, surface lots are an important community resource in the project area.

Transit projects compensate for loss of parking because they reduce vehicle traffic and the demand for parking. This alternative would increase non-automobile, transit access to the project area. Therefore, this alternative would partially offset potential adverse impacts to parking. Still, disproportionate cumulative impacts to parking in the Little Tokyo community are expected.

5.4.4 Displacement and Relocation

5.4.4.1 Direct Impacts

The Underground Emphasis LRT Alternative would require seven partial takes, 12 full takes, 13 temporary construction easements, and 11 permanent underground easements. This alternative would require these properties for Traction Power Substation (TPSS) site locations, construction staging, right-of-way, below grade tunneling, and stations. In Little Tokyo, seven full takes would be required. Takes of these properties would displace three businesses and approximately 90 jobs. This is a more significant impact than displacement in the rest of the project area. Thus, there would be a disproportionate adverse impact associated with displacement.

5.4.4.2 Indirect Impacts

There would be no indirect disproportionate adverse impacts associated with displacement under the Underground Emphasis LRT Alternative.

5.4.4.3 Cumulative Impacts

There would be no cumulative disproportionate adverse impacts associated with displacement under the Underground Emphasis LRT Alternative.

5.4.5 Community and Neighborhoods

5.4.5.1 Direct Impacts

Construction of the Underground Emphasis LRT Alternative would displace approximately 13 businesses. Approximately 130 jobs would be displaced. Approximately 70 percent of these jobs would be lost in Little Tokyo (approximately 90 jobs). Given that Little Tokyo is fully developed, the jobs would have to be relocated in another community. Thus, Little Tokyo would necessarily lose jobs and businesses.

Displacement of properties would reduce the stock of commercial space in Little Tokyo. However, transit-oriented development could occur on properties where businesses were displaced. This development could generate additional commercial space and jobs. Still, disproportionate adverse impacts to community cohesion are anticipated.

The Underground Emphasis LRT Alternative would run primarily underground but would cross the intersection of Alameda and 1st Streets at grade. The portal and crossing here would not insurmountably divide the community. Access will be enhanced across the portal, reducing the chance of pedestrian-train conflict. No disproportionate adverse impacts associated with division of a community are anticipated.

The vehicular underpass on Alameda Street at 1st Street would provide enough frontage road to maintain delivery access for the JANM. Bus loading zones here would be displaced. Other bus loading spaces would be available adjacent to the museum on 1st Street. Additional replacement bus loading spaces could be created. School buses could still load passengers along 1st Street at the current loading zone.

The parking lot across the street from the JANM (which is the primary parking area for the museum) would not be displaced. No other culturally significant community facility would be directly impacted by the Underground Emphasis LRT Alternative. After employment of mitigation measures, direct, adverse impacts to culturally-significant community and neighborhood facilities are not anticipated.

5.4.5.2 Indirect Impacts

The loss of parking under this alternative could result in indirect disproportionate effects by decreasing business viability in Little Tokyo. Little Tokyo has expressed concern that a loss of parking could hurt businesses crucial to the area's cultural identity. The Underground Emphasis LRT Alternative could partially offset losses in parking through increasing transit access. However, local businesses that rely on paid parking lots and on-street parking could be adversely impacted. Indirect, disproportionate, adverse impacts to this minority community are anticipated.

Displacement of businesses and loss of the commercial space in Little Tokyo would have indirect, disproportionate, adverse impacts to the community. Little Tokyo is a redevelopment area. The CRA/LA focuses on redevelopment of commercial areas for economic development. The reduction in physical commercial space could greatly reduce the availability of redevelopment area. Therefore, potential for increased economic development in a primarily low-income community would be reduced.

The Underground Emphasis LRT Alternative could result in the creation of new, high-quality commercial development and related jobs in Little Tokyo. However, indirect, disproportionate adverse impacts to the Little Tokyo community are anticipated.

5.4.5.3 Cumulative Impacts

Approximately 12 new construction projects are anticipated in the project area by 2014. Fifty four new construction projects are planned between 2014 and 2018. Twelve major renovation projects are anticipated by 2014, and eight are anticipated between 2014 and 2018. Several of these projects would occur in Little Tokyo or its close vicinity and would involve the removal of public paid-parking lots. As such, parking loss that would occur under the Underground Emphasis LRT Alternative would contribute cumulatively to parking loss in Little Tokyo. Loss of parking is anticipated to have cumulative, disproportionate, adverse impacts.

5.4.6 Visual Resources and Aesthetics

The majority of the Underground Emphasis LRT Alternative alignment would run below ground. This would minimize impacts to visual resources. Surface elements of the alignment would include station entrances, portals, and pedestrian bridges.

A portal and pedestrian bridge would be located in Little Tokyo. Portal construction in Little Tokyo would remove the majority of structures in the block bounded by Alameda Street, 1st Street, 2nd Street, and Central Avenue. Depending on its final design, the pedestrian bridge could adversely impact the aesthetic character of the area. Disproportionate, adverse impacts to visual resources are anticipated.

5.4.7 Air Quality

VMT would be reduced by 833,000 miles under this alternative. A beneficial effect to criteria pollutant emissions is anticipated. No direct, indirect, or cumulative disproportionate impacts to air quality are anticipated.

5.4.8 Noise and Vibration

The operation of the Underground Emphasis LRT Alternative would have moderate noise impacts on one sensitive receptor (the Savoy residences). The Savoy is adjacent to Little Tokyo, and this would create a disproportionate noise impact.

No direct, indirect, or cumulative disproportionate adverse impacts associated with operational vibration are anticipated.

5.4.9 Geotechnical/Subsurface/Seismic/Hazardous Materials

This alternative involves the potential for intrusion of subsurface gases in the underground portions of the alignment. Underground portions of the alignment traverse a primarily minority and low-income area. Thus, exposure to subsurface gases, in particular methane, could be substantially higher for these populations. Residents of Bunker Hill and Little Tokyo could be particularly affected.

Mitigation measures have been developed to address these impacts. No direct, indirect, or cumulative disproportionate adverse impacts associated with geotechnical/ subsurface/seismic/hazardous materials are anticipated.

5.4.10 Water Quality

The project area is heavily urbanized and covered largely by impervious surfaces. The Underground LRT Alternative would not result in additional water runoff that could impact water quality in the project area. No direct, indirect, or cumulative disproportionate adverse impacts to water quality are anticipated.

5.4.11 Energy

New transit under this alternative would reduce VMT in the project area by approximately 833,300 vehicle miles. This would be a beneficial impact in the project area. Operations of new rail lines and stations would result in a less than one percent increase in consumption in the LADWP service area. Therefore, no direct, indirect, or cumulative disproportionate adverse impacts to energy consumption are anticipated. In fact, beneficial impacts to energy consumption from reduced VMT are anticipated in the project area.

5.4.12 Climate Change

Under the Underground Emphasis LRT Alternative, GHG emissions in 2035 would decrease compared to the No Build Alternative and increase compared to existing 2009 emissions due to regional growth between 2009 and 2035 unrelated to the project. These effects would be regional, not localized. Also the Underground Emphasis LRT Alternative would be consistent with SB 375 by increasing regional transportation capacity and decreasing emissions from passenger vehicles. No direct, indirect, or cumulative disproportionate adverse impacts associated with climate change are anticipated.

5.4.13 Historic, Archaeological, and Paleontological Resources

The Underground Emphasis LRT Alternative would not adversely impact historic, archaeological, or paleontological resources. No direct, indirect, or cumulative disproportionate, adverse impacts to historic, archaeological or paleontological resources are anticipated.

5.4.14 Parklands or Other Community Facilities

The Underground Emphasis LRT Alternative would not displace parkland or recreational facilities. Underground Emphasis LRT Alternative would not impede access to any community facility. Therefore, no direct, indirect, or cumulative disproportionate, adverse impacts to parklands or other community facilities are anticipated.

5.4.15 Economic Vitality and Employment Opportunities

The Underground Emphasis LRT Alternative would enhance transportation access to Little Tokyo. A potential new station at 2nd/Los Angeles Streets would benefit businesses in Little Tokyo. Another option would be to place to station at 2nd/Broadway instead, which is two blocks farther from Little Tokyo. Office Depot and Starbucks on the block bounded by Central Avenue, 1st Street, 2nd Street, and Alameda Street would be removed. This would reduce the amount of commercial space and jobs in Little Tokyo. Little Tokyo is fully developed, and it is unlikely Office Depot would relocate to another location in Little Tokyo.

However, Little Tokyo is a redevelopment area. As such, there are economic incentives for commercial redevelopment. No direct, indirect, or cumulative disproportionate, adverse impacts to economic vitality or employment opportunities are expected.

5.4.16 Safety and Security

5.4.16.1 Direct Impacts

The Underground Emphasis LRT Alternative could result in adverse impacts to pedestrian safety and security. A conflict could exist between pedestrians or vehicles and trains. A portal would be constructed adjacent to residences, museums and commercial uses with high pedestrian and vehicle traffic.

Residents around the portal would be disproportionately impacted by impacts from activity around the egress/ingress area of the proposed alignment. Underground stations could raise security concerns, particularly at night. These safety and security issues are applicable to light rail in general. They exist regardless of the socioeconomic or ethnic status of the surrounding community.

In the Little Tokyo area, Metro would offer to build a pedestrian bridge, across Alameda Street, just south of the Little Tokyo/Arts District Station. This bridge would separate pedestrian movements from LRT and motorized vehicle movements. If the community opts against construction of the pedestrian bridge, Metro would use design to enhance pedestrian safety. Metro would create pedestrian queuing and refuge areas around proposed stations. Adding wide crosswalks would also facilitate pedestrian mobility. No disproportionate, adverse impacts to safety and security are anticipated.

5.4.16.2 Indirect Impacts

There would be no indirect, disproportionate, adverse impacts to safety and security under the Underground Emphasis LRT Alternative.

5.4.16.3 Cumulative Impacts

There would be no cumulative, disproportionate, adverse impacts to safety and security under the Underground Emphasis LRT Alternative.

5.4.17 Construction Impacts

Table 5-3 shows potential construction impacts under this alternative. Table 5-3 shows whether such impacts would be disproportionately adverse.

Table 5-3. Summary of Construction Impacts for the Underground Emphasis LRT Alternative

Topic	Impact Determination	Disproportionate Impact	EJ Mitigation	Impact After EJ Mitigation
Traffic, Circulation, & Parking	Potentially Adverse	Potentially Adverse for Parking and Circulation	Yes	Not Adverse
Land Use & Development	Not Adverse	Not Adverse	None	Not Adverse
Displacement & Relocation	Potentially Adverse, 8 temporary construction easements	Not Adverse	None	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced	Indirectly Potentially Adverse	Yes	Not Adverse
Visual Resources & Aesthetics	Potentially Adverse, visual disruptions	Potentially Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Not Adverse	None	Not Adverse
Noise & Vibration	Potentially Adverse	Not Adverse	None	Not Adverse
Ecosystems/Biological Resources	Not Adverse	Not Adverse	None	Not Adverse
Geotechnical/ Subsurface/Seismic/ Hazardous Materials	Potentially Adverse, potential soil erosion, seismically induced settlement, exposure to hazardous materials	Not Adverse	None	Not Adverse
Water Resources	Potentially Adverse, groundwater contamination	Not Adverse	None	Not Adverse
Energy	Not Adverse	Not Adverse	None	Not Adverse
Climate Change	Not Adverse	Not Adverse	None	Not Adverse
Historic, Archaeological & Paleontological	Potentially Adverse	Not Adverse	None	Not Adverse
Parklands or Other Community Facilities	Potentially Adverse, reduction of access	Yes	Yes	Not Adverse

Table 5-3. Summary of Construction Impacts for the Underground Emphasis LRT Alternative (continued)

Topic	Impact Determination	Disproportionate Impact	EJ Mitigation	Impact After EJ Mitigation
Economic & Fiscal	Potentially Adverse	Indirectly Potentially Adverse	Yes	Not Adverse
Safety & Security	Potentially Adverse	Not Adverse	None	Not Adverse

Source: TAHA, 2010

Construction of the Underground Emphasis LRT Alternative would potentially have adverse impacts associated with the following environmental topics:

- Parking and Circulation
- Visual Resources
- Community and Neighborhood Impacts
- Noise and Vibration
- Community Facilities
- Economic and Fiscal

5.4.17.1 Direct Impacts

Traffic Circulation

Construction of the Underground Emphasis LRT Alternative would result in temporary closure of several streets in the project area. In particular, construction of the Alameda Street underpass at Temple Street could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Unlike other street closures, closure of Alameda Street could be long term, unless cut-and-cover methods are used to construct the underpass. Alameda Streets is a major arterial providing access to Little Tokyo.

In addition, 2nd Street would be temporarily closed between Alameda Street and Central Avenue. Traffic would divert to 1st Street, which is already congested in Little Tokyo. Although construction impacts are short-term and intermittent, they would result in disproportionate adverse impacts.

Parking

Construction of the Underground Emphasis LRT Alternative would result in temporary displacement of on-street parking. Construction could restrict access to parking lots like the parking lot at the southwest corner of the intersection of Alameda and 1st Streets. This parking lot would be further

restricted once Alameda Street is closed for underpass construction. Restricting access to the parking lot and curb parking would have disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Community Facilities

Construction of the At-Grade Emphasis LRT Alternative would temporarily restrict access to the Japanese American National Museum. Access to the museum would be decreased during construction of the Alameda Street underpass and pedestrian bridge. Loading spaces along Alameda Street would be temporarily displaced, and congestion would increase on 1st Street when 2nd Street is closed. School bus loading zones along 1st Street could be affected by construction-related traffic. Overall, access to the museum building would be maintained. Construction of the proposed 2nd Street station -Los Angeles Street Option could impede access to the Little Tokyo Library Branch. Overall, access to the library branch would be maintained. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Visual Resources

Several large components of construction would occur near Little Tokyo including the Alameda Street underpass and pedestrian bridge. This construction could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Construction equipment and work areas in this area would be larger than most laydown areas in the alignment. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Parklands and Other Community Facilities

During construction of the Underground Emphasis LRT Alternative, street closures could restrict access to facilities adjacent to construction sites, such as the Little Tokyo Branch Public Library and JANM, in addition to other facilities throughout the project area. Automobile and pedestrian detours would be needed. Annual festivals in the downtown area could also be temporarily affected. Emergency service response times could also be affected by the temporary street closures and detours. These construction activities would affect the entire proposed alignment. Cut-and-cover construction in the Financial District and Bunker Hill areas would require surface excavation along the entire LRT route. However, TBM construction would be used in Little Tokyo on 2nd Street, so access restrictions on 2nd Street would be limited to staging areas.

5.4.17.2 Indirect Impacts

Community and Neighborhood Impacts

Construction of the Underground Emphasis LRT Alternative would result in temporary closure of several streets near Little Tokyo. Though temporary, these closures could restrict access to businesses in Little Tokyo. Impacts to businesses would affect the entire community.

In particular, construction of the Alameda Street underpass could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. A closure of Alameda Street here could be particularly long. Alameda Street is one of the main arterials providing access to Little

Tokyo. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

Economic and Fiscal

Construction of the At-Grade Emphasis LRT Alternative would result in temporary closure of several streets in the project area. Construction of the Alameda Street underpass could result in disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. A closure of Alameda Street here could be particularly long. Alameda Street is one of the main arterials providing access to Little Tokyo. Construction impacts could adversely affect the economic viability of some businesses in Little Tokyo. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts.

5.4.17.3 Cumulative Impacts

One major development is anticipated in Little Tokyo, the Nikkei Center. However, this alternative would not contribute cumulatively to disproportionate adverse impacts.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Editor's Note: The Fully Underground LRT Alternative – Little Tokyo Variation 1 was designated by the Metro Board of Directors as the Locally Preferred Alternative and has been refined to further reduce impacts. No changes to the conclusion of this report for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would occur as a result of the refinements.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would extend north from the 7th Street/Metro Center Station through a tunnel below Flower Street to a new, underground station north of 5th Street. An underground tunnel would extend east from 3rd Street to a new, underground station near 2nd and Hope Streets. The tunnel would be constructed using either the cut-and-cover method or the sequential excavation method.

A tunnel, excavated by a tunnel boring machine, would continue east beneath 2nd Street. A second, underground station would be located between Broadway and Spring Street. The tunnel would continue under Little Tokyo to a third underground station at the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. The alignment would emerge to at-grade connections with the Metro Gold Line tracks. The north-south line would connect north of Temple and Alameda Streets and the east-west line would connect on 1st Street east of Alameda Street.

Direct, indirect, and cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would mirror those from Underground Emphasis LRT Alternative for the following environmental justice topics:

- Transit Service Equity (Section 5.4.1)
- Parking (Section 5.4.3) (construction only)
- Displacement and Relocation (Section 5.4.4)

- Community and Neighborhood (Section 5.4.5)
- Air Quality (Section 5.4.7)
- Geotechnical/Subsurface/Seismic/Hazardous Materials (Section 5.4.9)
- Water Quality (Section 5.4.10)
- Climate Change (Section 5.4.12)
- Historic, Archaeological & Paleontological (Section 5.4.13)
- Parklands or Other Community Facilities (Section 5.4.14)
- Economic Vitality and Employment Opportunities (5.4.15)

5.5.1 Traffic Congestion

Under the Fully Underground LRT Alternative – Little Tokyo Variation 1, the intersection of Alameda Street/1st Street would remain unchanged. The proposed alignment grade would be separated from automobile and pedestrian traffic. Trains would not have to cross 1st Street when travelling to or from the Little Tokyo/Arts District Station. The traffic signal cycle at this intersection would be improved.

Under this alternative, traffic congestion would be reduced in Little Tokyo. Reduced congestion would benefit the elderly, transit-dependent population. Beneficial impacts to traffic congestion are anticipated in Little Tokyo and the project area.

5.5.2 Noise and Vibration

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not have noise or vibration impacts to the Los Angeles Hompa Hongwanji Temple on 1st Street. Therefore, no direct, indirect, or cumulative disproportionate, adverse impacts from operational noise or vibration are anticipated.

5.5.3 Visual Resources

Fully Underground LRT Alternative – Little Tokyo Variation 1 would run underground until surfacing near a connection to the Metro Gold Line. Adverse impacts to scenic resources, vistas, lighting and shade and shadows are not anticipated. However, the visual character of Little Tokyo would be impacted. The majority of the structures on the block bounded by Alameda Street, 1st Street, 2nd Street, and Central Avenue would be demolished. Therefore, direct and indirect, disproportionate, adverse impacts to visual resources are anticipated.

5.5.4 Energy

Fully Underground LRT Alternative – Little Tokyo Variation 1 would reduce VMT in the project area by approximately 1.13 million vehicle miles. This would result in a beneficial impact to the project area. New rail operations would increase energy consumption in the LADWP service area by less than one percent. Therefore, beneficial impacts to energy consumption are anticipated.

5.5.5 Safety and Security

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would run almost entirely underground. Therefore, the potential for conflict between pedestrians or vehicles and trains would be low. Underground stations could raise security concerns, particularly at night. These safety and security issues are applicable to light rail in general. They exist regardless of the socioeconomic or ethnic status of the surrounding community. No disproportionate direct, indirect, or cumulative adverse impacts to safety and securities are anticipated.

5.5.6 Construction Impacts

Table 5-4 shows a comparison of construction impacts between this alternative and the Underground Emphasis LRT Alternative.

Table 5-4. Comparison of Construction Impacts under the Fully Underground LRT – Little Tokyo Variation 1 and under the Underground Emphasis LRT Alternative

Topic	Disproportionate Impact	
	Underground Emphasis LRT Alternative	Fully Underground LRT Alternative – Little Tokyo Variation 1
Traffic, Circulation, & Parking	Potentially Adverse for Parking and Circulation	Potentially Adverse for Parking during construction
Land Use & Development	Not Adverse	Not Adverse
Displacement & Relocation	Not Adverse	Not Adverse
Community & Neighborhood Impacts	Indirectly Potentially Adverse	Yes
Visual Resources & Aesthetics	Potentially Adverse	Not Adverse
Air Quality	Not Adverse	Not Adverse
Noise & Vibration	Not Adverse	Not Adverse
Ecosystems/Biological Resources	Not Adverse	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Not Adverse	Not Adverse
Water Resources	Not Adverse	Not Adverse
Energy	Not Adverse	Not Adverse
Climate Change	Not Adverse	Not Adverse
Historic, Archaeological & Paleontological	Not Adverse	Not Adverse

Table 5-4. Comparison of Construction Impacts under the Fully Underground LRT – Little Tokyo Variation 1 and under the Underground Emphasis LRT Alternative (continued)

Topic	Disproportionate Impact	
	Underground Emphasis LRT Alternative	Fully Underground LRT Alternative – Little Tokyo Variation 1
Parklands or Other Community Facilities	Not Adverse	Not Adverse
Economic & Fiscal	Indirectly Potentially Adverse	Not Adverse
Safety & Security	Not Adverse	Not Adverse

Source: TAHA, 2010

5.5.6.1 Direct Impacts

Parking

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would temporarily displace on-street parking and could restrict access to parking lots. Access to the parking lot at the southeast corner of the intersection of 1st Street and Central Avenue could be particularly restricted. Restricting access to the parking lot and curb parking would have disproportionate adverse impacts to Little Tokyo and the Japanese American National Museum. Construction impacts are short-term and intermittent, but they would result in disproportionate, adverse impacts.

Community and Neighborhoods/Community Facilities

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would temporarily restrict access to the Los Angeles Hompa Hongwanji Temple. However, access to the building would be maintained. Construction impacts are short-term and intermittent, but they would result in disproportionate adverse impacts to community facilities.

5.5.6.2 Cumulative Impacts

One major development is anticipated in Little Tokyo, the Nikkei Center. However, this alternative would not contribute cumulatively to disproportionate adverse impacts.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would extend north from the 7th Street/Metro Center Station through a tunnel below Flower Street to a new, underground station north of 5th Street. At underground tunnel would extend east from 3rd Street to a new, underground station near 2nd and Hope Streets. The tunnel would be constructed using either the cut-and-cover method or the sequential excavation method.

A tunnel, excavated by a tunnel boring machine, would continue east beneath 2nd Street. A second, underground station would be located between Broadway and Spring Street. The tunnel would continue under Little Tokyo to a third underground station at the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. The alignment would emerge to at-grade connections with Metro Gold Line tracks via three portals. The portal for the north-south line would be located north of Temple and Alameda Streets. Two, staggered portals for the east-west line would be located on 1st Street east of Alameda Street.

Direct, indirect, and cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 2 would mirror those from Fully Underground LRT Alternative – Little Tokyo Variation 1 for the following environmental justice topics. Although direct, indirect, and cumulative impacts for Variation 2 would be similar to those of Variation 1, it should be noted that the representatives of the Los Angeles Hompa Hongwanji Temple feel that the portal placement for Variation 2 would be more intrusive to them. The temple's board members issued a statement indicating that one of the proposed Variation 2 portals on 1st Street would be physically too close to the building's main entrance, and they prefer Variation 1 as a result.

- Transit Service Equity (Section 5.4.1)
- Parking (Section 5.4.3) (construction only)
- Displacement and Relocation (Section 5.4.4)
- Community and Neighborhood (Section 5.4.5)
- Visual Resources (Section 5.4.6)
- Air Quality (Section 5.4.7)
- Geotechnical/Subsurface/Seismic/Hazardous Materials (Section 5.4.9)
- Water Quality (Section 5.4.10)
- Climate Change (Section 5.4.12)
- Historic, Archaeological & Paleontological (Section 5.4.13)
- Parklands or Other Community Facilities (Section 5.4.14)
- Economic Vitality and Employment Opportunities (5.4.15)
- Traffic Congestion (5.5.1)
- Noise and Vibration (5.5.2)
- Energy (5.5.3)

- Safety and Security (5.5.4)
- Construction Impacts (5.5.5)

No additional analysis is required for this alternative.

6.0 POTENTIAL MITIGATION MEASURES

6.1 No Build Alternative

The No Build Alternative would not result in disproportionate adverse effects. Consequently, mitigation measures are not considered.

6.2 Transportation Systems Management (TSM) Alternative

Metro would conduct a parking needs assessment in Little Tokyo. This assessment would gauge the supply of and demand for business and resident parking in Little Tokyo. If demand exceeds supply, Metro would consider providing replacement parking for spaces lost as a result of the project. Metro would consider replacing lost parking spots for the duration of construction and operation of the project.

If parking supply exceeds demand, Metro would work with Little Tokyo and surrounding communities to show visitors and residents where parking is available. This effort could include adding signage. After implementation of these mitigation measures, adverse impacts related to parking would not be disproportionately significant.

6.3 At-Grade Emphasis LRT Alternative

6.3.1 Direct Impacts

6.3.1.1 Parking

Metro would conduct a parking needs assessment in Little Tokyo. This assessment would gauge the supply of and demand for business and resident parking in Little Tokyo. If demand exceeds supply, Metro would consider providing replacement parking for spaces lost as a result of the project. Metro would consider replacing lost parking spots for the duration of construction and operation of the project.

If parking supply exceeds demand, Metro would work with Little Tokyo and surrounding communities to show visitors and residents where parking is available. This effort could include adding signage. After implementation of these mitigation measures, adverse impacts related to parking would not be disproportionately significant.

6.3.1.2 Community and Neighborhoods

Regarding parking loss, refer to mitigation measures in Section 6.3.1.1. Upon implementation of these mitigation measures, direct impacts associated to parking loss in Little Tokyo would not be considered disproportionately adverse.

6.3.1.3 Parklands or Other Community Facilities

Construction of parts of the new alignment would remove uncontrolled mid-block left turns. Metro would maintain adequate access to businesses and community facilities near the alignment. Metro would coordinate with LADOT to create signage that would indicate new ways to access businesses affected by construction. After implementation of these mitigation measures, direct impacts to access to community facilities would not be disproportionately adverse.

6.3.1.4 Visual and Aesthetic Impacts

Metro could build a pedestrian bridge under this alternative. The pedestrian bridge would be constructed to be minimally obtrusive. However, a bridge structure would be a unique visual element in Little Tokyo. Thus, visual impacts from the bridge may be significant and unavoidable. The Little Tokyo community is a redevelopment area.

6.3.1.5 Construction Impacts

Parking spots temporarily moved by construction would be either temporarily replaced nearby in the Nikkei Center lot or signage would be created indicating locations of nearby parking structures and parking lots. Access to the Little Tokyo Library Branch, the Japanese American National Museum, and the Go For Broke Monument would be maintained during construction of the At-Grade Emphasis LRT Alternative.

Access to bus stops would be maintained, and signage would indicate changes in access where necessary. Where bus stops would be closed, bus routes would be altered accordingly, and signage would indicate these changes. Metro would work with the community to create signage showing detour routes. This would help drivers and pedestrians maintain access to Little Tokyo businesses. After implementation of these mitigation measures, construction impacts would not be disproportionately adverse.

6.3.2 Indirect Impacts

6.3.2.1 Parking

Metro would conduct a parking needs assessment in Little Tokyo. This assessment would gauge the supply of and demand for business and resident parking in Little Tokyo. If demand exceeds supply, Metro would provide replacement parking for spaces lost as a result of the project. Metro would consider replacing lost parking spots for the duration of construction and operation of the project.

If parking supply exceeds demand, Metro would work with Little Tokyo and surrounding communities to show visitors and residents where parking is available. This effort could include adding signage. After implementation of these mitigation measures, indirect impacts to parking would not be disproportionately adverse.

6.3.2.2 Community and Neighborhoods/Community Facilities

See the discussion under 6.3.2.1. After implementation of these mitigation measures, indirect impacts to community and neighborhoods would not be disproportionately adverse.

This alternative could result in long-term displacement of commercial space. Displaced commercial space in Little Tokyo could be replaced with high quality commercial development opportunities consistent with Little Tokyo's community identity. This could include a development above the portal near 2nd Street and Central Avenue, or a possible future development at the Nikkei Center. New development would create at least as many jobs as had been displaced. After implementation of this mitigation measure, indirect impacts associated with loss of commercial space in Little Tokyo would not be disproportionately adverse. The Alameda Street undercrossing and associated frontage roads would provide space for delivery activities at the JANM during operation of this alternative.

Full mitigation of the community cohesion impacts of the proposed underpass and at-grade rail junction would not possible. The new light rail service may encourage new growth that would offset the permanent conversion of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street to transit facility use, but it would not necessarily occur at this central location. Disproportionate impacts would remain after mitigation.

6.3.3 Cumulative Impacts

6.3.3.1 Parking

See the discussion under 6.3.2.1. After implementation of these mitigation measures, cumulative impacts to parking would not be disproportionately adverse.

6.3.3.2 Community and Neighborhoods/Community Facilities

See the discussion under 6.3.2.1 and 6.3.3.1. After implementation of these mitigation measures, cumulative impacts to parking would not be disproportionately adverse.

6.4 Underground Emphasis LRT Alternative

6.4.1 Direct Impacts

6.4.1.1 Traffic Congestion

Mitigation measures would address impacts to intersection operations during the operation of this alternative (Transportation Technical Memorandum 2010). After mitigation measures are implemented, impacts to traffic congestion would remain significant at intersections in Little Tokyo. These disproportionate, adverse impacts would be significant and unavoidable.

6.4.1.2 Parking

Metro would conduct a parking needs assessment in Little Tokyo. This assessment would gauge the supply of and demand for business and resident parking in Little Tokyo. If demand exceeds supply, Metro would provide replacement parking for spaces lost as a result of the project. Metro would consider replacing lost parking spots for the duration of construction and operation of the project.

If parking supply exceeds demand, Metro would work with Little Tokyo and surrounding communities to show visitors and residents where parking is available. This effort could include adding signage. After implementation of these mitigation measures, impacts to parking would not be disproportionately adverse.

6.4.1.3 Displacement and Relocation

Some acquisitions and relocations would be unavoidable with this alternative. Metro would comply with the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by the USDOT. All real property acquired by Metro would be appraised to determine its fair market value. Metro would provide effected property holders just compensation not less than the approved appraisal. Metro would give advanced notice to each displaced renter, business, or nonprofit organization. This notice would provide information about eligibility for aid and assistance.

6.4.1.4 Community and Neighborhoods/Community Facilities

Regarding parking loss, refer to mitigation measures in Section 6.4.1.2. After implementation of these mitigation measures, direct impacts to parking loss in Little Tokyo would not be disproportionately adverse.

This alternative could result in long-term displacement of commercial space. Displaced commercial space in Little Tokyo could be replaced with high quality commercial development opportunities consistent with Little Tokyo's community identity. This could include a development above the portal, or a possible future development at the Nikkei Center. New development would create at least as many jobs as had been displaced. After implementation of this mitigation measure, indirect impacts associated with loss of commercial space in Little Tokyo would not be disproportionately adverse. The Alameda Street undercrossing and associated frontage roads would provide space for delivery activities at the JANM during operation of this alternative.

6.4.1.5 Visual Resources

To minimize impacts associated with visual resources in Little Tokyo, Metro would design a portal trench. The portal trench would minimize the amount of track and tunnel visible to pedestrians, residences across Alameda Street and Central Avenue, and visitors to the Japanese American National Museum.

Metro could build a pedestrian bridge under this alternative. The pedestrian bridge would be constructed to be minimally obtrusive. However, a bridge structure would be a unique visual element in Little Tokyo. Thus, visual impacts from the bridge may be significant and unavoidable. The Little Tokyo community is a redevelopment area.

Metro would work with the CRA/LA to create joint development opportunities for the block bounded by Alameda Street, 1st Street, 2nd Street, and Central Avenue. Commercial space would be reduced, but Metro and the CRA/LA would work to encourage commercial and mixed-use development to replace lost jobs.

6.4.1.6 Safety and Security

In the Little Tokyo area, Metro would offer to build a pedestrian bridge, across Alameda Street, just south of the Little Tokyo/Arts District Station. This bridge would separate pedestrian movements from LRT and motorized vehicle movements. If the community opts against construction of the pedestrian bridge, Metro would use design to enhance pedestrian safety.

Metro would create pedestrian queuing and refuge areas around proposed stations. Adding wide crosswalks would also facilitate pedestrian mobility. After implementation of these mitigation measures, direct impacts to safety would not be disproportionately adverse.

6.4.1.7 Noise and Vibration

Under this alternative, a moderate noise impact from operation was predicted at the Savoy Condominiums on Alameda and 1st Streets. The noise impact would be due to track switches near the intersection of 1st and Alameda Streets. However, a spring-rail or movable frog switch could be used at this location to reduce potential noise by covering the gap in the central part of the switch. Using

this measure would reduce switch noise to a FTA criteria level of no impact. This would eliminate the disproportionate noise impact in Little Tokyo.

6.4.1.8 Construction Impacts

Parking spots temporarily moved by construction would be either temporarily replaced nearby in the Nikkei Center lot or signage would be created indicating locations of nearby parking structures and parking lots. Access to the Little Tokyo Library Branch, the Japanese American National Museum, and the Go For Broke Monument would be maintained during construction of the Underground Emphasis LRT Alternative.

Access to bus stops would be maintained, and signage would indicate changes in access where necessary. Where bus stops would be closed, bus routes would be altered accordingly, and signage would indicate these changes. Metro would work with the community to create signage showing detour routes. This would help drivers and pedestrians maintain access to Little Tokyo businesses. This would help lessen indirect, adverse effects to business viability. After implementation of these mitigation measures, construction impacts would not be disproportionately adverse.

6.4.2 Indirect Impacts

6.4.2.1 Parking

Refer to mitigation measures in Section 6.4.1.2. Upon implementation of these mitigation measures, indirect impacts associated with parking loss in Little Tokyo would not be disproportionately adverse.

6.4.2.2 Community and Neighborhoods

Refer to mitigation measures in Section 6.4.1.2. Upon implementation of these mitigation measures, indirect impacts associated with parking loss in Little Tokyo would not be disproportionately adverse.

This alternative could result in long-term displacement of commercial space. Displaced commercial space in Little Tokyo could be replaced with high quality commercial development opportunities consistent with Little Tokyo's community identity. This could include a development above the portal at 2nd Street and Central Avenue, or a possible future development at the Nikkei Center. New development would create at least as many jobs as had been displaced. After implementation of this mitigation measure, indirect impacts associated with loss of commercial space in Little Tokyo would not be disproportionately adverse. The Alameda Street undercrossing and associated frontage roads would provide space for delivery activities at the JANM during operation of this alternative.

6.4.3 Cumulative Impacts

6.4.3.1 Parking

Refer to mitigation measures in Section 6.4.1.2. Upon implementation of these mitigation measures, cumulative impacts associated with parking would not be disproportionately adverse.

6.4.3.2 Community and Neighborhoods

Refer to mitigation measures in Section 6.4.1.2. Upon implementation of these mitigation measures, cumulative impacts associated with community and neighborhoods would not be disproportionately adverse.

6.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Adverse impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar or less adverse than impacts from the Underground Emphasis LRT Alternative, except for two additional businesses (Weiland's Brewery and Café Cuba) that would be displaced. The same mitigation analysis applies for the Fully Underground LRT Alternative – Little Tokyo Variation 1 as for the Underground Emphasis LRT Alternative.

6.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

Adverse impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar or more adverse than impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1. The Los Angeles Hompa Hongwanji Temple feels that portal placement under this alternative is more intrusive than under the Fully Underground LRT Alternative – Little Tokyo Variation 1. The same mitigation analysis applies for the Fully Underground LRT Alternative – Little Tokyo Variation 1 as for the Underground Emphasis LRT Alternative.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

The No Build Alternative would include transit investment planned in the Metro 2009 LRTP. Current transit service in the project area would be maintained. Little to no construction in the project area would be associated with transit infrastructure. The No Build Alternative would not have direct, indirect, or cumulative disproportionate adverse impacts. Therefore, no mitigation measures would be required.

7.1.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The No Build Alternative would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under the No Build Alternative. Therefore, no mitigation measures would be required.

7.2 Transportation Systems Management (TSM) Alternative

7.2.1 NEPA Findings

The TSM Alternative would include transit investment planned in the Metro 2009 LRTP. Two new bus shuttles would be added in the project area. The TSM Alternative would result in a disproportionate loss of curb parking spaces in Little Tokyo, but this impact would not remain disproportionate after mitigation. No other disproportionate adverse impacts are anticipated.

7.2.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The TSM Alternative would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under this alternative. Therefore, no mitigation measures would be required.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would extend light rail tracks from the 7th Street/Metro Center Station to the Metro Gold Line. The tracks would meet the Metro Gold Line at a 3-way junction north of the Little Tokyo/Arts District Station on Alameda Street at Temple Street.

The following adverse impacts could weigh disproportionately on relevant communities under this alternative:

- Parking loss in Little Tokyo (direct, indirect, and cumulative impacts)
- Decreased access to public facilities during operations (direct impacts only)

- Construction-related, decreased traffic circulation, parking, access to community facilities, and changed visual resources (direct impacts only)
- Construction-related, decreased economic and fiscal viability (indirect impacts only)
- Visual impacts of the pedestrian bridge at Temple and Alameda Streets

Mitigation measures would result in any adverse impacts weighing proportionally on relevant communities, except the visual impacts of the proposed pedestrian overpass at Temple and Alameda Streets, which would be significant and unavoidable.

7.3.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The At-Grade Emphasis LRT Alternative would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under this alternative. Therefore, no mitigation measures would be required.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

The Underground Emphasis LRT Alternative would extend north from the 7th Street/Metro Center Station along Flower Street. It would continue east under 2nd Street to an at-grade connection just southwest of the intersection of 1st and Alameda Streets.

The following adverse impacts could occur disproportionately on relevant communities under this alternative:

- Parking loss and permanently increased traffic congestion in Little Tokyo (direct, indirect and cumulative impacts)
- Displacement of businesses in Little Tokyo (direct impacts only)
- Decreased community cohesion in Little Tokyo due to loss of commercial space (direct and indirect impacts)
- Decreased access to public facilities during operations (direct impacts only)
- Construction-related, decreased traffic circulation, parking, access to community facilities, and changed visual resources (direct impacts)
- Construction-related, decreased economic and fiscal viability (indirect impacts only)
- Operational noise impacts at the Savoy condominium building
- Visual impacts of the pedestrian bridge at 1st and Alameda Streets and removal of structures on the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue

Mitigation measures would result in no adverse impacts weighing disproportionately on relevant communities, except the visual impacts of the pedestrian bridge at 1st and Alameda Streets, traffic circulation impacts, and impacts to community cohesion, which would be significant and unavoidable.

7.4.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The Underground Emphasis LRT Alternative would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under this alternative. Therefore, no mitigation measures would be required.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would extend north from the 7th Street/Metro Center Station north along Flower Street. It travels east under 2nd Street to an at-grade connection just northeast of the intersection of 1st and Alameda Streets.

The following adverse impacts could weigh disproportionately on relevant communities under this alternative:

- Parking loss in Little Tokyo during construction (direct, indirect, and cumulative impacts)
- Displacement of businesses in Little Tokyo (direct impacts only)
- Decreased community cohesion in Little Tokyo due to loss of commercial space (direct and indirect impacts)
- Construction-related traffic congestion, decreased access to community facilities (direct impacts)
- Visual changes to the neighborhood due to removal of structures from the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue

Mitigation measures would result in no adverse impacts weighing disproportionately on relevant communities.

7.5.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under this alternative. Therefore, no mitigation measures would be required.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would extend north from the 7th Street/Metro Center Station along Flower Street. It would continue east under 2nd Street to an at-grade connection just northeast of the intersection of 1st and Alameda Streets.

The following adverse impacts could weigh disproportionately on relevant communities under this alternative:

- Parking loss in Little Tokyo during construction (direct, indirect, and cumulative impacts)
- Displacement of businesses in Little Tokyo (direct impacts only)
- Decreased community cohesion in Little Tokyo due to loss of commercial space (direct and indirect impacts)
- Decreased access to public facilities during operations (direct impacts only)
- Construction-related, decreased parking and access to community facilities (direct impacts)

Mitigation measures would result in no adverse impacts weighing disproportionately on relevant communities.

7.6.2 CEQA Determinations

CEQA does not list thresholds of significance specific to environmental justice. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not displace affordable housing. Thus, the project would not necessitate construction of replacement housing under CEQA. No significant impacts are anticipated under this alternative. Therefore, no mitigation measures would be required.

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APPENDIX A

LITTLE TOKYO COMMUNITY COUNCIL LETTER

Little Tokyo Community Council
369 East First Street
Los Angeles, California 90012
213 **625.0414** ext **5720**
Fax 213 **625.1770**
http://ltcc.janet.org

November 24, 2009

Mr. Arthur T. Leahy
Chief Executive Officer
Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Re: Commendation & Appreciation

Dear Mr. Leahy:

On behalf of the Little Tokyo community, the Board of Directors of the Little Tokyo Community Council, an organization of over 100+ businesses, resident associations, religious and educational institutions and community-based organizations, would like to commend and thank the Metro Team for their hard work and efforts to develop the concept of the Fully Underground Alternative plan for consideration by the Metropolitan Transportation Authority Board of Directors for the Metro Regional Connector.

At today's meeting, the following motion was adopted by the Board of Directors:

MOTION

The Board of Directors commend and applaud the efforts of the Metro staff and the consultants for developing the concept plans of the Fully Integrated Alternative for the Regional Connector, for consideration by the Metropolitan Transit Authority Board of Directors.

The LTCC Board of Directors thank the Metro staff for listening to the concerns of the community; for creating the option specifically in response to the community's concerns by developing a conceptual plan that would clearly eliminate the at-grade train crossings at First Street and Alameda Street.

"The Little Tokyo Community Council is a nonprofit 501(c)(3) which has 90+ member organizations whose mission is to ensure that Little Tokyo would be a viable center for the Japanese American community and the Los Angeles Downtown community. The Council shall work to create a vision of what Little Tokyo should be in the future and serve as an advocate on behalf of the Little Tokyo community."

We wish to express our deep appreciation for the Metro Team's hard work and sensitivity to the community. In particular:

Dolores Roybal Saltarelli, Metro Project Manager
Ann Kerman, Metro Constituent Project Manager
Ray Sosa, CDM Consultants
Virginia Jackson, CDM Consultants
Ginny-Marie Brideau, Project Manager, The Robert Group
Clarissa Filgioun, The Robert Group

We are looking forward to continuing to work with the Metro Team on this option, which we hope will be added to the Draft Environmental Impact Statement/Report (Draft EIS/R) by the MTA Board of Directors.

Sincerely,

Bill Watanabe
Chair, Little Tokyo Community Council

cc: Dolores Roybal Saltarelli
Ann Kerman
Ray Sosa
Virginia Jackson
Ginny-Marie Brideau
Clarissa Filgioun

cc: LTCC Board of Directors:
Alan Kumamoto, 1st Vice Chair, Kumamoto Associates
Frances Hashimoto, 2nd Vice Chair, Mikawaya Inc.
Mike Okamoto, Co-Secretary, Asian American Architects & Engineers Assoc.
Kei Nagao, Co-Secretary, J-Town Voice
Eric Kurimura, Nishi Hongwanji Buddhist Temple
Chris Aihara, Past Chair, Japanese American Cultural & Community Center
Tom Kamei, Past Chair, Japanese Chamber of Commerce of So. CA
Noriaki Ito, Past Chair, Higashi Honganji Buddhist Temple
Howard Nishimura, Past Chair, Tokyo Villa Homeowners Association
Craig Ishii, Japanese American Citizens League
Goro Endo, Union Church of Los Angeles
Ken Kasamatsu, Pacific Commerce Bank
Brian Kito, Fugetsu-do and Little Tokyo Public Safety Association
Jeff Liu, Visual Communications
Tatsushi Nakamura, Japanese Prefectural Association
Wilbur Takashima, Little Tokyo Teramachi Owners Association
Satoru Uyeda, SK Uyeda Investments
Hiroshi Yamaguchi, Japanese Community Pioneer Center
Akemi Kikumura Yano, Japanese American National Museum
Evelyn Yoshimura, Little Tokyo Residents Association

APPENDIX B

PUBLIC OUTREACH MATERIALS

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
Central City East Association	4/7/10	Central City East Association 725 S Crocker St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau	CCEA Board members and Estela Lopez		
Elected Officials Briefing	02/12/10	Metro Headquarters, Windsor Room Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau			
Nishi Temple	02/12/10	Nishi Temple 815 E 1st St, Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virgina Jackson			
Central City East Association	2/3/10	Central City Association – Arts District Office 948 E 2nd St Los Angeles	Ginny Brideau	Arts District Committee and Estela Lopez	None at this time	Briefed Arts District Committee on progress of study. Supportive of the Fully Underground Alternative.
Higgins Building HOA	01/25/10	Higgins Building 108 W 2nd St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Kansai Uchida, Ginny Brideau	Higgins Building Homeowners Association Board members and property owners	Continue to provide updates as needed.	
Higgins Building HOA	01/20/10	Office of Lambert Giessinger 200 N Spring St Rm 620 Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau, Helene Kornblatt, Kansa Uchida	Stacey Chaiken, Lambert Giessinger, Joan Springhetti, Martin Berg	Continue to provide updates as needed. Identify "historic preservation as art" funding options.	
Central City East Association	01/12/10	Central City East Association 725 S Crocker St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau	Estela Lopez	Plan to attend the April 7, 2010 Board of Directors meeting. Contact owners of Fukui Mortuary and offer project briefing.	Concerned about the potential for the increased separation of the Arts District on 1st Street. Supports the FUG alternative, and looks forward to additional technical information becoming available.
Councilman Jose Huizar	01/07/10	Los Angeles City Hall Room	Diego Cardoso, Ann Kerman, Ginny Brideau	Jessica Wethington McLean	Continue to provide updates as needed.	Supports the FUG alternative, particularly with the potential for a station connecting directly to Broadway and the Bringing Back Broadway Streetcar. Wants to be sure to coordinate the construction effort in order to avoid duplicating construction impacts.

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
Central City Association	01/05/10	626 Wilshire Blvd Los Angeles	Dolores Roybal Saltarelli, Ann Kerman Randy Lamm, Devon Cichoski (For other projects)	David Wright, Sara Crestin, Jeff Moore, Gene Bougdanos, Richard Macias, Walter Okitsu, Fernando Chavez, Ryan Aubrey, RJ Noonan, Wilber Watts, Phil Recht, Jennifer Cohen, Mark Waie, Andy Leeka, Sammy Feuerci, Edward Carfdyno, Aaron Kelly, Sauli Dampour, Melani Smith, Michelle Boehm, Russ Brown, Hilary Norton	Continue to provide updates as needed.	Group approved a motion asking Metro to study the FUG alternative and supporting a station connecting to Broadway.
Little Tokyo Working Group	12/17/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Laura Cornejo, Gerry Alvarez, Ann Kerman, Eric Carlson, Ann Kerman, Ray Sosa, Kansai Uchida, Ginny Brideau	Roy Nakahara, Goro Endo, Robert Volk, Kristin Fukashima, Sean Miura, Wilbur Takashima, Jerard Wright, Yukio Kawaratani , Bill Watanabe, Ron Fong, Chris Komai, Evelyn Yoshimura, Kim Tachiki-Chin, Eric Kurimura, Alan Nishio, Kei Nagao, Chris Aihara, James Okazaki, Jeff Carpenter, Jeff Liu, Satori Uyeda, Mary Graybill, Susie Tae	LTCC to begin solicitations for EIR Mitigation Consultant	The purpose of the meeting was to discuss the draft consultant agreement and updates to the potential build alternative. The agreement was positively received, with most of the questions focused on the process to identify a potential consultant. Ann Kerman presented a draft scope of work identifying the process for securing a consultant to assist the LTWG during the environmental process. A copy of this memo is attached to this document. Ann further explained that the consultant would be the choice of the LTCC, but Metro is asking the LTCC to identify a person or firm who has understanding of and expertise in light rail operations, right-of-way requirements, construction impacts, transportation planning, economic and community development, the EIS/R process, urban design, and station area planning. The consultant would work with the LTWG/LTCC until the release of the Draft EIS/R. LTCC needs to decide internally how the consultant will be managed, who will manage this person. Chris Aihara and Don Watanabe asked if Metro could provide any direction or suggestions

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
						on how to best reach out to the professional community. Chris Aihara wanted to set up a small committee to identify a potential consultant. The committee will meet on the 28th and 29th of December. The committee includes Chris Aihara, Alan Nishio, Ron Fong, and Yukio Kawaratani. The consultant will complete their work before the DEIS will be released to the public. Metro reviewed the decision making process, including the multiple opportunities to review and fine tune mitigations, and the station and urban designs. The consultant is not intended to replace Metro's consultant team.
Japanese American National Museum	12/16/09	Japanese American National Museum 369 W 1st St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Helene Kornblatt, Kansai Uchida	Akemi Kikumura, Chris Komai, Nancy Araki	Distribute electronic copy of the new build alternative Plan to brief prior to the distribution of the Draft EIS/R JANM requesting that Metro reschedule the briefing with JANM's Board of Directors	Dolores presented the conceptual designs for the "5th Build Alternative", which was well received by JANM representatives. JANM would like to see if a station entrance can be located close to JANM's main entrance. They continued to have questions about specific construction impacts and mitigations in Little Tokyo. JANM would like to know if any of the Little Tokyo buildings have been identified to be historic. Helen noted that one of the technical studies currently underway will identify properties that are recognized by the State and Federal Historic offices. Chris Komai noted his appreciation that Metro has become willing to work with the Little Tokyo community. He is hopeful that the positive relationship and continued communications will continue to improve the project as it moves forward. He is excited about the project in the current form. This combined with the Nikkei Center development will lead to the first expansion

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
						of Little Tokyo in decades.
Thomas Properties Group	12/10/09	Thomas Properties Group 515 S Flower St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau	Thomas Ricci, Glen Berryhill, Jeanet Babauta, Ayahlushim Hammond, Alix Wisnher, Paul Rutter, Steve Achorn, Kent Handleman	Anticipate next meeting in April Distribute mitigation measure examples to Glen Berryhill	Continued uncertainties about support for the project as a whole. Would like more information regarding the construction and operational impacts to their properties.
Little Tokyo Business Association	12/10/09	Oiwake Restaurant 122 Japanese Village Plz Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Kansai Uchida, Ginny Brideau	Elizabet Viray, Akira Yuhara, David Kudo, Wilson Liu, Shigeko Katjiya, Yuriko Shikai, Joanne Kumamoto, Frances Hashimoto	Distribute electronic copy of the new build alternative to Wilson Liu	Provided an update on the project, including presentation of the new build alternative. Group plans to take a position to support the FUG alternative.
Downtown Los Angeles Neighborhood Council	12/07/09	Los Angeles Theater 615 S Broadway Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Helene Kornblatt, Kansai Uchida, Ginny Brideau	DLANC Board of Directors	Continue to provide periodic updates to the neighborhood council	Provided an update on the project, including presentation of the new build alternative.
Savoy Homeowners Association	11/30/09	100 S Alameda St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau	Bobby Garza, Paul Yeh, Susie Tae, Sidney Wang, Lynne Collmann, Alfred Chang, Andrew Lin	Invite the Savoy Homeowners Association to the urban design meeting to discuss the potential Little Tokyo station.	Concerns that remain focus on potential construction impacts, and future meetings would need to discuss potential mitigation activities. The group would prefer the tunnel boring machine (TBM) be launched at 2nd and Hope Streets, rather than 2nd Street and Central Avenue. The Homeowners Association would like to work closely with Metro when deciding the construction timing and sequencing.
Little Tokyo Working Group	11/19/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Gerry Alvarez, Eric Carlson, Ray Sosa, Helene Kornblatt, Clarissa Filgioun, Ginny Brideau	Complete list attached to report	Provide update on consultant procurement process and new alternative.	Presentation of grade-separated build alternative, discussion of consultant, and distribution of mitigation plan examples.
Elected Officials Briefing	11/04/09	Metro Headquarters, Windsor Room Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau	<u>City of Los Angeles: Office of the Mayor</u> Jaime De La Vega, Maria Rountree, Borja Leon <u>Office of U.S. Representative</u>		Comprehensive Report Available

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
				Xavier Becerra Gayle Greenberg Office of Supervisor Zev Yaroslavsky Vivian Rescalvo City of Los Angeles: Office of Councilman Tom LaBonge Laura McLennan City of Los Angeles: Office of Councilman Ed Reyes Susan Wong State of California: Office of Assembly member Charles Calderon Marisela Cervantes Office of U.S. Senator Feinstein Molly O'Brien, Liz Delgado Office of Assembly member Krekorian John Hisserich		
Little Tokyo Working Group	10/15/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Gerry Alvarez, Eric Carlson, Ray Sosa, Monica Villalobos, Yara Jasso, Helene Kornblatt, Clarissa Filgioun, Ginny Brideau	Complete list attached to report		Discuss At-Grade Emphasis impacts, mitigations, mitigation plan development, and the Working Group's technical needs.
Little Tokyo Service Center	10/13/09	Japanese American Cultural and Community Center 244 S San Pedro St	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Monica Villalobos,			

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
		Los Angeles	Clarissa Filgioun			
Little Tokyo Working Group	10/01/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Gerry Alvarez, Eric Carlson, Ray Sosa, Monica Villalobos, Yara Jasso, Helene Kornblatt, Clarissa Filgioun, Ginny Brideau	Complete list attached to report		Discuss At-Grade Emphasis impacts and potential mitigations.
Savoy Homeowners Association	09/29/09	100 N Alameda St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Savoy Homeowners Association members, including Paul Yeh, Susan Tae, Bobby Garza, and Lynne Collemann (Manager)	Schedule follow up meeting with Savoy's MTA Committee	Concerned about project impacts. Homeowners Association would like to meet again to discuss potential mitigations.
Little Tokyo Community Council	09/22/09	Japanese American National Museum 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa,	Complete list attached to report	LTCC and Metro to hold LTCC:PCPC meetings. This group is known at the Little Tokyo Working Group	Presented a project update to the full board of directors
Little Tokyo Working Group	09/17/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Complete list attached to report		Comprehensive Report Available
Little Tokyo CAC	09/16/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Eric Carlson, Ann Kerman, Ray Sosa, Ginny Brideau	Complete list attached to report	None at this time	LTCAC requested an update on the project.
MOCA Senior Staff	09/15/09	250 South Grand Avenue Los Angeles	Dolores Roybal Saltarelli, Diego Cardoso, Ray Sosa, Ginny Brideau	Charles E. Young, CEO Ari Wiseman, Deputy Director Jennifer Arceneaux, Director of Development Richard Weil, Interim CFO Lyn Winter, Director of Communications Suzanne Isken, Director of Education Michael Nauyok, Director of Operations		Metro provided a project overview, and discussed the impact the project would have on the entire LRT system. MOCA was interested in the shuttle system, and if it was possible to begin operations on that particular alternative once the study was completed. They would like additional information regarding the at-grade alternative, specifically finding out how fast the trains would travel in front of the Geffen. They are supportive of the Alameda underpass, and removing regional truck traffic, but would like to maintain a visual presence from Alameda.

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
						They are supportive of any station that would provide a direct connection to either MOCA and/or The Geffen. They would also like to see the station closest to Bunker Hill to have a unique identity, and encouraging people to visit MOCA.
City of Los Angeles: Cultural Affairs	09/02/09		Dolores Roybal Saltarelli	Edgar Garcia		Would like to participate in the TAC
Little Tokyo Community Council	08/25/09	Japanese American National Museum 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau			Presented project update
Central City East Association	08/19/09	St. Xavier Catholic Church 222 S Hewitt St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Monica Villalobos, Chris Robert, Ginny Brideau	Complete list attached to report	Continue to provide periodic updates to CCEA.	CCEA hosted a community meeting to discuss the Regional Connector. Metro staff provided an overview of the project. Questions from the community focused on the alternatives, how Metro identified the alternatives, and the price differences between each alternative. There were also questions about the Alameda undercrossing regarding construction, timing, and impacts.
Japanese Chamber of Commerce of Southern California	08/18/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Terry Handa, President of JCCSC, Lee Aoki, Mike Okamoto, Shinji Abe	Schedule meeting prior to release of Draft EIS/R	Comprehensive Report Available
Little Tokyo Community Council	08/13/09	Little Tokyo Service Center 231 E 3rd St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Bill Watanabe, Chair of LTCC Lee Aoki, Small Business Advocate LTSC Ron Fong, LTSC	Attend October 20th Board of Directors Meting for project briefing. Attend August 19th Planning and Cultural Preservation Committee meeting for Working Group adoption	Provided project update, discussed the development of working groups and business mitigation measures. Also discussed the decision making process, the 2nd Street stations, and project alternatives. (Comprehensive Report Available)
Little Tokyo Community Council: Parking, Planning, and Cultural Preservation	07/22/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa	Parking, Planning, and Cultural Preservation Committee of the Little Tokyo Community Council	Address concerns at the August 5th Little Tokyo Working Group meeting	Addressed concerns of the committee on specific issues on the project. For example, they were concerned that an alternative had been chosen, discussed impacts of the underground alternative, and funding.

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
Los Angeles Conservancy	07/22/09	CDM Los Angeles Offices 523 W 6th St, Ste 400 Los Angeles	Dolores Roybal Saltarelli, Gerardo Alvarez, Ray Sosa, Monica Villalobos, Kansai Uchida, Helene Kornblatt	Jim Steely, SWCA Francesca Smith, SWCA Cara Corsetti, SWCA Mike Buhler, Los Angeles Conservancy	Meet with LA Conservancy in advance of the release of the Draft EIS/EIR to discuss the results of the historical resources analysis	Metro provided a project overview, explaining the reason for studying two possible station locations on Second Street between Broadway and Los Angeles, the impacts of the construction impacts at Little Tokyo, the project's relation to Bringing Back Broadway. Members of the Conservancy asked several specific questions, including whether: vibration impacts had been studied both during and after construction; the team had identified old buildings that will be demolished; the team had identified buildings with basements; the cost of both build alternatives being studied.
Japanese American National Museum	07/14/09	Japanese American National Museum 369 W 1st St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Miyoko Oshima, Nancy Araki, June Burke, Chris Komai	Schedule briefing for Japanese Chamber of Commerce, MOCA, Tom Kamei, Honda Plaza	The purpose of Metro's initial visit with the museum staff was to begin to understand the potential impacts to JANM, discuss potential mitigation activities, and answer questions about the project. Representatives from JANM specifically mentioned strong reservations about the "Origami Bridge" concept. They would prefer a "plaza" approach to the intersection of First and Alameda Streets. Any bridge would obscure their retail space that is located on the corner of First and Alameda. (Comprehensive Report Available)
Central City East	07/13/09	Central City East Association Offices 725 S Crocker St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Estela Lopez, Qathryn Brehm	Schedule briefing for Arts District Community	Concerned that too much of the focus is on Little Tokyo impacts. Requested a briefing for the Arts District community. (Comprehensive Report Available)
Little Tokyo Community Council	07/13/09	Japanese American Cultural and Community Center 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Chris Aihara	Schedule briefing with Bill Wantanabe, incoming chair	Metro began by providing Ms. Aihara with a project update, including information about the Urban Design workshops hosted by Metro in June 2009. Ms. Aihara was concerned that the timing of the workshops seemed to imply the project is closer to construction than is the reality.

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
						One of the overarching questions was "how can we show the benefits of the project to Little Tokyo"? Ms. Aihara thought that it is difficult for the community to visualize the Regional Connector, what construction might look like, and what the project means to the neighborhood. (Comprehensive Report Available)
Thomas Properties Group	07/07/09	Thomas Properties Group Offices 515 S Flower 6th Floor Los Angeles	Robin Blair, Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Yara Jasso, Ann Kerman, Ginny Brideau	Thomas Ricci, Glen Berryhill, Jeanet Babauta, Stephen Achorn, Dennis Watsabaugh	Metro to provide cross section of Station Area Design	The City National Plaza is located close to 5th and Flower Streets in Downtown Los Angeles. The building is situated nearby the proposed Financial District station. This was the first informational meeting with TPG to provide background on the project, and to understand the inter-relationship between the building and the proposed station. (Comprehensive Report Available)
Los Angeles County: Public Works Los Angeles County: Flood Control	07/01/09	Los Angeles County Department of Public Works 900 S Fremont Ave Alhambra	Gerardo Alvarez, Eric Carlson, Girish Roy, Ray Sosa, Amanda Elioff, Zafer Mudar	Tsujii, Masashi Tsujii (LACDPW); Allen Ude (LACDPW); Ed Torran (LAC Flood Control); Amir Zandig (LACDPW); Bill Bowers (LACDPW)	Project Team to return with different conceptual drawings, the supporting documentation, and model runs of the existing conditions, along with a cover letter from Metro describing the project with its submittal. LACDPW and Metro to check to see if we have a cooperative agreement in place between the two agencies.	The purpose of this meeting was to initiate discussion with the Los Angeles County Department of Public Works and LA County Flood Control District (a department within LACDPW) and discuss the project's impacts on a large county storm drain running underneath Second Street near Central Ave in downtown Los Angeles as well as see if the County Department of Public Works had any additional concerns after being walked through the alignment.
City of Los Angeles: Public Works: Bureau of Engineering	06/18/09	Metro Headquarters Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Gerardo Alvarez, Monica Villalobos, Virgina Wade,	Curtis Tran, Calvin Chow, Farid Naguib	Design team to revisit current plans to minimize impacts to streets, especially with regards to	The purpose of this meeting was to discuss the design of the underpass at 1st/Alameda Streets, related issues such as the storm drain on 2nd street, the possible reconfigurations of nearby

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
			Lana Terry, Zafer Mudar		underground option	streets; and to discuss the 4th Street bridge at Flower Street.
City of Los Angeles: Transportation	06/10/09	Metro Headquarters Los Angeles	Dolores Roybal Saltarelli, Girish Roy, Gerardo Alvarez, Ray Sosa, Monica Villalobos	Kang Hu, Calvin Chow, Tom Carranza	Set up meeting with LA BOE Revisit vehicular traffic circulation in the 2nd street tunnel	Shared the conceptual plan for both alternatives
University of Southern California	05/22/09	USC: Town and Gown Building 665 Exposition Blvd Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ray Sosa	David Roberts (Associate Director of USC Local Government), David Galaviz (Executive Director of USC Local Government), Bing Cherrie (Associate VP of Planning of USC Capital Construction Development)	Provide updates through the project development process	Briefed the attendees of the project and illustrated its benefits to the university. The project was well received. They saw the project's potential in regards to campus life and access to the rest of county car free.
Go For Broke	05/11/09	HMC Architects 633 W 5th St 3rd Fl Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Zapher Mudar	Raymond Pan, Diane Tanaka, Edward Avila	Provide project updates as they become available.	The Go for Broke project will break ground sometime mid year of 2010. Want to know of any engineering issues with the at-grade alterative. The at-grade alternative will impact their project the most.
Little Tokyo Community Council	05/05/09	Japanese American National Museum 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Yvette Rapose, Gerry Alvarez, Laura Conejo, Ray Sosa, Monica Villalobos, Yara Jasso, Clarissa Filgioun	Executive Board of LTCC	Provide project updates as they become available.	Comprehensive Report Available
Bringing Back Broadway	05/04/09	Central City Association Offices 626 Wilshire Blvd Ste 200 Los Angeles	Ginny-Marie Case	Bringing Back Broadway Streetcar Committee	Metro to advise this group about when Metro Board of Directors will consider the LRTP. TRG staff to attend July 1, 2009 meeting	This was a regular meeting of the Streetcar, Transportation and Parking Committee of the Bringing Back Broadway organization. The agenda included a brief discussion regarding parking needs in the project area, and an update on the three potential LA Streetcar alignments currently under consideration. Comprehensive Report Available
Little Tokyo Community Council	04/28/09	Japanese American National Museum 369 W 1st St	Ann Kerman, Dolores Roybal Saltarelli, Ray Sosa	Little Tokyo Community Council	Additional meetings to be scheduled as needed	Ann Kerman, Community Relations Coordinator and the consultants presented an update report on the Metro Regional Transit Corridor Project at

Metro Regional Connector LRT
Meeting Matrix

Organization	Date	Location	Project Team Attendance *Anticipated*	Attendees	Action Items	Summary
		Los Angeles				the LTCC meeting. This presentation was one several scoping meetings in the area for the Project. They were here today to listen to the concerns of the community. (Comprehensive Report Available)
Japanese American National Museum	09/xx/09	Japanese American National Museum 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa			

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX F

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State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX FF

CONSTRUCTION IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Construction Impacts
Technical Memorandum

April 14, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

APE	Area of Potential Effects
ASI	Application Screening Index
BMP	Best Management Practice
BTU	British Thermal Unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Caltrans	State of California Department of Transportation
CARB	California Air Resources Board
CAS	Chemical Abstracts Service
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulation
CO	Carbon Monoxide
CWA	Clean Water Act
dBA	A-Weighted Decibels
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
FTA	Federal Transit Administration
GBV	Ground Borne Vibration

GHG	Greenhouse Gas
HAER	Historic American Engineering Record
HRA	Health Risk Assessment
JANM	Japanese American National Museum
LADOT	City of Los Angeles Department of Transportation
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
MOA	Memorandum of Agreement
MOCA	Museum of Contemporary Art
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_2	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OCS	Overhead Catenary System
Pb	Lead
PCB	Polychlorinated Biphenol
PM_{10}	Particulate Matter 10 Microns or Smaller in Diameter
$PM_{2.5}$	Particulate Matter 2.5 Microns or Smaller in Diameter
ppd	Pounds Per Day

PPM	Parts per Million
PPV	Peak Particle Velocity
PSC	Pollutant Screening Level
PSI	Pollutant Screening Index
RMS	Root Mean Square
ROW	Right of Way
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SEM	Sequential Excavation Method
SO_2	Sulfur Dioxide
SVP	Society of Vertibrate Paleontology
TAC	Toxic Air Contaminant
TBM	Tunnel Boring Machine
TPSS	Traction Power Substation
TSM	Transportation System Management
USC	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VdB	Vibration Decibels
VOC	Volatile Organic Compound

1.0 SUMMARY

The alternatives under consideration for the Regional Connector Transit Corridor are: the No Build Alternative, the Transportation Systems Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2. This technical memorandum discusses the potential construction-related impacts associated with the TSM Alternative and the build alternatives. Construction of any of the build alternatives is estimated to last approximately four years. Construction impacts would be temporary, short-term.

The No Build Alternative would include the transit investments already planned as described in the Metro *2009 Long-Range Transportation Plan* (LRTP). The No Build Alternative would not result in direct or indirect construction impacts. Furthermore, the No Build Alternative would not have adverse cumulative construction impacts.

The TSM Alternative would include the same transit improvements as the No Build Alternative and would also include two new shuttle bus routes that would serve as a connection between Union Station and the existing 7th Street/Metro Center Station. The TSM Alternative would not involve major infrastructure construction and, therefore, would not result in any direct or indirect adverse construction impacts. Furthermore, the TSM Alternative would not have adverse cumulative impacts during construction.

Construction of the At-Grade Emphasis LRT Alternative is anticipated to result in potentially adverse impacts related to traffic circulation; displacements and relocation; community and neighborhoods; visual and aesthetic resources; air quality; noise and vibration; geotechnical, subsurface, seismic hazards and hazardous materials; water resources; cultural/archeological resources; paleontological resources; parklands and community facilities; and economic and fiscal resources. Measures to minimize harm have been identified for these anticipated potentially adverse construction impacts. Upon implementation of these measures, the potential impacts would not be considered adverse under the National Environmental Policy Act (NEPA) and would be less than significant under the California Environmental Quality Act (CEQA), except for air quality and traffic circulation. The remaining potential impacts on air quality and traffic circulation could not be feasibly mitigated and would be significant and unavoidable. The At-Grade Emphasis LRT Alternative would also contribute to potential impacts on air quality and traffic circulation, resulting in potentially adverse cumulative impacts to air quality and traffic circulation during construction.

Construction of the Underground Emphasis LRT Alternative would result in similar construction-related potential impacts as the At-Grade Emphasis Alternative. Specifically, the Underground Emphasis LRT Alternative would potentially impact traffic circulation; displacements and relocation; community and neighborhoods; visual and aesthetic resources;

air quality; noise and vibration; geotechnical, subsurface, seismic hazards and hazardous materials; water resources; cultural/archeological resources; paleontological resources; parklands and community facilities; and economic and fiscal resources. The level of impact may be more intense than the At-Grade Emphasis LRT Alternative due to the larger volume of soil excavated and the greater potential to encounter archeological, cultural, or paleontological resources. Measures to minimize harm have been identified for these anticipated potentially adverse construction impacts. Upon implementation of these measures, impacts would not be considered adverse under NEPA and would be less than significant under the CEQA, except for air quality and traffic circulation. The remaining potential impacts on air quality and traffic circulation could not be feasibly mitigated and would be significant and unavoidable. The Underground Emphasis LRT Alternative would also contribute to potential impacts on air quality and traffic circulation, resulting in potentially adverse cumulative impacts to air quality and traffic circulation during construction.

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in similar construction-related potential impacts as the Underground Emphasis LRT Alternative. Specifically, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would impact traffic circulation; displacements and relocation; community and neighborhoods; visual and aesthetic resources; geotechnical, subsurface, seismic hazards and hazardous materials; and water resources. The level of impact may be more intense than the Underground Emphasis LRT Alternative due to the larger volume of soil excavated and the potential to encounter archeological, cultural, or paleontological resources. Measures to minimize harm have been identified for these anticipated potentially adverse construction impacts. Upon implementation of these measures, impacts would not be considered adverse under NEPA and would be less than significant under CEQA, except for air quality and traffic circulation. The remaining potential impacts on air quality and traffic circulation could not be feasibly mitigated and would be significant and unavoidable. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would also contribute to potential impacts on air quality and traffic circulation, resulting in potentially adverse cumulative impacts to air quality and traffic circulation during construction.

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in similar construction-related potential impacts as the Underground Alternative – Little Tokyo Variation 1. Specifically, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would impact traffic circulation; displacements and relocation; community and neighborhoods; visual and aesthetic resources; geotechnical, subsurface, seismic hazards and hazardous materials; and water resources. The level of impact may be more intense than the other build alternatives due to the larger volume of soil excavated and the potential to encounter archeological, cultural, or paleontological resources. Measures to minimize harm have been identified for these anticipated potentially adverse construction impacts. Upon implementation of these measures, the potential impacts would not be considered adverse

under NEPA and would be less than significant under CEQA, except for air quality and traffic circulation. The remaining potential impacts on air quality and traffic circulation could not be feasibly mitigated and would be significant and unavoidable. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would also contribute to potential impacts on air quality and traffic circulation, resulting in potentially adverse cumulative impacts to air quality and traffic circulation during construction.

2.0 INTRODUCTION

This Technical Memorandum describes the expected potential construction scenario for the TSM Alternative and the build alternatives. The discussion includes typical construction methods that would be used when building the Regional Connector. The construction period for the build alternatives is estimated to last approximately four years. The conditions and potential impacts described in this section would only occur during construction, and would be temporary and short-term. Some permanent impacts would begin during construction, such as the elimination of parking, and these are evaluated in other technical reports as operational impacts. The analysis in this Technical Memorandum focuses primarily on potential temporary impacts that would occur as a result of the construction process.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Federal Regulatory Framework

The United States Environmental Protection Agency (USEPA) creates regulation that governs the assessment and consideration of construction impacts on the environment for various topic areas, including air quality, water quality, hazardous materials, biological resources, and cultural preservation under NEPA (42 United States Code [or USC] Section 4231). NEPA places regulatory responsibility on the federal government to "use all practicable means" to "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings." The following federal regulations apply to the evaluation of construction effects for the proposed project.

3.1.1 Air Quality

The Federal Clean Air Act (CAA) of 1963 regulates air quality in the United States. The USEPA is responsible for enforcing the CAA and establishing the National Ambient Air Quality Standards (NAAQS). NAAQS have been established for seven major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter 2.5 microns or smaller in diameter ($PM_{2.5}$), particulate matter ten microns or smaller in diameter (PM_{10}), sulfur dioxide (SO_2), and lead (Pb).

3.1.2 Water Quality

The National Pollutant Discharge Elimination System (NPDES) regulates the issuance of storm water permits necessary for projects that will require dewatering or discharge pollutants from any point source into waters of the United States. The Clean Water Act (CWA) of 1972 provides the statutory basis for the NPDES permit program. A plan must be submitted to obtain a NPDES permit, which lists potential sources of pollutants during construction, and identifies erosion prevention, sediment control, dewatering procedures and storm water management measures to be implemented during construction of the proposed project.

3.1.3 Hazardous Materials

The Resource Conservation and Recovery Act of 1976 under Title 40, Protection of the Environment of the Code of Federal Regulations (CFR), regulates hazardous wastes that may be encountered during construction activities. The Toxics Substances Control Act of 1976 regulates handling of polychlorinated biphenol (PCB) wastes encountered during construction or demolition. In addition, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 regulates the handling and removal of underground storage tanks that may be encountered during construction.

3.2 State Regulatory Framework

3.2.1 Air Quality

In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The CCAA, which is governed by the California Air Resources Board (CARB), requires all air districts in the State to endeavor to achieve and maintain the California Ambient Air Quality Standards (CAAQS) established for construction activities.

3.2.2 Water Quality

The State Regional Water Quality Control Board (RWQCB) is responsible for administering water quality at the State level. Water quality during construction activity would be related to activities which encounter groundwater or affect the groundwater quality.

3.3 Local Regulatory Framework

3.3.1 Air Quality

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the region. SCAQMD has jurisdiction over an area of approximately 10,740 square miles, consisting of Orange County, the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. SCAQMD has developed regional and localized significance thresholds for air pollutants during construction.

3.3.2 Noise

The Los Angeles Municipal Code (LAMC) Section 112.05 provides noise ordinances that specify construction hours and construction equipment noise thresholds. The noise thresholds and applicable hours of construction are as follows:

- Construction activities lasting more than one day would exceed existing exterior noise levels by ten A-weighted decibels (dBA) or more at a sensitive use.
- Construction activities lasting more than ten days in a three-month period would exceed existing ambient exterior noise levels by five dBA or more at a noise sensitive use.
- Construction activities would exceed the ambient noise level by five dBA at a sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

3.4 CEQA Guidelines

The CEQA Guidelines implicitly acknowledge that construction-related changes may be the source of significant impacts to the physical environment even though these effects may be short-term in duration. Typically, significant construction effects are identified in CEQA as changes to the physical environment that are particularly disruptive or that have specific health and safety considerations. There are no specific thresholds of significance for impacts from construction-related activities under CEQA for the following environmental topics:

- Land Use and Development
- Displacements and Relocation
- Ecosystems/Biological Resources
- Energy
- Climate Change
- Cultural/Archeological/Paleontological Resources
- Economic and Fiscal
- Growth-Inducing Impacts
- Environmental Justice

However, the potential for impacts that could occur during the construction period (although not explicitly as a result of construction activities) is presented in the respective technical memoranda for the environmental topics above.

3.4.1 Traffic Circulation and Parking

A significant transportation impact would occur if construction-related activities result in temporary short and long-term lane closures, turning prohibitions, reduced access to the circulation network, removal of parking, or secondary impacts to adjacent streets (see the Transportation Technical Memorandum for more information).

3.4.2 Community and Neighborhood Impacts

A significant community or neighborhood impact would occur if construction-related activities physically divide an established community or neighborhood.

3.4.3 Visual Resources and Aesthetics

A significant visual resource or aesthetic impact would occur if construction-related activities substantially degrade the existing visual character or quality of a significant site or its surroundings, or create a new source of substantial light or glare which would adversely affect day or nighttime views.

3.4.4 Air Quality

A significant air quality impact would occur if construction-related activities:

- Exceed SCAQMD daily regional and localized construction emissions thresholds emissions for VOC, NOX, CO, SOX, PM2.5, or PM10;
- Generate significant emissions of TACs;
- Create an odor nuisance; and/or
- Cause CO concentrations at study intersections by construction-related traffic to violate the CAAQS for either the one- or eight-hour period. The CAAQS for the one- and eight-hour periods are 20 parts per million (ppm) and 9.0 ppm, respectively. If CO concentrations currently exceed the CAAQS, then an incremental increase of 1.0 ppm over "no build" conditions for the one-hour period would be considered a significant impact. An incremental increase of 0.45 ppm over the existing conditions for the eight-hour period would be considered significant.

3.4.5 Noise and Vibration

A significant noise impact would occur if construction-related activities exceed the ambient noise level by five dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or anytime on Sunday unless mitigated to the greatest extent feasible.

A significant vibration impact would occur if construction-related activities cause vibration damage to surrounding buildings. The potential for ground borne vibration (GBV) to cause damage to buildings varies based on the types of buildings (i.e., building materials and structural techniques) involved. The Federal Transit Administration (FTA) vibration damage criteria for various structural categories are listed below in Table 3-1.

Table 3-1. FTA Construction Vibration Damage Criteria	
Building Category and Description	**Peak Particle Velocity (PPV) (in/sec)**
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: U.S. Federal Transit Administration's "Transit Noise and Vibration Impact Assessment Manual", May 2006. FTA-VA-90-1003-06. Table 12-3.

3.4.6 Geotechnical/Subsurface/Seismic/Hazardous Materials

3.4.6.1 Geotechnical/Subsurface/Seismic

A significant geotechnical/subsurface/seismic impact would occur if construction-related activities result in substantial damage to structures or infrastructure, expose people to substantial risk of injury; cause or accelerate instability from erosion; or accelerate wind, water erosion, and sedimentation resulting in sediment runoff or deposition which would not be contained or controlled on-site.

3.4.6.2 Hazardous Materials

A significant hazardous materials impact would occur if construction-related activities create a significant hazard to the public or environment through the routine transport, storage, use, or disposal of hazardous materials; create reasonably foreseeable accident conditions; emit hazardous emissions within one-quarter mile of an existing or proposed school; or physically interfere with an adopted emergency response plan.

3.4.7 Water Resources

A significant water resource impact would occur if construction-related activities change the direction of existing groundwater contaminants; substantially deplete groundwater supplies or recharge resulting in a lowering of the local groundwater table; alter the existing drainage pattern of the site or area, including the course of a stream or river, resulting in substantial erosion or siltation on- or off-site; create runoff water that exceeds the capacity of existing or

planned storm water drainage systems; provide substantial additional sources of polluted runoff; or otherwise substantially degrade water quality.

3.4.8 Parklands and Other Community Facilities

A significant parkland or community facility impact would occur if construction-related activities impair implementation of or physically interfere with an adopted emergency response plan.

3.4.9 Safety and Security

A significant safety or security impact would occur if construction-related activities increase pedestrian and/or bicycle safety risks or substantially limit the delivery of community safety services, such as police, fire, or emergency services, to locations along the proposed alignment.

3.5 Methodology

The analysis in this report is based on the activities outlined in the Draft Description of Construction Methods. Key considerations include potential construction methods, sequencing, phasing, staging areas, and possible effects on environmental resources. Each environmental topic area is analyzed to identify three classes of potential impacts:

- Direct Impacts – Impacts that would occur as a result of the construction process
- Indirect Impacts – Impacts that would be reasonably foreseeable future actions related to the construction process.
- Cumulative Impacts - Impacts that would result from the combined effects of the Regional Connector and other projects in the vicinity.

Multiple contractors would work on the project during the construction period. A representative phasing of construction is shown in Table 3-2. Many of the project elements could be constructed simultaneously, and the overall duration of construction would be approximately four years.

Table 3-2. Typical Phasing of Construction Activities		
Activity	**Tasks**	**Average Time Required (months)/a/**
Site Survey	Locate utilities, establish ROW and project control points and centerlines, and relocate survey monuments	4 to 6
Site Preparation	Relocate utilities and clear and grub ROW (demolition), widen streets, establish detours and haul routes, erect safety devices and mobilize special construction equipment, prepare construction equipment yards and stockpile materials	12 to 18
Heavy Construction	Construction of tunnels, street guideways including trackbed, subway stations and portals, trenches, piles, and disposal of excess material. Refinish roadways and sidewalks.	24 to 48
Medium Construction	Lay track, construct surface stations, drainage, backfill and pave streets.	12 to 24
Light Construction	Finish work, install all systems elements (electrical, signals, and communication), street lighting where applicable, landscaping, signing and striping, close detours, clean-up and test system.	4 to 6
Pre-Revenue Service	Testing of communications, signaling, and ventilation systems, training of operators and maintenance personnel	3 to 6

/a/ Some of these activities would be completed simultaneously.
Source: TAHA, 2010.

4.0 AFFECTED ENVIRONMENT

This section examines the affected environment as it relates to construction activities for the proposed TSM Alternative and the build alternatives.

4.1 Area of Potential Impact

The project is located in the downtown area of the City of Los Angeles. The project area includes several communities, including the Financial District, Bunker Hill, Civic Center, Little Tokyo, Toy District, Historic Core, and Arts District. These areas are fully urbanized, and limited space is available for construction staging. Multiple community and environmental resources would potentially be impacted by construction of the TSM Alternative or the build alternatives.

4.2 General Construction Scenario

The construction activities for the TSM Alternative include installation of new bus stops and associated structures. These activities would require minimal construction equipment and would occur in the existing street and sidewalk right-of-way. The surrounding transportation infrastructure would be maintained. Construction activities would last approximately four months.

The construction duration for the build alternatives would be approximately four years. However, construction activities at any one location may be shorter. In the vicinity of cut and cover construction, surface streets would be impacted intermittently over a period of 24 to 48 months. Construction could begin simultaneously at several locations along the selected route to minimize the overall construction times. Facilities requiring the lengthiest construction work, such as tunnels, underground stations, and grade separation segments, could potentially be started first so that the entire alignment is completed at approximately the same time.

Construction of the proposed alternatives would involve conventional techniques and equipment typically used on similar projects in the Southern California region. Methods would include cut and cover excavation for certain segments of tunnels, crossovers, portals, stations and ancillary facilities and Tunnel Boring Machine (TBM) excavation for portions of the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternatives beneath 2nd Street. The 2nd/Hope Street station would be constructed using either the open cut or the Sequential Excavation Method (SEM), and off-street portions of the underground alignments would be constructed using the open cut method. Also, the proposed portal on 1st Street for the Fully Underground LRT Alternative would be constructed using either the open cut or cut and cover method.

The equipment that would be used during construction may include rail-mounted vehicles, earth moving vehicles, cranes, concrete mixers, flatbed trucks, sand and gravel delivery trucks, dump trucks, and TBMs. These construction vehicles may temporarily impede traffic mobility in areas of construction and, therefore, traffic detours, designated truck routes, and off-peak hauling schedules could be required during construction. Traffic management and traffic control measures would be coordinated with the City of Los Angeles Department of Transportation (LADOT).

Construction would follow all applicable local, state, and federal laws for building and safety. The Metro Fire Life Safety Committee, composed of members from the City and County of Los Angeles Fire Departments and Metro specialists, would approve all construction methods. Working hours would be varied to meet special circumstances. Standard construction methods would be used for traffic, noise, vibration, and dust control, consistent with all applicable laws as described in the following sections.

To provide an understanding of the likely steps involved, the anticipated construction activities are described below. This potential construction sequence does not represent the order in which construction activities would be performed. Actual construction would be a complex process with many activities taking place simultaneously. Some of the construction methods and sequences would be left to the discretion of the construction contractor.

4.2.1 Utility Relocation and Street Closures

Prior to beginning construction it would be necessary to relocate, modify, or protect in place all utilities and below-grade structures which would conflict with excavations for street level track work and excavation (cut and cover sections, tunneling, and station structures). Shallow utilities that would interfere with guideway excavation work, such as maintenance holes or pull boxes, would require relocation. These utilities would be modified and moved away from the construction area.

Travel lanes would need to be temporarily occupied during utility relocation for approximately two to three blocks at a time. Closures could potentially occur in stages and alternate between opposite sides of the street. Depending on the extent of utility relocation work, construction could last up to four months on each two-block segment. Some of the major utilities (greater than 18 to 24 inches in diameter), such as the storm drains on 2nd and on Flower Streets, may require more complex construction sequences and schedules for relocations and supports. Other preconstruction activities, such as soldier piling or installation of geotechnical instrumentation, may require temporary partial street closures and the use of drilling equipment and excavators.

4.2.2 Staging Areas and Haul Routes

Temporary easements would be required at various locations for construction staging. Easements typically include portions of the sidewalk and street, and sometimes private property. The street alongside the stations and track areas, supplemented by adjacent off-street areas, would be used for construction staging and for equipment and material storage. Construction staging within the street right-of-way is also envisioned where no off-street areas can be identified.

Site clearance and demolition of existing structures at the construction staging areas would also be necessary before major construction begins. Figure 4-1 shows the location of potential staging areas along the build alternatives alignment, including the approximate footprints of the construction staging areas.

To facilitate the removal of excavated materials, haul routes to disposal sites would be predetermined by agreement with local authorities prior to construction. Routes would follow streets and highways that form the safest, shortest route with the fewest adverse effects on traffic, residences, and businesses.

4.2.3 At-Grade Construction Methods

4.2.3.1 Surface Track work

Track work construction involves demolition of the affected roadway sections, preparation of the track bed, construction of the supporting track slab, and laying of rail. Foundations for overhead catenary poles may be installed simultaneously. Construction would be performed within the parking and travel lanes identified to be permanently removed as part of the project and potentially in parallel lanes which would be impacted temporarily. Typical drilling of the shafts for catenary pole and track installation is relatively shallow. Given the urban context of the project area, approximately two-block segments of the roadway at a time are likely to be reserved for construction activities in order to achieve economies of scale and minimize the schedule. Rails would be brought to the site by truck, stockpiled at designated storage areas, welded into rail strings, and moved into place as work progresses. Construction durations for each two-block segment are estimated to be two to four months. Periodic lane closures, typically on just one side of the work zone, would be required for delivery of materials and other construction activities such as concrete pours. Construction of station platform slabs would likely be included in line segment contracts and would be coordinated with track work installation.

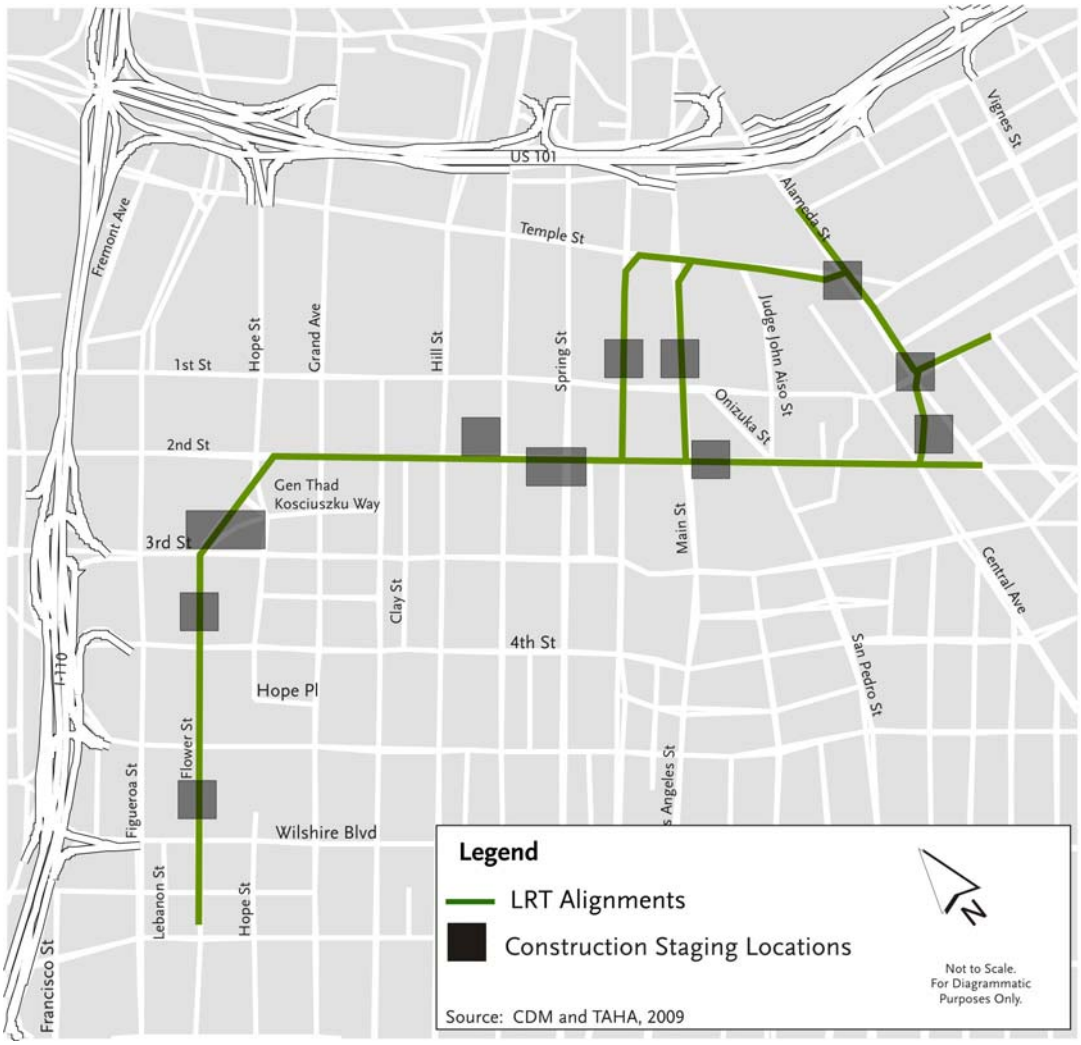


Figure 4-1. Construction Staging Area Locations

During construction within a two-block segment, cross streets and alleyways may be temporarily closed. Major cross streets would require partial closure, usually half of the street at a time, for the construction of surface stations and the light rail trackbed. Depending on allowable working hours, full blocks may require closure during excavation, preparation of subgrade, drilling for soldier pile installation, and track foundation placement. Closures would be staggered to facilitate traffic control. Where streets are not fully closed, two-way traffic could be allowed on half of the street. After the trackbed is constructed across a local street and the roadway is restored to its permanent condition, vehicles can resume planned traffic patterns (e.g. 2nd Street would have single direction traffic for the At-Grade Emphasis LRT Alternative). Rails would be brought to the sites by truck, and local rail storage areas

would be necessary for short-term storage and to facilitate placement of the rails. Equipment used for construction of surface tracks and stations would be similar to the equipment required for relocation of utilities, plus track-laying equipment, paving machines, concrete mixers, and concrete finishers. The areas of the proposed alternatives where at-grade construction is anticipated are shown in Figure 4-2.

4.2.3.2 At-Grade Stations

The at-grade station platforms on Main Street and Los Angeles Street could be constructed at the same time as other segments of the alternative, although the construction contractor may elect to construct them sequentially. Materials would be delivered to staging areas and station sites via the shortest, safest route agreed upon by local authorities. The at-grade station platforms would be constructed using standard building materials that are durable and resistant to vandalism, such as concrete, steel, aluminum, and heavy plastic. The station would consist of two single-direction platforms located along the eastern curb of Main and Los Angeles Streets.

4.2.4 Underground Construction Methods

4.2.4.1 Cut and Cover Construction

Cut and cover construction is one of various traditional construction methods for underground facilities. It entails a construction shoring system, excavating down from the ground surface, placing a temporary deck over the excavated area, constructing the underground facilities beneath the deck, and then backfilling and restoring the surface once the facilities are completed (Figure 4-3). Temporary excavation support would be provided to stabilize the ground, allowing excavation to be carried out inside the supported area. Temporary concrete decking can be placed over the cut immediately following the first part of excavation (at about 12 to 15 feet below ground surface) to allow traffic to pass above. Once the deck is in place, excavation and internal bracing would continue to the required depth. Once the desired construction is completed inside the excavated area, the deck would be removed, the excavation would be backfilled, and the surface would be restored permanently.

For the build alternatives, cut and cover construction would be utilized in various portions of the proposed alignments (Figure 4-2). These areas include underground cut-and-cover and trackway construction on Flower Street between 7th Street and 3rd Street, underground stations, crossovers, portals, and entry areas for a TBM.

Cut and cover construction would begin with the identification and relocation of utilities in the project area. Once the utilities are relocated, construction of temporary retaining walls would be required to support the soils laterally for excavation of the cut and cover tunnel, the underground station, or potential underpass to the required depths. Depending on the depth of excavation, ground conditions, proximity of adjacent structures to the proposed construction, building foundation type, and the potential for construction-induced ground

movement, an appropriate temporary support method would be selected. Temporary excavation support systems include:

- Tangent Pile Walls - reinforced concrete drilled-in-place piles which are contiguous; equipment required for installation includes drill rigs, concrete trucks, cranes, and dump trucks; or
- Secant Pile Walls - similar to tangent pile walls, but they overlap each other, providing better water tightness and ground support ; or
- Soldier Piles and Lagging, or Slurry Walls - typically constructed along the perimeter of excavation areas and involve installing soldier beams (vertical steel beams) at regular intervals and placing precast panels or other lagging materials between the beams to form the retaining wall.

Figure 4-2A Construction Methods (At-Grade Emphasis LRT Alternative)

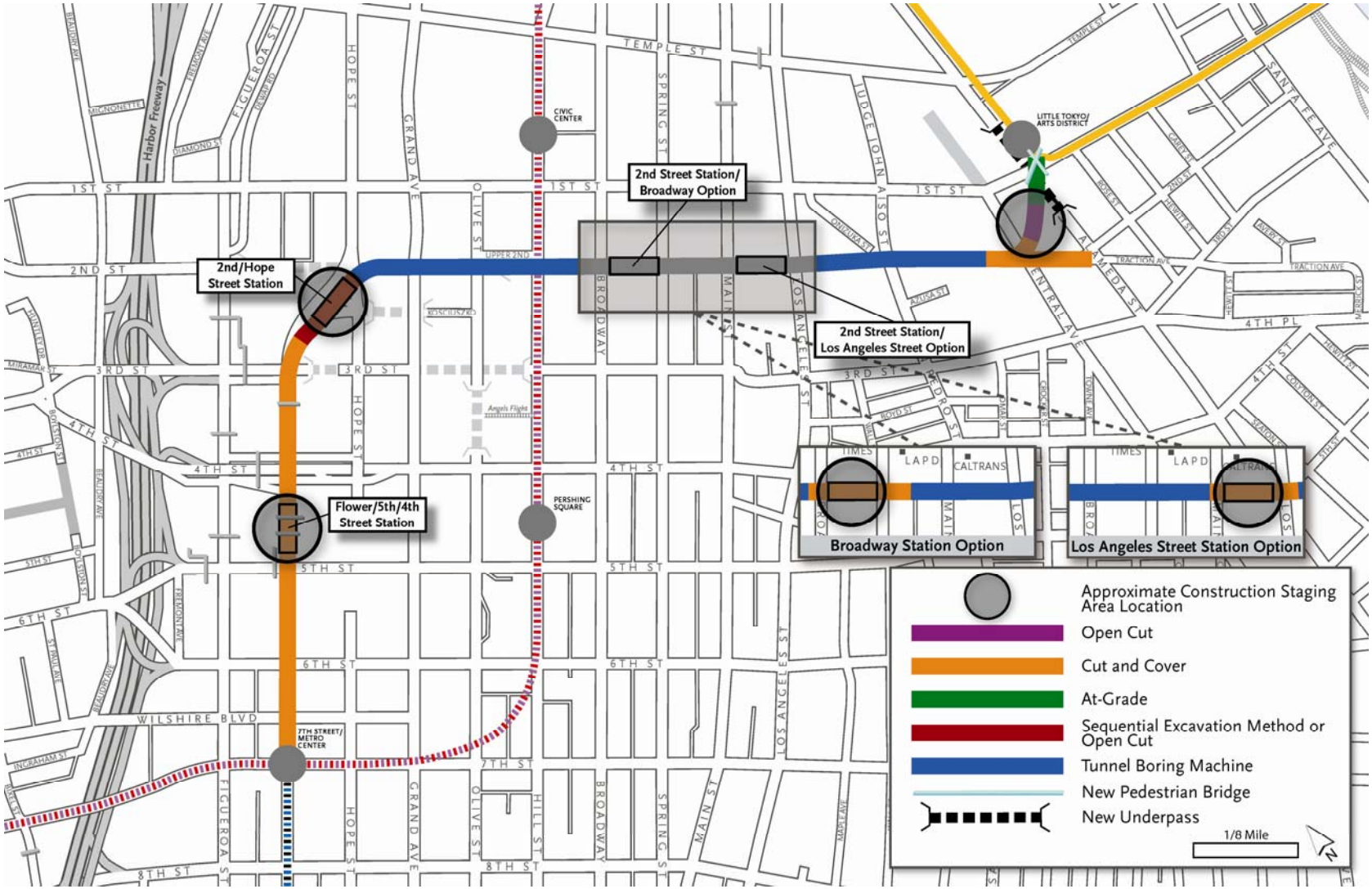


Figure 4-2B Construction Methods (Underground Emphasis LRT Alternative)

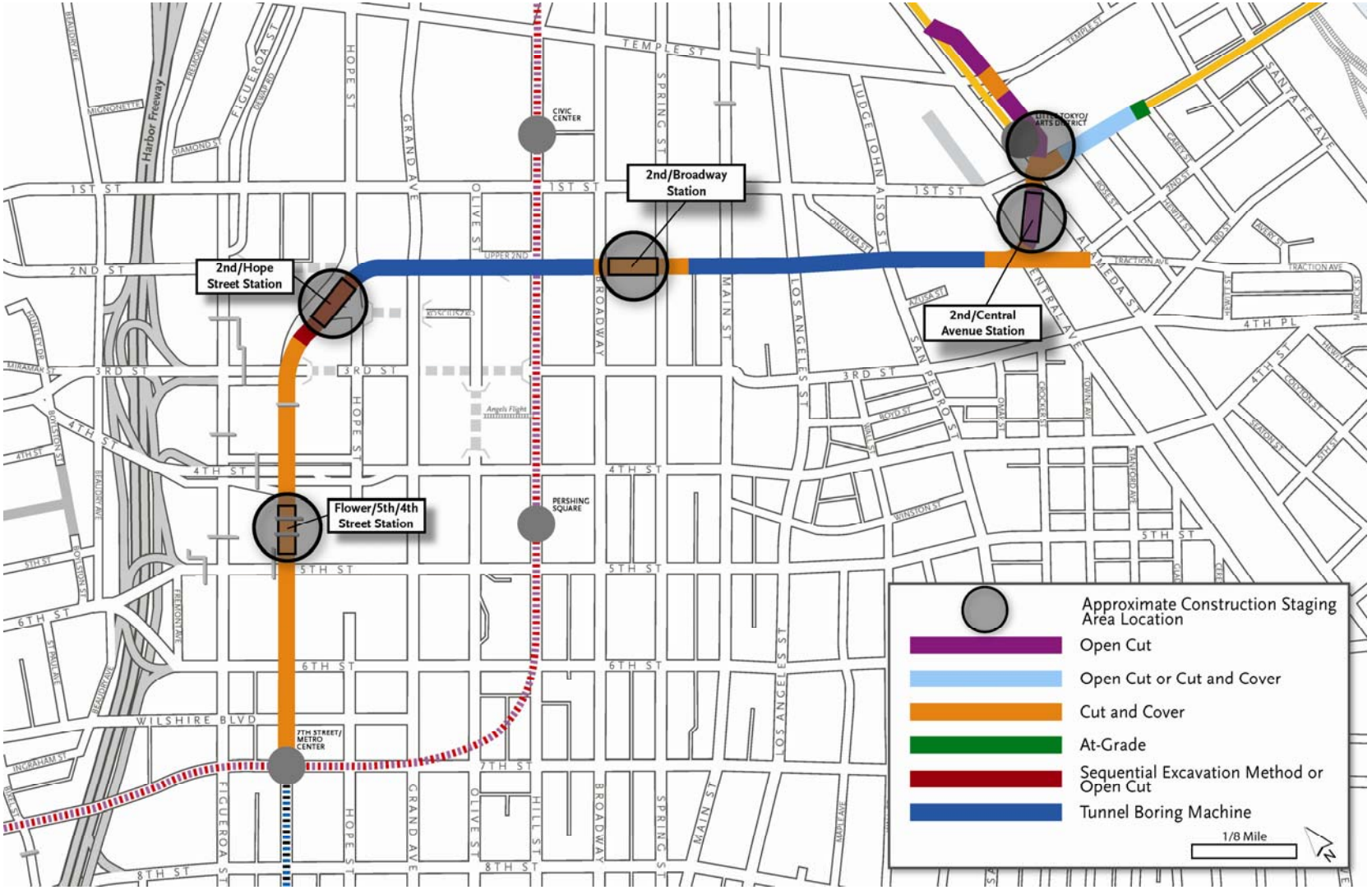


Figure 4-2C Construction Methods (Fully Underground LRT Alternative)

These wall systems would be braced with internal struts or supported by tiebacks as the excavation progresses. Tiebacks consist of horizontal or inclined wire strands or steel rods installed in drilled holes in the ground behind the wall. One end of each tieback would be secured to the wall, and the other end would be anchored to stable ground to provide sufficient resistance and to limit ground movement. Prior to the installation of a temporary ground support system, dewatering may be required at underground station locations and tunnel sites in alluvium to temporarily lower the groundwater level below the excavation depth or to an impermeable layer. Dewatering facilitates installation of soldier piles and other non-watertight shoring systems, improves soil stability, and allows excavation in dry conditions. Groundwater would be pumped from wells installed around the perimeter of the excavation.

After installation of the temporary shoring support system and initial excavation, the contractor would proceed with installation of the deck beams, followed by multiple sequences of excavation and installation of cross bracing or tieback systems. Pre-cast concrete decking panels would allow traffic and pedestrian circulation to resume after the initial excavation, since they would be installed flush with existing street or sidewalk levels. Deck installation would require temporary lane closures in the cut-and-cover areas. Concrete decking would be installed in progressive stages and would require much less time than the overall station or crossover construction, which would occur underneath the street after decking is installed. Based on experience with the cut and cover construction of the two underground stations on the Metro Gold Line to East Los Angeles, after the shoring system was in place, decking installation occurred over several weekends only with non-stop activity from Friday at 5 pm to Monday morning at 6 am with community and local agency approval. Similar progressive staging could be performed for the Regional Connector. Portal construction would employ construction methods similar to those used for station excavations and retaining walls, but the portal could remain permanently open and no decking would be required during construction. However, decking may be used during construction of the portal facilities on 1st and 2nd Streets for the Fully Underground LRT Alternatives.

Cut and cover construction plans would need to address the potential presence of temporary shoring and tieback systems that were utilized during construction of the underground basements of many structures in downtown Los Angeles. Many of these temporary shoring and tieback systems were abandoned in place once building construction was completed, as is common practice in the City of Los Angeles and elsewhere in Southern California. These abandoned tiebacks could be encountered under Flower Street and 2nd Street. Steel tieback cables could also impede TBM operation.

The trackway planned under Flower Street between 7th and 3rd Street, and all underground stations and crossovers would be built with the cut and cover technique. A potential exception is the 2nd/Hope Street station where SEM construction is being considered for the Underground Emphasis LRT Alternative and Fully Underground LRT Alternatives due to the

station's depth. Open cut construction would be used for the 2nd Street/Central Avenue station for both of the Fully Underground LRT Alternatives. The activities described for

underground station construction could last up to 48 months at each underground station location. Based on the anticipated volume of excavation for the cut and cover tunnel and stations, it is estimated that an average of 20 to 30 dump truck trips per day would be required to haul and dispose of the excavated soils.

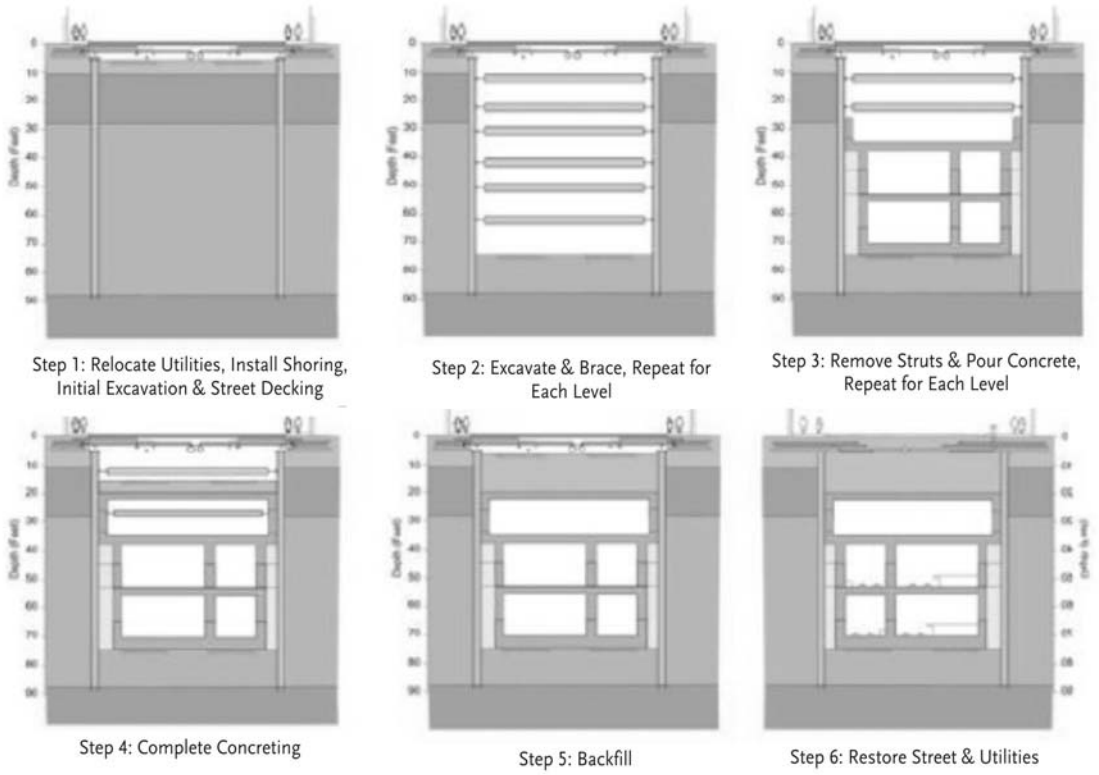

Step 1: Relocate Utilities, Install Shoring, Initial Excavation & Street Decking
Step 2: Excavate & Brace, Repeat for Each Level
Step 3: Remove Struts & Pour Concrete, Repeat for Each Level
Step 4: Complete Concreting
Step 5: Backfill
Step 6: Restore Street & Utilities

Figure 4-3. Cut and Cover Construction Method

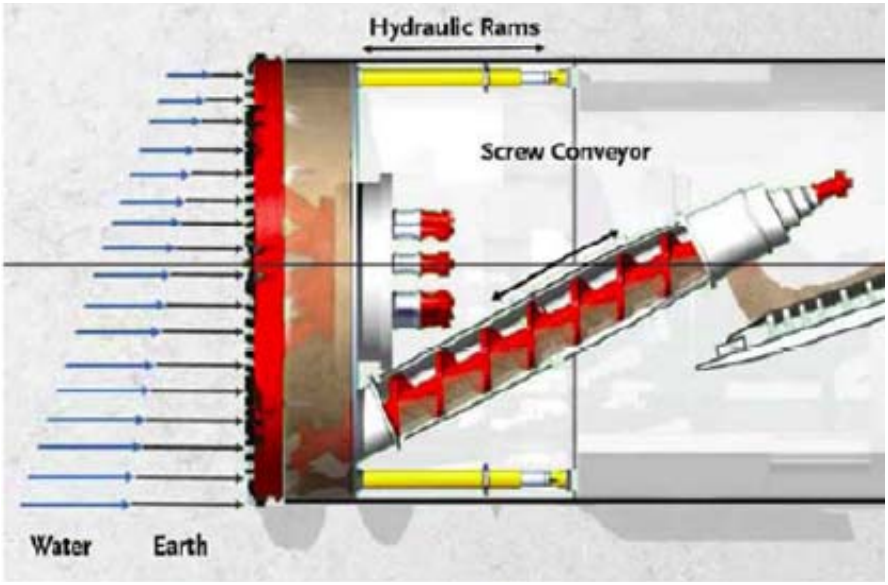
The Open Cut construction method is similar to Cut and Cover, but does not include temporary decking.

4.2.4.2 Tunnel Construction and Tunnel Boring Machine (TBM)

Portions of the Underground Emphasis LRT Alternative and both Fully Underground LRT Alternatives along 2nd Street are anticipated to be bored using a pressurized face TBM(s) (Figure 4-2). TBMs are large-diameter horizontal drills that continuously excavate circular tunnel sections. Compared to the cut and cover method, tunnel boring is far less disruptive to surface traffic and adjacent land uses. The TBM would be advanced a small distance at a time (typically four to five feet) by means of hydraulic jacks, which push against a previously installed tunnel lining ring. The hydraulic jacks would then be retracted and another tunnel

lining ring would be installed. The machine would then be advanced again and the process would be repeated until the entire length of tunnel has been constructed. The excavated materials would be removed through the tunnel using hopper type rail cars or a conveyor system. As the TBM advances, it would support both the ground in front of it and the hole it creates using a shield and pre-cast concrete tunnel liners (Figure 4-4). This method creates a tunnel with little disruption at the surface, and is especially suitable for creating a circular opening at depths that would not be practical for cut and cover construction. Concrete tunnel liner segments would have rubber gaskets between them where necessary to prevent water from entering the tunnel, allowing excavation to proceed below the groundwater level.

TBMs require a launching shaft to start the tunneling operation. One option for a launching shaft for the TBM would be planned near the east end of the project, on 2nd Street between Central Avenue and Alameda Street. From the east end, the machine would bore westward along 2nd Street towards the 2nd/Hope Street Station site, passing through the proposed 2nd Street station area at either Broadway or Los Angeles Streets. The TBM would then be dismantled and retrieved through a vertical shaft created by cut and cover method adjacent to the 2nd/Hope Street Station. It would then be transported back to the launching shaft, and reassembled to repeat its journey for the second twin tunnel. An alternative tunnel boring approach is possible that would use a single, larger diameter tunnel instead of two smaller diameter tunnels. A single large TBM could be used to bore one tunnel big enough to contain both tracks and possible the station platforms. Further studies will determine if such an approach would be feasible for the Regional Connector. The TBM could also be launched from 2nd and Hope Streets and travel east toward 2nd and Alameda Streets. Launching two TBMs simultaneously from each end is an option as well.



Source: CDM 2009

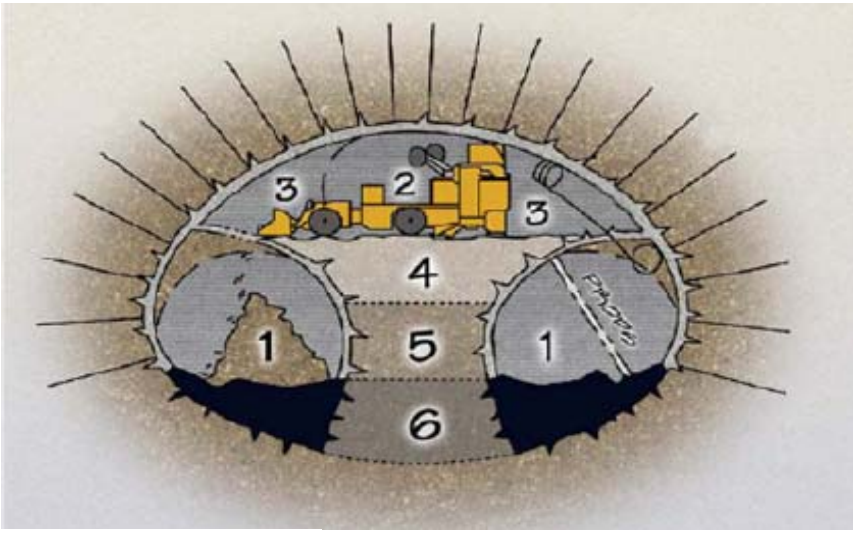
Figure 4-4. Tunnel Boring Machine (TBM) Method

The pre-cast concrete liners would be fabricated off-site and delivered by truck. Segment delivery would require 6 to 10 truck trips per day for the duration of tunneling, assuming an average excavation rate of 30 to 50 feet per day for a single tunnel. Should simultaneous tunneling occur, 12 to 20 truck trips would be required for segment delivery. Tunneling operation would typically be continuous, occurring seven days a week with two 10-hour shifts per day.

4.2.4.3 Sequential Excavation Method (SEM)

SEM construction involves excavating incrementally in small areas and supporting with steel supports beyond the opening and sprayed concrete as shown in Figure 4-5. Whereas TBMs can only excavate a fixed circular shape, SEM permits construction of a tunnel with a horseshoe or sub-rounded shape. This construction technique is considered in special instances where the planned depth, shape, or length of the tunnel may render it not cost effective using other methods. All operations would be conducted from an access shaft for spoils removal and future entrance(s). The sequence of excavation for the SEM method would be determined during the design stage and controlled and modified as needed during construction based on actual conditions encountered. After all of the predetermined sequence areas are excavated and supported, the larger area of the station would be completed.

Because of the depth of the 2nd/Hope Street station for the Underground Emphasis LRT and Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 , SEM construction is being considered as an alternative to the open cut method. Application of SEM would have less surface interruption than the cut and cover method since the excavation would be performed mostly underground and accessed via a vertical shaft.



Source: CDM. 2009

Figure 4-5. Sequential Excavation Method (SEM)

4.2.5 Additional Construction Activities

4.2.5.1 Construction of Underground Station and Portal Structures

The construction sequence for the station structure would begin with excavation of the station box, followed by the pouring of the foundation base slab, followed by the installation of exterior walls and any interior column elements. Slabs would be poured as the columns and intermediate floor and roof wall pours progress. Portal structures would use similar construction methods involving placement of concrete inverts, walls, and walkways. Station entrance locations would likely be used as access points to the underground station during the construction process. Exterior entrances would be constructed after the station structure has been completed.

4.2.5.2 Foundations and Tunnel Connection

Under the At-Grade Emphasis LRT Alternative, the connection to the existing 2nd Street Tunnel would require installation of a temporary shoring system, construction of retaining walls to support soil removal, reinforcement of the tunnel structure, and installation of supporting elements at the location of the new openings. This would not be required for the Underground Emphasis LRT Alternative, or the Fully Underground LRT Alterative Little Tokyo Variations 1 or 2.

4.2.5.3 Grade Separations

For the At-Grade Emphasis LRT Alternative, an underpass would be constructed at the intersection of Temple and Alameda Streets. For the Underground Emphasis LRT Alternative, an underpass would be constructed at the intersection of 1st and Alameda Streets. No underpass or pedestrian bridge would be required for the Fully Underground LRT Alternatives. The underpass would allow through traffic on Alameda Street to pass beneath Temple Street (At-Grade Emphasis LRT Alternative) and 1st Street (Underground Emphasis LRT Alternative) and the new rail junctions. In addition, pedestrian bridges could potentially be constructed above the Alameda Street underpass that would span the respective intersections for the At-grade Emphasis LRT Alternative and the Underground Emphasis Alternative. A pedestrian bridge could also possibly be constructed from the 2nd/Hope Street station to Upper Grand Avenue for all of the build alternatives. Bridge construction would involve heavy construction equipment, including cranes for erection of the structure. Underpass construction would involve installation of an appropriate shoring system followed by excavation to the required depth of the underpass. Lane closures and traffic rerouting would be required during construction. Currently, an existing modular wall system provides support for the existing rails at the Temple Street and 1st Street intersections. Lowering Alameda Street in these areas would require either underpinning the existing wall or constructing a new, higher replacement wall.

4.2.5.4 Operating Systems Installation

Operating systems for all of the build alternatives would include traction power, an overhead catenary system (OCS), a communications system, and a signal system. An OCS consists of poles connected to drilled shaft foundations with overhead wires to supply power to the trains. Within the tunnel segments, the OCS would be connected to the top of the tunnels. The system would include Traction Power Substations (TPSS) to provide direct power to the trains. TPSS facilities would include ground systems and prefabricated units which are placed on foundation slabs by crane and connected to the system. Construction equipment would include high rail vehicles for installation of the wires from the guideway area. While wires are being strung at cross streets, temporary street closures of a few hours at suitable times are anticipated. TPSS equipment would need to be installed adjacent to the alignment along at-grade segments, or within station boxes along underground segments.

4.2.5.5 Ventilation Shafts and Emergency Exits

The underground segments would include a number of ventilation and emergency exit areas in the vicinity of the underground stations. The stations would house emergency ventilation fan shafts, as well as separate emergency exit shafts at both ends of the stations. Ventilation fans would be installed to extracting smoke from tunnels and stairs for evacuation in the event of an emergency, such as a fire in the underground areas. The exact location of these facilities would be determined during the final design. These shafts would be built as extensions of the station excavations using cut and cover construction methods.

5.0 IMPACTS

This section addresses the construction-related adverse effects of the proposed alternatives, based on the implementation of the construction scenario described in Section 4. Each environmental topic that would have potential construction impacts is discussed. In addition, permanent impacts that would begin during the construction period are also identified, though they are analyzed in more depth in other technical reports.

5.1 No Build Alternative

Under the No Build Alternative, transit infrastructure investment would be limited to improvements planned for and funded in the 2009 Metro LRTP. By 2035, the Metro Expo Line to Santa Monica, Metro Purple Line to Westwood, Metro Crenshaw Line, and the Metro Gold Line to Azusa and I-605 will be in operation, and a number of bus services will have been reorganized and expanded to provide connections with these new rail lines. The transit network within the project area would otherwise be largely the same as it is now.

5.1.1 Direct Impacts

The No Build Alternative does not include the construction of any new facilities in the project area. Therefore, there would be no direct construction impacts under the No Build Alternative.

5.1.2 Indirect Impacts

The No Build Alternative does not include the construction of any new facilities in the project area. Therefore, there would be no indirect construction impacts under the No Build Alternative.

5.1.3 Cumulative Impacts

The No Build Alternative does not include the construction of any new facilities in the project area. Therefore, there would be no cumulative construction impacts under the No Build Alternative.

5.2 Transportation System Management (TSM) Alternative

Under the TSM Alternative, in addition to the provisions of the No Build Alternative, there would be two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. These buses would run frequently and may also have traffic signal priority similar to the Metro Rapid system to assist in the movement of buses within projected future traffic conditions. The traffic signal priority system grants longer green lights to oncoming transit vehicles. Enhanced bus stops would be located every two to three blocks, so as to maximize coverage of the area surrounding the routes. These new shuttles would also have minor associated structures, such as bus stops and signage. In addition, the same

infrastructure investments that would occur under the No Build Alternative would also occur under the TSM Alternative.

5.2.1 Direct Impacts

The TSM Alternative does not include the construction of any substantial new transit infrastructure. Transit infrastructure and improvements would be limited to the installation of new bus shelters and associated safety features. Construction of these facilities would occur on small localized sites and would occur over a very short term (days) compared to the Build Alternatives (years). Therefore, the TSM Alternative is not anticipated to result in any adverse environmental impacts.

5.2.2 Indirect Impacts

The TSM Alternative does not include the construction of any substantial new transit infrastructure. Transit infrastructure and improvements would be limited to the installation of new bus shelters and associated safety features and are not anticipated to result in any indirect adverse construction impacts.

5.2.3 Cumulative Impacts

The TSM Alternative does not include the construction of any substantial new transit infrastructure. Transit infrastructure and improvements would be limited to the installation of new bus shelters and associated safety features and are not anticipated to result in any cumulative adverse construction impacts.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces to at-grade north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The alignment continues along 2nd Street and it splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). It then heads east on Temple Street, realigns into a dual track configuration just east of Los Angeles Street, and connects to the Metro Gold Line tracks in a 3-way junction north of the Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that will traverse the Regional Connector Transit Corridor, an automobile underpass and pedestrian overpass will be constructed at the Temple and Alameda Streets to eliminate potential pedestrian-train and automobile-train conflicts. To implement this alternative, the number of traffic lanes and on-street parking on Temple Street, Main Street, Los Angeles Street, Flower Street and 2nd Street will be reduced.

Construction of the At-Grade Emphasis LRT Alternative would consist of the activities listed in Table 5-1. The At-Grade Emphasis LRT Alternative would require utility relocation and street

closures, staging areas necessary for equipment storage of excavated material, haul routes for construction equipment, the laying of surface track work, building of stations and portal structures, cut and cover construction, and excavation or installation of foundations. The analysis of the potential impacts that these construction activities could have are discussed for all environmental topic areas except for Land Use and Growth-Inducing Impacts because construction activities do not tend to have impacts in these topic areas.

5.3.1 Traffic and Parking

5.3.1.1 Direct Impacts

Permanent Impacts During Construction

Construction of the At-Grade Emphasis LRT Alternative would result in the permanent loss of approximately 47 on-street parking spaces and 33 on-street loading spaces, including 23 on-street parking spaces and five loading spaces on 2nd Street during off-peak hours. Three bus loading spaces in front of the Japanese American National Museum (JANM) on Alameda Street would be eliminated, but additional spaces are available on 1st Street, and replacement spaces would be identified in close proximity to the museum. The loss of on-street parking would result from the placement of tracks along streets. The details of these impacts and mitigation measures are presented in the Transportation Impacts Technical Memorandum and in the Displacement and Relocation of Existing Uses Technical Memorandum.

Table 5-1. Construction Activity Summary for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips Per Day	Workers Per Day
		Haul Trucks	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	6-12	X	X	X	X				<1,000	<500	10	20-30
Flower Street Cut and cover Tunnel	24-48	X	X	X	X	X	X	X	70,000	12,000	20-30	20-30
Flower/6th/5th Cut and cover Station	24-48	X	X	X	X	X	X	X	50,000	9,500	20-30	20-30
Portal on Flower South of 3rd Street	12-18	X	X	X	X	X	X	X	20,000	3,500	20-30	20-30
Portal NE of Flower/3rd Streets	TBD	X	X	X	X	X	X	X	10,600	4,000	20-30	20-30
2nd/Hope Sts Open Cut Station	24-28	X	X	X	X	X	X	X	55,000	17,500	20-30	20-30
New Portal into 2nd St Tunnel	TBD	X	X	X	X	X	X	X	40,000	11,700	TBD	TBD
Surface Track work	12-18	X	X	X	X	X		X	10,000	8,000	5-10	5-10

Table 5-1. Construction Activity Summary for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips Per Day	Workers Per Day
		Haul Trucks	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Main/Los Angeles Street Stations	12-18	X	X	X	X	X	X	X	<1,000	1,500	5-10	5-10
Temple/Alameda Junction	24-36	X	X	X	X	X	X	X	65,000	12,000	15-20	20-30
Operating Systems Install	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Source: CDM, 2009.

Construction-Related Impacts

Construction of the At-Grade Emphasis LRT Alternative would require the loss of on-street parking and reduction in travel lanes in certain locations. In most instances, these would be temporary conditions during the construction phase. In areas designated for cut and cover construction, the top two to three feet of the roadway would be removed and decking would be installed over an approximate three- to four-month period. Construction of the stations would continue underground while traffic operates normally on the decking. This procedure would require temporary off-peak, nighttime or weekend street closures to install the decking. The closure schedules would be coordinated to minimize impacts to residences, businesses, and traffic flow. During these times, traffic would be rerouted to adjacent streets via clearly marked detours.

Utility relocations, construction of the trackway, stations, and the proposed Alameda Street underpass at Temple Street would require the temporary closure of lanes on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, Main Street, Los Angeles Street, Temple Street, 2nd Street, and Alameda Street. The track construction and permanent street configuration along 2nd Street would result in the elimination of eastbound vehicular travel on the segment of roadway between Hill Street and Main Street as well as the permanent closure of one eastbound travel lane between Main Street and Los Angeles Street. For the westbound direction of 2nd Street, a one lane permanent closure has been identified between Hill Street and Los Angeles Street. Travel times for vehicles traveling along the westbound direction of 2nd Street are expected to increase and eastbound vehicular through traffic would shift to 4th and 1st Streets. This shift would result in increased delay at several intersections between Hill Street and Los Angeles Street. Vehicular travel times and intersection operations along these roadways would potentially be impacted.

The construction of the proposed Alameda Street underpass at Temple Street would also result in the temporary reduction of roadway capacity for extended periods of time. In order to maintain two through travel lanes in each direction during construction activities, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches would be temporarily eliminated over the two to three year period estimated to construct the underpass. The north and south intersection lane configurations would consist of a shared through and right turn lane and a shared through and left turn lane for the segment of Alameda Street between Aliso and 1st Streets. The existing signal phasing may be changed to split phasing in order to minimize conflicts between left turns and opposing through movements. This would minimize the formation of queues that could result from a vehicle waiting for a gap in the opposing traffic to complete a left turn movement. Consequently, travel times along this segment of Alameda Street are expected to increase due to the potential for additional traffic congestion. Also, operating conditions for the Alameda Street intersections between Aliso and 1st Streets are expected to experience increased delays.

Construction of the At-Grade Emphasis LRT Alternative would require use of heavy-duty trucks to transport equipment and excavated soil. The addition of these truck trips to the existing street network has the potential to adversely affect traffic. Haul and delivery truck routes would affect residents and commuters along the alignment. Soil hauling, rail and catenary deliveries, and general construction traffic would impact traffic flow patterns as well. Roadway surface restoration may be needed in areas that experience frequent project-related truck trips. These would be temporary conditions during the construction phase.

Existing on-street parking spaces and loading stalls would be temporarily removed during construction. This would potentially impact parking space and loading areas on the east and west sides of Flower Street, the loading areas on the east side of Main and Los Angeles Streets, and the parking spaces on the south side of Temple Street. In addition, the realigned intersection of Hope Street in the vicinity of General Thaddeus Kosciuszko Way may temporarily remove several parking spaces along both the east and west sides of the roadway segment. The track construction and permanent street configuration along 2nd Street would result in the temporary removal of several parking and loading stalls. Adjacent to the Alameda Street underpass, the JANM tour bus loading zone on the west side of the street would be temporarily relocated for the duration of the construction period.

Track construction, permanent street configuration changes along 2nd Street, and the construction of an underpass on Alameda Street may also require temporary sidewalk detours. As noted earlier, the construction along 2nd Street would shift some of the through traffic movements on to 1st Street, which is designated as a Class III bicycle route. Consequently, the flow of bicycle traffic could be hampered due to increased auto traffic volumes on 1st Street. The additional automobile traffic would result in increased turning movements, potentially reducing bicycle operating speeds or resulting in a greater risk of bicycle-automobile conflict, since Class III routes do not have bicycle-designated lanes. The construction of the underpass on Alameda Street may result in localized shifts in traffic to adjacent streets such as Central Avenue, which is also designated as a Class III bicycle route. Similarly, the increase in traffic volumes could potentially impact the flow of bicycle traffic. Temporary sidewalk detours during the construction of this alternative would also impact pedestrian flow.

Restoration of these parking, pedestrian and bicycle circulation, and travel lanes to their permanent configurations would occur prior to operations. Although short term, potentially adverse impacts are anticipated during construction of this alternative.

5.3.1.2 Indirect Impacts

Impacts from construction-related activities would be temporary and direct in nature. There would be no indirect impacts affecting traffic circulation or parking under the At-Grade Emphasis LRT Alternative.

5.3.1.3 Cumulative Impacts

Impacts to traffic circulation during construction would be short-term. They would contribute to a cumulative adverse effect when combined with additional projects in the downtown area. Therefore, potential cumulative adverse traffic circulation impacts are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.2 Displacements and Relocation

5.3.2.1 Direct Impacts

Permanent Impacts During Construction Period

To construct the At-Grade Emphasis LRT Alternative, 11 parcels would be partially acquired at different locations along the alignment. These properties would be utilized for TPSS facilities, construction staging, below grade tunneling, and stations. Details of these impacts and mitigation measures are presented in the Displacements and Relocation of Existing Uses Technical Memorandum.

Construction-Related Impacts

During construction of the At-Grade Emphasis LRT Alternative, staging of construction equipment and materials would require temporary construction easements that would impact two parcels. The portions of these parcels that would be utilized would be plazas and open areas. Access to businesses and buildings would be maintained. Some sidewalk detours would be necessary. Mitigation would minimize the adverse impacts associated with this type of displacement during construction. In addition, once construction is completed, the sites would be restored to their permanent conditions.

5.3.2.2 Indirect Impacts

Displacement impacts are direct in nature. Therefore, no indirect construction impacts associated with displacement are anticipated.

5.3.2.3 Cumulative Impacts

During construction, two temporary construction easements would be required. Given the temporary nature of these easements, the project is not anticipated to contribute to cumulative adverse construction impacts.

5.3.3 Community and Neighborhoods

5.3.3.1 Direct Impacts

Mobility would be reduced in the Civic Center, the Historic Core, and Little Tokyo areas due to street closures associated with construction activities including track work, cut and cover excavation, and structural support work. Disruption of traffic patterns would require detours for persons accessing nearby residences and businesses. In Little Tokyo, disruption to traffic

along Alameda Temple Streets would directly affect cultural institutions such as JANM, the Go For Broke Monument, and the Museum of Contemporary Art (MOCA) and other businesses during the excavation and construction of the Alameda Street underpass and the potential pedestrian bridge. Without mitigation, potential adverse construction impacts associated with community and neighborhoods are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.3.2 Indirect Impacts

During utility relocation, mobility would be reduced in the Civic Center, Historic Core, and Little Tokyo areas. Disruption of traffic patterns would require detours for persons accessing nearby residences and businesses. This could impact the economic vitality of some businesses, particularly in Little Tokyo, where the community has expressed concern about construction activities. Prolonged disruption to businesses could affect the cohesion of some communities, including Little Tokyo. Without mitigation, potential adverse indirect construction impacts associated with community and neighborhoods are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.3.3 Cumulative Impacts

No cumulative adverse construction impacts are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.4 Visual Resources and Aesthetics

5.3.4.1 Direct Impacts

Views and Visual Character

During construction of the At-Grade Emphasis LRT Alternative, several construction staging areas would be utilized. Construction areas would be protected by barriers. The placement of concrete barriers and fencing would be visible from multi-family residences and other sensitive uses adjacent to the alignment, particularly the Bunker Hill Towers, the Higgins Building, Hikari, and Savoy. Viewers would see construction equipment, construction-related activities, stockpiles of dirt and debris, and the urban streetscape would be temporarily altered. Screening of construction staging areas would minimize aesthetic impacts at street level. The project would be constructed in a heavily urbanized environment where construction activities are not uncommon, and the construction of the project would not noticeably reduce visual quality or alter viewing context. In Little Tokyo, large construction equipment would be required for the excavation and construction of the Alameda Street underpass and of the potential pedestrian bridge. This impact would be temporary and would be considered less than significant. Overall, less-than-significant impacts associated with views and visual character are anticipated due to construction activities.

Lighting

Temporary lighting may be necessary for nighttime construction, which minimizes disruption to daytime traffic and business activities and for nighttime lighting for staging sites, primarily for security. However, nighttime construction activities would be limited to non-residential areas and nighttime illumination of staging areas would be directed towards the site and away from sensitive uses. Therefore, less-than-significant impacts are anticipated.

5.3.4.2 Indirect Impacts

No indirect adverse construction impacts associated with visual resources are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.4.3 Cumulative Impacts

No cumulative adverse construction impacts associated with visual resources are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.5 Air Quality

5.3.5.1 Direct Impacts

Regional Construction Emissions

An analysis of construction-related emissions was completed in accordance with SCAQMD requirements. The estimate included emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul truck emissions. Table 5-2 provides a summary of anticipated construction emissions during peak operation for the entire project area.

Use of electric construction equipment could be encouraged where feasible. Daily regional construction emissions are anticipated to exceed SCAQMD regional significance thresholds for VOC, NO_x, CO, and $PM_{2.5}$ and would result in a potential adverse effect without mitigation.

Localized Construction Emissions

In addition to evaluating emissions on a regional level, construction emissions were also compared to SCAQMD's localized significance thresholds. The methodology includes using look-up tables for NOx, CO, PM_{10}, and $PM_{2.5}$. The tables show the maximum allowable emission levels given the project location, acreage, and distance to the nearest receptor. It was assumed that most project construction sites would be approximately one acre in size and located within 25 meters of a receptor. The maximum localized construction emissions would occur during cut and cover construction along Flower Street, and would result in maximum daily localized emissions of approximately 300 pounds per day (ppd) of NO_x, 150 ppd of CO, 14 ppd of $PM_{2.5}$ and 15 ppd of PM_{10}. Daily construction emissions are anticipated to exceed SCAQMD localized significance thresholds for NO_x, PM_{10}, and $PM_{2.5}$, and would result in a potentially adverse localized air quality effect.

Table 5-2. At Grade Emphasis LRT Alternative (2014-2017) Maximum Daily Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Onsite	281	2,088	1,088	2	82	75
Offsite	8	87	62	<1	21	6
Total	**289**	**2,175**	**1,150**	2	102	**80**
Threshold	75	100	550	150	150	55
Significant	Yes	Yes	Yes	No	No	Yes

*Note: Emissions greater than threshold of significance are shown in **bold**.*
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010

5.3.5.2 Indirect Impacts

The At-Grade Emphasis LRT Alternative would result in indirect emissions of TACs from construction. A TAC is an air pollutant that can cause or contribute to an increase in mortality or in serious illness, or may pose another potential hazard to human health. Common TACs associated with mobile sources, such as passenger vehicles and construction equipment, include toluene, xylenes, acrolein, and DPM, among others. A Tier 1 risk assessment was included, which compares TAC emission levels to published screening limits. Only acute risks were reviewed because of the temporary nature of these potential impacts. Speciation profiles from CARB were used to estimate emissions of TACs from construction. The profiles for diesel vehicle exhaust (profile no. 425) and construction dust (profile no. 420) were used in the analysis. A summary of project-related emissions and Health Risk Assessment (HRA) results are provided in Table 5-3. Since volatile organic compound (VOC) emissions will decrease in future years because of improvements in engine technology, the HRA was not completed for VOC emissions. Instead, it was restricted to inorganic emissions. The At-Grade Emphasis LRT Alternative would not result in an adverse effect due to TAC construction emissions.

5.3.5.3 Cumulative Impacts

Daily regional and localized construction emissions are anticipated to exceed SCAQMD regional significance thresholds and would result in a potentially adverse cumulative effect without mitigation.

Table 5-3. At-Grade Emphasis LRT Alternative (2014-2017) Construction Health Risk Assessment				
TAC	**CAS #**	**Emissions (lb/hr)**	**PSL (lb/hr)**	**PSI**
Arsenic	7440-38-2	1.74E-05	1.00E-04	1.74E-01
Chlorine	7782-50-5	1.27E-03	1.05E-01	1.21E-02
Copper	7440-50-8	8.76E-05	5.00E-02	1.75E-03
Mercury	7439-97-6	1.01E-04	9.00E-04	1.12E-01
Nickel	7440-02-0	6.58E-05	3.00E-03	2.19E-02
			Application Screening Index (Total PSI)	3.22E-01
			Threshold	1

Notes:
TAC = Toxic Air contaminant
CAS = Chemical Abstracts Service
PSL = pollutant screening level (minimum level expected to exceed health risk)
PSI = pollutant screening index (PSL divided by project emissions)
ASI = application screening index (total PSI)
lb/hr = pounds per hour
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010

5.3.6 Noise and Vibration

5.3.6.1 Direct Impacts

Anticipated construction activities, equipment, and related noise levels are shown in Table 5-4. Construction of the At-Grade Emphasis LRT Alternative would potentially generate noise and vibration from excavators, bulldozers, trenchers, drill rigs, cranes, and heavy-duty trucks used to transport construction equipment. According to the City of Los Angeles *2006 CEQA Thresholds Guide*, this type of construction activity would generate a maximum noise level of 90 dBA at 50 feet. The construction activities and locations with the greatest potential for noise impacts are: the Flower Street cut and cover tunnel, Flower/6th/5th Street station cut and cover construction, 2nd/Hope Street station open cut construction, and construction of the junction and underpass at Temple and Alameda Streets. These four activities have the greatest potential for noise impacts due to the extended duration of work and proximity to noise-sensitive land uses. Potential adverse effects from construction noise are anticipated if mitigation measures are not implemented.

Table 5-4. Construction Activity and Equipment Typical Noise Levels in dBA at 50 feet from Source for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
Pre-Construction	4-6	NA	NA	NA	NA	90
Site Preparation	6-12	77	85	82	NA	NA
Flower Street Cut and cover Tunnel	24-48	77	85	82	81	90
Flower/6th/5th Cut and cover Station	24-48	77	85	82	81	90
Portal on Flower South of 3rd	12-18	77	85	82	81	90
Portal northeast of Flower and 3rd	TBD	77	85	82	81	90
2nd/Hope Street Open Cut Station	24-28	77	85	82	81	90
New Portal into 2nd Street Tunnel	TBD	77	85	82	81	90
Surface Track work	12-18	77	85	82	81	NA
Main and Los Angeles At-Grade Stations	12-18	77	85	82	81	90
Temple and Alameda Junction	24-36	77	85	82	81	90
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD

Source: CDM, Metro Regional Connector Noise and Vibration Technical Memorandum, 2010.

The potential for GBV to cause damage to buildings varies based on type of building, building materials, structural techniques, and distance from construction activities. Thresholds are described in the Noise and Vibration Impacts Technical Memorandum, Tables 3-4 and 3-5. Pre-auguring would likely be necessary for installation of the soldier piles. During pre-augering, the holes for the piles would first be drilled and then the piles would be cast in place. Using the minimum safe distance for Category IV (0.12 inch/sec PPV), the potential worst case vibration category, vibration from construction equipment during construction of the At-Grade Emphasis LRT Alternative would result in an adverse effect if it occurred less than 21 feet from buildings. A pre-construction survey of structures within 21 feet of the anticipated construction zone would be conducted to assess potential for GBV to cause

damage, and to establish baseline pre-construction conditions. Because impact type construction equipment such as pile drivers and hoe rams would not be used, no construction vibration impacts related to impact type equipment are anticipated.

Vibration from large bulldozers and drill rigs could exceed the FTA annoyance criteria for sensitive receptors identified in the Noise and Vibration Technical Memorandum, Table 3-2. However, perceptible vibration from construction equipment would be short-term and intermittent. Therefore, perceptible vibration from the construction equipment is considered an "infrequent event," less than 30 events a day as defined by FTA. Sensitive receptors located along the alignment are considered Category 2 and Category 3 land uses under the FTA annoyance criteria. Short-term vibration levels during construction could exceed the FTA annoyance criteria if the identified construction equipment operates within 20 feet of Category 2 land uses or within 16 feet of Category 3 land uses. After incorporating the adjustment of 10 dBA for coupling to building foundation loss (Table 10-1, FTA, 2006), occupants would not be subject to vibration levels above the FTA annoyance criteria. It should be noted that large bulldozers and drill rigs would operate intermittently and would not be used during every day of construction. Without the implementation of mitigation measures, potentially adverse effects from vibration could occur.

5.3.6.2 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts are anticipated from noise or vibration under the At-Grade Emphasis LRT Alternative.

5.3.6.3 Cumulative Impacts

Impacts from noise and vibration during construction would be short term and would not contribute to a cumulative adverse effect. Therefore, no cumulative adverse noise or vibration impacts are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

5.3.7.1 Direct Impacts

Geotechnical/Subsurface/Seismic

The At-Grade Emphasis LRT Alternative proposed alignment does not cross any known faults. However, portions of the proposed alignment occur in areas mapped with the potential for liquefaction based on soil stability. Areas susceptible to liquefaction are along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. The eastern edge of the alignment near the intersection of 1st and Temple Streets is within the mapped Inundation Hazard Area. In addition, the proposed 2nd/Hope Street Station is within the Hillside Ordinance area (Bunker Hill).

During construction of underground stations, portal structures, and the Alameda Street underpass, there is the potential for adverse impacts related to ground settlement and

differential settlement on adjacent structures including historical buildings. Further evaluation and survey would be performed during final design to establish building types and existing conditions, and to develop criteria to limit potential movement to acceptable threshold values. Protection of buildings could involve design of adequately rigid excavation support systems, underpinnings, and ground improvements to minimize settlement to tolerable limits. A preconstruction survey of the adjacent structures and all historical buildings in the vicinity would be conducted to establish a baseline for measuring potential construction-induced damage. Construction monitoring would be required to ensure that ground movement does not exceed threshold values. With mitigation, less-than-significant impacts are anticipated.

Construction of surface track work, stations, and portals would likely require removal of protective vegetation or pavement that would increase the potential for soil erosion. With mitigation, potential adverse construction impacts associated with subsurface soils would be less than significant.

Hazardous Materials

Construction of the At-Grade Emphasis LRT Alternative would entail excavation along most of the proposed alignment, during which contaminated soil and groundwater could be encountered. As listed in Table 4-5 of the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, known and suspected soil and groundwater contamination exists at properties along the proposed alignment for the At-Grade Emphasis LRT Alternative. Lead may be present in surface soils from historical vehicle emissions of older automobiles using leaded gasoline, and PCBs may exist in surface or subsurface soils from leaking transformers. If released during excavation, there is potential for these hazardous materials to impact human health and the environment. Until further study is conducted, the actual levels of hazardous materials that could be encountered in soil and groundwater during construction are unknown. Without mitigation, potential adverse impacts are anticipated.

5.3.7.2 Indirect Impacts

No indirect adverse construction geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.7.3 Cumulative Impacts

No cumulative adverse construction geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.8 Water Quality

5.3.8.1 Direct Impacts

According to the Geotechnical/Subsurface/Seismic/ Hazardous Materials Technical Memorandum and the Water Resources Technical Memorandum, there is known and suspected soil and groundwater contamination along the proposed alignment. Construction activities have the potential to increase erosion and sedimentation around proposed construction and staging areas. Grading activities associated with construction could potentially result in a temporary increase in the amount of suspended solids running off construction sites. In the case of a storm event, construction site runoff could result in sheet erosion of exposed soil. Groundwater may be encountered during trenching or tunneling, and would require dewatering. Dewatering activity would result in the potential release of contaminated water due to the presence of relatively shallow groundwater (located at depths ranging from 14 to 36 feet) that is contaminated with pollutants common to urban development. All dewatering activity would occur with a NDPES permit. Testing would occur prior to construction and on-site treatment and discharge in accordance with applicable standards or transport to a treatment or disposal facility would be required. Without mitigation, potential adverse construction impacts associated with water quality are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.8.2 Indirect Impacts

No indirect adverse construction impacts associated with water quality are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.8.3 Cumulative Impacts

No cumulative adverse construction impacts associated with water quality are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.9 Energy

5.3.9.1 Direct Impacts

The highest direct energy consumption would occur during site clearance and construction guideways, stations, and support facilities. . Construction of the At-Grade Emphasis LRT Alternative would result in the one-time, non-recoverable energy cost of of 3,457 billion British Thermal Units (BTUs). This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative, potential construction-related impacts would be less-than significant.

5.3.9.2 Indirect Impacts

No indirect adverse construction impacts associated with energy are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.9.3 Cumulative Impacts

No cumulative adverse construction impacts associated with energy are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.10 Climate Change

5.3.10.1 Direct Impacts

No direct adverse construction impacts associated with climate change are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.10.2 Indirect Impacts

No indirect adverse construction impacts associated with climate change are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.10.3 Cumulative Impacts

The construction of the At-Grade Emphasis LRT Alternative would result in Greenhouse Gas (GHG) emissions from diesel-fueled construction equipment. Construction emissions would result from the use of onsite equipment, offsite worker vehicles, and offsite haul trucks. A total of approximately 76,400 metric tons per year of GHG emissions would be produced during all phases of construction under the At-Grade Emphasis LRT Alternative.

The At-Grade Emphasis LRT Alternative would result in a decrease in GHG emissions compared to the No Build Alternative and, because of regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The At-Grade Emphasis LRT Alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

5.3.11 Historic, Archaeological, and Paleontological Resources

5.3.11.1 Direct Impacts

Historic Resources

Potential effects, but no adverse effects, would result from dirt from construction activities, changes in access during construction, visual changes during construction, demolition and partial takes, construction of at-grade stations, installation of catenary poles and TPSS. The effects would be short-term and would not alter characteristics of historic properties in a

manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

In applying the criteria of adverse effect for historic properties (36 CFR 800.5(a)(1)) potentially affected by the construction near 2nd Street, an adverse effect would occur due to the demolition of a portion of the NRHP eligible 2nd Street Tunnel and the subsequent change in use. The changes would directly alter a characteristic of the historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Documentation of the property in accordance with mitigation measure MM-BE-1 would resolve the potential adverse effect.

At least seven NRHP and/or CRHR eligible properties could be potentially affected by cut and cover construction, differential settlement, and construction noise and vibration associated with construction of the At-Grade Emphasis LRT Alternative. The implementation of design measures would protect and stabilize the ground near historic properties as noted in MM-BE-2, MM-BE-3, and MM-BE-5. These measures would avoid adverse effects to all properties. If properly implemented, short term construction activities would not directly alter a characteristic of the historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Archaeological Resources

The At-Grade Emphasis LRT Alternative has the potential to alter, remove, or destroy archaeological resources within the APE. Site RC-1, a historic brick alignment, may be affected during ground disturbance from construction of a proposed pedestrian bridge at the intersection of Temple and Alameda Streets.
Site RC-1 appears to be not eligible for National Register or California Register listing. However, previously unrecorded parts of the site that retain substantial integrity may be present. This alternative also has the potential to affect previously unrecorded archaeological resources during ground disturbance from constructing new underground tunnel segments on Flower Street between 7th Street and Hope Street; new stations proposed at Main/1st Streets, Los Angeles/1st Streets, 2nd/Hope Streets, and Flower/6th/5th Streets; and an automobile underpass and pedestrian overpass on Alameda Street at Temple Street. Such damage to archaeological resources would represent a significant effect that could be mitigated. Implementing MM-A-1 (see Section 6.1) would reduce this effect to a less-than-significant level.

Paleontological Resources

The At-Grade Emphasis LRT Alternative has the potential to adversely impact paleontological resources at the surface and at depth within the project area as a result of ground disturbance related to construction of new underground tunnel segments between 7th and Hope Streets and at new proposed stations at Flower/6th/5th Street, 2nd/Hope Street, Main/1st Street, and Los

Angeles/1st Street. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; area ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or greater below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level.

5.3.11.2 Indirect Impacts

The construction of the At-Grade Emphasis LRT Alternative would have the potential to indirectly impact historical resources during cut and cover construction, underpass construction at Alameda and Temple Streets, and during construction of the new portals into the 2nd Street tunnel. The potential impacts would be indirect because the construction activities themselves would not damage historical properties, but vibration and possible subsidence of soils could potentially impact the historical integrity of buildings. Mitigation would minimize the potential adverse impacts.

5.3.11.3 Cumulative Impacts

No cumulative adverse construction impacts associated with historical, archaeological, or paleontological resources are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.12 Ecosystems and Biological Resources

5.3.12.1 Direct Impacts

During construction of the At-Grade Emphasis LRT Alternative, some mature trees located along the proposed alignment could be removed. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removal or disturbance of this vegetation during the nesting season could directly impact this habitat and any bird species that are present. There are currently approximately 250 mature trees in the area that could potentially be affected by construction, and some of these trees could be removed or disturbed. Approximately 60 of the trees are native California sycamore trees, a protected species. Potential mitigation measures are described in Section 6 and include compliance with the Native Tree Protection Ordinance. Compliance with the Native Tree Protection Ordinance, including replacement of this protected species at a 2:1 ratio, would reduce this potential impact to a less than significant level.

5.3.12.2 Indirect Impacts

Direct impacts to birds and their habitat by removing or disturbing mature trees have the potential to cause indirect impacts elsewhere. If birds are forced to relocate to new areas during the nesting season, increased competition for food and nesting habitat would be a potential indirect impact.

However, because the downtown area provides only low quality habitat for migratory birds, these potential impacts are not considered to be significant because only a small number of birds (if any) could be displaced. Further, mitigation taken to comply with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code would reduce potential indirect impacts to a less-than-significant level.

5.3.12.3 Cumulative Impacts

No cumulative adverse construction impacts associated with ecosystems or biological resources are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.13 Parklands and Other Community Facilities

5.3.13.1 Direct Impacts

During construction of the At-Grade Emphasis LRT Alternative, access to the parking structure beneath Maguire Gardens and pedestrian access to the gardens and the City Hall Park could potentially be reduced, but not eliminated, due to street closures and construction activities. Discrete locations along the alignment that could experience modified pedestrian and vehicle access during construction and operation include the new Los Angeles Police Department (LAPD) headquarters, the State of California Department of Transportation (Caltrans) building, City Hall, City Hall East, the U.S. Federal Government Building (Roybal Center), the Los Angeles Ambulatory Care Center, the fire station on Temple Street, and the Little Tokyo Branch Public Library. Disruption of traffic patterns would restrict access to certain community resources such as the MOCA, JANM, and the Go for Broke Monument. This would have the potential to affect annual festivals and events held in the downtown area during the construction period. Response times for emergency services could also be impacted due to street closures and detours. Without mitigation, potential adverse construction impacts associated with parklands and other community facilities are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.13.2 Indirect Impacts

Although construction impacts are direct by nature, the construction of the At-Grade Emphasis LRT Alternative alignment could potentially discourage patrons of community facilities and parks to visit them due to restricted access and temporary parking restrictions. Without mitigation, potential adverse impacts are anticipated.

5.3.13.3 Cumulative Impacts

No cumulative adverse construction impacts associated with parklands or other community facilities are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.14 Economic Vitality and Employment Opportunities

5.3.14.1 Direct Impacts

Construction of the At-Grade Emphasis LRT Alternative would directly impact several businesses located along the alignment due to lane closures, sidewalk detours and restricted street parking during track installation and cut and cover activities. These businesses, including Pitfire Pizza, China Bistro, and the Kawada Hotel among others, primarily rely on vehicular and pedestrian traffic for revenue generation. The Economic and Fiscal Impacts Technical Memorandum provides a list of businesses along the proposed alignment that would likely be affected by the track installation and street closures during construction. In addition, temporary closures or restricted access to Alameda Street during construction of the underpass and pedestrian bridge would impact a heavily utilized truck route and restrict freeway access to Little Tokyo. Cultural institutions, such as MOCA and JANM, could potentially be impacted directly and other businesses indirectly. Investment in transportation, including direct investment in the form of capital construction and operation costs, provides economic benefits in several basic ways: the creation of direct and indirect jobs, and spending by suppliers whose goods and services are used in the project. These benefits are discussed in the Economic and Fiscal Impacts Technical Memorandum. The benefits of the additional transit infrastructure in the long-term would outweigh the temporary significant impacts in the project area.

5.3.14.2 Indirect Impacts

No indirect adverse construction impacts associated with economic vitality are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.14.3 Cumulative Impacts

No cumulative adverse construction impacts associated with economic vitality are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.15 Safety and Security

5.3.15.1 Direct Impacts

The contractor will have a safety plan and be responsible for construction site security in conformance with local regulations and standards. Construction activities are not anticipated to affect security in the project area. Typically construction areas are fenced off with restricted access and are well lit. No direct adverse impacts associated with safety or security are anticipated.

5.3.15.2 Indirect Impacts

No indirect adverse construction impacts associated with safety or security are anticipated under the At-Grade Emphasis LRT Alternative.

5.3.15.3 Cumulative Impacts

No cumulative adverse construction impacts associated with safety or security are anticipated under the At-Grade Emphasis LRT Alternative.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would extend from the 7th Street/Metro Center Station north beneath Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with a new underground station near 2nd and Hope Streets to provide access to Bunker Hill. A pedestrian bridge could potentially be constructed to connect the 2nd/Hope Street station to Upper Grand Avenue. A second underground station would be located either between Broadway and Spring Street or between Main and Los Angeles Streets. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets.

Construction of the Underground Emphasis LRT Alternative would consist of the activities listed in Table 5-5 and would require utility relocation, street closures, creation of staging areas necessary for equipment storage, creation of haul routes for construction equipment and excavated materials, laying of surface track work, cut and cover station excavation, portal construction, excavation or installation of foundations, and possible SEM station construction.

The analysis of the potential impacts that these construction activities could have are discussed for all environmental topic areas except for Land Use and Growth-Inducing Impacts because construction activities do not tend to have impacts in these topic areas.

5.4.1 Traffic and Parking

5.4.1.1 Direct Impacts

Permanent Impacts During Construction

Construction of the Underground Emphasis LRT Alternative would result in the permanent loss of approximately 20 on-street parking spaces. Three bus loading spaces in front of JANM on Alameda Street would be eliminated, but additional spaces are available on 1st Street, and replacement spaces would be identified in close proximity to the museum. The details of these project impacts and mitigation measures are presented in the Transportation Technical Memorandum and the Displacements and Relocation of Existing Uses Technical Memorandum.

Construction-Related Impacts

Construction of the Underground Emphasis LRT Alternative would require the loss of on-street parking and reduction in travel lanes in certain locations. In most instances, these would be temporary conditions during the construction phase. In areas designated for cut and cover or SEM construction, the top two to three feet of the roadway would be removed, and decking would be installed over an approximate three- to four-month period. Construction of the stations would continue underneath while traffic operates normally on the decking. This procedure would require temporary off-peak, nighttime and weekend street closures to install the decking. The closure schedules would be coordinated to minimize impacts to residences, businesses, and traffic flow. As these street closure requirements are identified, traffic would be rerouted to adjacent streets with detours clearly signed and marked.

Utility relocations, track installation, station construction, and construction of the proposed Alameda Street underpass at 1st Street would require the temporary closure of lanes on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, 2nd Street, 1st Street, and Alameda Street. This would result in a reduction of roadway capacity and potentially the modification of existing traffic patterns to bypass congested areas. Vehicular travel times and intersection operations along these roadways would potentially be impacted. The construction of the proposed Alameda Street underpass at 1st Street would also result in the reduction of roadway capacity for extended periods of time. In order to maintain two through travel lanes in each direction during construction activities, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches would be temporarily eliminated over the two to three year period estimated to construct the underpass. The north-south intersection lane configurations would consist of a shared through and right turn lane and a shared through and left turn lane on Alameda Street between Aliso and 1st Streets. In addition, the existing signal phasing may be changed to split phasing in order to minimize conflicts between left turns and opposing through movements, and to minimize the formation of queues behind vehicles waiting for gaps in opposing traffic to complete left turn movements. Consequently, travel times along this segment of Alameda Street are expected to increase due to the potential for increased traffic congestion. Also, operating conditions for the Alameda Street intersections between Aliso and 1st Streets are expected to deteriorate.

Table 5-5. Construction Activity Summary for the Underground Emphasis LRT Alternative												
Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips Per Day	Workers Per Day
		Haul Trucks	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	12-18	X	X	X	X				<1,000	1,000	10-20	20-30
Flower Street Cut and cover Tunnel	24-48	X	X	X	X	X	X	X	280,000	27,750	20-30	20-30
Flower/5th/4th Cut and cover Station	24-48	X	X	X	X	X	X	X	105,000	26,000	15-20	20-30
Cut and cover Approach to 2nd/Hope Streets Station	24-48	X	X	X	X	X	X	X	30,000	5,500	15-20	20-30
2nd/Hope St Station (SEM)	24-48	X	X	X	X	X	X	X	50,000	8,250	10-15	20-25
2nd/Hope St Station (Open Cut)	24-48	X	X	X	X	X	X	X	147,500	17,250	20-30	20-30
2nd St TBM Tunnel	24-48	X	X	X	X	X		X	120,000	Pre-Cast	35-70	15-20
2nd St Cut and cover Station (Broadway Option)	24-48	X	X	X	X	X	X	X	200,000	47,250	15-20	15-20
2nd St Cut and cover Station (Los	24-48	X	X	X	X	X	X	X	175,000	48,500	15-20	15-20

Table 5-5. Construction Activity Summary for the Underground Emphasis LRT Alternative												
Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips Per Day	Workers Per Day
		Haul Trucks	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Angeles St Option)												
Portal	12-24	X	X	X	X	X	X	X	20,000	7,500	TBD	TBD
TBM Launch Site	24	X	X	X	X	X	X	X	20,000	N/A	5-10	15-20
1st/ Alameda Junction	24-36	X	X	X	X	X		X	65,000	12,000	15-20	20-30
Operating Systems Install	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Source: CDM, 2009.

Construction of the Underground Emphasis LRT Alternative would require the use of heavy-duty trucks to transport equipment and excavated soil. The addition of these trucks to the existing street network has the potential to adversely affect traffic and parking. The additional excavated soil necessary to construct the underground segment along 2nd Street would require more haul trucks than the At-Grade Emphasis LRT Alternative. Haul and delivery truck routes would affect residents and commuters along the proposed alignment. Tunnel spoil hauling, rail and catenary deliveries, and general construction traffic would impact traffic flow as well. Roadway surface restoration may be needed in areas that experience frequent project-related truck trips. These would be temporary conditions during the construction phase.

Lane closures during construction on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, Main Street, 2nd Street, 1st Street, and Alameda Street would result in the temporary removal of existing on-street parking spaces and loading stalls. This would impact parking spaces and loading areas on the both sides of Flower Street, on 2nd Street between Spring and Alameda Streets, on Central Avenue and Alameda Street between 1st and 2nd Streets, and on 1st Street between San Pedro and Hewitt Streets. In addition, the realigned intersection of Hope Street in the vicinity of General Thaddeus Kosciuszko Way may temporarily remove several parking spaces along both the east and west sides of the roadway segment. In the vicinity of the Alameda Street underpass, the JANM tour bus loading zone on the west side of the street would be temporarily removed and relocated for the duration of the construction period.

Cut and cover station construction along segments of Flower Street and construction of the underpass on Alameda Street may require temporary sidewalk detours, which could potentially impede pedestrian flow. However, pedestrian flow on 2nd Street would be better under this alternative than the At-Grade Emphasis LRT Alternative. In addition, the construction of the underpass on Alameda Street may result in localized shifts in traffic to adjacent streets such as Central Avenue, which is designated as a Class III bicycle route. The flow of bicycle traffic could potentially be impacted due to increased traffic volumes on Central Avenue. The additional automobile traffic would result in increased turning movements, potentially reducing bicycle operating speeds or resulting in a greater risk of bicycle-automobile conflict, since Class III routes do not have bicycle-designated lanes.

Restoration of the curb parking spaces, pedestrian facilities, bicycle lanes, and auto lanes to their permanent configuration would occur prior to operations. Potential short term, adverse impacts are anticipated during construction of this alternative.

5.4.2.1 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts to traffic circulation or parking are anticipated under the Underground Emphasis LRT Alternative.

5.4.2.2 Cumulative Impacts

Impacts to traffic circulation during construction would be short term. However, they would contribute to a potential cumulative adverse effect when combined with other projects in the downtown area. Therefore, potential cumulative adverse traffic circulation impacts are anticipated under the Underground Emphasis LRT Alternative.

5.4.2 Displacements and Relocation

5.4.2.1 Direct Impacts

Permanent Impacts During Construction Period

To construct the Underground Emphasis LRT Alternative, 11 full takes, ten partial takes, and four permanent underground easements would be required at different locations along the alignment. These properties would be utilized for TPSS facilities, construction staging, below grade tunneling, and station construction. The details of these impacts and mitigation measures are presented in the Displacements and Relocation of Existing Uses Technical Memorandum.

Construction-Related Impacts

During construction of the Underground Emphasis LRT Alternative, creation of staging areas would require temporary easements that would impact eight parcels. The portions of these parcels that would be utilized would be plazas and open areas. Access to businesses, existing buildings, and sidewalks would be maintained, though detour routes may be required. Mitigation would minimize the adverse impacts associated with this type of displacement during construction. Once construction is completed, the sites would be restored to their permanent conditions.

5.4.2.2 Indirect Impacts

Displacement impacts are direct in nature. Therefore, no indirect construction impacts associated with displacement are anticipated.

5.4.2.3 Cumulative Impacts

No cumulative adverse construction impacts associated with displacements or relocation are anticipated under the Underground Emphasis LRT Alternative.

5.4.3 Community and Neighborhoods

5.4.3.1 Direct Impacts

Mobility would be reduced in the Financial District, Bunker Hill, Civic Center, the Historic Core, and Little Tokyo areas due to street closures associated with construction activities including track installation at 1st and Alameda, cut and cover excavation, and structural support work. Disruption of traffic patterns would restrict, but not eliminate, access to

residences and businesses. In Little Tokyo, disruption to traffic along Alameda and 1st Streets would directly affect cultural institutions such as JANM, the Go for Broke Monument, MOCA, and other businesses during the excavation and construction of the Alameda Street underpass and the potential pedestrian bridge. In addition, the installation of TBMs either in the Little Tokyo or Bunker Hill areas would temporarily disrupt communities, businesses, and residents. Buildings likely to experience disruption include Savoy and Honda Plaza in Little Tokyo, and the Bunker Hill Towers. Without mitigation, potential adverse construction impacts associated with community and neighborhoods are anticipated under the Underground Emphasis LRT Alternative.

5.4.3.2 Indirect Impacts

During utility relocation, mobility would be temporarily reduced in the Financial District, Bunker Hill, Civic Center, Historic Core, and Little Tokyo areas. Disruption of traffic patterns would temporarily restrict access to residences and businesses. This could impact the economic vitality of some businesses, particularly in Little Tokyo, where the community has expressed concern about construction activities. Prolonged disruption to businesses could affect community cohesion. Without mitigation, potential adverse indirect construction impacts associated with community and neighborhoods are anticipated under the Underground Emphasis LRT Alternative.

5.4.3.3 Cumulative Impacts

No cumulative adverse construction impacts associated with communities or neighborhoods are anticipated under the Underground Emphasis LRT Alternative.

5.4.4 Visual Resources and Aesthetics

5.4.4.1 Direct Impacts

Views and Visual Character

During construction of the Underground Emphasis LRT Alternative, several construction staging areas would be utilized. These staging areas and the areas where the TBMs will be deployed, either in Little Tokyo or Bunker Hill, would be separated from non-construction areas by barriers. The placement of concrete barriers with fencing would be visible from multi-family residences and other sensitive uses adjacent to the alignment, particularly the Bunker Hill Towers, Hikari, and Savoy. Viewers would see construction equipment, construction-related activities, and stockpiles of dirt and debris, and the urban streetscape would be temporarily altered. Screening of construction staging areas would minimize aesthetic impacts at street level. The project would be constructed in a heavily urbanized environment where construction activities are not uncommon, and the construction of the project would not noticeably reduce visual quality or alter viewing context. Visual character impacts would be limited to construction staging areas and would occur to a lesser extent than under the At-Grade Emphasis LRT Alternative. In Little Tokyo, large construction

equipment would be required for the excavation and construction of the Alameda Street underpass and the potential pedestrian bridge. These impacts would be temporary and less than significant. Overall, less-than-significant impacts associated with views and visual character are anticipated.

Lighting

Temporary lighting may be necessary for nighttime construction, which is sometimes scheduled in order to minimize disruption to daytime traffic and for nighttime lighting for staging sites, primarily for security. However, nighttime construction activities would be limited to non-residential areas and nighttime illumination of staging areas would be directed towards the site and away from sensitive uses. Therefore, less-than-significant impacts are anticipated.

5.4.4.2 Indirect Impacts

No indirect adverse construction impacts associated with visual resources are anticipated under the Underground Emphasis LRT Alternative.

5.4.4.3 Cumulative Impacts

No cumulative adverse construction impacts associated with visual resources are anticipated under the Underground Emphasis LRT Alternative.

5.4.5 Air Quality

5.4.5.1 Direct Impacts

Regional Construction Emissions

An analysis of anticipated construction-related emissions was completed in accordance with SCAQMD requirements. The estimate included emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul trucks. Table 5-6 provides a summary of anticipated construction emissions during peak operation for the entire project area.

Daily regional construction emissions are anticipated to exceed SCAQMD regional significance thresholds for VOC, NO_x, CO, and $PM_{2.5}$, and would result in a potential adverse effect without mitigation. Regional construction emissions would be highest during cut and cover or SEM construction activity. The additional excavated soil for the underground segment along 2nd Street would result in an increase in haul truck trips and construction intensity compared to the At-Grade Emphasis LRT Alternative.

Table 5-6. Underground Emphasis LRT Alternative (2014-2017) Maximum Daily Regional Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Street station (SEM) + Broadway Station Option						
Onsite	**300**	**2,247**	**1,189**	4	82	**75**
Offsite	8	89	59	<1	19	6
Total	**308**	**2,336**	**1,249**	4	101	**80**
2nd/Hope Street station (Open Cut) + Broadway Station Option						
Onsite	**304**	**2,280**	**1,210**	4	83	**75**
Offsite	9	94	62	11<1	20	6
Total	**313**	**2,375**	**1,272**	4	103	**81**
2nd/Hope Streets station (SEM) + Los Angeles Street Station Option						
Onsite	**300**	**2,247**	**1,189**	4	82	**75**
Offsite	8	85	58	<1	19	5
Total	**308**	**2,332**	**,1,247**	4	101	**80**
2nd/Hope Street station (Open Cut) + Los Angeles Street Station Option						
Onsite	**304**	**2,280**	**1,210**	4	83	**75**
Offsite	8	91	61	<1	19	6
Total	**313**	**2,371**	**1,270**	4	103	**81**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold**.*
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Localized Construction Emissions

In addition to evaluating emissions on a regional level, construction emissions were also compared to SCAQMD's localized significance thresholds. The maximum localized construction emissions would occur during cut and cover construction of the tunnel on Flower Street, the Flower/6th/5th Street station, the 2nd Street station - Broadway Option or the 2nd Street station - Los Angeles Street Option, and would result in maximum daily localized emissions of approximately 300 ppd of NO_X, 170 ppd of CO, 10 ppd of $PM_{2.5}$ and 11 ppd of PM_{10}. The additional soil removal necessary for the underground segment along 2nd Street would also intensify the localized emissions compared to the At-Grade Emphasis LRT Alternative. Use of electric construction equipment could be encouraged where feasible. Daily construction emissions are anticipated to exceed SCAQMD localized significance thresholds for NO_X, and PM_{10}, and $PM_{2.5}$, and would result in a potential adverse localized air quality construction effect.

5.4.5.2 Indirect Impacts

The Underground Emphasis LRT Alternative construction activities would result in indirect emissions of TACs. Emissions from the project were compared to existing conditions (2009) for CEQA. A summary of project-related emissions are provided in Table 5-7. A summary of the results of the Tier 1 HRA are provided in Table 5-8. Since VOC emissions will decrease in future years because of the improvement in engine technology, the HRA was not conducted for VOC emissions. Instead, it was restricted to inorganic emissions. The Underground Emphasis LRT Alternative would not cause significant construction emissions of TACs under CEQA.

5.4.5.3 Cumulative Impacts

Daily regional and localized construction emissions are anticipated to exceed SCAQMD regional significance thresholds and would result in a potential adverse cumulative effect without mitigation.

5.4.6 Noise and Vibration

5.4.6.1 Direct Impacts

Anticipated construction activities, the construction equipment expected to be used, and the related noise levels are shown in Table 5-9.

Construction of the Underground Emphasis LRT Alternative would generate noise and vibration from excavators, bulldozers, trenchers, drill rigs, tunnel boring machines, cranes, and heavy-duty trucks used to transport construction equipment. According to the City of Los Angeles *2006 CEQA Thresholds Guide*, this type of construction activity would generate a maximum noise level of 90 dBA at 50 feet. The construction activities with the greatest potential to cause noise impacts are: cut and cover excavation on Flower Street, cut and cover construction of the Flower/5th/4th Street station, construction of the cut and cover approach to the 2nd/Hope Street station, construction of the 2nd/Hope Street station, construction of the 2nd

Street station - Broadway Station Option or the 2nd Street Station - Los Angeles Street Option, and construction of the1st and Alameda junction and underpass. These activities would have the greatest potential for noise impacts due to the duration of construction work and proximity to noise sensitive land uses. Without mitigation, adverse effects from construction noise are anticipated.

Table 5-7. Underground Emphasis LRT Alternative (2014-2017) TAC Construction Emissions

TAC	CAS #	Emissions (pounds/hr)			
		2nd/Hope SEM + Broadway Option	2nd/Hope Open Cut + Broadway Option	2nd/Hope SEM + Los Angeles Street Option	2nd/Hope Open Cut + Los Angeles Street Option
Arsenic	7440-38-2	1.83E-05	1.86E-05	1.83E-05	1.86E-05
Chlorine	7782-50-5	1.41E-03	1.46E-03	1.40E-03	1.45E-03
Copper	7440-50-8	9.26E-05	9.44E-05	9.23E-05	9.42E-05
Mercury	7439-97-6	1.02E-04	1.04E-04	1.02E-04	1.03E-04
Nickel	7440-02-0	6.86E-05	6.98E-05	6.85E-05	6.97E-05

Notes:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Noise levels for TBM operation are not listed, except for the potential installation and recovery sites, because TBM operation occurs underground and produces little to no noise at the surface. The operations at the potential installation and recovery sites account for the noise listed in Table 5-9. These would be the potential locations where excavated material would be treated and removed. Other construction noise along the TBM segment would be produced haul trucks and equipment needed to perform utility relocations. Noise from these sources

would generate a maximum of 85 dBA at 50 feet and would occur less frequently and for a shorter duration than construction of the At-Grade Emphasis LRT Alternative along 2nd Street.

Table 5-8. Underground Emphasis LRT Alternative (2014-2017) Construction Health Risk Assessment

TAC	CAS #	PSL (pounds/hr)	PSI			
			2nd/Hope SEM + Broadway Option	2nd/Hope Open Cut + Broadway Option	2nd/Hope SEM + Los Angeles Street Option	2nd/Hope Open Cut + Los Angeles Street Option
Arsenic	7440-38-2	1.00E-04	1.83E-01	1.86E-01	1.83E-01	1.86E-01
Chlorine	7782-50-5	1.05E-01	1.35E-02	1.39E-02	1.34E-02	1.38E-02
Copper	7440-50-8	5.00E-02	1.85E-03	1.89E-03	1.85E-03	1.88E-03
Mercury	7439-97-6	9.00E-04	1.14E-01	1.15E-01	1.14E-01	1.15E-01
Nickel	7440-02-0	3.00E-03	2.29E-02	2.33E-02	2.28E-02	2.32E-02
		ASI	3.35E-01	3.35E-01	3.35E-01	3.40E-01
		Threshold	1.0			

Notes:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Using the minimum safe distance for Category IV (0.12 inch/sec PPV), the potential worst case vibration category, vibration from construction equipment during utility relocation lane closures would result in a potential adverse effect if it occurred less than 21 feet from buildings. A pre-construction survey of structures within 21 feet of the anticipated zone of construction would be conducted to assess the potential for GBV to cause damage, and to establish baseline pre-construction conditions.

Table 5-9. Construction Activity and Equipment Typical Noise Levels in dBA at 50 feet from Source for the Underground Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
Pre-Construction	4-6	NA	NA	NA	NA	90
Site Preparation	12-18	77	85	82	NA	NA
Flower Street Cut and cover Tunnel	24-48	77	85	82	81	90
Flower/5th/4th Cut and cover Station	24-48	77	85	82	81	90
Cut and cover Approach to 2nd/Hope Street Station	24-48	77	85	82	81	90
2nd/Hope Street Station (SEM)	24-48	77	85	82	81	NA
2nd/Hope Street Open Cut Station	24-48	77	85	82	81	90
2nd Street TBM Tunnel	24-48	77	85	82	81	NA
2nd Street Cut and cover Station (Broadway Option)	24-48	77	85	82	81	NA
2nd Street Cut and cover Station	24-48	77	85	82	81	90
Portal	12-24	77	85	82	81	90
TBM Launch Site	2-4	77	85	82	81	90
1st and Alameda Junction	24-36	77	85	82	81	NA
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD

Source: CDM, 2010

For the Underground Emphasis LRT Alternative, pre-auguring of the soldier piles at the cut and cover sections would eliminate the need for impact pile driving. Large bulldozers and drill rigs would be the main construction vibration sources, but would operate intermittently and would not be used during every day of construction. LRT construction could begin simultaneously at several locations along the selected route in order to minimize overall construction time. Construction activities in any one location would not last for the entire project construction period.

TBMs perform a slow moving drilling process that produces very little vibration in the surrounding areas. PPVs from tunnel construction in soft ground ranges from 0.0024 to 0.0394 inches per second at a distance of 33 feet from the vibration source. Similar vibration velocities at the same 33 feet distance in the range of 0.0157 to 0.0551 inches per second have also been measured. These PPV vibrations may also be expressed as root mean square (rms) vibration velocity levels ranging from 56 to 83 decibels (VdB) at 33 feet using the same conversion calculation as FTA. The range of vibration generated by TBMs (between 0.0024 to 0.0551 inches per second PPV at a distance of 33 feet) and the distance below grade that tunnel boring would occur (a minimum of 30 feet below ground surface), would yield vibration levels well below the FTA threshold for Category IV buildings of 0.12 inches per second PPV.

TBMs, large bulldozers, and drill rigs would be the main construction vibration sources that could potentially exceed the FTA annoyance criteria for sensitive receptors, as shown in The Noise and Vibration Technical Memorandum, Table 3-2. Perceptible vibration from the construction equipment would be short-term and intermittent, and considered an "infrequent event," less than 30 events per day, as defined by FTA. Sensitive receptors located along the alignment are considered Category 2 and Category 3 land uses under the FTA annoyance criteria. Short-term vibration levels during construction could exceed the FTA annoyance criteria if the identified construction equipment operates within 20 feet of Category 2 land uses or within 16 feet of Category 3 land uses. After incorporating the adjustment of -10 dBA for coupling to building foundation loss (Table 10-1, FTA, 2006), building occupants would not be subject to vibration levels above the FTA annoyance criteria. It should be noted that large bulldozers and drill rigs would operate intermittently and would not be used during every day of construction. Without the implementation of mitigation measures, vibration impacts would be potentially significant.

5.4.6.2 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts are anticipated from noise or vibration under the Underground Emphasis LRT Alternative.

5.4.6.3 Cumulative Impacts

Impacts from noise and vibration during construction would be short term and would not contribute to a cumulative adverse effect. Therefore, no cumulative adverse noise or vibration impacts are anticipated under the Underground Emphasis LRT Alternative.

5.4.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

5.4.7.1 Direct Impacts

Geotechnical/Subsurface/Seismic

The Underground Emphasis LRT Alternative proposed alignment would not cross any known faults. However, portions of the proposed alignment occur in areas mapped with the potential for liquefaction based on soil stability. Areas susceptible to liquefaction are along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. A limited portion of the alignment near 1st and Alameda Streets would be within the mapped Inundation Hazard Area. In addition, the proposed 2nd/Hope Street station would be within the Hillside Ordinance area (Bunker Hill).

During construction of underground stations, portal, and the Alameda Street underpass, there would be potential for adverse impacts related to ground settlement and differential settlement on adjacent structures, including historical buildings. Further evaluation and survey would be performed during final design to establish building types, existing conditions, and to develop criteria to limit potential movement to acceptable thresholds. Protection of buildings could involve design of adequately rigid excavation support systems, underpinnings, and ground improvements to minimize settlement to tolerable limits. In addition, a pre-construction survey of the adjacent structures and all historical buildings in the vicinity would be conducted to establish a baseline for measuring potential construction-induced damage. TBMs, cut and cover, and SEM would potentially be used to construct the underground portions of the alignment, and appropriate shoring would be used as needed. TBM operations would not be expected to directly affect building foundations. However, construction monitoring would be utilized during to ensure that movement does not exceed the threshold values. With mitigation, less-than-significant impacts are anticipated.

The laying of surface track work and building of stations and portal structures would likely require removal of protective vegetation and pavement, which would increase the potential for soil erosion. With mitigation, potential adverse construction impacts associated with subsurface soils would be considered less than significant.

Hazardous Materials

Construction of the Underground Emphasis LRT Alternative would entail excavation along most of the proposed alignment, during which contaminated soil and groundwater could be encountered. As described in the Hazardous Materials Technical Memorandum, known and suspected soil and groundwater contamination exists on properties along the proposed

alignment. Lead may be present in surface soils from historical vehicle emissions of older automobiles using leaded gasoline, and PCBs may exist in surface or subsurface soils from leaking transformers. If released during excavation, there would be potential for impacts to human health and the environment from these hazardous materials. Until further study is conducted, the actual levels of hazardous materials that could be encountered in soil and groundwater during construction are unknown. Without mitigation, potential adverse impacts are anticipated.

5.4.7.2 Indirect Impacts

No indirect adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Underground Emphasis LRT Alternative.

5.4.7.3 Cumulative Impacts

No cumulative adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Underground Emphasis LRT Alternative.

5.4.8 Water Quality

5.4.8.1 Direct Impacts

According to the Geotechnical/Subsurface/Seismic/ Hazardous Materials Technical Memorandum, there is known and/or suspected soil and/or groundwater contamination along the proposed alignment. Construction activities have the potential to increase erosion and sedimentation around proposed construction and staging areas. Grading activities associated with construction could potentially result in a temporary increase in the amount of suspended solids running off construction sites. In the case of a storm event, construction site runoff could result in sheet erosion of exposed soil. Groundwater may be encountered during trenching or tunneling which would require dewatering. Dewatering activity would result in the potential release of contaminated water due to the presence of relatively shallow groundwater (located at depths ranging from 14 to 36 feet) that is contaminated with pollutants common to urban development. All dewatering activity would occur with a NDPES permit. Testing would occur prior to construction and on-site treatment and discharge in accordance with applicable standards or transport to a treatment or disposal facility would be required. Without mitigation, potential adverse construction impacts associated with water quality are anticipated under the Underground Emphasis LRT Alternative.

5.4.8.2 Indirect Impacts

No indirect adverse construction impacts associated with water quality are anticipated under the Underground Emphasis LRT Alternative.

5.4.8.3 Cumulative Impacts

No cumulative adverse construction impacts associated with water quality are anticipated under the Underground Emphasis LRT Alternative.

5.4.9 Energy

5.4.9.1 Direct Impacts

The highest indirect energy consumption would occur during site clearance and construction of guideways, structures, stations, and support facilities. Construction of the Underground Emphasis LRT Alternative would consume a one-time amount of approximately 5,000 billion BTUs. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. The one-time energy use required to construct this alternative would be offset by the project's long-term, beneficial operational impacts. Given the long-term, beneficial decreases in energy use, potential construction-related impacts would be less than significant.

5.4.9.2 Indirect Impacts

No indirect adverse construction impacts associated with energy are anticipated under the Underground Emphasis LRT Alternative.

5.4.9.3 Cumulative Impacts

No cumulative adverse construction impacts associated with energy are anticipated under the Underground Emphasis LRT Alternative.

5.4.10 Climate Change

5.4.10.1 Direct Impacts

No direct adverse construction impacts associated with climate change are anticipated under the Underground Emphasis LRT Alternative.

5.4.10.2 Indirect Impacts

No indirect adverse construction impacts associated with climate change are anticipated under the Underground Emphasis LRT Alternative.

5.4.10.3 Cumulative Impacts

The construction of the Underground Emphasis LRT Alternative would result in GHG emissions from diesel-fueled construction equipment. Emissions would be produced by onsite equipment, offsite worker vehicles, and offsite haul trucks. A total of approximately 100,600 metric tons per year of GHG emissions would be produced during all phases of construction under the Underground Emphasis LRT Alternative (see the Climate Change Technical Memorandum for more details).

The proposed project would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The Underground Emphasis LRT Alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, potential emissions would not be cumulatively significant.

5.4.11 Historic, Archaeological, and Paleontological Resources

5.4.11.1 Direct Impacts

Historic Resources

Potential effects, but no adverse effects, would result from dirt from construction activities, changes in access during construction, visual changes during construction, demolition and takes, construction of underground stations, installation of catenary poles and TPSS. The effects would be short-term and would not alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

The proposed train portal at the intersection of Alameda and 1st Street would be within the viewshed of two historic properties, the Little Tokyo National Historic Landmark Historic District and the NRHP eligible John A. Roebling Sons Co. Building (APE Map #7-35). However, the portal area is not encompassed within the boundary of a historic property, historical resource, or a contributing element to the significance of either property. An asphalt paved parking lot currently occupies the majority of the parcel. No adverse effect would occur to the Little Tokyo National Historic Landmark District or the John A. Roebling Sons Co Building from the construction of the portal.

Several NRHP and/or CRHR eligible properties could be potentially affected by cut and cover construction, differential settlement, and construction noise and vibration associated with construction of the Underground Emphasis LRT Alternative. The implementation of design measures would protect and stabilize the ground near historic properties as noted in MM-BE-2, MM-BE-3, and MM-BE-5. These measures would avoid adverse effects to all properties. If properly implemented, short term construction activities would not directly alter a characteristic of the historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Archaeological Resources

The Underground Emphasis LRT Alternative involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations on 2nd

Street (either at Broadway or at Los Angeles Street), 2nd/Hope Street, and Flower/5th/4th Streets; an automobile underpass on Alameda Street between 2nd and Temple Streets; and a potential pedestrian bridge at the intersection of Alameda and 1st Streets.

Potentially affected resources include site CA-LAN-3588 and the Los Angeles zanja system (specifically Zanjas 3, 4, 5, and 8; see Figure 4-1). Although the precise location and local integrity of the zanjas have not been established, the project's 2nd Street alignment likely crosses the system multiple times.

Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated. Construction of new stations would almost certainly affect any extant archaeological resources within their footprints. Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects to shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 would reduce this effect to a less-than-significant level.

Paleontological Resources

The Underground Emphasis LRT Alternative involves ground disturbance and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations related to construction of a new underground tunnel along most of the alignment; new underground stations at Flower/5th/4th Street, 2nd/Hope Street, 2nd Street station (either at Broadway or at Los Angeles Street); an automobile underpass on Alameda Street between 2nd Street and Temple Street; and a proposed pedestrian bridge at the intersection of Alameda and 1st Streets. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources will not be feasible and are thus unavoidable.

5.4.11.2 Indirect Impacts

The construction of the Underground Emphasis LRT Alternative would have the potential to indirectly impact historical resources during cut and cover construction, underpass construction at Alameda and 1st Streets, portal construction, and TBM tunneling. The impacts would be indirect because the construction activities themselves would not damage

historical properties, but vibration and possible subsidence of soils could impact the historical integrity of buildings. Mitigation would minimize the potential adverse impacts.

5.4.11.3 Cumulative Impacts

No cumulative adverse construction impacts associated with historical, archaeological, and paleontological resources are anticipated under the Underground Emphasis LRT Alternative.

5.4.12 Ecosystems and Biological Resources

5.4.12.1 Direct Impacts

During construction of the Underground Emphasis LRT Alternative, some mature trees containing nesting could be removed. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removal or disturbance of this vegetation during the nesting season could directly impact the habitat and any bird species that are present. There are currently 170 mature trees in the area that could potentially be affected by construction, and some of these trees could be removed or disturbed during construction. It is unknown at this time exactly how many trees could be affected. An estimated 40 native California sycamore trees are located in the potential area of impact and could be affected by this alternative. As project design progresses it may be possible to minimize the number of sycamores affected by avoidance or fencing. The details of these impacts and mitigation measures are presented in the Ecosystems/Biological Resources Technical Memorandum. Potential mitigation measures are described in Section 6 and include compliance with the Native Tree Protection Ordinance. Compliance with the Native Tree Protection Ordinance, including replacement of this protected species at a 2:1 ratio, would reduce this potential impact to a less than significant level.

5.4.12.2 Indirect Impacts

Direct impacts to birds and their habitat by removing or disturbing mature trees have the potential to cause indirect impacts elsewhere. If birds are forced to relocate to new areas during the nesting season, increased competition for food and nesting habitat would be a potential indirect impact.

However, because the downtown area provides only low quality habitat for migratory birds, these potential impacts are not considered to be significant because only a small number of birds (if any) could be displaced. Further, mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce potential indirect impacts to a less-than-significant level.

5.4.12.3 Cumulative Impacts

No cumulative adverse construction impacts associated with ecosystems or biological resources are anticipated under the Underground Emphasis LRT Alternative.

5.4.13 Parklands and Other Community Facilities

5.4.13.1 Direct Impacts

A large portion of the alignment of the Underground Emphasis LRT Alternative would be constructed underground using TBMs, so access restrictions on 2nd Street would be limited to staging areas. However, where there would be cut and cover, temporary road closures would be needed. Access to the parking structure beneath Maguire Gardens and pedestrian access to the gardens would be temporarily restricted. Locations along the alignment that could experience modified pedestrian and vehicle access during construction include the new LAPD headquarters, Caltrans, the Little Tokyo Branch Public Library, MOCA, Go For Broke Monument, and JANM. Response times for emergency services could also be impacted, but less than the At-Grade Emphasis LRT Alternative on 2nd Street. Without mitigation, potential adverse construction impacts associated with parklands and other community facilities are anticipated under the Underground Emphasis LRT Alternative.

5.4.13.2 Indirect Impacts

Although construction impacts are direct by nature, the construction of the Underground Emphasis LRT Alternative alignment could potentially discourage patrons of community facilities and parks due to restricted access and temporary parking restrictions. Mitigation could include signs, detour routes, and temporary replacement parking to encourage pedestrian and vehicular access to these community facilities. Without mitigation, potential adverse impacts are anticipated.

5.4.13.3 Cumulative Impacts

No cumulative adverse construction impacts associated with parklands or other community facilities are anticipated under the Underground Emphasis LRT Alternative.

5.4.14 Economic Vitality and Employment Opportunities

5.4.14.1 Direct Impacts

The construction of the Underground Emphasis LRT Alternative would result in fewer adverse economic impacts in the project area than the At-Grade Emphasis LRT Alternative. Depending on the construction techniques used, there would be a need for phased street closure, but the economic effects would be less pronounced than at-grade track construction. The potential economic impacts caused by the Underground Emphasis LRT Alternative would be primarily limited to the station sites, portal location and underpass location.

Temporary closures or restricted access to Alameda and 1st Streets during construction of the underpass and pedestrian bridge would impact a heavily utilized truck route and also restrict freeway access to Little Tokyo. Cultural institutions, such as MOCA and JANM, and businesses could potentially be impacted directly.

Investment in transportation, including direct investment in the form of capital construction and operations costs, would provide economic benefits through the creation of direct and indirect jobs and spending by suppliers whose goods and services are used for the project. These benefits are discussed further in the Economic and Fiscal Impacts Technical Memorandum. The benefits of the additional transit infrastructure in the long-term would outweigh the temporary significant impacts in the project area.

5.4.14.2 Indirect Impacts

As discussed in Section 5.4.3, construction of the Underground Emphasis LRT Alternative would result in the temporary closure of several streets throughout the project area. During utility relocation and lane closures, traffic would be diverted to surrounding streets. The traffic diversions and parking restrictions could potentially impact the economic viability of businesses adjacent to the closures, though to a lesser extent than the At-Grade Emphasis LRT Alternative. Although these construction impacts would be short-term and intermittent, they would be considered potentially adverse without mitigation.

5.4.14.3 Cumulative Impacts

No cumulative adverse construction impacts associated with economic vitality are anticipated under the Underground Emphasis LRT Alternative.

5.4.15 Safety and Security

5.4.15.1 Direct Impacts

The contractor will have a safety plan and be responsible for construction site security in conformance with local regulations and standards. Construction activities are not anticipated to affect security in the project area. Construction and staging areas would typically be fenced off and well lit. A large portion of the construction would occur underground, separated from pedestrians and vehicles. No direct adverse impacts associated with safety and security are anticipated.

5.4.15.2 Indirect Impacts

No indirect adverse construction impacts associated with safety and security are anticipated under the Underground Emphasis LRT Alternative.

5.4.15.3 Cumulative Impacts

No cumulative adverse construction impacts associated with safety and security are anticipated under the Underground Emphasis LRT Alternative.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would extend from the 7th Street/Metro Center Station northward in a cut and cover tunnel below Flower Street with a

new underground station north of 5th Street. At 3rd Street, the underground tunnel would extend east with a new underground station near 2nd and Hope Streets to provide access to Bunker Hill. The station would be constructed using either the open cut method or SEM. From there, a tunnel excavated by TBM would continue east beneath 2nd Street. A third underground station would be located between Broadway and Spring Street. The tunnel would continue along 2nd Street under Little Tokyo to Central Avenue. Until this point, the alignment would be the same as the Underground Emphasis LRT Alternative – Broadway Station Option. A fourth underground station would be constructed using the cut and cover method at the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. This station would replace the existing Little Tokyo/Arts District at-grade station. The alignment would emerge to at-grade connections with the existing Gold Line tracks via two portals: one northeast of Temple and Alameda Streets for the North-South Line, and one on 1st Street east of Alameda Street for the East-West Line.

The analysis of the potential impacts that these construction activities could have are discussed for all environmental topic areas except for Land Use and Growth-Inducing Impacts because construction activities do not tend to have impacts in these topic areas.

5.5.1 Traffic and Parking

5.5.1.1 Direct Impacts

Permanent Impacts From Construction

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, would result in the permanent loss of approximately seven on-street parking spaces. The details of these impacts and mitigation measures are presented in the Transportation Impacts Technical Memorandum. Additional parking spaces that would be temporary lost during construction activities are described below.

Construction-Related Impacts

For this build alternative, temporary lane changes due to construction activities would be the same as the Underground Emphasis LRT Alternative west of Central Avenue. This would result in the temporary reduction of roadway capacity and potential modification of existing traffic patterns to bypass construction activities. The construction of the proposed Alameda Street portal north of Temple Street would result in the reduction of roadway capacity for extended time periods during construction. Two through travel lanes would be maintained in each direction along Alameda Street from Temple Street northwards, tapering back to three through lanes in each direction near Aliso Street. As a result of this configuration, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the southbound intersection approach at Temple Street would be temporarily eliminated over the period needed to construct the portal. The southbound intersection lane configuration at Temple Street would consist of a shared through and right turn lane and a shared through and left turn lane. The existing signal phasing may be changed to split phasing to minimize

conflicts between southbound left turns and the opposing northbound through movements. This would help prevent the formation of queues behind vehicles waiting for a gap in opposing traffic to complete left turn movements. Consequently, travel times for vehicles along this segment of Alameda Street would be expected to increase due to the potential for additional congestion and changed operating conditions at the intersection of Temple and Alameda Streets.

On 1st Street between Alameda and Vignes Streets, one through travel lane in each direction would need to be removed temporarily during construction. This could cause additional congestion. However, the 1st Street bridge is currently operating one-way eastbound with only two lanes, and lengthy delays do not frequently occur.

Parking impacts due to construction activities would be the same as the Underground Emphasis LRT Alternative west of Central Avenue (unless the entire block is required for construction, in which case, additional off-street parking would be lost; see the Transportation Technical Memorandum for more details). The construction of the proposed Alameda Street portal north of Temple Street would result in the displacement of loading areas for extended time periods during construction.

Construction activities and impacts to pedestrian and bicycle flow for this alternative would be the same as the Underground Emphasis LRT Alternative west of Central Avenue. The construction of the proposed Alameda Street portal north of Temple Street would result in the reduction of roadway capacity for extended time periods during construction activities and the elimination of the sidewalk on the east side of Alameda Street. Roadway capacity would also be temporarily reduced on 1st Street between Alameda and Vignes Streets. These capacity reductions could potentially impact both pedestrian and bicycle flow.

The operational phase of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in the restoration of the travel lanes and parking, pedestrian, and bicycle facilities to their permanent configurations. Potential short term, adverse impacts are anticipated during construction of this alternative.

5.5.1.2 Indirect Impacts

Impacts from construction-related activities would be temporary and direct in nature. No indirect impacts are anticipated from traffic circulation or parking under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.1.3 Cumulative Impacts

Impacts to traffic circulation during construction would be short term, but would contribute to a potential cumulative adverse effect when added to other projects in the downtown area. Potential cumulative adverse traffic circulation impacts are anticipated under the Fully Underground LRT Alternative - Little Tokyo Variation 1.

5.5.2 Displacements and Relocation

5.5.2.1 Direct Impacts

Permanent Impacts During Construction Period

Compared to the Underground Emphasis LRT Alternative, up to five additional full takes, one fewer partial take, and two additional permanent underground easements would be required to construct the Fully Underground LRT Alternative – Little Tokyo Variation 1. These properties would be utilized for construction staging, below grade tunneling, and station construction. The details of these impacts and mitigation measures are presented in the Displacements and Relocation of Existing Uses Technical Memorandum.

Construction-Related Impacts

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, staging of equipment and materials would require temporary construction easements that would impact three fewer parcels than the Underground Emphasis LRT Alternative (five parcels in total). The portions of these parcels that would be utilized would be plazas and open areas. Access to businesses and existing buildings would be maintained. Sidewalks and detour routes would also be configured as needed. Mitigation would minimize the potential adverse impacts associated with this type of displacement during construction. In addition, once construction is completed, the sites would be restored to their permanent configurations.

5.5.2.2 Indirect Impacts

Displacement impacts are direct in nature. Therefore, no indirect construction impacts associated with displacement are anticipated.

5.5.2.3 Cumulative Impacts

No cumulative adverse construction impacts associated with displacements or relocation are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.3 Community and Neighborhoods

5.5.3.1 Direct Impacts

Similar to the Underground Emphasis LRT Alternative, mobility would be reduced in the Financial District, Bunker Hill, Civic Center, Historic Core \ and Little Tokyo areas due to street closures associated with construction activities including track installation, cut and cover excavation, TBM deployment, and structural support work for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Disruption of traffic patterns would restrict, but not eliminate, access to residences and businesses, though to a lesser extent than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. In Little Tokyo, there would be less disruption to traffic along Alameda and 1st Streets than the Underground Emphasis LRT Alternative because this alternative does not include the excavation and

construction of the Alameda Street underpass or construction of the potential pedestrian bridge across Alameda Street. However, the cut and cover construction of the rail junction beneath the intersection of 1st and Alameda Streets could still cause disruption. The installation of TBMs either at Little Tokyo or Bunker Hill could pose temporary disruptions for businesses and residents, particularly Savoy and Honda Plaza in Little Tokyo and the Bunker Hill Towers. Without mitigation, potential adverse construction impacts associated with community and neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.3.2 Indirect Impacts

During utility relocation, mobility would be reduced in the Civic Center, the Historic Core, and Little Tokyo areas. Disruption of traffic patterns would access for residents and businesses, though to a lesser extent than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. This could impact the economic vitality of some businesses, particularly in Little Tokyo, where the community has expressed concern about construction activities. Prolonged disruption to businesses could affect the cohesion of some communities, including Little Tokyo. Without mitigation, potential adverse indirect construction impacts associated with community and neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.3.3 Cumulative Impacts

No cumulative adverse construction impacts associated with communities or neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.4 Visual Resources and Aesthetics

5.5.4.1 Direct Impacts

Views and Visual Character

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, the same construction staging as the Underground Emphasis LRT Alternative would be used. Impacts associated with views and visual character would be similar to the Underground Emphasis LRT Alternative.

Lighting

Most of the construction would be conducted beneath the surface. In some locations along the surface, temporary lighting may be necessary for nighttime construction, which is typically scheduled in order to minimize disruption to daytime traffic and for nighttime lighting for staging sites, primarily for security. However, nighttime construction activities would be limited to non-residential areas and nighttime illumination of staging areas would be directed towards the site and away from sensitive uses. Therefore, less-than-significant impacts are anticipated.

5.5.4.2 Indirect Impacts

No indirect adverse construction impacts associated with visual resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.4.3 Cumulative Impacts

No cumulative adverse construction impacts associated with visual resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1

5.5.5 Air Quality

5.5.5.1 Direct Impacts

Regional Construction Emissions

Additional excavation needed for the underground station at 2nd Street and Central Avenue as well as the underground junction beneath Alameda and 1st Streets would cause the Fully Underground LRT Alternative – Little Tokyo Variation 1 to have greater construction emissions than the Underground Emphasis LRT Alternative. Additional truck trips to dispose of excavated material would also be needed. This would result in an increase in NO_x and diesel particulate matter emissions. An analysis of construction-related emissions was completed in accordance with SCAQMD requirements. The estimate included emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul trucks. Table 5-10 provides a summary of anticipated construction emissions during the peak of construction for the entire project area.

Table 5-10. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2014-2017) Maximum Daily Regional Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Street station (SEM)						
Onsite	**367**	**2,596**	**1,474**	5	105	**95**
Offsite	10	104	69	<1	24	7
Total	**377**	**2,699**	**1,542**	5	129	**102**
2nd/Hope Street station (Open Cut)						
Onsite	**376**	**2,670**	**1,523**	5	108	**98**

Table 5-10. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2014-2017) Maximum Daily Regional Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Offsite	10	107	71	<1	24	7
Total	**386**	**2,777**	**1,593**	5	133	**105**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold.***
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Use of electric construction equipment could be encouraged where feasible. Daily regional construction emissions are anticipated to exceed SCAQMD regional significance thresholds for VOC, NO_x, CO, and $PM_{2.5}$ and would result in a potential adverse effect without mitigation.

Localized Construction Emissions

In addition to evaluating emissions on a regional level, construction emissions were also compared to SCAQMD's localized significance thresholds. The maximum localized construction emissions would occur during cut and cover construction of the tunnel along Flower Street, cut and cover construction of the Flower/5th/4th Street station, and cut and cover construction of the 2nd Street/Broadway station. The maximum daily localized emissions would be approximately 300 ppd of NO_x, 170 ppd of CO, 11 ppd of $PM_{2.5}$ and 13 ppd of PM_{10}. Daily construction emissions are anticipated to exceed SCAQMD localized significance thresholds for NO_x, and PM_{10}, and $PM_{2.5}$ and would result in a potential adverse localized air quality construction effect.

5.5.5.2 Indirect Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in indirect emissions of TACs. Emissions from the project were compared to existing conditions (2009) for CEQA. A summary of the results of the Tier 1 HRA are provided in Table 5-11. Since VOC emissions will decrease in future years because of the improvement in engine technology, the HRA was not conducted for VOC emissions. Instead, it was restricted to inorganic emissions. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would not generate significant construction emissions of TACs under CEQA.

5.5.5.3 Cumulative Impacts

Daily regional and localized construction emissions are anticipated to exceed SCAQMD regional significance thresholds and would result in a potential adverse cumulative effect without mitigation.

5.5.6 Noise and Vibration

5.5.6.1 Direct Impacts

The anticipated construction activities and equipment and the related noise levels for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same as shown in Table 5-9 for the Underground Emphasis LRT Alternative.

The construction of the underground alignment along Alameda and 1st Streets would result in additional areas of noise and vibration beyond those identified for the Underground Emphasis LRT Alternative. Additional exposure to sensitive receptors adjacent to these areas is expected. Construction activities would result in the same levels of noise and vibration described under the Underground Emphasis LRT Alternative. The closer proximity of these activities to sensitive receptors along Alameda and 1st Streets would intensify the level of impacts compared to the Underground Emphasis LRT Alternative.

The construction activities with the greatest potential to cause noise impacts would be: cut and cover construction along Flower Street, cut and cover construction of the Flower/5th/4th Street station, cut and cover construction of the approach to the 2nd/Hope Street station, construction of the 2nd/Hope Street station, cut and cover construction of the 2nd Street /Broadway station, and open cut construction of the 2nd Street/Central Avenue station. These activities would have the greatest potential for noise impacts due to the duration of the proposed work and proximity to noise sensitive land uses.

Table 5-11. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2014-2017) Toxic Air Contaminant Construction Emissions and HRA

TAC	CAS #	Emissions (pounds/hr)		PSL	PSI	
		2nd/Hope Station SEM	2nd/Hope Station Open Cut	(lb/hr)	2nd/Hope Station SEM	2nd/Hope Station Open Cut
Arsenic	7440-38-2	2.35E-05	2.43E-05	1.00E-04	2.35E-01	2.43E-01
Chlorine	7782-50-5	1.82E-03	1.90E-03	1.05E-01	1.74E-02	1.81E-02
Copper	7440-50-8	1.19E-04	1.23E-04	5.00E-02	2.38E-03	2.46E-03
Mercury	7439-97-6	1.31E-04	1.35E-04	9.00E-04	1.46E-01	1.50E-01
Nickel	7440-02-0	8.80E-05	9.11E-05	3.00E-03	2.93E-02	3.04E-02
				ASI	4.29E-01	4.44E-01
				Threshold	1.0	

Notes:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Under the Fully Underground LRT Alternative – Little Tokyo Variation 1, the at-grade junction and underpass on Alameda Street would not be constructed. This would remove a noise source in the Little Tokyo community that would last for a two to three year period under the At-Grade and Underground Emphasis LRT Alternatives. However, noise would still be generated by construction of the underground junction beneath 1st and Alameda Streets and the new portals on 1st Street and near Temple and Alameda Streets. Adverse effects from construction noise would still be expected without the implementation of mitigation measures.

The potential for construction vibration to cause building damage and annoyance impacts would be the same as identified for the Underground Emphasis LRT Alternative. Without the implementation of mitigation measures, vibration impacts would be potentially significant under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.6.2 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts are anticipated from noise or vibration under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.6.3 Cumulative Impacts

Impacts from noise and vibration during construction would be short term and would not contribute to a cumulative adverse effect. Therefore, no cumulative adverse noise or vibration impacts are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

5.5.7.1 Direct Impacts

Geotechnical/Subsurface/Seismic

The proposed Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment would not cross any known faults. However, portions of the proposed alignment occur in areas mapped with the potential for liquefaction based on soil stability. Areas susceptible to liquefaction are on Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. The portion of the alignment near the intersection of 1st and Alameda Streets would be within the mapped Inundation Hazard Area. In addition, the proposed 2nd/Hope Street station would be within the Hillside Ordinance area (Bunker Hill).

Geotechnical, subsurface, and seismic impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.7.1 contains further analysis.

Hazardous Materials

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would entail excavation along most of the proposed alignment, during which contaminated soil and groundwater could be encountered. Hazardous material impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.7.1 contains further analysis.

5.5.7.2 Indirect Impacts

No indirect adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.7.3 Cumulative Impacts

No cumulative adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.8 Water Quality

5.5.8.1 Direct Impacts

Water quality impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.8.1 contains further analysis.

5.5.8.2 Indirect Impacts

No indirect adverse construction impacts associated with water quality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.8.3 Cumulative Impacts

No cumulative adverse construction impacts associated with water quality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.9 Energy

5.5.9.1 Direct Impacts

The highest indirect energy consumption would occur during site clearance and construction of guideways, stations, and support facilities. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a temporary energy demand of approximately 6,000 billion BTUs. This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative; potential construction-related impacts would be less than significant.

5.5.9.2 Indirect Impacts

No indirect adverse construction impacts associated with energy are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.9.3 Cumulative Impacts

No cumulative adverse construction impacts associated with energy are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.10 Climate Change

5.5.10.1 Direct Impacts

No direct adverse construction impacts associated with climate change are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.10.2 Indirect Impacts

No indirect adverse construction impacts associated with climate change are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.10.3 Cumulative Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in GHG emissions from diesel-fueled construction equipment. Emissions would be generated by onsite equipment, offsite worker vehicles, and offsite haul trucks. An approximate total of 118,300 metric tons per year of GHG emissions would be produced during all phases of construction for the Fully Underground LRT Alternative – Little Tokyo Variation 1.

The proposed alternative would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The Fully Underground Alternative – Little Tokyo Variation 1 is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

5.5.11Historic, Archaeological, and Paleontological Resources

5.5.11.1 Direct Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have the potential to alter, remove, or destroy archaeological and paleontological resources within the APE due to the creation of a new underground tunnel along its entire route and four new underground stations. Potential archaeological and paleontological impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those of the Underground Emphasis LRT Alternative. Section 5.4.11.1 contains further analysis.

5.5.11.2 Indirect Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would have the potential to indirectly impact historical resources during cut and cover tunnel and station construction, portal construction, and TBM tunneling. The potential impacts would be indirect because the construction activities themselves would not damage historical

properties, but vibration and possible subsidence of soils could impact their historical integrity. Mitigation would minimize the potential adverse impacts.

5.5.11.3 Cumulative Impacts

No cumulative adverse construction impacts associated with historical, archaeological, or paleontological resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.12 Ecosystems and Biological Resources

5.5.12.1 Direct Impacts

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, some mature trees containing nesting located along the proposed alignment could be removed, though less than the Underground Emphasis LRT Alternative. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removal or disturbance of this vegetation during the nesting season could directly impact the habitat and any bird species that are present. As no mature trees or other biological resources were observed in the area north and east of 1st and Alameda Streets, there are no additional direct impacts related to the Fully Underground LRT Alternative – Little Tokyo Variation 1. The same mitigation measures described in Section 6 would be required to reduce these potential impacts to a less-than-significant level.

5.5.12.2 Indirect Impacts

As with the other build alternatives, indirect impacts to migratory birds from the Fully Underground LRT Alternative- Little Tokyo Variation 1 would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less-than-significant level.

5.5.12.3 Cumulative Impacts

No cumulative adverse construction impacts associated with ecosystems or biological resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.13 Parklands and Other Community Facilities

5.5.13.1 Direct Impacts

A large portion of the alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be constructed underground using TBM tunneling and cut-and-cover construction, so access restrictions on 2nd Street would be limited to staging areas. However,

temporary road closures would be needed in the vicinity of cut and cover construction activities. Access to the parking structure beneath Maguire Gardens and pedestrian access to the gardens would be temporarily restricted, but not removed, as in the Underground Emphasis LRT Alternative. Locations along the alignment that could experience modified pedestrian and vehicle access during construction and operation include the new LAPD headquarters, Caltrans, and the Little Tokyo Branch Public Library. Other community resources, particularly in Little Tokyo (MOCA, Go For Broke Monument, and JANM), would experience fewer impacts associated with restricted access because the Fully Underground LRT Alternative – Little Tokyo Variation 1 does not include surface track work, an underpass, or a pedestrian bridge at the intersection of Alameda and 1st Streets. Instead, an underground junction would be built at this location using the cut and cover method, along with portals near Temple and Alameda Streets and on 1st Street east of Alameda Street. Response times for emergency services could also be impacted, but to a lesser extent than the At-Grade Emphasis LRT Alternative. Without mitigation, potential adverse construction impacts associated with parklands and other community facilities are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.13.2 Indirect Impacts

Although construction impacts are direct by nature, the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment could potentially discourage patrons of community facilities and parks due to restricted access and temporary parking restrictions. Mitigation could include signs, detour routes, and temporary replacement parking to encourage pedestrian and vehicular access to these community facilities. Without mitigation, potential adverse impacts are anticipated.

5.5.13.3 Cumulative Impacts

No cumulative adverse construction impacts associated with parklands or community facilities are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.14 Economic Vitality and Employment Opportunities

5.5.14.1 Direct Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in fewer adverse economic impacts in the project area than identified under the Underground Emphasis LRT Alternative. Depending on the construction techniques used, there may be a need for phased street closure. However, the economic effects of the closures would not be as severe as the Underground Emphasis LRT Alternative due to lack of elements such as construction of an at-grade junction in the intersection of 1st and Alameda Streets and an Alameda Street underpass and pedestrian bridge. Other elements such as the underground junction beneath 1st and Alameda Streets and the new portals at Temple and Alameda Streets and on 1st Street east of Alameda Street would also cause disruption. The

potential temporary economic impacts caused by construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be primarily limited to the station sites, and would be similar to the Underground Emphasis LRT Alternative.

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits through the creation of direct and indirect jobs, and investment and spending by suppliers whose goods and services are used in the project. These benefits are discussed in the Economic and Fiscal Impacts Technical Memorandum. The benefits of the additional transit infrastructure in the long-term would outweigh the temporary significant impacts in the project area.

5.5.14.2 Indirect Impacts

As discussed in the Section 5.5.3, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in the temporary closure of several streets. During utility relocation and lane closures, traffic would be diverted to surrounding streets. The traffic diversions and restricted parking could potentially impact the economic viability of businesses adjacent to the closures, though to a lesser degree than the At-Grade Emphasis LRT Alternative. Although these potential construction impacts would be short-term and intermittent, they would be considered potentially adverse without mitigation.

5.5.14.3 Cumulative Impacts

No cumulative adverse construction impacts associated with economic vitality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.15 Safety and Security

5.5.15.1 Direct Impacts

The contractor will have a safety plan and be responsible for construction site security in conformance with local regulations and standards. Construction activities are not anticipated to affect security in the project area. Construction staging areas are typically fenced off and well lit. A large portion of the construction would occur underground, separated from pedestrians and vehicles. No direct adverse impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.15.2 Indirect Impacts

No indirect adverse construction impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.15.3 Cumulative Impacts

No cumulative adverse construction impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would extend from the 7th Street/Metro Center Station northward in a cut and cover tunnel below Flower Street with a new underground station north of 5th Street. At 3rd Street, the underground tunnel would extend east with a new underground station near 2nd and Hope Streets to provide access to Bunker Hill. This station could be constructed using either the open cut method or SEM. From there, a tunnel excavated by TBM would continue east beneath 2nd Street. A second underground station would be located between Broadway and Spring Street. The tunnel would continue along 2nd Street under Little Tokyo to Central Avenue. Until this point, the alignment would be the same as the Underground Emphasis LRT Alternative – Broadway Station Option. An underground two-level station would be located in the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets. This station would replace the existing Little Tokyo/Arts District at-grade station. The alignment would emerge to at-grade connections with the existing Gold Line tracks via three portals: northeast of Temple and Alameda Streets for the North-South Line, and two staggered portals on 1st Street east of Alameda Street for the East-West Line.

The analysis of the potential impacts that these construction activities could have are discussed for all environmental topic areas except for Land Use and Growth-Inducing Impacts because construction activities do not tend to have impacts in these topic areas.

5.6.1 Traffic and Parking

5.6.1.1 Direct Impacts

Permanent Impacts During Construction

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2, would result in the permanent loss of approximately seven on-street parking spaces. The details of these potential impacts and mitigation measures are presented in the Transportation Impacts Technical Memorandum. Additional parking spaces that would be temporarily lost during construction are described below.

Construction-Related Impacts

Traffic impacts due to construction activities for this alternative would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, this alternative also includes a proposed two-portal configuration on 1st Street east of Alameda Street. The construction of the eastbound portal would require the temporary closure of one eastbound and one westbound travel lane for extended time periods along 1st Street between Alameda and Vignes Streets. This would result in a reduction of roadway capacity and may potentially modify existing traffic flow patterns during construction activities. Travel times and intersection operations along this roadway segment would be impacted and delays would be expected to increase due to the potential for increased traffic congestion during peak periods.

However, the 1st Street Bridge is currently reduced to two lanes for an unrelated construction project, and lengthy delays do not frequently occur.

Construction activities and impacts to pedestrian and bicycle flow for this alternative would be the same as the Underground Emphasis LRT Alternative – Broadway Station Option west of Central Avenue and the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1 for the proposed Alameda Street portal. Closure of the two travel lanes for extended time periods along 1st Street between Alameda and Vignes Streets would potentially impact the designated Class III bicycle route along 1st Street. The flow of bicycle traffic would be impacted due to the reduction of roadway capacity. The additional automobile traffic would result in increased turning movements, potentially reducing bicycle operating speeds or resulting in a greater risk of bicycle-automobile conflict, since Class III routes do not have bicycle-designated lanes.

The operational phase of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in the restoration of the parking, pedestrian, bicycle, and auto facilities to their permanent configurations. Potential short term, adverse impacts are anticipated during construction of this alternative.

5.6.1.2 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts are anticipated for traffic circulation or parking under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.1.3 Cumulative Impacts

Impacts to traffic circulation during construction would be short term. However, it would contribute to a potential cumulative adverse effect when added to other projects in the downtown area. Therefore, cumulative adverse traffic circulation impacts are anticipated for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.2 Displacements and Relocation

5.6.2.1 Direct Impacts

Permanent Impacts During Construction Period

To construct the Fully Underground LRT Alternative – Little Tokyo Variation 2, up to five additional full takes, one fewer partial take, and two additional permanent underground easements than the Underground Emphasis LRT Alternative would be required. This includes two more partial takes along 1st Street than would be required for the Fully Underground LRT Alternative –Little Tokyo Variation 1. These properties would be utilized for construction staging, below grade tunneling operations, and station construction. The details of these potential impacts and associated candidate mitigation measures are presented in the Displacements and Relocation of Existing Uses Technical Memorandum.

Construction-Related Impacts

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2, staging of construction equipment and materials would require temporary construction easements that would impact three fewer parcels than the Underground Emphasis LRT Alternative (five parcels in total). The portions of these parcels that would be utilized would be plazas and open areas. Access to businesses and existing buildings would be maintained. Some temporary sidewalk detours may be needed. Mitigation would minimize the potential adverse impacts associated with this type of displacement during construction. In addition, once construction is completed, the sites would be restored to their permanent configurations.

5.6.2.2 Indirect Impacts

Displacement impacts are direct in nature. Therefore, no indirect construction impacts associated with displacements or relocation are anticipated.

5.6.2.3 Cumulative Impacts

No cumulative adverse construction impacts associated with displacements or relocation are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.3 Community and Neighborhoods

5.6.3.1 Direct Impacts

Similar to the Underground Emphasis LRT Alternative, mobility would be reduced in the Bunker Hill and Little Tokyo areas due to street closures associated with construction activities, including track installation, cut and cover excavation, TBM deployment, structural support work. Disruption of traffic patterns would restrict access of residents and businesses, though to a lesser extent than the At-Grade Emphasis LRT Alternative. However, in Little Tokyo, there would be less disruption to traffic along Alameda and 1st Streets than the Underground Emphasis LRT Alternative because this alternative does not include the excavation and construction of the Alameda Street underpass and potential pedestrian bridge. Instead, the Fully Underground LRT Alternative – Little Tokyo Variation 2 includes an underground rail junction beneath the intersection of 1st and Alameda Streets, a portal near Temple and Alameda Streets, and two portals on 1st Street between Alameda and Vignes Streets. The installation of TBMs either at Little Tokyo or Bunker Hill would temporarily disrupt the communities, businesses, and residences, including Savoy and Honda Plaza in Little Tokyo and the Bunker Hill Towers. In addition the construction activity related to tunnel portal construction on 1st Street would extend about one half block further east. Without mitigation, potential adverse construction impacts associated with community and neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.3.2 Indirect Impacts

During utility relocation, mobility would be reduced in the Civic Center, Historic Core, and Little Tokyo areas. Disruption of traffic patterns would restrict access to residences and businesses, though to a lesser extent than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. This could impact the economic vitality of some businesses, particularly in Little Tokyo, where the community has expressed concern about construction activities. Prolonged disruption to businesses could affect the cohesion of some communities, including Little Tokyo. Without mitigation, potential adverse indirect construction impacts associated with community and neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.3.3 Cumulative Impacts

No cumulative adverse construction impacts associated with communities or neighborhoods are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4 Visual Resources and Aesthetics

5.6.4.1 Direct Impacts

Views and Visual Character

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2, roughly similar construction staging areas would be utilized as the Underground Emphasis LRT Alternative. Impacts associated with views and visual character would be similar to the Underground Emphasis LRT Alternative with one exception: There would be fewer visual impacts in the Little Tokyo because large construction equipment would no longer be required for the excavation and construction of the Alameda Street underpass and potential pedestrian bridge. However, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would require construction of an underground junction beneath 1st and Alameda Streets, a portal near Temple and Alameda Streets, and two portals on 1st Street between Alameda and Vignes Streets.

Lighting

A large portion of the construction would be conducted beneath the surface. However, there is a portion that would be at-grade where the tracks emerging from the portals would link to the existing Metro Gold Line tracks. During surface construction activities, temporary lighting may be necessary for nighttime work, which is typically scheduled in order to minimize disruption to daytime traffic and for nighttime lighting for staging sites, primarily for security. However, nighttime construction activities would be limited to non-residential areas and nighttime illumination of staging areas would be directed towards the site and away from sensitive uses. Therefore, less-than-significant impacts are anticipated.

5.6.4.2 Indirect Impacts

No indirect adverse construction impacts associated with visual resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4.3 Cumulative Impacts

No cumulative adverse construction impacts associated with visual resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.5 Air Quality

5.6.5.1 Direct Impacts

Regional Construction Emissions

Additional excavation for the two-level underground station at 2nd Street and Central Avenue as well as from the additional underground alignment along Alameda and 1st Streets would occur under the Fully Underground LRT Alternative – Little Tokyo Variation 2. This would require additional truck trips to dispose of excavated material. This would intensify the potential impacts to air quality beyond those identified for the Underground Emphasis LRT Alternative. An analysis of construction-related emissions was completed in accordance with SCAQMD requirements. The estimate included emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul trucks. Table 5-12 provides a summary of daily construction emissions anticipated during peak activities for the entire project area.

Table 5-12. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2014-2017) Maximum Daily Regional Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Street station (SEM)						
Onsite	**367**	**2,596**	**1,474**	5	105	**95**
Offsite	10	102	72	<1	25	7
Total	**377**	**2,698**	**1,545**	5	131	**102**
2nd/Hope Street station (Open Cut)						
Onsite	**176**	**2,670**	**1,523**	5	109	**98**

Table 5-12. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2014-2017) Maximum Daily Regional Construction Emissions

Daily Emissions (pounds/day)						
Location	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Offsite	10	107	74	<1	26	7
Total	**386**	**2,777**	**1,597**	5	135	**105**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold**.*
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

Use of electric construction equipment could be encouraged where feasible. Daily regional construction emissions are anticipated to exceed SCAQMD regional significance thresholds for VOC, NO_X, CO, and $PM_{2.5}$, and would result in a potentially adverse effect without mitigation.

Localized Construction Emissions

In addition to evaluating emissions on a regional level, construction emissions were compared to SCAQMD's localized significance thresholds. The maximum localized construction emissions would occur during cut and cover construction along Flower Street, cut and cover construction of the Flower/5th/4th Street station, and construction of the 2nd Street/Broadway station. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in maximum daily localized emissions of approximately 300 ppd of NO_X, 170 ppd of CO, 11 ppd of $PM_{2.5}$ and 13 ppd of PM_{10}. Daily construction emissions are anticipated to exceed SCAQMD localized significance thresholds for NO_X, and PM_{10}, and $PM_{2.5}$ and would result in a potentially adverse localized air quality construction effect.

5.6.5.2 Indirect Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in indirect emissions of TACs. Emissions from the project were compared to existing conditions (2009) for CEQA. A summary of the results of the Tier 1 HRA are provided in Table 5-12. Since VOC emissions will decrease in future years because of the improvement in engine technology, the HRA was not conducted for VOC emissions. Instead, it was limited to inorganic emissions. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not cause significant emissions of TACs under CEQA.

5.6.5.3 Cumulative Impacts

Daily regional and localized construction emissions are anticipated to exceed SCAQMD regional significance thresholds and would result in a potentially adverse cumulative effect without mitigation.

5.6.6 Noise and Vibration

5.6.6.1 Direct Impacts

Anticipated construction equipment and the related noise levels would be the same as those shown in Table 5-8 for the Underground Emphasis LRT Alternative.

The construction of the additional underground alignment along Alameda and 1st Streets would result in new sources of temporary noise and vibration that would not be part of the Underground Emphasis LRT Alternative. These sources would result in the same levels of noise and vibration as those described for Underground Emphasis LRT Alternative.

Additional construction activity would occur closer to sensitive receptors along Alameda and 1st Streets. This would intensify the impacts from noise and vibration compared to those identified for the Underground Emphasis LRT Alternative. The construction activities with the greatest potential to cause noise impacts would be construction of the cut and cover tunnel along Flower Street, cut and cover construction of the Flower/5th/4th Street station, cut and cover construction of the approach to 2nd/Hope Street station, construction of the 2nd/Hope Street station, cut and cover construction of the 2nd Street /Broadway station, and open cut construction of the 2nd Street/Central Avenue station. These activities would have the greatest potential for noise impacts due to the duration of the work and the proximity of construction activities to noise sensitive land uses.

Under the Fully Underground LRT Alternative – Little Tokyo Variation 2, the no at-grade junction or underpass would be constructed on Alameda Street. This would remove a potential temporary noise source in the Little Tokyo community that would occur for a two to three year period under the At-Grade and Underground Emphasis LRT Alternatives. However, an underground junction beneath 1st and Alameda Streets, a portal near Temple and Alameda Streets, and two portals on 1st Street between Alameda and Vignes Streets would be constructed as part of this alternative. Potential adverse effects from construction noise are anticipated without the implementation of mitigation measures.

The potential for construction vibration to cause building damage and annoyance impacts would be the same as identified under the Fully Underground LRT Alternative – Little Tokyo Variation 1. Without the implementation of mitigation measures, vibration impacts would be potentially significant under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.6.2 Indirect Impacts

Impacts from construction-related activities are temporary and direct in nature. No indirect impacts are anticipated from noise or vibration under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.6.3 Cumulative Impacts

Impacts from noise and vibration during construction would be short term and would not contribute to a cumulative adverse effect. Therefore, no cumulative adverse noise or vibration impacts are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

5.6.7.1 Direct Impacts

Geotechnical/Subsurface/Seismic

The Fully Underground LRT Alternative – Little Tokyo Variation 2 proposed alignment would not cross any known faults. However, portions of the Fully Underground LRT Alternative – Little Tokyo Variation 2 proposed alignment occur in areas mapped with the potential for liquefaction based on soil stability. Areas susceptible to liquefaction are along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. A portion of the alignment near Alameda and 1st Streets would be within the mapped Inundation Hazard Area. In addition, the proposed 2nd/Hope Street station would be within the Hillside Ordinance area (Bunker Hill).

Geotechnical, subsurface, and seismic impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.7.1 contains further analysis.

Hazardous Materials

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would entail excavation along most of the proposed alignment, during which contaminated soil and groundwater could be encountered. Hazardous material impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.7.1 contains further analysis.

5.6.7.2 Indirect Impacts

No indirect adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 5-13. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2014-2017) Toxic Air Contaminant Construction Emissions and HRA						
TAC	CAS #	Emissions (pounds/hr)		PSL	PSI	
		2nd/Hope Street SEM	2nd/Hope Street Open Cut	(lb/hr)	2nd/Hope Street SEM	2nd/Hope Street Open Cut
Arsenic	7440-38-2	2.38E-05	2.46E-05	1.00E-04	2.38E-01	2.46E-01
Chlorine	7782-50-5	1.88E-03	1.95E-03	1.05E-01	1.79E-02	1.86E-02
Copper	7440-50-8	1.21E-04	1.25E-04	5.00E-02	2.41E-03	2.50E-03
Mercury	7439-97-6	1.31E-04	1.35E-04	9.00E-04	1.46E-01	1.51E-01
Nickel	7440-02-0	8.90E-05	9.20E-05	3.00E-03	2.97E-02	3.07E-02
				ASI	4.29E-01	4.44E-01
				Threshold	1.0	

Notes:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Source: CDM, Metro Regional Connector Air Quality Technical Memorandum, 2010.

5.6.7.3 Cumulative Impacts

No cumulative adverse geotechnical, subsurface, seismic, or hazardous materials impacts are anticipated during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.8 Water Quality

5.6.8.1 Direct Impacts

Water quality impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.8.1 contains further analysis.

5.6.8.2 Indirect Impacts

No indirect adverse construction impacts associated with water quality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.8.3 Cumulative Impacts

No cumulative adverse construction impacts associated with water quality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.9 Energy

5.6.9.1 Direct Impacts

The highest indirect energy consumption would occur during site clearance and construction of guideways, stations, and support facilities. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a temporary energy demand of approximately 6,300 billion BTUs. This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative; potential construction-related impacts would not be significant.

5.6.9.2 Indirect Impacts

No indirect adverse construction impacts associated with energy are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.9.3 Cumulative Impacts

No cumulative adverse construction impacts associated with energy are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.10 Climate Change

5.6.10.1 Direct Impacts

No direct adverse construction impacts associated with climate change are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.10.2 Indirect Impacts

No indirect adverse construction impacts associated with climate change are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.10.3 Cumulative Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in GHG emissions from diesel-fueled construction equipment. Emissions would be generated by onsite equipment, offsite worker vehicles, and offsite haul trucks. A total of approximately 117,600 metric tons per year of GHG emissions would be produced during all phases of construction under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

The proposed project would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). This proposed alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

5.6.11 Historic, Archaeological, and Paleontological Resources

5.6.11.1 Direct Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have the potential to alter, remove, or destroy archaeological and paleontological resources within the APE due to the creation of a new underground tunnel along its entire route and new underground stations. Potential archaeological and paleontological impacts during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those of the Underground Emphasis LRT Alternative during construction. Section 5.4.11.1 contains further analysis.

5.6.11.2 Indirect Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would have the potential to indirectly impact historical resources during cut and cover station and tunnel construction, portal construction, and TBM tunneling. The impacts would be indirect because the construction activities themselves would not damage historical properties, but vibration and possible subsidence of soils could potentially impact the historical integrity of buildings. Mitigation would minimize the potential adverse impacts.

5.6.11.3 Cumulative Impacts

No cumulative adverse construction impacts associated with historical, archaeological, or paleontological resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.12 Ecosystems and Biological Resources

5.6.12.1 Direct Impacts

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2, some mature trees containing nesting located along the proposed alignment could be removed. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removal or disturbance of this vegetation during the nesting season could directly impact the habitat and any bird species that are present. As no mature trees or other biological resources were observed in the area north and east of 1st and Alameda Streets, there are no additional direct impacts related to the Fully Underground LRT Alternative – Little Tokyo Variation 2. The same mitigation measures described in Section 6 would be required to reduce these potential impacts to a less-than-significant level.

5.6.12.2 Indirect Impacts

As with the other build alternatives, indirect impacts to migratory birds from the Fully Underground LRT Alternative- Little Tokyo Variation 2 would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less-than-significant level.

5.6.12.3 Cumulative Impacts

No cumulative adverse construction impacts associated with ecosystems or biological resources are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.13 Parklands and Other Community Facilities

5.6.13.1 Direct Impacts

A large portion of the alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be constructed underground using TBM tunneling, so access restrictions on 2nd Street would be limited to staging areas. However, there would be temporary road closures in the vicinity of cut and cover construction activities. Access to parking structure beneath Maguire Gardens and pedestrian access to the gardens would be temporarily restricted, as in the Underground Emphasis LRT Alternative. Locations along the alignment that could experience modified pedestrian and vehicle access during construction include the new LAPD headquarters, Caltrans, and the Little Tokyo Branch Public Library. Other community resources, particularly in Little Tokyo, such as MOCA, Go for Broke Monument, and JANM, would have fewer impacts associated with restricted access because the Fully Underground LRT Alternative – Little Tokyo Variation 2 does not include an underpass at Alameda Street at 1st Street, a pedestrian bridge, or surface track work at the Alameda Street/1st Street intersection. However, this alternative does include construction of an

underground junction beneath 1st and Alameda Streets, construction of a portal near Temple and Alameda Streets, and construction of two portals on 1st Street between Alameda and Vignes Streets. The portals on 1st Street will be closer to the Los Angeles Hompa Hongwanji Temple than any of the other alternatives, placing potential construction activities and impacts such as noise in greater proximity to the Temple. Response times for emergency services could also be impacted by this alternative, but to a lesser extent than the At-Grade Emphasis LRT Alternative on 2nd Street. Without mitigation, potential adverse construction impacts associated with parklands and other community facilities are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.13.2 Indirect Impacts

Although construction impacts are direct by nature, the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment could potentially discourage patrons of community facilities and parks due to restricted access and temporary parking restrictions. Mitigation could include signs, detour routes, and temporary replacement parking to encourage pedestrian and vehicular access to these community facilities. Without mitigation, potential adverse impacts are anticipated.

5.6.13.3 Cumulative Impacts

No cumulative adverse construction impacts associated with parklands and community facilities would be anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.14 Economic Vitality and Employment Opportunities

5.6.14.1 Direct Impacts

The construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in fewer potential adverse economic impacts in the project area than the Underground Emphasis LRT Alternative. Depending on the construction techniques used, there may be a need for phased street closure. However the economic effects of these closures would not be as severe as the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative due to lack of significant at-grade track construction and an Alameda Street underpass and pedestrian bridge. This alternative would include an underground junction beneath 1st and Alameda Streets, a portal near Temple and Alameda Streets, and two portals on 1st Street between Alameda and Vignes Streets. The economic impacts caused by the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be primarily limited to the station sites, and would be similar to the Underground Emphasis LRT Alternative.

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits through the creation of direct and indirect jobs and spending by suppliers whose goods and services are used in the project. These benefits are discussed in the Economic and Fiscal Impacts Technical Memorandum. The

benefits of the additional transit infrastructure in the long-term would outweigh the temporary significant impacts in the project area.

5.6.14.2 Indirect Impacts

As discussed in Section 5.6.3, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in the temporary closure of several streets. During utility relocation and lane closures, traffic would be diverted to surrounding streets. The traffic diversions and parking restrictions could potentially impact the economic viability of businesses adjacent to the closures, though to a lesser extent than the At-Grade Emphasis LRT Alternative. Although these potential construction impacts would short-term and intermittent, they would be considered potentially adverse without mitigation.

5.6.14.3 Cumulative Impacts

No cumulative adverse construction impacts associated with economic vitality are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.15 Safety and Security

5.6.15.1 Direct Impacts

The contractor will have a safety plan and be responsible for construction site security in conformance with local regulations and standards. Construction activities are not anticipated to affect security in the project area. Construction staging areas would typically be fenced off with restricted access and well lit. A large portion of the construction would occur underground, separated from pedestrians and vehicles. No direct adverse impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.15.2 Indirect Impacts

No indirect adverse construction impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.15.3 Cumulative Impacts

No cumulative adverse construction impacts associated with safety or security are anticipated under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

6.0 POTENTIAL MITIGATION MEASURES

Construction impacts are typically short-term and temporary. The following potential mitigation measures would minimize the potential adverse impacts associated with construction that were identified in Section 5.

6.1 No Build Alternative

6.1.1 Direct Impacts

No direct adverse impacts associated with construction-related activities are anticipated under the No Build Alternative. Therefore, no mitigation measures would be required.

6.1.2 Indirect Impacts

No indirect adverse impacts associated with construction-related activities are anticipated under the No Build Alternative. Therefore, no mitigation measures would be required.

6.1.3 Cumulative Impacts

No cumulative adverse impacts associated with construction-related activities are anticipated under the No Build Alternative. Therefore, no mitigation measures would be required.

6.2 Transportation Systems Management (TSM) Alternative

6.2.1 Direct Impacts

No direct adverse impacts associated with construction-related activities are anticipated under the TSM Alternative. Therefore, no mitigation measures would be required.

6.2.2 Indirect Impacts

No indirect adverse impacts associated with construction-related activities are anticipated under the TSM Alternative. Therefore, no mitigation measures would be required.

6.2.3 Cumulative Impacts

No cumulative adverse impacts associated with construction-related activities are anticipated under the TSM Alternative. Therefore, no mitigation measures would be required.

6.3 At-Grade Emphasis LRT Alternative

6.3.1 Direct Impacts

6.3.1.1 Transportation, Circulation, and Parking

During the final design phase of the project, site and street specific Worksite Traffic Control Plans would be developed in cooperation with the LADOT to accommodate the required

traffic, pedestrian, and bicycle movements. To the extent practical, traffic lanes would be maintained in both directions, particularly during the morning and afternoon peak traffic hours. Access to adjacent businesses, via existing or temporary driveways, would be maintained throughout the construction period. In some cases, specific construction techniques may be utilized by the contractor to minimize construction envelopes. This could include the use of segmental construction, which would help minimize the need for extensive falsework on the ground. Apart from the proposed elimination of eastbound travel between Hill and Main Streets on 2nd Street, at least one traffic lane in each direction in addition to pedestrian access would be maintained during construction activities. Alternately, the construction contractor may elect to close 2nd Street entirely during construction between Figueroa and Los Angeles Streets. Designated haul routes for trucks would be identified during the final design phase of the project. These routes would be identified and located so as to minimize noise, vibration, and other possible impacts to adjacent businesses and neighborhoods. Following completion of the project, slight roadway restorations may be needed in areas that experienced frequent project-related truck trips.

A parking mitigation and circulation plan would be developed by the contractor in coordination with Metro and LADOT prior to construction to minimize impacts on curb parking. It may be possible to sequence construction activities so that multiple blocks of on-street parking are not temporarily removed simultaneously. This strategy would maximize the number on-street parking spaces available near the construction area. Some of the proposed parking mitigation measures associated with permanent parking displacements could be developed early so that they may be utilized during the construction. Metro may also lease parking lots for construction employees, if necessary.

After implementation of the proposed mitigation measures, construction-related traffic, parking, pedestrian, and bicycle impacts would still be considered potentially significant and unavoidable.

6.3.1.2 Displacements and Relocation

Where temporary construction easements are unavoidable, Metro would follow the provisions of the Uniform Act, as amended and implemented pursuant to the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by the United States Department of Transportation (USDOT), dated February 3, 2005. Metro would apply acquisition and relocation policies to assure compliance with the Uniform Act and amendments. All real property acquired by Metro would be appraised to determine its fair market value. Just compensation, which would not be less than the approved appraisal made to each property owner, would be offered by Metro.

Potential adverse impacts associated with temporary construction easements are anticipated due to the construction and operation of the At-Grade Emphasis LRT Alternative. The following potential mitigation measures would result in no adverse impacts.

- Access to the Little Tokyo Library Branch would be maintained at all times during construction of the At-Grade Emphasis LRT Alternative.

- Adequate bus stop relocation and route detours would be implemented where bus stops would be displaced due to street closures. Adequate signage and noticing indicating the relocated bus stop would be placed at strategic locations, as determined by Metro Operations.

6.3.1.3 Community and Neighborhood Impacts

Potential adverse impacts associated with community and neighborhoods are anticipated due to construction of the At-Grade Emphasis LRT Alternative. Implementation of the following proposed mitigation measures would result in no adverse impacts.

- Whenever possible, detours would be developed for any roadways or sidewalks that must be closed during construction. Signs would be posted in appropriate languages to alert pedestrians and vehicles of any road or sidewalk detours. Pedestrian detours would be accessible to seniors and disabled persons.

- Early notification would be given to emergency service providers of any road closures or detours.

- A community outreach plan would be developed to notify local communities of construction schedules, road and sidewalk detours. Metro would coordinate with local communities during preparation of the traffic management plans to minimize potential construction impacts to community resources and special events. Efforts would be made to limit construction activities during special events when possible.

- Metro would develop a construction mitigation plan with community input to directly address specific construction impacts in the Little Tokyo community.

6.3.1.4 Visual Resources and Aesthetics

Implementation of the following mitigation measure would reduce the potential impacts to visual resources and aesthetics to a less than significant level.

- Construction staging areas outside of the public right-of-way (ROW) would be located adjacent to non-residential land uses to the maximum extent possible. In the event a building or site contains mixed land uses, with residential units above offices or retail, that site would be considered residential for staging purposes. If complete avoidance of adjacent residential properties is not possible, then construction staging would be screened from the residential land uses.

6.3.1.5 Air Quality

The effects of lane closures and intersection improvements during construction activities would reduce traffic speeds and result in increased emissions, particularly CO emissions, at major points of delay. Detour routes would ensure that traffic does not idle for extended periods of time, thus reducing the potential for localized exceedances of the federal CO standards. Construction-related air quality impacts would be temporary. With the implementation of mitigation measures, the potential adverse construction effects would still be significant and unavoidable.

- Water or a stabilizing agent would be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.
- Track-out would not extend 25 feet or more from an active operation and track-out would be removed at the conclusion of each workday.
- Contractors would be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.
- All haul trucks hauling soil, sand, and other loose materials would maintain at least six inches of freeboard in accordance with California Vehicle Code Section 23114.
- All haul trucks hauling soil, sand, and other loose materials would be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- Traffic speeds on unpaved roads would be limited to 15 mph.
- Operations on unpaved surfaces would be suspended when winds exceed 25 mph.
- Heavy equipment operations would be suspended during first and second stage smog alerts.
- On-site stockpiles of debris, dirt, or rusty materials would be covered or watered at least two times per day.
- Contractors would use non-electric equipment and non-electric vehicle engines built in 2014 or later.
- Contractors would utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.
- Heavy-duty trucks would be prohibited from idling in excess of five minutes, both on- and off-site.

- Construction parking would be configured to minimize traffic interference.
- Construction activity that affects traffic flow on the arterial system would be limited to off-peak hours, as feasible.

6.3.1.6 Noise and Vibration

Noise-control measures during construction would be required to minimize adverse effects on existing noise-sensitive land uses. All construction activities would have to comply with local noise ordinances and noise regulations. The measures listed in this section are examples of those that would be incorporated and should be re-evaluated in greater detail during preliminary design because adverse effects to residences cannot be accurately determined without detailed construction plans and schedules. During the construction phase of the project, sensitive and/or historic buildings within 21 feet of the construction may be susceptible to vibration damage. If survey of the structures finds buildings susceptible to vibration damage, a monitoring plan would be developed and committed to during project construction to ensure appropriate measures are taken to avoid any damage to historic buildings due to construction-induced vibration. These measures would also further reduce annoyance from ground borne vibration to sensitive land uses. General mitigation measures presented below are guidelines in developing measures to reduce construction noise and vibration. The measures would be incorporated into site-specific construction plans to minimize adverse noise effects to sensitive receivers along the project corridor. Equipment noise emission limits also would be developed and/or adopted from existing sources. Construction hours would be set, and construction activity noise level emission criteria would be determined and compliance required during construction. With the implementation of mitigation measures, no substantial adverse noise and vibration construction effects are anticipated.

- When possible, maintaining distances greater than those provided in Table 5-2 would help to avoid potential construction-related vibration damage.
- Where construction vibration may be problematic, Metro would use less vibration-intensive construction equipment or techniques near vibration-sensitive structures or operations to reduce the potential for damage or annoyance from ground borne vibration.
- Heavily laden vehicles would be routed away from vibration-sensitive locations.
- Earthmoving equipment would be routed as far away as possible from vibration-sensitive locations by site layout considerations. Metro would use chemical splitting or hydraulic jack splitting and drilled soldier piles would be used instead of high impact methods.

- Construction activities that produce vibration such as demolition, excavation, earthmoving, and ground impacting would be sequenced such that the vibration sources operate separately and not simultaneously.
- Nighttime construction activities that produce noticeable vibration would be avoided because people are more likely to be home and more sensitive to vibration at night.
- The smallest vibration-producing device possible to accomplish necessary tasks while minimizing excess vibration would be used.
- Non-impact demolition and construction methods would be selected, such as saw or torch cutting and removal for off-site demolition; chemical splitting or hydraulic jack splitting would be used instead of high impact methods.
- Use of pavement breakers and vibratory rollers and packers would be avoided near sensitive uses.
- Temporary sound wall and noise blankets would be installed at off-street construction staging sites where activity on the site will be continuous such as the TBM launch and excavation sites, the station sites. These walls would be decorated with local artistry and maintained regularly.

6.3.1.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

Implementation of the proposed mitigation measures and plans would result in no adverse geotechnical, subsurface, seismic, or hazardous materials impacts during construction.

- Design criteria would be established during project design that requires the construction contractor to limit movement to less than an acceptable threshold value as a performance standard. This acceptable threshold standard would be a function of several factors including but not limited to the type of structure and its existing condition. Additional data and survey information would be gathered during preliminary engineering for each building to enable assessment of the tolerance of the subject structures. In addition, standard threshold criteria and guidelines published by agencies and for similar type of structures would be reviewed. Additional geotechnical studies would be performed to define the nature of the soils and to refine the means of achieving the performance specification.
- Ground improvement such as grouting or other methods to fill voids where appropriate and offset potential settlement when excess material has been removed during excavation would be required. The criteria for requiring grouting or ground improvement would be based on the additional data collection and reviews as noted above and the acceptable threshold value.

- The tunnel alignment would be grouted in advance to provide adequate soil support and minimize settlement as geotechnical conditions require.
- Settlement would be monitored along project alignment using a series of measuring devices above the route of the alignment. Leveling surveys would be conducted prior to tunneling, to monitor for possible ground movements.
- A preconstruction survey of buildings would be conducted to establish a baseline for measuring potential construction-induced damage.
- Tunnel construction monitoring requirements would be described and defined. In addition, provisions could be included to use the Earth Pressure Balance or Slurry TBM for tunnel construction to minimize ground loss. During tunnel construction, the soils encountered would be monitored relative to anticipated soil conditions as described in a Geotechnical Report.

A Contaminated Soil/Groundwater Management Plan would be implemented during construction to establish procedures to follow if contamination is encountered. The Plan would be prepared during the Final Design phase of the project, and the construction contractor would be held to the level of performance specified in the Plan. The Plan would include the following:

- Notification procedures and contact information for appropriate regulatory agencies;
- Procedures for sampling and analysis of soil and/or groundwater known or suspected to be impacted by hazardous materials;
- Procedures for the proper handling, storage, transport, and disposal of contaminated soil and/or groundwater, in consultation with regulatory agencies;
- Dust control measures (e.g., soil wetting, wind screens, etc.) for contaminated soil;
- Groundwater collection, treatment and discharge procedures and applicable standards.

A Worker Health and Safety Plan would be implemented prior to the start of construction activities. All workers would be required to review the plan, receive training if necessary, and sign the plan prior to starting work. The plan would, at a minimum, identify the following:

- Properties of concern and the nature and extent of contaminants that could be encountered during excavation activities;

- All appropriate worker, public health, and environmental protection equipment and procedures;
- Emergency response procedures, including most direct route to a hospital; and
- The Site Safety Officer.

During construction of the underground portions of the At-Grade Emphasis LRT Alternative mitigation would be required to address the potential for the creation of a preferential pathway and resulting spread of existing groundwater contamination. This could entail the use of impermeable grout where necessary to fill the gap between the tunnel and the surrounding earth along underground portions of the alignment where groundwater contamination exists.

To reduce potential impacts from subsurface gases associated with oilfields in the vicinity of the project area, mitigation measures would be implemented during construction of the underground portions of the At-Grade Emphasis LRT Alternative to address both exposure to toxic gases and the risk of explosion. This would be particularly important in methane zones and methane buffer zones, but testing would be required in all underground segments, as oilfield gases could occur outside of mapped zones. Specific precautions to protect workers and the public from exposure to toxic gases would be required, and specialized excavation methods would be needed to prevent explosion. Prior to building demolition, surveys of asbestos containing materials and lead-based paint would be conducted. If necessary, destructive sampling would be used. All asbestos containing materials and lead-based paint would be removed or otherwise abated prior to demolition. Removal and abatement activities would comply with all applicable laws, regulations, and rules.

6.3.1.8 Water Resources

If contaminated groundwater is encountered during initial drilling and water quality testing prior to construction, and it is determined that there is potential for the contamination to spread, this would be mitigated during the design and engineering process. For example, it could be specified that impermeable concrete-based grouting materials be used to fill the gap between the tunnel and the surrounding earth. The permeability of grouting materials is lower than surrounding soil types and this would reduce the possibility that the tunnel could serve as a preferential pathway for contaminant migration. Additional best management practices (BMPs) that would address potential impacts from encountering contaminated groundwater and groundwater dewatering activities are proposed in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum.

Additional potential construction mitigation measures could include:

- Establishment of an erosion control plan prior to the initiation of construction activities. The erosion control plan would include:
  - Use of natural drainage, detention ponds, sediment ponds, or infiltration pits to allow runoff to collect and reduce or prevent erosion;
  - Use of barriers to direct and slow the rate of runoff and to filter out large-sized sediments;
  - Use of down-drains or chutes to carry runoff from the top of a slope to the bottom; and,
  - Control of water use for irrigation and dust control so as to avoid off-site runoff.

Potentially significant impacts to water quality stemming from construction of the Regional Connector project could be mitigated with the following measures as appropriate;

- Project design that includes properly designed and maintained biological oil and grease removal systems in new storm drain systems to treat water before it leaves project sites;
- Proper storage of hazardous materials to prevent contact with precipitation and runoff;
- Development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials;
- Placement of equipment to be repaired or maintained in covered areas on a pad of absorbent material to contain leaks, spills, or small discharges;
- Periodic and consistent removal of landscape and construction debris;
- Removal of any significant chemical residue on the project sites through appropriate methods;
- Use of non-toxic alternatives for any necessary applications of herbicides or fertilizers;
- Installation of detention basins to remove suspended solids by settlement; and/or,
- Periodic monitoring of the water quality of runoff before discharge from the site and into the storm drainage system.

6.3.1.9 Cultural/Archeological Resources

Historic Resources

- MM-BE-1 Historic Properties/Historical Resources Documentation. Documentation of historic properties and historical resources adversely affected by the project would consist of the development of individual Historic American Building Survey/Historic American Engineering Record (HABS/HAER) submissions. The HABS/HAER documents would be prepared so that the original archival-quality documentation could be donated for inclusion in the Library of Congress if the National Park Service accepts these materials. Archival copies of the documentation would also be offered for donation to local repositories, including the Los Angeles Central Library and the Los Angeles Conservancy. The appropriate level of recordation would be established in consultation with the California SHPO and formalized as a part of MM-BE-5.

- MM-BE-2 Pre-Construction Baseline Survey And Geo-Technical Investigations. A survey of historic properties and/or historical resources within 21 feet of vibration producing construction activity would be conducted to assess the building category and the potential for GBV to cause damage. The survey would also be used to establish baseline, preconstruction conditions for historic properties and historical resources. During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken under this measure to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. This analysis would assist in the development of appropriate support mechanisms for cut and fill construction areas. The subsurface investigation would also identify areas that could experience differential settlement as a result of using a tunnel boring machine in close proximity to historic properties and/or historical resources. An architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards would provide input and review of final design documents prior to implementation of measures (36 CFR Part 61).

- MM-BE-3 Building Protection Measures, Geotechnical and Vibration Monitoring, and Post Construction Survey. For those historic properties and historical resources that have the potential to be affected or impacted by ground borne vibrations and/or differential settlement, Metro would use building protection measures such as underpinning, soil grouting, or other forms of ground improvement, as well as lower vibration equipment an/or construction techniques. These techniques, combined with a geotechnical and vibration monitoring program, would help protect identified historic properties and historical resources. The historic property and historical resource protection measures as well as the geotechnical and vibration monitoring program would be reviewed by an architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) to ensure that the measures would adequately protect the properties/resources. A

post construction survey would also be undertaken to ensure that no adverse effects or significant impacts had occurred to historic properties and historical resources.

- MM-BE-4 TBM Specifications/Requirements Near Historic Properties And Historical Resources. For those historic properties and historical resources that have the potential to be affected or impacted by differential settlement caused by TBM construction, a contractor would be required to develop and use an earth pressure balance or slurry shield tunnel boring machine. The method of machine operation would be based on the anticipated ground conditions near historic properties and historical resources. These construction methods and machinery types would reduce the potential for differential settlement near historic properties and historical resources.

- MM-BE-5 Memorandum of Agreement. For those historic properties and historical resources that would be anticipated to experience adverse effects, a memorandum of agreement would be developed to resolve those adverse effects consistent with 36 CFR 800. This agreement, developed by FTA and Metro in consultation with the CA SHPO and other consulting parties would resolve and/or avoid, minimize, or mitigate potential effects to historic properties and/or historical resources. The agreement would include stipulations that outline the specific requirements for consultation and decision making between the lead federal agency and consulting parties, specify the level of HABS/HAER recordation, outline specific requirements for pre- and post-construction surveys, geotechnical investigations, building protection measures, and TBM specifications.

Archaeological Resources

The Regional Connector Transit Corridor project may impact one or more National Register- or California Register-eligible archeological sites, including the Los Angeles zanja system (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339, along with an unknown number of previously unidentified archeological resources.

Construction-related impacts to potentially significant archeological sites would be avoided by project design where possible. Zanja segments have been encountered in the project vicinity as shallow as 0.45 m (1.5 feet) below current grade (Zanja 6-1; P-19-003352) and as deep as 3.0 m (9.8 feet) below grade (Zanja Madre [CA-LAN-887H]; Slawson 2006). The use of deep-tunneling construction techniques, as opposed to cut and cover methods, for the underground portions of the proposed alignments may avoid impacts to this resource, although vibration effects caused by tunneling machinery must be taken into account as well. Site CA-LAN-3588 occupies a portion of the city block currently bounded by Alameda, Temple, Vignes, and 1st Streets. Sites P-19-003338 and P-19-003339 are located on 1st Street between Hewitt and Garey Streets. The avoidance of ground-disturbing construction activities within

these areas may circumvent impacts to these resources. In the event that resource avoidance is not possible, and to mitigate impacts to previously unidentified archeological resources, the following mitigation measures could be implemented.

Treatment of Undiscovered Archeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro Gold Line to East Los Angeles (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less than significant levels. This plan would include, but not be limited to, the following elements, which are described briefly in the Archeological Technical Memorandum:

- Worker training
- Archeological monitoring
- Scientific evaluation and mitigation of archeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains, if applicable
- Reporting of monitoring and mitigation results

Treatment of Known Archeological Resources

The destruction of a resource that is eligible for listing in the National Register or California Register would be a significant adverse effect. This effect may be resolved through the implementation of a Memorandum of Agreement (MOA) between FTA, Metro, and the SHPO, as well as other interested parties. For the purposes of this report, four archeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the National Register and the California Register. These include the Los Angeles zanja system (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archeological sites can be mitigated to a less than significant level through the preparation and implementation of a data recovery plan under Section 106 and CEQA. The actual measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archeological resources within the direct APE that are eligible for listing in the National Register or

California Register. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archeological data recovery.

Los Angeles Zanja System

The Los Angeles Zanja system was an extensive and integrated water conveyance network that served large areas of the city for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the evaluation of the overall zanja system, given the requirements that the OHP clarified in their recent letter (Toffelmier 2009). It is likely that other projects (such as emergency utility repair) have damaged segments of the zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect/impact that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect/impact, particularly given the likelihood of damaging the zanjas prior to discovery during project construction process. Project-related inadvertent damage to the zanjas may constitute an adverse effect under the Criteria of Adverse Effect, "physical destruction or damage" (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects/impacts.

Both Section 106 of the National Historic Preservation Act (as amended) and the California Environmental Quality Act require the identification, documentation, and evaluation of historic properties/historic resources in a project area (or direct Area of Potential Effects, APE). For a poorly mapped and buried linear resource like the zanja system, identification alone is challenging. Rather than a costly archeological excavation program or a remote sensing (ground penetrating radar, etc.) survey that is unlikely to produce clear-cut results, we recommend a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner. Using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjas within the APE would facilitate mitigation. Where these alignments are expected to be affected by the proposed project, a limited archeological investigation (e.g., mechanical trenching at the direction of a qualified archaeologist) immediately preceding project construction would be an efficient and economical method to identify intact zanja segments.

The documentation and evaluation of the Los Angeles Zanja system would be best accomplished with a system-wide approach that incorporates historical, archeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. The documentation of the zanja segments' alignments and slopes would have the added benefit

of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles Zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archeological testing, and architectural documentation, and would be followed by a formal evaluation of National Register and California Register eligibility. It is important to note that substantial documentation already exists for the zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is advocated here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Such research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document the creation, maintenance, modification, and abandonment of the system.
- Archeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE through the use of physical exposure through controlled excavation and/or remote sensing. Resources would be documented using California Department of Parks and Recreation (DPR) series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archeological Resource Management Report (OHP 1990) guidelines that addresses research questions and assesses the National Register and California Register eligibility of the system.
- Architectural documentation of exposed zanja segments through the production of narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.
- Preserving the results of the historical, archeological, and historic architectural studies in repositories such as the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter.
- Interpreting the Los Angeles zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

6.3.1.10 Paleontological Resources

The following mitigation measures have been developed in accordance with the SVP (1995) standards and guidelines and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

- MM-P-1. A qualified paleontologist would produce a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring would include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor would have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.

- MM-P-2. All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these geologic sediments are determined to have a high paleontological sensitivity (Figure 4-3). Very shallow surficial excavations (less than 5 feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected (Figure 4-3). Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.

- MM-P-3. At each fossil locality, field data forms would be used to record pertinent geologic data, stratigraphic sections would be measured, and appropriate sediment samples would be collected and submitted for analysis.

- MM-P-4. Due to the likelihood of the presence of microfossils, matrix samples would be collected and tested within the Puente Formation and Fernando Formation. Testing for microfossils would consist of screen-washing samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests would result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.

- MM-P-5. Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

- MM-P-6. The paleontologist would prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository.

6.3.1.11 Ecosystems and Biological Resources

Federal and state migratory bird protection would require mitigation measures to address potential impacts to nesting bird species from the potential disturbance of trees within the proposed build alternative alignments. Trees that could potentially be disturbed include a portion of the approximately 250 trees located within the proposed alignment and station footprints for the At-Grade Emphasis LRT Alternative. The following potential mitigation measures would apply to all of the proposed build alternatives.

The first potential mitigation would be to avoid tree disturbances as much as possible. As project design progresses, it may be possible to reduce the number of trees potentially disturbed by avoidance or fencing. It may also be possible to reduce the scale of disturbance by trimming individual trees instead of removing them completely.

The second potential mitigation would be to time necessary tree removal and trimming activities to seasons outside of the bird breeding season, which can extend from February 1 to August 31. If it is not feasible to avoid tree removal and trimming related to construction during the breeding bird season from February 1 to August 31, breeding bird surveys would be conducted as recommended by the California Department of Fish and Game. Two biological surveys would be conducted, one 15 days and a second 72 hours prior to construction activities that would remove or disturb suitable nesting habitat. The surveys would be performed by a biologist with experience conducting breeding bird surveys. The biologist would prepare survey reports documenting the presence or absence of active nests of any protected native bird in the habitat to be removed and any other such habitat within 300 feet of the construction work area (or within 500 feet for raptors). If an active nest is located, construction within 300 feet of the nest (or 500 feet for raptor nests) would be postponed until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting.

If construction of the project requires removing any of the native trees located along the proposed alignment and stations for any of the build, a removal permit would be required from the Los Angeles Board of Public Works in accordance with the City of Los Angeles Native Tree Protection Ordinance. The tree removal permit may require replanting of native trees within the project area or at another location within the City of Los Angeles to mitigate for the removal of these trees. The City's ordinance requires replacement of protected trees at a 2:1 ratio and other trees at a 1:1 ratio. If construction would require pruning of any protected native tree, the pruning would be performed in a manner that does not cause permanent damage or adversely affect the health of the trees.

6.3.1.12 Parklands, Community Facilities, and Section 4(f)

Metro would prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone and reduce restrictions to the access of public services along the alignment to the greatest extent feasible. This traffic management plan would include the following measures:

- Scheduling a majority of construction-related travel (i.e., deliveries, hauling, and worker trips) during the off-peak hours;
- Developing detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas;
- Where feasible, temporarily re-striping roadway to maximize the vehicular capacity at those locations affected by construction closures;
- Where feasible, temporarily removing on-street parking to maximize the vehicular capacity at those locations affected by construction closures;
- Where feasible, stationing traffic control officers at major intersections during peak hours to minimize delays related to construction activities;
- Developing and implementing an outreach program to inform the general public about the construction process and planned roadway closures;
- Developing and implementing a program with business owners to minimize impacts to businesses during construction activity, including but not limited to signage programs.

6.3.1.13 Economic and Fiscal

Potential mitigation measures would apply to construction-related effects to minimize the economic construction effects of the proposed project. With implementation of the following mitigation measures no adverse economic effects would occur during construction.

- Compensation to property owners for acquisition of property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
- Relocation assistance offered affected property and business owners in compliance with the California Relocation Act
- Measures to assist business owners significantly impacted by temporary construction activity (temporary parking, marketing programs, and other measures to be identified by Metro working with the appropriate businesses).

- Replacement parking locations and strategies (Metro is committed to implementing a feasible parking mitigation plan that would reduce parking impacts to a less than significant level).

6.3.1.14 Safety and Security

The following potential mitigation measures would apply to construction-related effects to minimize the construction effects of the proposed project.

- Providing alternate walkways for pedestrians around construction staging sites in accordance with American with Disability Act (ADA) requirements.
- Signing and properly marking all pedestrian detour locations around staging sites in accordance with the Manual on Uniform Traffic Control Devices "work zone" guidance, and other applicable local and state requirements.
- Coordinating work plans and traffic control measures with emergency responders to prevent effects to emergency response times.
- Metro would develop a Construction Mitigation Program during final design and implement during construction. The Program would guide Metro in communicating to the community and obtaining input from residents and businesses affected during construction. This would include communicating traffic control measures, schedule of activities and duration of operations.

6.3.2 Indirect Impacts

6.3.2.1 Community and Neighborhood Impacts

The mitigation measures in Section 6.3.1.3 would address potential indirect community and neighborhood construction impacts. Implementation of these proposed mitigation measures would result in no indirect adverse impacts from the proposed alternative.

6.3.2.2 Geotechnical/Subsurface/Seismic/Hazardous Materials

During construction of the At-Grade Emphasis LRT Alternative, gaps between the tunnel and the surrounding earth could serve as preferential pathways for the migration of groundwater contamination. Specifications for impermeable grouting materials to fill the gap between the tunnel and the surrounding earth would be designed to reduce this potential impact.

- During construction of the underground portion of the At-Grade Emphasis LRT Alternative, mitigation would be required to address the potential for the creation of a preferential pathway and resulting spread of existing groundwater contamination. This could entail the use of impermeable grout where necessary to fill the gap between the

tunnel and the surrounding earth along underground portions of the alignment where groundwater contamination exists.

6.3.3 Cumulative Impacts

6.3.3.1 Traffic Circulation and Parking

The mitigation measures in Section 6.3.1.1 would address potential cumulative traffic circulation and parking construction impacts. After implementation of these proposed mitigation measures, a potential significant and unavoidable traffic circulation impact would remain during construction of the At-Grade Emphasis LRT Alternative.

6.3.3.2 Air Quality

The mitigation measures in Section 6.3.1.5 would address potential cumulative air quality construction impacts. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would remain under the At-Grade Emphasis LRT Alternative.

6.4 Underground Emphasis LRT Alternative

6.4.1 Direct Impacts

6.4.1.1 Traffic Circulation and Parking

Refer to mitigation measures in Section 6.3.1.1. After implementation of these proposed mitigation measures, a potential significant and unavoidable traffic circulation impact would remain during construction of the Underground Emphasis LRT Alternative.

6.4.1.2 Displacements and Relocation

Refer to mitigation measures in Section 6.3.1.2. After implementation of these proposed mitigation measures, a potential less-than-significant impact from displacements and relocation would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.3 Community and Neighborhood Impacts

Refer to mitigation measures in Section 6.3.1.3. After implementation of these proposed mitigation measures, a potential less-than-significant community and neighborhood impact would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.4 Visual Resources and Aesthetics

Refer to mitigation measures in Section 6.3.1.4. After implementation of these proposed mitigation measures, a less-than-significant impact to visual resources and aesthetics would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.5 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would occur under the Underground Emphasis LRT Alternative.

6.4.1.6 Noise and Vibration

Refer to mitigation measures in Section 6.3.1.6. After implementation of these proposed mitigation measures, a potential less-than-significant impact to noise and vibration would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to mitigation measures in Section 6.3.1.7. After implementation of these proposed mitigation measures, a potential less-than-significant geotechnical, subsurface, seismic, and hazardous materials impact would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.8 Water Resources

Refer to mitigation measures in Section 6.3.1.8. After implementation of these proposed mitigation measures, a potential less-than-significant impact to water resources would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.9 Cultural/Archeological

Refer to mitigation measures in Section 6.3.1.9. After implementation of these proposed mitigation measures, a potential less-than-significant impact to cultural/archeological resources would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.10 Paleontological Resources

Refer to mitigation measures in Section 6.3.1.10. Mitigation measures would not be feasible in areas where tunnels would be constructed using TBMs. Potential impacts in these areas would be unavoidable. Despite implementation of proposed mitigation measures where possible, potentially significant impacts to paleontological resources could occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.11 Ecosystems and Biological Resources

Refer to mitigation measures in Section 6.3.1.11. After implementation of these proposed mitigation measures, a potential less-than-significant impact to ecosystems and biological resources would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.12 Parklands, Community Facilities, and Section 4(f)

Refer to mitigation measures in Section 6.3.1.12. After implementation of these proposed mitigation measures, a potential less-than-significant impact to parklands, community facilities, and Section 4(f) resources would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.13 Economic and Fiscal

Refer to mitigation measures in Section 6.3.1.13. After implementation of these proposed mitigation measures, a potential less than significant economic and fiscal impact would occur during construction of the Underground Emphasis LRT Alternative.

6.4.1.14 Safety and Security

Refer to mitigation measures in Section 6.3.1.14. After implementation of these proposed mitigation measures, a potential less-than-significant impact to safety and security would occur during construction of the Underground Emphasis LRT Alternative.

6.4.2 Indirect Impacts

6.4.2.1 Community and Neighborhood Impacts

Refer to Section 6.3.1.3 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.4.2.2 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to Section 6.3.1.7 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.4.3 Cumulative Impacts

6.4.3.1 Traffic Circulation and Parking

Refer to mitigation measures in Section 6.3.1.1. After implementation of these proposed mitigation measures, a potential significant and unavoidable traffic circulation impact would remain during construction of the Underground Emphasis LRT Alternative.

6.4.3.2 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would remain under the Underground Emphasis LRT Alternative.

6.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

6.5.1 Direct Impacts

6.5.1.1 Traffic Circulation and Parking

Potential adverse impacts associated with traffic circulation are anticipated during the construction of the Fully Underground LRT Alternative – Variation 1. Refer to Section 6.3.1.1 for mitigation measures regarding traffic circulation impacts. After implementation of these proposed mitigation measures, a potential significant and unavoidable adverse impact would remain during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.2 Displacements and Relocation

Refer to mitigation measures in Section 6.3.1.2. After implementation of these proposed mitigation measures, a potential less-than-significant impact from displacements and relocation would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.3 Community and Neighborhood Impacts

Refer to mitigation measures in Section 6.3.1.3. After implementation of these proposed mitigation measures, a potential less than significant community and neighborhood impact would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.4 Visual Resources and Aesthetics

Refer to mitigation measures in Section 6.3.1.4. After implementation of these proposed mitigation measures, a potential less-than-significant impact to visual resources and aesthetics would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.5 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would occur under the Fully Underground LRT Alternative – Variation 1.

6.5.1.6 Noise and Vibration

Refer to mitigation measures in Section 6.3.1.6. After implementation of these proposed mitigation measures, a potential less-than-significant impact to noise and vibration would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to mitigation measures in Section 6.3.1.7. After implementation of these proposed mitigation measures, a potential less-than-significant impact to geotechnical /subsurface

/seismic /hazardous materials would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.8 Water Resources

Refer to mitigation measures in Section 6.3.1.8. After implementation of these proposed mitigation measures, a potential less-than-significant impact to water resources would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.9 Cultural/Archeological

Refer to mitigation measures in Section 6.3.1.9. After implementation of these proposed mitigation measures, a potential less-than-significant impact to cultural/archeological resources would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.10 Paleontological Resources

Refer to mitigation measures in Section 6.3.1.10. Mitigation measures would not be feasible in areas where tunnels would be constructed using TBMs. Potential impacts in these areas would be unavoidable. Despite implementation of proposed mitigation measures where possible, potentially significant impacts to paleontological resources could occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.11 Ecosystems and Biological Resources

Refer to mitigation measures in Section 6.3.1.11. After implementation of these proposed mitigation measures, a potential less-than-significant impact to ecosystems and biological resources would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.12 Parklands, Community Facilities, and Section 4(f)

Refer to mitigation measures in Section 6.3.1.12. After implementation of these proposed mitigation measures, a potential less-than-significant impact to parklands, community facilities, and Section 4(f) resources would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.13 Economic and Fiscal

Refer to mitigation measures in Section 6.3.1.13. After implementation of these proposed mitigation measures, a potential less than significant economic and fiscal impact would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.1.14 Safety and Security

Refer to mitigation measures in Section 6.3.1.14. After implementation of these proposed mitigation measures, a potential less-than-significant impact to safety and security would occur during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.2 Indirect Impacts

6.5.2.1 Community and Neighborhood Impacts

Refer to Section 6.3.1.3 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.5.2.2 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to Section 6.3.1.7 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.5.3 Cumulative Impacts

6.5.3.1 Traffic Circulation and Parking

Refer to mitigation measures in Section 6.3.1.1. After implementation of these proposed mitigation measures, a potential significant and unavoidable traffic circulation impact would remain during construction of the Fully Underground LRT Alternative – Variation 1.

6.5.3.2 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would remain under the Fully Underground LRT Alternative – Variation 1.

6.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

6.6.1 Direct Impacts

6.6.1.1 Traffic Circulation and Parking

Potential adverse impacts associated with traffic circulation are anticipated during the construction of the Fully Underground LRT Alternative – Variation 2. Refer to Section 6.3.1.1 for mitigation measures regarding traffic circulation and parking impacts. After implementation of these proposed mitigation measures, a potential significant and unavoidable adverse impact would remain during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.2 Displacements and Relocation

Refer to mitigation measures in Section 6.3.1.2. After implementation of these proposed mitigation measures, a potential less-than-significant impact from displacements and relocation would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.3 Community and Neighborhood Impacts

Refer to mitigation measures in Section 6.3.1.3. After implementation of these proposed mitigation measures, a potential less than significant community and neighborhood impact would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.4 Visual Resources and Aesthetics

Refer to mitigation measures in Section 6.3.1.4. After implementation of these proposed mitigation measures, a potential less-than-significant impact to visual resources and aesthetics would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.5 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would occur under the Fully Underground LRT Alternative – Variation 2.

6.6.1.6 Noise and Vibration

Refer to mitigation measures in Section 6.3.1.6. After implementation of these proposed mitigation measures, a potential less-than-significant impact to noise and vibration would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.7 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to mitigation measures in Section 6.3.1.7. After implementation of these proposed mitigation measures, a potential less-than-significant geotechnical, subsurface, seismic, and hazardous materials impact would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.8 Water Resources

Refer to mitigation measures in Section 6.3.1.8. After implementation of these proposed mitigation measures, a potential less-than-significant impact to water resources would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.9 Cultural/Archeological

Refer to mitigation measures in Section 6.3.1.9. After implementation of these proposed mitigation measures, a potential less-than-significant impact to cultural/archeological resources would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.10 Paleontological Resources

Refer to mitigation measures in Section 6.3.1.10. Mitigation measures would not be feasible in areas where tunnels would be constructed using TBMs. Potential impacts in these areas would be unavoidable. Despite implementation of proposed mitigation measures where possible, potentially significant impacts to paleontological resources could occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.11 Ecosystems and Biological Resources

Refer to mitigation measures in Section 6.3.1.11. After implementation of these proposed mitigation measures, a potential less-than-significant impact to ecosystems and biological resources would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.12 Parklands, Community Facilities, and Section 4(f)

Refer to mitigation measures in Section 6.3.1.12. After implementation of these proposed mitigation measures, a potential less-than-significant impact to parklands, community facilities, and Section 4(f) resources would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.13 Economic and Fiscal

Refer to mitigation measures in Section 6.3.1.13. After implementation of these proposed mitigation measures, a potential less than significant economic and fiscal impact would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.1.14 Safety and Security

Refer to mitigation measures in Section 6.3.1.14. After implementation of these proposed mitigation measures, a potential less-than-significant impact to safety and security would occur during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.2 Indirect Impacts

6.6.2.1 Community and Neighborhood Impacts

Refer to Section 6.3.1.3 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.6.2.2 Geotechnical/Subsurface/Seismic/Hazardous Materials

Refer to Section 6.3.1.7 for mitigation measures regarding community and neighborhood impacts. Implementation of these proposed mitigation measures would result in no indirect adverse construction impacts.

6.6.3 Cumulative Impacts

6.6.3.1 Traffic Circulation and Parking

Refer to mitigation measures in Section 6.3.1.1. After implementation of these proposed mitigation measures, a potential significant and unavoidable traffic circulation impact would remain during construction of the Fully Underground LRT Alternative – Variation 2.

6.6.3.2 Air Quality

Refer to mitigation measures in Section 6.3.1.5. After implementation of these proposed mitigation measures, a potential significant and unavoidable construction air quality impact would remain under the Fully Underground LRT Alternative – Variation 2.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

The No Build Alternative would not result in construction related impacts. Therefore, no significant adverse impacts are anticipated, and no mitigation measures would be required.

7.1.2 CEQA Determinations

Based on the CEQA thresholds of significance, the No Build Alternative would not have significant construction impacts. No cumulative considerable impacts are anticipated. Therefore, no mitigation measures would be required.

7.2 Transportation Systems Management (TSM) Alternative

7.2.1 NEPA Findings

The TSM Alternative would not result in construction related impacts. Therefore, no significant adverse impacts are anticipated, and no mitigation measures would be required.

7.2.2 CEQA Determinations

Based on the CEQA thresholds of significance, the TSM Alternative would not have significant impacts during construction. No cumulative considerable impacts are anticipated. Therefore, no mitigation measures would be required.

7.3 At-Grade Emphasis LRT Alternative

Table 7-1 shows a summary of potential impacts by topic during construction of the At-Grade Emphasis LRT Alternative.

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would have potentially adverse construction impacts related to following environmental topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality
- Noise and Vibration

- Community and Neighborhood Impacts
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Cultural/Archeological Resources
- Paleontological Resources
- Water Resources
- Economic and Fiscal Resources
- Ecosystems and Biological Resources

Potential mitigation measures would reduce these impacts to less than significant other than to air quality and traffic circulation. Implementation of mitigation measures would result in no direct, indirect, or cumulative adverse construction impacts other than to air quality and traffic circulation. Unavoidable adverse air quality and traffic circulation impacts are anticipated during construction.

Table 7-1. Summary of Construction Impacts for the At-Grade Emphasis LRT Alternative

Topic	Impact Determination	Mitigation	Impact After Mitigation
Traffic circulation	Potentially Adverse	Yes	Potentially Adverse
Land Use & Development	Not Adverse	No	Not Adverse
Displacement & Relocation	Potentially Adverse, two temporary construction easements	Yes	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced (NEPA Only)	Yes	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Yes	Potentially Adverse for VOC, NO_x, and CO
Noise & Vibration	Potentially Adverse	Yes	Not Adverse

Table 7-1. Summary of Construction Impacts for the At-Grade Emphasis LRT Alternative

Topic	Impact Determination	Mitigation	Impact After Mitigation
Ecosystems/Biological Resources	Potentially Adverse	No	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Potentially Adverse, seismically induced settlement, exposure to hazardous materials	Yes	Not Adverse
Water Resources	Potentially Adverse, erosion, groundwater contamination	Yes	Not Adverse
Energy	Not Adverse	No	Not Adverse
Climate Change	Not Adverse	No	Not Adverse
Cultural- Archeological Resources	Potentially Adverse	Yes	Not Adverse
Paleontological	Potentially Adverse	Yes	Not Adverse
Parklands, Community Facilities & Section 4(f)	Potentially Adverse, reduction of access	Yes	Not Adverse
Economic & Fiscal	Potentially Adverse	Yes	Not Adverse
Safety & Security	Not Adverse	Yes	Not Adverse
Growth-Inducing Impacts	Not Adverse	No	Not Adverse

Source: TAHA, 2010.

7.3.2 CEQA Determinations

Based on the CEQA thresholds of significance, the At-Grade Emphasis LRT Alternative would have potentially significant construction impacts related to the following environmental topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality

- Noise and Vibration
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Cultural/Archeological Resources
- Paleontological Resources
- Water Resources
- Economic and Fiscal Resources
- Ecosystems and Biological Resources
- Parklands and Other Community Facilities

Significant and unavoidable air quality and traffic circulation construction impacts are anticipated after mitigation. Potential mitigation measures would reduce all other direct, indirect, and cumulative construction impacts to less than significant levels.

7.4 Underground Emphasis LRT Alternative

Table 7-2 shows a summary of impacts by topic during construction of the Underground Emphasis LRT Alternative.

7.4.1 NEPA Findings

The Underground Emphasis LRT Alternative would have potentially adverse construction impacts related to following environmental topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality
- Noise and Vibration
- Community and Neighborhood Impacts
- Ecosystems/Biological Resources
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Water Resources

- Cultural/Archeological Resources
- Paleontological Resources
- Economic and Fiscal Resources
- Ecosystems and Biological Resources
- Parklands and Other Community Facilities

Unavoidable adverse air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

Table 7-2. Summary of Construction Impacts for the Underground Emphasis LRT Alternative

Topic	Impact Determination	Mitigation	Impact After Mitigation
Traffic circulation	Potentially Adverse	Yes	Potentially Adverse
Land Use & Development	Not Adverse	No	Not Adverse
Displacement & Relocation	Potentially Adverse, eight temporary construction easements	Yes	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced (NEPA Only)	Yes	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Yes	Potentially Adverse for VOC, NO_x, and CO
Noise & Vibration	Potentially Adverse	Yes	Not Adverse
Ecosystems/Biological Resources	Potentially Adverse	No	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Potentially Adverse, seismically induced settlement, exposure to hazardous materials	Yes	Not Adverse

Table 7-2. Summary of Construction Impacts for the Underground Emphasis LRT Alternative			
Topic	**Impact Determination**	**Mitigation**	**Impact After Mitigation**
Water Resources	Potentially Adverse, erosion, groundwater contamination	Yes	Not Adverse
Energy	Not Adverse	No	Not Adverse
Climate Change	Not Adverse	No	Not Adverse
Cultural/Archeological Resources-	Potentially Adverse	Yes	Not Adverse
Paleontological	Potentially Adverse	Yes	Potentially Adverse (CEQA Only)
Parklands, Community Facilities & Section 4(f)	Potentially Adverse, reduced access	Yes	Not Adverse
Economic & Fiscal	Potentially Adverse	Yes	Not Adverse
Safety & Security	Not Adverse	Yes	Not Adverse
Growth-Inducing Impacts	Not Adverse	No	Not Adverse

Source: TAHA, 2010.

7.4.2 CEQA Findings

Based on the CEQA thresholds of significance, the Underground Emphasis LRT Alternative would have potentially significant construction impacts related to the following topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality
- Noise and Vibration
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Cultural/Archeological Resources

- Paleontological Resources
- Water Resources
- Economic and Fiscal Impacts
- Ecosystems and Biological Resources
- Parklands and Other Community Facilities

Significant and unavoidable paleontology, air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would reduce all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Table 7-3 shows a summary of impacts by topic during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Table 7-3. Summary of Construction Impacts for the Fully Underground LRT Alternative – Little Tokyo Variation 1

Topic	Impact Determination	Mitigation	Impact After Mitigation
Traffic circulation	Potentially Adverse	Yes	Potentially Adverse
Land Use & Development	Not Adverse	No	Not Adverse
Displacement & Relocation	Potentially Adverse, five temporary construction easements	Yes	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced (NEPA Only)	Yes	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Yes	Potentially Adverse for VOC, NO_x, and CO
Noise & Vibration	Potentially Adverse	Yes	Not Adverse

Table 7-3. Summary of Construction Impacts for the Fully Underground LRT Alternative – Little Tokyo Variation 1			
Topic	**Impact Determination**	**Mitigation**	**Impact After Mitigation**
Ecosystems/Biological Resources	Potentially Adverse	No	Not Adverse
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Potentially Adverse, seismically induced settlement, exposure to hazardous materials	Yes	Not Adverse
Water Resources	Potentially Adverse, erosion, groundwater contamination	Yes	Not Adverse
Energy	Not Adverse	No	Not Adverse
Climate Change	Not Adverse	No	Not Adverse
Cultural/Archeological Resources	Potentially Adverse	Yes	Not Adverse
Paleontological	Potentially Adverse	Yes	Potentially Adverse (CEQA Only)
Parklands, Community Facilities & Section 4(f)	Potentially Adverse, reduced access	Yes	Not Adverse
Economic & Fiscal	Potentially Adverse	Yes	Not Adverse
Safety & Security	Not Adverse	Yes	Not Adverse
Growth-Inducing Impacts	Not Adverse	No	Not Adverse

Source: TAHA, 2010.

7.5.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have potentially adverse construction impacts related to following environmental topics:

- Traffic Circulation
- Displacements and Relocation

- Air Quality
- Noise and Vibration
- Community and Neighborhood Impacts
- Ecosystems/Biological Resources
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Water Resources
- Cultural/Archeological Resources
- Paleontological Resources
- Economic and Fiscal Impacts
- Ecosystems and Biological Resources
- Parklands and Other Community Facilities

Unavoidable adverse air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would reduce all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

7.5.2 CEQA Determinations

Based on the CEQA thresholds of significance, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would have potentially significant construction impacts related to the following topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality
- Noise and Vibration
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Cultural/Archeological Resources
- Paleontological Resources

- Water Resources
- Economic and Fiscal Impacts
- Ecosystems and Biological Resources

Significant and unavoidable paleontology, air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would reduce all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 7-4 shows a summary of impacts by topic during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 7-4. Summary of Construction Impacts for the Fully Underground LRT Alternative – Little Tokyo Variation 2

Topic	Impact Determination	Mitigation	Impact After Mitigation
Traffic Circulation	Potentially Adverse	Yes	Potentially Adverse
Land Use & Development	Not Adverse	No	Not Adverse
Displacement & Relocation	Potentially Adverse, five temporary construction easements	Yes	Not Adverse
Community & Neighborhood Impacts	Potentially Adverse, mobility and access reduced (NEPA Only)	Yes	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Yes	Not Adverse
Air Quality	Potentially Adverse	Yes	Not Adverse
Noise & Vibration	Potentially Adverse	Yes	Not Adverse
Ecosystems/Biological Resources	Potentially Adverse	No	Not Adverse

Table 7-4. Summary of Construction Impacts for the Fully Underground LRT Alternative – Little Tokyo Variation 2

Topic	Impact Determination	Mitigation	Impact After Mitigation
Geotechnical/Subsurface/Seismic/Hazardous Materials	Potentially Adverse, seismically induced settlement, exposure to hazardous materials	Yes	Not Adverse
Water Resources	Potentially Adverse, erosion, groundwater contamination	Yes	Not Adverse
Energy	Not Adverse	No	Not Adverse
Climate Change	Not Adverse	No	Not Adverse
Cultural/Archeological	Potentially Adverse	Yes	Not Adverse
Paleontological	Potentially Adverse	Yes	Potentially Adverse (CEQA Only)
Parklands, Community Facilities & Section 4(f)	Potentially Adverse, reduced access	Yes	Not Adverse
Economic & Fiscal	Potentially Adverse	Yes	Not Adverse
Safey & Security	Not Adverse	Yes	Not Adverse
Growth-Inducing Impacts	Not Adverse	No	Not Adverse

Source: TAHA, 2010.

7.6.1 NEPA Findings

Fully Underground LRT Alternative – Little Tokyo Variation 2 would have potentially adverse construction impacts related to following environmental topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality

- Noise and Vibration
- Community and Neighborhood Impacts
- Ecosystems/Biological Resources
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Water Resources
- Cultural/Archeological Resources
- Paleontological Resources
- Economic and Fiscal Impacts
- Ecosystems and Biological Resources

Unavoidable adverse air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would reduce all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

7.6.2 CEQA Determinations

Based on the CEQA thresholds of significance, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would have potentially significant construction impacts related to the following topics:

- Traffic Circulation
- Displacements and Relocation
- Air Quality
- Noise and Vibration
- Geotechnical/Subsurface/Seismic/Hazardous Materials
- Cultural/Archeological Resources
- Paleontological Resources
- Water Resources
- Economic and Fiscal Impacts

- Ecosystems and Biological Resources

Significant and unavoidable paleontology, air quality and traffic circulation construction impacts are anticipated to remain after mitigation. Potential mitigation measures would reduce all other potential direct, indirect, and cumulative construction impacts to less than significant levels.

7.7 Comparison of Build Alternatives

Table 7-5 shows a comparison of impacts by Build Alternative during construction.

Table 7-5. Summary of Construction Impacts for the Build Alternatives (After Implementation of Mitigation Measures)

Topic	At-Grade Emphasis	Underground Emphasis	Underground - Little Tokyo Variation 1	Underground - Little Tokyo Variation 2
Traffic circulation	Potentially Adverse	Potentially Adverse	Potentially Adverse	Potentially Adverse
Land Use & Development	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Displacement & Relocation	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Community & Neighborhood Impacts	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Visual Resources & Aesthetics	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Air Quality	Potentially Adverse for VOC, NO_x, and CO	Potentially Adverse for VOC, NO_x, and CO	Potentially Adverse for VOC, NO_x, and CO	Potentially Adverse for VOC, NO_x, and CO
Noise & Vibration	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Ecosystems/Biological Resources	Not Adverse	Not Adverse	Not Adverse	Not Adverse

Table 7-5. Summary of Construction Impacts for the Build Alternatives (After Implementation of Mitigation Measures)

Topic	At-Grade Emphasis	Underground Emphasis	Underground - Little Tokyo Variation 1	Underground - Little Tokyo Variation 2
Geotechnical/Subsurface/ Seismic/Hazardous Materials	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Water Resources	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Energy	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Climate Change	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Cultural/Archeological Resources-	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Paleontological	Not Adverse	Potentially Adverse (CEQA)	Potentially Adverse (CEQA)	Potentially Adverse (CEQA)
Parklands, Community Facilities & Section 4(f)	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Economic & Fiscal	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Safety & Security	Not Adverse	Not Adverse	Not Adverse	Not Adverse
Growth-Inducing Impacts	Not Adverse	Not Adverse	Not Adverse	Not Adverse

Source: TAHA, 2010.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX G

SCOPING REPORT

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Scoping Report

October 20, 2009

FINAL

State Clearinghouse #2009031043

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INTRODUCTION

1.1 Overview

The Los Angeles County Metropolitan Transportation Authority (Metro) has begun preparing an Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) for the Regional Connector Transit Corridor Project in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Federal Transit Administration (FTA) is the lead agency for the purposes of NEPA, and Metro is the lead agency for the purposes of CEQA.

Over the past two decades, Metro and its predecessor agencies (Los Angeles County Transportation Commission and Southern California Rapid Transit District) have initiated rail transit service in multiple corridors spanning much of Los Angeles County. Three of Metro's current and under-construction light rail transit (LRT) lines serve downtown Los Angeles, but they do not directly connect to one another. The existing Metro Blue Line to Long Beach and the Metro Expo Line to Culver City (scheduled to open in 2010) terminate at 7th Street/Metro Center Station in the southern part of the downtown area. The Metro Gold Line to Pasadena and East Los Angeles (East Los Angeles extension is scheduled to open in late 2009) passes through the northeastern portion of the downtown area with stops at Union Station and Little Tokyo/Arts District Station. Passengers must transfer to the heavy rail Metro Red and Purple Lines in order to make connections between these light rail lines.

The proposed Regional Connector project would provide new LRT tracks through downtown Los Angeles that would link the Metro Blue, Expo, and Gold Lines and enable them to operate as a single system. For example, trains would run directly from Long Beach to Pasadena and from East Los Angeles to Culver City via the Regional Connector route, with no need for passengers to transfer to the Metro Red or Purple Lines. The proposed Regional Connector project would also include new stations in downtown Los Angeles, thereby expanding the rail transit coverage of the central business district.

A Final Alternatives Analysis (AA) Report was prepared for the Regional Connector Transit Corridor and published by Metro in January 2009. The AA report is incorporated into this Scoping Report by reference. During the AA process, Metro hosted agency and public early scoping meetings and community updates. The input received at these meetings, as well as subsequent technical analysis, formed the basis for narrowing the initial 32 conceptual alternatives to two LRT alternatives for study in the EIS/EIR, along with a No Build Alternative and a Transportation System Management (TSM) Alternative. Subsequent to the release of the Final AA report, FTA and Metro initiated the public and agency NEPA and CEQA scoping to obtain input on the scope of the EIS/EIR. The Notice of Intent/Notice of Preparation (NOI/NOP) identified the four alternatives carried forward from the AA for study. This report summarizes the results of the NEPA/CEQA scoping process.

The Draft EIS/EIR (DEIS/DEIR) will build upon the AA study and form the basis for selection of a Locally Preferred Alternative (LPA), performance of Preliminary Engineering, and preparation of a subsequent Final EIS/EIR. One of the primary purposes of scoping is to identify possible environmental impacts of the project, and eliminate proposed alternatives with substantial environmental impacts from further analysis. High-capacity transit improvements in the Regional Connector Transit Corridor would be financed with a mix of local, state, federal New Starts, and other federal funds. Accordingly, the project will be executed in compliance with current FTA Section 5309 New Starts guidelines, and all environmental documents will satisfy NEPA and CEQA requirements.

The proposed Regional Connector Transit Corridor Project is also designated to receive funding from Measure R, a half cent sales tax measure passed by Los Angeles County voters in November 2008. The project is also included in Metro's Draft 2008 Long Range Transportation Plan. Final adoption of the 2008 Long Range Transportation Plan by the Metro Board of Directors is expected to occur in mid-2009.

1.2 Project Area

The proposed project lies entirely within the downtown area of the City of Los Angeles. The project area is generally bounded by US Highway 101 on the north, 7th and 9th Streets on the south, Alameda Street on the east, and State Route 110 on the west. A map of the project area is provided in Figure 1-1.

1.3 Alternatives

Four alternatives were carried forward from the AA process for study in the EIS/EIR (See Appendix A for maps of alternatives). These include the No Build Alternative, the TSM Alternative, and two LRT Alternatives. The **No Build Alternative** would maintain existing transit service through the year 2030. No new transportation infrastructure would be built, except projects identified as funded under Metro's 2008 Long Range Transportation Plan. Transit service under the No-Build Alternative would be focused on the preservation of existing services and projects. By the projection year of 2030, some bus service would have been reorganized and expanded to provide connections with the new rail lines; however, the transit network within the project area would largely be the same as it is now.

The **TSM Alternative** would include the provisions of the No Build Alternative and add two shuttle bus routes from 7th Street/Metro Center station to Union Station, providing an enhanced link between the unconnected LRT lines. One route would run along Grand Avenue and 1st Street, and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes, where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. Stops would be located every few blocks so as to provide full coverage of the area. Each shuttle route would be one and one-half to two miles in length.

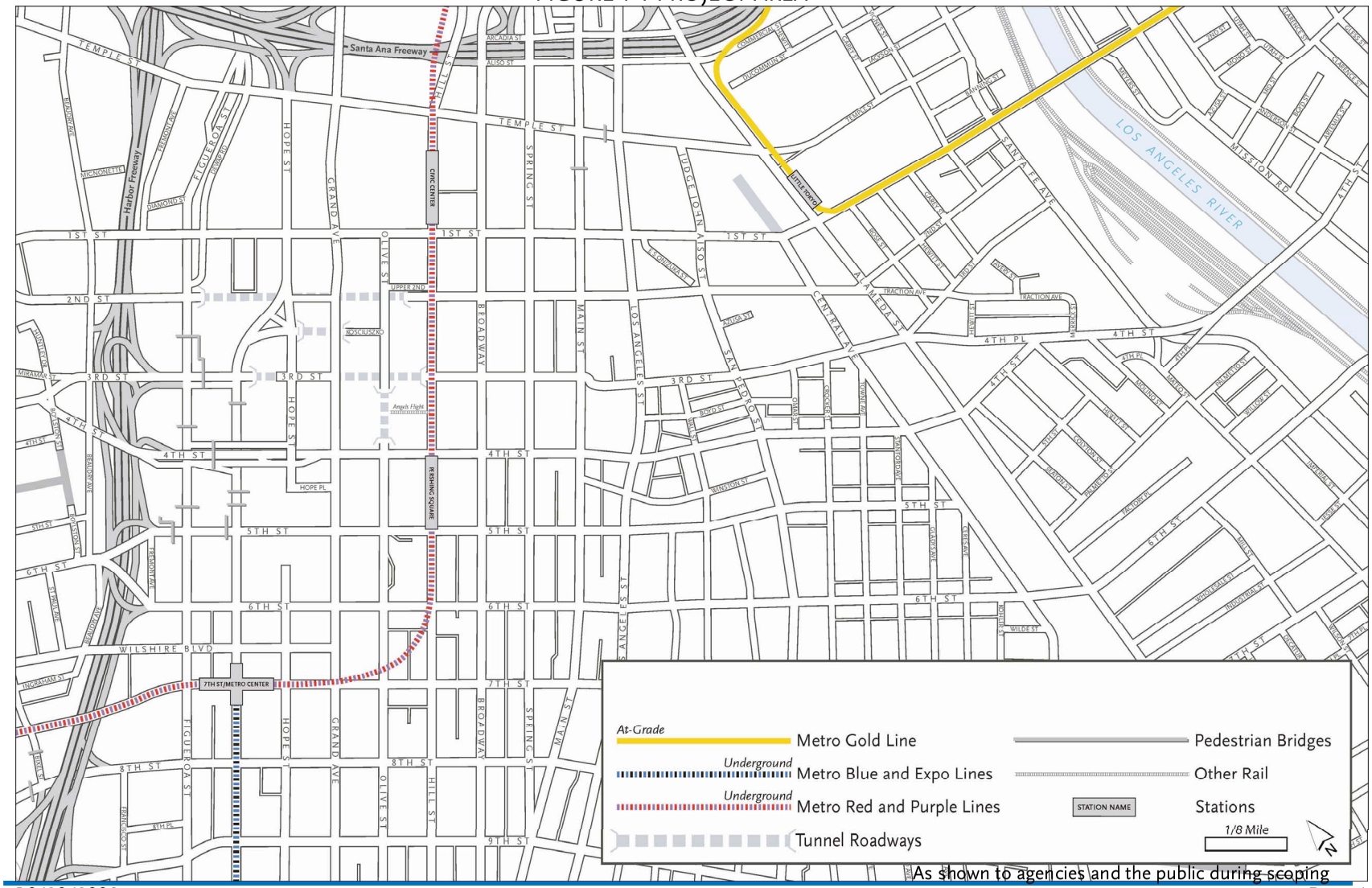
The **At-Grade Emphasis LRT Alternative** would extend north under Flower Street from 7th Street/Metro Center Station, surface to at-grade north of 5th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street where it would split into an at-grade couplet configuration on Main and Los Angeles Streets (one track on each roadway) to Temple Street. Then it would head east on Temple Street, realign into a dual track configuration east of Los Angeles Street, and join the Metro Gold Line just north of the Little Tokyo/Arts District Station on Alameda Street. Trains headed east toward East Los Angeles would then proceed to Little Tokyo/Arts District Station. Trains headed north toward Pasadena would bypass Little Tokyo/Arts District Station and proceed to Union Station. An automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to reduce pedestrian-train and automobile-train conflicts.

There are two options for the At-Grade Emphasis LRT Alternative's configuration on Flower Street. For Option A, tracks would extend north under Flower Street from 7th Street/Metro Center Station to a new underground station just south of 5th Street, then surface just before crossing 3rd Street at grade. For Option B, tracks would extend north under Flower Street from 7th Street/Metro Center Station and surface between 5th and 4th Streets before reaching a new at-grade station just south of 3rd Street, then the tracks would continue across 3rd Street at grade. In total, the At-Grade Emphasis LRT Alternative would add 1.8 miles of new double track to the light rail system.

In addition to the Option A and Option B Station configurations, there would be an underground station south of 2nd and Hope Streets and a split station on Main and Los Angeles Streets between 1st and Temple Streets.

The **Underground Emphasis LRT Alternative** would extend north along Flower Street from 7th Street/Metro Center Station with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east. New underground stations at 2nd and Hope Streets and on 2nd Street between Los Angeles Street and Broadway would provide access to Bunker Hill and to the area south of the Civic Center. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. Trains headed north toward Union Station and Pasadena would then proceed to the Little Tokyo/Arts District station, while trains headed east toward East Los Angeles would bypass the station and continue to Pico/Aliso station. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

FIGURE 1-1 PROJECT AREA



As shown to agencies and the public during scoping

1.4 Summary of Purpose and Need

The purpose of this project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting the light rail services of the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line.

The proposed Regional Connector Transit Corridor project would improve region-wide public transit service, despite being located in a relatively small portion of downtown Los Angeles. The connection would allow direct light rail service from Long Beach to Pasadena and East Los Angeles to Culver City, with both services using the same tracks and stations in downtown Los Angeles. This service improvement would in turn eliminate many transfers, reduce wait time, overcrowding at stations, and shorten trip times across the entire light rail system.

The project area is located within the largest regional employment center of Los Angeles, and is densely developed with multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and private high-rise office towers. The enhanced transit services made possible by the proposed Regional Connector project would serve communities across the region, allowing greater mobility between existing light rail corridors and improved access to downtown Los Angeles. The project would thus help the transportation system accommodate the population and employment growth projected to occur in central business district between now and 2030. Mobility issues throughout the region and the identified need to join the unconnected segments of the light rail system have been documented in several past studies, including the *Pasadena – Los Angeles Light Rail Transit Project Environmental Impact Report* (1993), the *Blue Line Connection Preliminary Planning Study* (1993), and the *Regional Light Rail Connector Study* (2004).

Additional considerations that support implementation of the proposed Regional Connector Transit Corridor project include:

- Potential for increased travel times and station overcrowding in the absence of substantial capacity increases. This is primarily due to the number of transfers required to traverse the project area, and the need to reverse trains in the busiest parts of the system. Station overcrowding is a safety concern.
- Poor schedule reliability due to the need to reverse trains in downtown Los Angeles, the busiest part of the regional rail system.
- Current system enhancements under construction will increase transit ridership in the project area and magnify the effects of poor system connectivity and station overcrowding due to transfers.
- High numbers of transit dependent residents living in the project area.

- Existing high transit ridership in the project area is projected to increase.
- High concentrations of transit-supportive land uses in the project area.
- Substantial population, employment, and congestion growth in the project area is expected by 2030.
- Location of several redevelopment areas within the project area, where improved transit access can support properly located economic growth.

1.5 Project Participants

The project participants include FTA, Metro, and Metro's consultants. Metro's consultants include the Community Participation Program Consultant (The Robert Group), the Environmental and Engineering Consultant (CDM), and CDM's subconsultants. Other project participants include federal, state, and local participating agencies identified in accordance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) 6002.

1.6 Purpose of Report

The Council on Environmental Quality's NEPA regulations and the State of California's CEQA guidelines require federal and state lead agencies to conduct agency and public scoping when defining the appropriate range of issues and depth of analysis for a major environmental document (40 CRF part 1500 et seq.; 14 CA Code of Regulations, §15082-15083). This Scoping Report documents the proposed Regional Connector Transit Corridor project's lead agencies' compliance with these requirements.

SCOPING PROCESS

2.1 Early Scoping Activities

In order to help define the purpose and need and identify a range of reasonable alternatives, Metro conducted an AA, an early public scoping process consistent with the Federal Transit Administration's (FTA) guidelines. This "early scoping" process was designed to solicit stakeholders' views on the possible range of alternatives with regards to transportation modes, potential alignments, and station locations.

Between October 2007 and fall 2008, the Regional Connector Transit Corridor project conducted an extensive stakeholder outreach effort. The community outreach effort successfully raised awareness about the study, engaged stakeholders and, most importantly, garnered public input at key decision points that demonstrated widespread consensus about the study recommendations that required Board approval in order to move forward into the environmental process.

Recognizing the unique challenges and opportunities of the study, as well as its potential impacts beyond the immediate Downtown area, the AA outreach program included the following key elements:

- Public meetings, including one series of early public and agency scoping meetings, and two series of public update meetings at key study milestones
- Targeted stakeholder meetings to address specialized issues and localized concerns
- Multi-lingual outreach to include Japanese and Spanish-speaking stakeholders
- Multi-tiered meeting notifications including direct mail, print and broadcast media, advertisements, internet based distribution via e-mail and notices or ads onboard Metro buses and trains
- Employment of "new" media tools such as blogs, social networks and other internet or web-based tools to involve a wider audience in the decision-making process

Early scoping commenced with a briefing for elected officials and their staff on October 17, 2007. An agency early scoping meeting was held on October 30, 2007 at Metro Headquarters followed by publication of an Early Scoping Notice to Conduct an AA in the Federal Register on October 31, 2007. Early public scoping meetings were subsequently held on November 6 and 7, 2007 in downtown Los Angeles at the Los Angeles Central Library and the Japanese American National Museum; a daytime meeting was scheduled to ensure that people working in downtown would have an opportunity to participate in the process, and a nighttime meeting was held to encourage those living in the area to provide their input. The public outreach process is described in the "Final Project Early Scoping Report" published by Metro

in March 2008 (incorporated by reference into this scoping report and available at http://www.metro.net/projects_studies/connector/news_info.htm).

Metro reviewed all public comments from the early scoping meetings and, based on this feedback, developed eight alternatives for further analysis including various modes, alignments and station locations.

A second series of public meetings was held in February 2008 to provide a general study update, review comments and outcomes from the public early scoping meetings and discuss proposed criteria for how project alternatives would be analyzed and screened. A third and final series of public meetings for the AA phase was held in October 2008. These meetings provided Metro with an opportunity to present its recommendations to the public before proceeding to the Metro Board for consideration. A majority of attendees were supportive of the Regional Connector and see this as a cost effective project that will benefit the entire County of Los Angeles and downtown residents.

In addition to these public scoping and update meetings, numerous briefings and meetings were held with key stakeholder groups throughout the AA study period. Targeted stakeholder meetings took place with local elected officials and their staff, elected citizens groups and Neighborhood Councils, residential associations, business, cultural and civic organizations, and religious congregations. These meetings allowed Metro to address stakeholder questions, issues and concerns which were instrumental in developing consensus around the ultimate recommendations.

During the AA phase, the majority of public comments submitted expressed a preference for Light Rail Transit (LRT) technology with a predominantly underground alignment. Preferred station locations included the Financial District, the Bunker Hill/Grand Avenue project area, and connections to Historic Broadway and Little Tokyo. Additional concerns were raised about impacts during construction, compatibility with existing automobile and bus traffic, and traffic management during downtown events.

Throughout the AA phase, there was widespread support for the Regional Connector project to move forward for further in-depth study and into environmental review and clearance. This support was expressed not only by residents and business interests in downtown Los Angeles, but also by transit riders and advocates from across the region.

2.2 DEIS/DEIR Scoping Activities

In January 2009, Metro's Board of Directors approved the Regional Connector Transit Corridor AA Study and authorized staff to proceed with the DEIS/DEIR. The AA process is described in the Final AA Report (Metro 2009) and is incorporated by reference into this scoping report. The Final AA Report may be found at: http://www.metro.net/projects_studies/connector/news_info.htm. This next phase will

continue the transparent and inclusive community outreach process, building upon the public engagement efforts developed during the AA.

2.2.1 Public Participation Plan

In order to ensure that the public remain informed on an ongoing basis and provided with opportunities to comment at key milestones during the DEIS/DEIR process, a detailed Community Outreach and Public Participation Plan (PPP) has been developed. The plan covers both scoping activities and the DEIS/DEIR public involvement process. A summary of the Public Participation Plan by The Robert Group (TRG) can be found in Appendix B.

The PPP includes elements such as stakeholder identification, communications protocols, public input tracking, a proposed schedule for interfacing with the public and recommendations for how meetings should be conducted at various milestones during the of the NEPA process. Additional recommendations for key stakeholder interviews or briefings, inter-agency coordination, topic specific and general meetings are also included in the PPP. Additionally, it includes recommendations for generating publicity for public meetings, and information dissemination via the web and "new" media opportunities to engage the public. It is important to note, that while plans are important, the public involvement activities, especially for this complex project, were developed to be flexible enough to accommodate changing circumstances and enhanced approaches.

The PPP includes outreach to engage not only downtown Los Angeles stakeholders, but also current and potential light rail riders, and a wider population of transit users in Los Angeles County. The outreach efforts outlined in the PPP will also re-engage targeted stakeholders from the AA phase while, at the same time, identifying and involving potential new interested stakeholders who may have a special interest in this project. PPP recommendations are based on Metro's experience with the AA.

2.2.2 Coordination Plan

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) established an environmental review process for transit projects that has now been included in Section 139 of Title 23 of the U.S. Code. Section 139 directs agencies to prepare a plan for public and agency participation and comments during the environmental review process. The Coordination Plan describes how the lead agencies will provide opportunities for public and agency input.

2.3 Initiation of Scoping (Notice of Intent/Notice of Preparation)

FTA published the NOI in the Federal Register on March 24, 2009. The publication of the NOI is the official federal notification of the agency's intent to prepare a DEIS. The NOI included notification of the dates and locations of the agency and public scoping meetings, the public comment period, as well as a description of the project purpose and need and

alternatives. The NOI initiates the NEPA scoping process. A copy of the NOI is in Appendix C.

Metro posted the NOP with the California State Clearinghouse and mailed the NOP to state and local agencies on March 17, 2009. The NOP was also recorded with the Los Angeles County Clerk's Office on March 17, 2009. Publication of the NOP with the State Clearinghouse was done in compliance with California Environmental Policy Act (CEQA) requirements. A copy of the NOP may be found in Appendix D. Publications of the legal notices were also published in local newspapers such as the Los Angeles Times and La Opinion. A copy of these legal notices can be found in Appendix E.

In addition, Metro mailed the NOP and scoping information to 18 Federal, 4 Native Tribes, 31 State, 6 regional, and 11 local agencies to inform them of the start of the DEIS/DEIR scoping process and invite comments. The NOP was mailed to these agencies with a return receipt requested to provide proof of receipt. The complete list of agencies notified in this manner is included in Appendix F.

Comments were accepted by Metro from the date of publication in the Federal Register (March 24, 2009) through May 11, 2009. This provided a public comment period of 49 days.

2.4 Agency Scoping

2.4.1 Participating Agencies

Participating agencies can be Federal, State, tribal, regional, and local government agencies that may have an interest in the project. In accordance with SAFETEA-LU Section 6002 requirements, Metro, in coordination with the FTA, prepared and mailed participating agency invitation letters to 159 agencies with a potential interest in the project in March 2009. The identification of potential participating agencies built on the list of agencies identified through the AA process.

The responsibilities of these agencies include, but are not limited, to:

- Participating in the NEPA/CEQA process starting at the earliest possible time, especially with regards to the development of the purpose and need statement, range of alternatives, methodologies, and the level of detail for the analysis of alternatives
- Identify, as early as practicable, any issues of concern regarding potential environmental or socioeconomic impacts of the project
- Participate in the issue resolution process, described in Section 3.4 of this Plan
- Provide meaningful and timely input on unresolved issues
- Participate in the scoping process

Accepting the designation as a participating agency does not indicate project support and does not provide the agency with increased oversight or approval authority beyond its statutory limits.

Participating agencies for the project are listed in Appendix G. They include federal agencies that did not affirmatively decline the invitation to become a participating agency, and regional, state and local agencies that affirmatively accepted the invitation to become a participating agency. Agencies were given 30 days from the date of the letter to respond. Agencies may also request to be added at any time during the process. Appendix H contains two sample invitation letters; one that was sent to federal agencies and tribes and one that was sent to state, regional, and local agencies.

2.4.2 Cooperating Agencies

Cooperating agencies are, by definition in 40 CFR 1508.5, federal agencies with jurisdiction, by law or special expertise, with respect to any environmental impact involved in the proposed project. A state or local agency of similar qualifications may, by agreement with the lead agency, also become a cooperating agency. The cooperating agencies are by definition participating agencies as well, and while the roles and responsibilities of both are similar, the cooperating agencies have a slightly greater degree of authority, responsibility, and involvement in the environmental review process.

No cooperating agencies have been identified for the Regional Connector Transit Corridor project.

2.4.3 Agency Scoping Meeting

One Agency Scoping meeting was held as follows:

Time: Thursday, March 26, 2009, 1:30P.M.

Location: Metro, Gateway Plaza Room
One Gateway Plaza
Los Angeles, CA 90012

Comments: 9 verbal, 0 written

Attendees: 19, representing the following agencies and jurisdictions (Sign-in sheet included in Appendix I:

- City of Los Angeles Community Redevelopment Agency (CRA)
- City of Los Angeles Department of Public Works, Bureau of Engineering
- City of Los Angeles Department of Public Works, Bureau of Sanitation

- City of Los Angeles Fire Department (LAFD)
- City of Los Angeles Police Department (LAPD)
- City of Pasadena
- Federal Transit Administration (FTA)
- Los Angeles County Office of Education
- Los Angeles County Sheriff's Department, Transportation Safety
- Solar Enlightenment
- Southern California Association of Governments (SCAG)
- State of California Department of Transportation
- University of California, Los Angeles

The meeting included a PowerPoint presentation similar to the one shown at the public scoping meetings and described in Section 2.5.4.1.

2.4.3.1 Agency Scoping Meeting Comments

The topics addressed in the question and answer session included:

- Inquiry as to current property owners along the proposed right-of-way for the two LRT alternatives
- A discussion of the capital cost estimates for each alternative and proposed funding sources
- Priority level of the project compared to other current Metro projects
- Safety issues including
    - Project's potential to relieve crowding at 7th Street/Metro Center Station
    - Safety features of at-grade crossings on the At-Grade Emphasis LRT Alternative
- Design details including
    - Locations and depths of the proposed underground stations

- Configuration of the intersection of 1st and Alameda Streets proposed for the Underground Emphasis LRT Alternative
- Issues with placing rail facilities on the northeast corner of 1st and Alameda Streets

- Operational issues including:
  - Proposed operation plans and transfer points
  - Potential service changes at Little Tokyo/Arts District Station under the two LRT alternatives
- Redefinition of rail line names and colors once Regional Connector service begins

A full transcript of the agency scoping meeting proceedings is provided in Appendix J.

2.4.4 State Historic Preservation Office (SHPO) Coordination

The State Historic Preservation Office (SHPO) was provided with a scoping package and a Draft Area of Potential Effects (APE) map on March 13, 2009. FTA wrote a letter to the SHPO on April 7, 2009 asking that Metro coordinate direct with SHPO for Section 106 compliance. SHPO concurred with the Draft APE map on September 9, 2009.

2.5 Public Scoping

Notification of the public scoping meetings was completed via several forms of media as described further in this section. This outreach was in addition to the official notices published in the Federal Register and posted with the State Clearinghouse. Four public scoping meetings were held as described in Section 2.5.3.

2.5.1 Notification Database

Metro maintained and updated the stakeholder database developed during the AA study to track interested individuals and groups, their areas of interest, communication, and other pertinent information for the duration of the project. To the extent possible, Metro includes mailing addresses as well as email contact information on the database. A list of the public agency database entries is provided in Appendix K.

Since the project has regional benefits and, potentially, impacts, Metro is building the outreach database to be more inclusive of stakeholders beyond the downtown area. This is being accomplished by selectively importing information from Metro's existing databases from other projects into the Regional Connector database, as well as targeting councils of governments and those jurisdictions potentially benefiting from the project. The project database will be used to communicate with project stakeholders, including:

- Elected officials on the local, state and federal level
- Neighborhood councils and other elected groups
- Homeowners associations and neighborhood organizations
- Chambers of Commerce, local business improvement districts (BIDs) and business leaders
- Property management firms serving lofts and condominiums in the downtown Los Angeles area
- Community-based and civic organizations
- Large employers and operators of key destinations
- Transportation advocates and interest groups
- Print, broadcast and electronic media, including community-based publications and blogs
- Stakeholders who attended any AA meeting or provided comment
- Other interested groups and persons

For the purposes of notification for the public scoping meetings, the existing AA database was updated to include contact information for new neighborhood council members, and unit numbers for a number of residential buildings. In addition, Metro completed a walk -through of the project area to further identify stakeholders who were then added to the database. At the time of the scoping meetings, 1,542 entries were listed on the Regional Connector database.

2.5.2 Public Notification Activities

A variety of methods were employed to notify stakeholders about the public scoping meetings. These meetings were publicized via direct mail notices to the project database; emails; postings on Metro's website; display advertisements in multi-lingual publications (English, Spanish and Japanese); notices placed on Metro buses and trains serving the project area; a press release which was sent to at least 83 local, regional, ethnic and multi-lingual publications as well as blogs; and through grassroots outreach to downtown property owners and residential management companies. Noticing was conducted in English, Spanish and Japanese.

2.5.2.1 Direct Mail

A scoping notification letter was translated into English, Spanish and Japanese and distributed by US Mail on March 16, 2009, to the postal addresses on the existing project database. The sample letter, which indicates the date, time and address of each scoping meeting, is included in Appendix L.

2.5.2.2 Take Ones

Preceding the public scoping meetings, "Take One" brochures inviting transit users to the scoping meetings were placed on Metro buses and the Metro Gold and Blue Lines in or adjacent to the project area. The "Take Ones" were identical in content to the direct mail notices described in Section 2.5.2.1 and are included in Appendix M.

2.5.2.3 Email Blasts

The project team disseminated e-mail blasts, or electronic mailings, to all stakeholders in the database with email addresses, including elected officials, neighborhood councils, and community-based organizations. These groups then were asked to forward these e-mails to their constituents and/or members. E-mail blasts are typically used to distribute the scoping meeting announcements and other project information instantly and to large numbers of people.

Electronic distribution of the meeting notice took place on March 16, 2009. Notices were sent to 721 email addresses within the existing project database. A copy of the email is included in Appendix N.

2.5.2.4 Newspaper Advertisements

Display advertisements for the scoping meetings were placed in five newspapers within the project area and were selected based on their geographic focus, language needs, and audited circulation numbers. A sample newspaper advertisement is included in Appendix O.

- *Rafu Shimpo* (English/Japanese)
    - Date: March 23, 2009
    - Circulation: 45,000 weekly
    - Serves the Japanese and Little Tokyo community within study area
- *Downtown News*
    - Date: March 20, 2009
    - Circulation: 49,000 weekly

- Serves Downtown Los Angeles and is widely distributed in the study area, including at transit stops

- *Daily Trojan*
  - Date: March 23, 2009
  - Circulation: 9,000 daily
  - Serves the University of Southern California Campus in the Exposition Park/South Park area adjacent to the study area

- *Garment and Citizen* (Spanish/English)
  - Dates: March 20, 2009
  - Circulation: 25,000 weekly
  - Serves Downtown Los Angeles area and is widely distributed to Spanish speaking workers within the study area

- *Pasadena Star News*
  - Dates: March 23, 2009
  - Circulation: 89,000 daily
  - Serves the City of Pasadena and wider portions of the San Gabriel Valley

2.5.2.5 Project Webpage

The project website, located at www.metro.net/regionalconnector, that was initially used for the AA, was updated for the purposes of the DEIS/DEIR, including publicizing the public scoping meetings. Website content for the Regional Connector included a project overview, information about upcoming meetings and other materials including Fact Sheets, presentations made at the public meetings, and other information of interest to the public from the AA. The website will continue to be updated at key milestones. Some materials posted to the website were translated into Spanish and Japanese.

2.5.2.6 Additional Outreach During Public Scoping Period

In order to maximize the coverage of the outreach effort for the scoping meetings, Metro undertook some creative approaches to engage the public as follows:

- Grassroots canvassing was conducted on March 26 and 27, 2009, at Union Station to distribute scoping meeting information to Gold Line riders. Over 3,000 flyers were distributed over these two days.
- Metro partnered with the California Institute of Technology to post on-campus meeting notices to publicize the Pasadena scoping meeting.
- Metro partnered with the University of Southern California to post notices on-campus to publicize the USC meeting. Notices were also forwarded to students in the School of Policy and Planning.
- The outreach team distributed bi-lingual meeting notices along 2nd Street within the Little Tokyo Service Center area.
- Capitalizing on new ways to communicate with a wider audience, Metro also established a "Regional Connector" Facebook page for the project. The Facebook page has over 100 members.
- The information phone line (213.922.7277) was monitored regularly.

2.5.3 Elected Official Briefing Meeting

A meeting was held with elected officials and/or their staff prior to the Public Scoping meetings. Typically, the briefing serves as a sounding board for the project team about the presentation, and provides these officials with notification about the upcoming meetings as well as preliminary information about the status of the project.

Time: Wednesday, March 25, 2009

Location: Metro
One Gateway Plaza, 15th Floor
Windsor Conference Room
Los Angeles, CA 90012

Attendees: Representatives from the following offices attended:

- Office of U.S. Senator Dianne Feinstein
- Office of U.S. Representative Dianne Watson
- Office of State Senator Fran Pavley
- Office of State Senator Alex Padilla
- Office of Assembly member Curren Price

- Office of Assembly member Felipe Fuentes
- Office of Los Angeles City Councilmember Jan Perry
- City of South Pasadena

Comments: Metro received oral comments from attendees at the meeting. Several attendees suggested that Metro highlight the potential benefits of the Regional Connector to communities outside downtown Los Angeles and to explain how this project fits in with Metro's other corridor studies running concurrently.

2.5.4 Public Scoping Meetings

Four public scoping meetings were scheduled in late March and early April 2009. Meetings were conducted in compliance with NEPA and CEQA guidelines, and locations were selected to reflect equitable geographic coverage, proximity to public transportation, and to minimize overlap with other meetings scheduled in the project area. For the convenience of all attendees, bus lines to and from the meeting sites were publicized on some notices. In order to provide the greatest opportunity for community participation, meetings were scheduled in the early evening on weekdays.

An approximate total of 175 people attended the scoping meetings, with approximately 82 persons providing verbal and/or written comments at the meetings. Approximately 45 additional comments were received after the meetings through letters and email.

Individual Public Scoping meeting details are as follows:

Meeting 1

Time: Monday, March 30, 2009, 4:30 – 6:00 PM

Location: Alumni Room, Davidson Conference Center
University of Southern California
3415 S. Figueroa Street
Los Angeles, CA 9007

Attendees: 24 (Sign-in sheet included in Appendix P)

Comments: 11 verbal, 10 written

Meeting 2

Time: Tuesday, March 31, 2009, 6:30 – 8:00 PM

Location: Lake Avenue Church
393 N. Lake Ave.

Pasadena, CA 91101

Attendees: 29 (Sign-in sheet included in Appendix Q)

Comments: 11 verbal, 2 written

Meeting 3

Time: Wednesday, April 1, 2009, 6:30 – 8:00 PM

Location: Japanese American National Museum (JANM)
369 E. 1st Street
Los Angeles, CA 90012

Attendees: 45 (Sign-in sheet included in Appendix R)

Comments: 12 verbal, 11 written

Meeting 4

Time: Thursday, April 2, 2009, 12 Noon – 1:30 PM

Location: Board Room
Los Angeles Central Library
630 W. 5th Street
Los Angeles, CA 90071

Attendees: 56 (Sign-in sheet included in Appendix S)

Comments: 11 verbal, 9 written

2.5.4.1 Public Meeting Format

The meeting format was as follows:

- 20 minutes: Open House
- 20 minutes: Presentation
- 50 minutes: Public Comment

The scoping meetings began with an open house format to provide attendees with an opportunity to review the project information prior to the start of the presentation and subsequent comment period. Project team members were present at the project display boards to answer questions related to the technical aspects of the project. A Spanish language interpreter was made available at all meetings, with a Japanese language interpreter

at the April 1, 2009 meeting. Following the open house period, a PowerPoint presentation was made to provide attendees with information regarding the purpose of scoping and information on the project purpose and need, background, the recently completed AA process, and the alternatives being carried forward into the DEIS/DEIR. Emphasis was placed on the importance of the community providing comments before the comment deadline, at the public meetings or via email, fax, or postal mail.

Following the presentation, attendees who completed speaker cards provided their verbal comments, which were recorded by a court reporter/transcriber. The oral comment period was moderated, and speakers were asked to limit their comments to two minutes. Those requiring translation were provided with four minutes. After the public comment portion of the meeting, the project team was again available to answer technical questions at the informational display boards.

2.5.4.2 Public Meeting Materials

The following items were distributed to meeting attendees in English, Spanish and Japanese.

- Agenda
- Scoping Packet
- Comment Form

Attendees were also invited to download a copy of the presentation made at the meetings from the Metro project website.

Copies of the boards displayed at the meetings as well as meeting handouts are included in Appendix T.

A copy of the Power Point presentation is included in Appendix U.

2.5 Comments Received

The public comment period for the DEIS/DEIR was from March 24 to May 11, 2009, which was greater than the required 45 calendar days. People had opportunities to comment in writing or orally at the four public scoping meetings or they could comment in writing via email, fax, or postal letter. Email comments could be sent either directly to the Metro project manager or via a project specific email address found on the project website. In total, approximately 126 comments were received by the May 11, 2009, scoping deadline:

- Approximately 47 persons provided oral comments and 32 written statements were submitted at the public scoping meetings
- Approximately 45 emails and letters were received during the public comment period

- All comments received are included in Appendices V and W

SUMMARY OF SCOPING COMMENTS

Metro accepted comments on the Regional Connector Transit Corridor Project throughout the entire scoping period, from March 24, 2009 until May 11, 2009. Agencies, community groups, members of the public, elected officials, and other interested parties submitted an approximate total of 126 letters, emails, comment cards, and individuals' oral testimony during this period. The summary table (Table 3-1) in Section 3.7 provides a tally of the topics discussed in the comments. It should be noted that the combined numbers of comments listed in the following subsections and the summary table will be greater than the total number of comment submissions because some commenters discussed multiple topics in their submission. Topics covered in the comments included the purpose and need, the range of alternatives to be analyzed in the DEIS/DEIR, potential impacts and mitigation measures, and other substantive issues. This section contains a summary of comments received during the scoping period. Full, unedited copies of the public comments and public scoping meeting transcripts are included in Appendix V and agency comments are in Appendix W.

3.1 Summary of Substantive Comments

All comments were reviewed and categorized in an electronic database. The database contains information documenting the name of the commenter, the agency or organization the commenter represents, the method by which the comment was received, the date the comment was received, the topic categories addressed in the comment, and the full text of the comment. The comments were largely fit into four topic categories. The major categories of comments were the project purpose and need (approximately 16 comments), the alternatives to be studied in the DEIS/DEIR (including track configuration, alignment options, station location options, and potential design features; approximately 151 comments), and environmental impacts and mitigation measures (approximately 139 comments). The following sections contain summaries of the comments from each major category.

3.2 Comments Related to Purpose and Need

Most comments regarding the purpose and need for the project cited the benefits of enhanced light rail connectivity and new stations in the downtown area. In total, approximately 16 comments related to purpose and need were received. The general topics that these comments addressed were:

- Making the light rail system connect better through downtown Los Angeles
- Making downtown Los Angeles more accessible from other Los Angeles neighborhoods
- Attracting new riders with improved transit service
- Reducing downtown traffic congestion

- Reducing transfers and shortening transit travel times
- Revitalizing the downtown area
- Timeliness of the project
- Promoting an alternative to driving
- Encouraging a pedestrian-friendly downtown
- Improving air quality
- Accommodating short headways on the light rail system
- Focusing on transit system quality
- Addressing capacity constraints of the light rail system, such as station crowding, before they become serious
- Expanding the rail transit system

3.3 Comments Related to Alternatives

An approximate total of 151 comments specifically discussed the alternatives. Several comments recommend alignment routes and design features that were studied in the AA, but not carried forward. Some comments mentioned other alignments, such as Alameda Street, which were included in prior connector studies, but were not studied in the AA because they did not meet the objective of connecting the light rail system through the central business district. Many commenters simply indicated a preference for particular alternatives without indicating reasons for their choices. Some comments citing potential environmental impacts (safety, noise, traffic circulation, etc.) as the basis for preference of an alternative are counted in both this section and Section 3.4.

3.3.1 No Build Alternative

Two comments mentioned the No Build Alternative. Both supported the No Build Alternative in light of the potential impacts of the other proposed alternatives.

3.3.2 TSM Alternative

Approximately five comments about the TSM alternative were received. One pointed out the shuttle buses' potential to improve circulation within the downtown area for senior citizens. One supported the TSM Alternative being implemented in conjunction with one of the LRT alternatives. The remaining comments did not mention any specific advantages or drawbacks.

3.3.3 At-Grade Emphasis LRT Alternative

Approximately 30 comments were received regarding the At-Grade Emphasis LRT Alternative. Less than 20 percent of the comments expressing an opinion about this alternative were in support of the At-Grade Emphasis LRT Alternative. Comments on this alternative included:

- Potential traffic impacts due to construction, reduced travel lanes as a result of the at-grade design, and the potential for stalled train operations to further disrupt traffic flows during operation
- Potential impacts to the regional system reliability from traffic congestion or potential collisions with cars or pedestrians which could interrupt service
- Potential safety concerns associated with at-grade train operations including the potential for emergency vehicle access to be hindered
- Potential impacts to rider mobility and inconvenient transfers due to the split station at 1st and Main and Los Angeles Streets
- Relative costs associated with operating the At-Grade Emphasis LRT Alternative compared to the Underground Emphasis LRT Alternative
- Potential impacts on vehicle access for specific buildings and the reduction in available turning radii with tracks running in the street.
- Potential visual impacts of at-grade LRT facilities
- Potential for the increased visibility of the at-grade system to attract more riders
- Potential economic impacts if the 2nd Street Tunnel becomes unavailable for filming
- Potential restriction of access to driveways and public buildings along 2nd Street

3.3.4 Underground Emphasis LRT Alternative

Metro received approximately 64 comments regarding the Underground Emphasis LRT Alternative. Over 80 percent of the comments expressed support for this alternative. Some commenters indicated specific concerns and/or potential benefits. These included:

- Potential for greater safety and reliability over an at-grade configuration
- Potential for fewer impacts on traffic circulation
- Potential for fewer impacts to downtown land uses and the potential for public/private joint development projects and other economic benefits to businesses on 2nd Street

- Potential for negative impacts on businesses in the Little Tokyo District and loss of businesses and parking at 1st and Alameda Streets
- Potential for negative impacts on traffic operations and intersection capacity at 1st and Alameda Streets as well as vehicle and freight access to buildings in this vicinity
- Several comments were related to the potential location and design of the station on 2nd Street
- Potential construction impacts associated with tunneling, such as detours for pedestrians and automobiles, noise, and loss of street parking
- Potential for easier pedestrian circulation compared to the other alternatives
- Potentially fewer visual impacts to the existing streetscape
- Discontinuation of direct service to East Los Angeles from Little Tokyo/Arts District Station
- Ability of the alternative to avoid disruption of Metro and LADOT DASH bus service
- Potential for the high volumes of trains at 1st and Alameda Streets to deter pedestrians and motorists from crossing, causing a division in the Little Tokyo neighborhood

3.3.5 Configuration

Approximately 25 comments were received regarding the potential configurations for the LRT tracks. Comments in this category did not specifically mention either of the build alternatives. Since both of the LRT alternatives include underground and at-grade segments, comments about configuration are relevant to both. Comments in this category were primarily related to the preference to grade separate the tracks from automobile traffic either by placing the system entirely underground or elevated. Commenters identified potential benefits to system reliability and speed and the potential to avoid impacts to traffic congestion or pedestrian circulation and safety from a grade separated configuration. Many comments suggest exclusively using one type of configuration (an entirely underground alignment, for example).

3.3.6 Station Locations and Connections

An approximate total of 25 comments suggesting new station locations were received, along with five comments about connections that the Regional Connector could make with other operating and planned transit services and activity centers at its stations. These comments relate to issues of accessibility and mobility within the project area and the regional system. The comments pertaining to station locations included:

- Suggestions for additional station locations:

- A second station at 1st and Alameda Streets, just east of the intersection, in order to facilitate transfers between the North-South and East-West LRT services.
- A station near 2nd and Spring Streets on the Underground Emphasis LRT Alternative
- At-grade station at Alameda and 7th Streets
- At-grade station at Alameda Street and Olympic Boulevard
- A station location close to the Civic Center
- A station at Temple and Judge John Aiso Streets on the At-Grade Emphasis LRT Alternative
- A station in the western portion of Little Tokyo
- A station near Weller Court
- An underground station on the Mangrove development site

- Alternate station location suggestions:
  - A station on 2nd Street between Los Angeles and San Pedro Streets instead of between Main and Los Angeles Streets on the Underground Emphasis LRT Alternative
  - Moving the station planned for 2nd and Hope Streets to 2nd Street and Grand Avenue
  - Replacing the existing Little Tokyo/Arts District Station with a larger underground station

Commenters suggested that the following connections be accommodated by the Regional Connector stations:

- Connection to the proposed Broadway Streetcar, potentially at the Underground Emphasis LRT Alternative station at 2nd and Los Angeles Streets
- Connections to the Grand Avenue Project and Historic Core
- Connections to additional bus service

- Convenient connections for bicycles and pedestrians at all stations

3.3.7 Other Alignments

Metro received approximately 11 comments suggesting alignments for the Regional Connector other than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. These suggested alignments are as follows:

- An alignment along 3rd Street from Flower Street to Little Tokyo
- An alignment following Alameda Street from Little Tokyo/Arts District Station to Washington Boulevard and then turning west to join the existing Metro Blue Line tracks
- An underground alignment on either 3rd Street or Temple Street instead of 2nd Street
- An alignment directly south from the Metro Gold Line bridge across the 101 freeway into a subway beneath 1st and Alameda Streets leading to the Underground Emphasis LRT Alternative's subway underneath 2nd Street

3.3.8 Design Features

Approximately 17 comments were submitted suggesting additional design features to be taken into consideration. Suggestions regarding design features were primarily related to issues of accessibility and mobility and potential visual and aesthetic impacts. These features include the following:

- Alternatives to the At-Grade Emphasis LRT Alternative's split stations at 1st and Main Streets and 1st and Los Angeles Streets to potentially reduce confusion and prevent missed connections
- Provide knock-out panels on the Underground Emphasis LRT Alternative to provide for future system connections at 2nd Street and Central Avenue to a southerly route on Central Avenue to Washington Boulevard, and at 2nd and Hope Streets to a route along Temple Street to Silverlake and Glendale
- Provide escalator access at CitiGroup Center Plaza into the proposed Underground Emphasis LRT Alternative station at 5th and Flower Streets
- Provide entrances and exits directly into nearby buildings at underground stations
- Building an underground split-level junction near 1st and Alameda streets instead of a single-level junction at-grade, so as to improve operations and avoid traffic impacts

- Double tracks (two tracks in each direction, for a total of four sets of tracks) or three sets of tracks to increase capacity
- Providing adequate capacity for transfers at Little Tokyo/Arts District Station
- Provide additional capacity beyond the provisions of either build alternative
- Include bicycle racks at stations
- Provide green space at stations
- Ensuring that the project complies with the Americans with Disabilities Act

3.4 Comments Related to Potential Impacts

Approximately 139 comments received pertained to specific potential impacts of the project. Commenters discussed a wide range of impacts, though the majority touched upon traffic circulation, safety, and construction impacts. The comments on each type of impact are summarized in the following subsections.

3.4.1 Transportation Impacts – Traffic Circulation

Metro received approximately 35 comments regarding potential transportation impacts and traffic circulation. Most of them expressed concern over the potential for increased traffic congestion as a result of construction and operation of at-grade LRT facilities. Comments included the following issues:

- Transportation impacts and traffic circulation comments pertaining to the At-Grade Emphasis LRT Alternative:
    - Potential impacts to traffic congestion on adjacent streets with the conversion of 2nd Street to primarily rail use under the At-Grade Emphasis LRT Alternative
    - Potential for the At-Grade Emphasis LRT Alternative to restrict access to driveways and public buildings along 2nd Street
    - Potential for at-grade LRT to worsen traffic congestion in the downtown area
- Transportation impacts and traffic circulation comments pertaining to the Underground Emphasis LRT Alternative:
    - Potential for worsened traffic due to the loss of parking on the lot bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue under the Underground Emphasis LRT Alternative

  - Compatibility of the Underground Emphasis LRT Alternative with the encouragement of a pedestrian-friendly downtown
  - Potential traffic capacity and operation impacts specifically to the intersection of 1st and Alameda Streets

- Transportation impacts and traffic circulation comments that do not pertain to a specific alternative:
  - Potential for the Regional Connector to alleviate traffic congestion in the downtown area
  - Potential impacts resulting in loss of both on and off-street parking
  - Potential to impact access to specific buildings for vehicle and freight due to changes in the current street capacity and configurations

3.4.2 Land Use and Development

Four comments about Land Use and Development impacts were received. The issues addressed in these comments include:

- Potential for the Underground Emphasis LRT Alternative to minimize long-term impacts on downtown land use, provide sites for possible public-private joint development projects, and compatibility with continued development of properties along 2nd Street
- Potential for transit-oriented development if an underground station is located on 2nd Street between Los Angeles and San Pedro Streets
- Foreclosing options for signature development in Little Tokyo neighborhood

3.4.3 Community and Neighborhood Impacts

Approximately ten comments were received concerning community and neighborhood impacts. The issues addressed by these comments included:

- Community and neighborhood impacts comments pertaining to the Underground Emphasis LRT Alternative:
  - Potential for the Underground Emphasis LRT Alternative to divide Little Tokyo at 1st and Alameda Streets due to the high volume of trains

  - Potential deterioration of quality of life in Little Tokyo due to the loss of businesses on the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue under the Underground Emphasis LRT Alternative
  - Potential for the Underground Emphasis LRT Alternative to reduce the developable size of Little Tokyo

- Community and neighborhood impacts comments that do not pertain to a specific alternative:
  - Potential impacts to the Little Tokyo and Arts District areas due to changes in traffic circulation and land use patterns
  - Potential for project facilities to force alteration of traditional parade routes
  - Potential for a grade separated alignment to have less of an impact on revitalizing neighborhoods than a non-grade separated alignment

3.4.4 Visual and Aesthetic Impacts

Approximately nine comments regarding visual and aesthetic impacts were received. Issues addressed by these comments include:

- Visual and aesthetic impacts comments pertaining to the At-Grade Emphasis LRT Alternative:
  - Potential for the high visibility of the At-Grade Emphasis LRT Alternative to attract more riders
  - Potential for at-grade LRT facilities to interrupt the streetscape to an unacceptable extent
- A visual and aesthetic impacts comment pertaining to the Underground Emphasis LRT Alternative:
  - Potential for the Underground Emphasis LRT Alternative to avoid visual street clutter
- Visual and aesthetic impacts comments that do not pertain to a specific alternative:
  - Potential impacts to the Little Tokyo and Arts District areas
  - Potential visual impacts of catenary poles on adjacent residences, particularly those located at the same level as the wires

- Request to incorporate sound urban design and public art into the project

3.4.5 Noise and Vibration

Approximately eight comments about noise and vibration were received. The issues addressed in these comments included potential noise impacts from train horns sounding when approaching grade crossings, noise and vibration from the trains moving along the tracks, potential damage to surrounding buildings due to construction vibration, and engine noise.

3.4.6 Historic Impacts

Four comments about historic impacts were received. The topics addressed by these comments included potential impacts to the historic Saint Vibiana Cathedral, the historic Higgins Building, and historic features along 2nd Street.

3.4.7 Parklands

Two comments regarding parklands were received. One suggested that parks be created adjacent to proposed stations, and another suggested converting the area above the proposed Alameda Street underpass to open space.

3.4.8 Economic and Fiscal Impacts

Approximately 11 comments concerning the economic and fiscal impacts of the project were received. These comments discussed the following issues:

- An economic and fiscal impacts comment pertaining to the At-Grade Emphasis LRT Alternative:
  - Potential for the At-Grade Emphasis LRT Alternative to eliminate revenue from filming in the 2nd Street tunnel due to the addition of tracks
- Economic and fiscal impacts comments pertaining to the Underground Emphasis LRT Alternative:
  - Potential loss of businesses due to construction of the portal at 1st and Alameda Streets for the Underground Emphasis LRT Alternative and subsequent potential effects on the long-term economic wellbeing of the Little Tokyo District
  - Potential for the Underground Emphasis LRT Alternative's removal of businesses and parking to devalue properties in Little Tokyo and lead to financial losses, and request for direct assistance to these businesses

- Potential for an underground configuration to avoid impacts to current and future businesses on 2nd Street
- Potential impacts to small businesses on 2nd Street between Los Angeles and Alameda Streets from potential traffic congestion and construction

- Economic and fiscal impacts comments that do not pertain to a specific alternative:
  - Potential impacts to retail business volume due to disruptions in pedestrian and vehicle flow patterns both during construction and post construction
  - Potential for the project to create jobs

3.4.9 Safety and Security

Approximately 27 comments related to safety and security were received. Topics addressed by these comments included:

- Safety and security comments pertaining to the At-Grade Emphasis LRT Alternative:
  - Potential for at-grade trains to collide with other vehicles or pedestrians
  - Potential for at-grade LRT facilities to compromise emergency vehicle and law enforcement access
  - Potential for the grade separated Underground Emphasis LRT Alternative to be safer than the At-Grade Emphasis LRT Alternative due to high volumes of motorists and pedestrians crossing 2nd Street
- A safety and security comment pertaining to the Underground Emphasis LRT Alternative:
  - Safety concerns for pedestrians and automobiles near the proposed Underground Emphasis LRT Alternative facilities at 1st and Alameda Streets
- Safety and security comments that do not pertain to a specific alternative:
  - Potential for overcrowding on station platforms or inadequate ingress and egress at Little Tokyo/Arts District Station due to increased ridership and additional transfers
  - Potential for security issues related to the proposed underpasses on each build alternative

- Potential security issues related to unauthorized pedestrian access into tunnel facilities
- Security considerations for public facilities near the potential stations and right-of-way
- Potential safety issues for vehicles and trucks turning in an out of buildings along streets with altered configurations and capacity
- Potential health risks posed by public transit vehicles
- Potential safety concerns of seniors and persons with disabilities
- Request that the hazard analysis study be complete and adequate

3.4.10 Construction Impacts

Approximately 18 comments about construction impacts were received. Topics covered by these comments included:

- Difficulty of making changes to an active revenue rail transit line without service disruptions and additional costs
- Potential impacts to traffic during construction
- Potential construction impacts from tunneling activities and the need to mitigate those potential impacts
- Potential impacts to building access during construction
- Potential impacts to businesses during construction
- Potential for construction vibration to damage buildings and property
- Order in which portions of the build alternatives are constructed

3.4.11 Growth Inducing Impacts

One comment about growth inducing impacts was received. It mentioned the potential for the Underground Emphasis LRT Alternative to generate public/private joint development opportunities.

3.4.12 Air Quality Impacts

One comment about air quality was received. The comment contains a request to analyze potential smog reductions generated by each proposed alternative.

3.4.13 Water Resources

One comment was received requesting that the analysis evaluate potential impacts to floodplains and that the project design be consistent with the National Flood Insurance Program requirements for new development.

3.5 Comments Related to Policy, Scoping, Operations, and Other Projects

Approximately nine comments pertaining to policy, the scoping process, operations, and other projects were received. Some of the topics covered by these comments included:

- Extending the operating hours of the Metro Rail system
- Revising Metro policies regarding transfers
- Creation of a downtown free fare zone
- Request for information about Metro Expo Line construction activities
- Request that the Scoping Report and EIS/EIR be adequate, respond to non-environmental comments, and be subject to critical review
- Request to maintain Metro Blue Line headways
- Suggestions for new rail projects

3.6 Comments Submitted by Federal, State, and Other Agencies

Seven agencies submitted comments during the scoping period. Most of the topics mentioned were also covered in the comments discussed in the previous sections. However, some of the agency comments presented new issues, including requests to ensure compliance with government-mandated policies, safety concerns, and warnings of potential access restrictions to various public buildings along the proposed alignments, among others. The agency comments are summarized in the following sections, and full text of the agency comments is provided in Appendix W. Many agencies also have regulatory authority over the design and construction of a rail project. The concerns of all the agencies will be addressed both through the DEIS/DEIR analysis and through on-going coordination with Metro.

3.6.1 Comments Submitted by Federal Agencies

The United States District Court submitted a comment that discussed topics listed in the previous sections as well as concerns about the At-Grade Emphasis LRT Alternative's impacts on access to the new Federal District Courthouse planned for the block bounded by 1st Street, Hill Street, Broadway, and 2nd Street.

The Federal Emergency Management Agency (FEMA) of the US Department of Homeland Security also provided comments related to the analysis that will need to be conducted in the DEIS/DEIR and the requirements for any proposed development within a floodplain. The Environmental Protection Agency provided additional comments regarding the issues to be analyzed.

3.6.2 Comments Submitted by State Agencies

The State of California Department of Transportation, the California Public Utilities Commission, and the California Native American Heritage Commission submitted comments discussing topics listed in the previous sections. They also emphasized the need to keep the public informed of the progress of the EIS/EIR study process and provided information on CEQA guidelines.

3.6.3 Comments Submitted by Other Agencies

The Los Angeles County Sheriff's Department, the City of Los Angeles Department of Transportation, the Community Redevelopment of the City of Los Angeles, and the City of Pasadena submitted comments covering some of the topics mentioned in previous sections, as well as:

- Request for traffic impact analysis
- Design and placement guidelines for stations, the alignment, and the surrounding streets
- Request for anticipated train speeds to be included in the EIS/EIR
- Application of the Federal Rail Administration's grade crossing policy
- Security of the At-Grade Emphasis LRT Alternative during protests in the Civic Center area

3.7 Comment Database

Table 3-1 provides a summary of the comments received during the scoping period. Transcripts of the spoken comments submitted at the public scoping meetings and full text of all written public comments are provided in Appendix V. Agency comments are provided in Appendix W.

Table 3-1 Comment Summary

Purpose and Need

Better light rail system connectivity downtown
More access between Los Angeles neighborhoods
Attracting new riders with improved transit service
Reducing downtown traffic congestion
Reducing transfers and shortening trip times
Revitalizing downtown
Timeliness of the project
Promoting an alternative to driving
Encouraging a pedestrian-friendly downtown
Improving air quality
Accommodating short headways on the LRT lines
Focusing on transit system quality
Addressing LRT system capacity constraints
Expanding the rail transit system

Proposed Alternatives

Prefer No-Build (2)

TSM (5)
Prefer (50%)
Do Not Prefer (50%)

At-Grade Emphasis LRT (30)
Prefer (20%)
Do Not Prefer (80%)

Underground Emphasis LRT (64)
Prefer (80%)
Do Not Prefer (20%)

Other Alternatives Studied During AA Phase

Stations (23)
2nd & Spring
Bunker Hill
2nd & LA-San Pedro
Two stations on 2nd Street
Underground Little Tokyo Station
Temple & Aiso
Civic Center

Connections (10)
Broadway Streetcar
Grand Avenue Project
Historic Core
Additional bus service
Bikes and pedestrians

Configuration (25)
At-Grade
Underground

Alignments (11)
3rd Street from Flower Street to Little Tokyo

Design Features (17)
Bike racks
Green space
More capacity
Escalator to CitiGroup Plaza
ADA compliance

New Concepts

1st & Alameda (transfer platform)
Alameda & 7th
Alameda & Olympic
2nd & Grand

Alameda Street from 1st Street to Washington Boulevard

Knock-out panels at 2nd & Central
Knock-out panels near Bunker Hill
Double tracks
Underground split-level junction in Little Tokyo

Potential Impacts

Traffic Circulation (35)
Land Use and Development (4)
Community and Neighborhood Impacts (10)
Visual and Aesthetic Impacts (9)
Noise and Vibration (8)
Historic Impacts (4)
Parklands (2)
Economic and Fiscal Impacts (11)
Safety and Security (27)
Construction Impacts (18)
Growth Inducing Impacts (1)
Air Quality Impacts (1)

Other Impacts

Extending the operation hours of the Metro Rail system
Revising Metro's transfer policies
Creation of a downtown free fare zone
Request for information about Metro Expo Line construction
Request that Scoping Report and EIS/EIR be adequate and respond to non-environmental comments

Note: Tallies and percentages are approximate

RESPONSES TO COMMENTS

4.1 Introduction

The purpose of scoping is to provide an opportunity for agencies and the public to comment on the purpose and need, the range of alternatives proposed for analysis, and to help the project proponent identify issues that should be evaluated in the DEIS/DEIR analysis. Therefore, all comments that fall within the scope of the NEPA/CEQA process will be addressed in the DEIS/DEIR. Metro will also continue to work closely with agencies and stakeholder groups to address issues identified through scoping.

4.2 Comments Related to Purpose and Need

There were no comments directly related to the stated purpose of the project. A number of comments did affirm many of the previously identified needs for the project. In addition, some commenters identified additional conditions or benefits that support the need for the project. The DEIS/DEIR will expand and clarify the purpose and need statement in response to these comments.

4.3 Comments Related to Alternatives

The Regional Connector project has completed an AA and conducted early scoping on the potential range of alternatives. The results of that report may be found in the Final AA Report (Metro 2009) and which is incorporated here by reference. The AA provides the reasoning for decisions regarding the identification and narrowing of the range of alternatives. The AA process identified an initial set of 36 conceptual alternatives that met the project purpose of improving connections within the light rail system through the central business district. These alternatives were screened against criteria related to constructability, right-of-way constraints, impacts of configurations, and operational concerns. This initial screening narrowed the range of alternatives to eight alternatives with a few variations on some of the alternatives. These eight alternatives were screened against the goals, objectives, and evaluation criteria established for the project. In addition, input from stakeholders, the public and agencies was solicited in the process of further narrowing the range of alternatives. The AA process resulted in four alternatives (two build alternatives, a No Build Alternative, and a TSM Alternative) that will be carried forward into the DEIS/DEIR.

Most commenters expressed a preference for one of the build alternatives. Comments that included reasons for a stated preference also provide insight into potential impacts or benefits of all of the alternatives. These insights into potential impacts are helpful in guiding the impact analysis of the DEIS/DEIR. Comments that provide this insight are also counted as a comment on a particular resource discipline and will be included in the analysis of potential impacts.

A few comments expressed a preference for an alternative that is not currently proposed for consideration in the DEIS/DEIR.

The DEIS/DEIR will summarize the alternatives previously considered and eliminated and the process used to do so. Other alternatives that do not meet the project purpose and need will not be evaluated further.

4.4 Comments Related to Potential Impacts

Potential impacts or benefits of alternatives identified by commenters will be analyzed in the DEIS/DEIR. Insights into how a particular alternative may affect traffic, neighborhoods, safety, or accessibility and mobility through the central business district are a valuable result of the scoping process. Specific comments on each potential impact will be used to guide the analysis of the alternatives.

Specific comments on potential impacts were related to traffic congestion, circulation, property access, mobility for segments of the ridership, safety, air quality, community and neighborhood, economic, historic resources, visual and aesthetic concerns, noise and vibration, land use and development, and construction activities.

4.5 Other Comments

A number of comments were received on matters related to Metro policies, operations, and other projects within the Metro system. These comments are beyond the scope of this DEIS/DEIR and have been relayed to Metro management for consideration in other, more appropriate forums.

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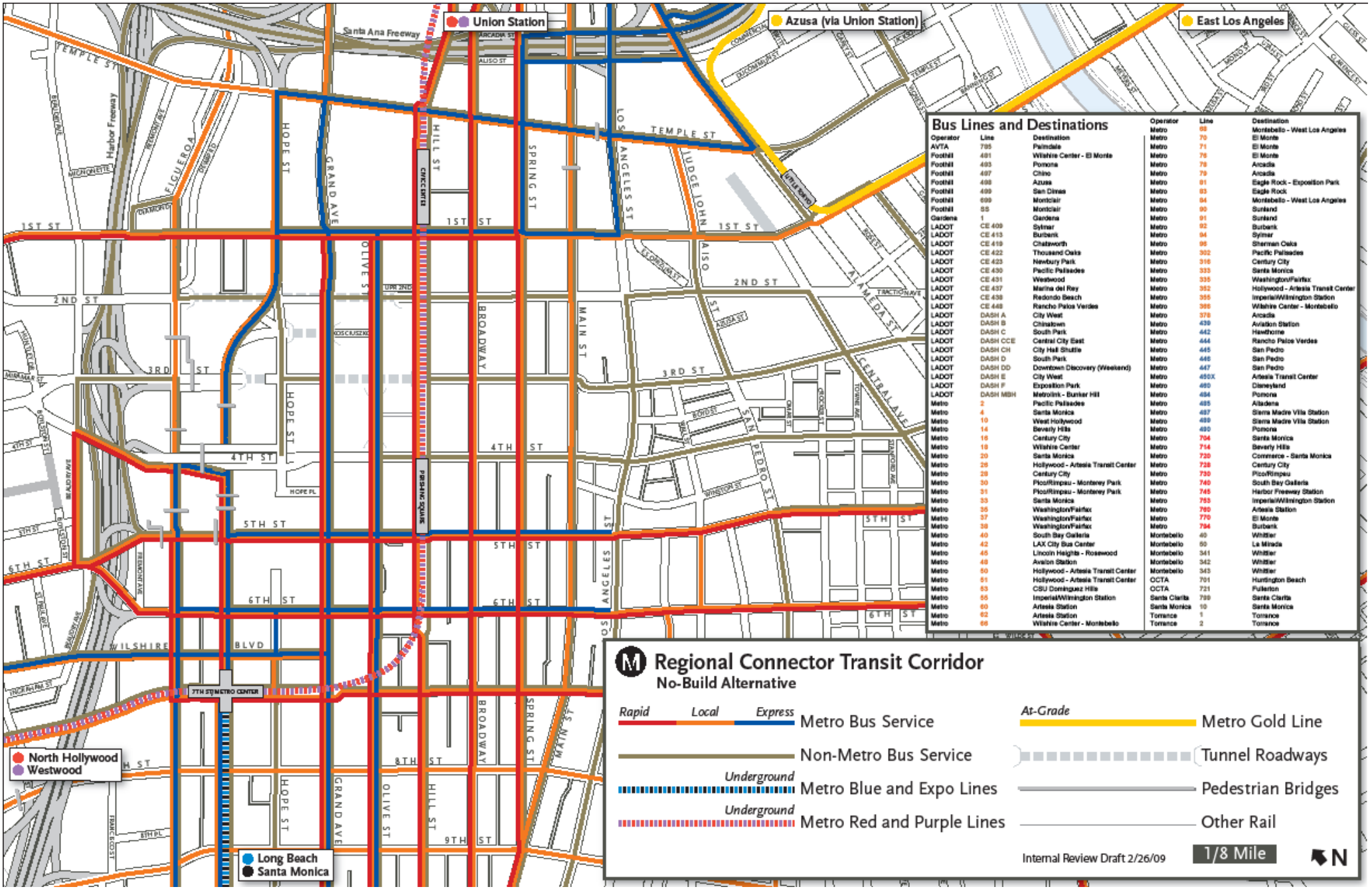
APPENDICES

- A: Maps of Alternatives
- B: Public Participation Plan
- C: Notice of Intent
- D: Notice of Preparation
- E: Newspaper Publications of Legal Notices
- F: Agency List
- G: Participating Agencies
- H: Invitation Letters
- I: Agency Sign In Sheet
- J: Agency Scoping Transcript
- K: Notification Database
- L: Direct Mail Scoping Letter
- M: "Take Ones"
- N: Electronic Meeting Notice
- O: Newspaper Advertisements
- P: Public Scoping Meeting #1 Sign In Sheet
- Q: Public Scoping Meeting #2 Sign In Sheet
- R: Public Scoping Meeting #3 Sign In Sheet
- S: Public Scoping Meeting #4 Sign In Sheet
- T: Boards Displayed & Meeting Handouts
- U: PowerPoint Presentation
- V: Summary of Public Comments, Comment Matrix & Transcripts

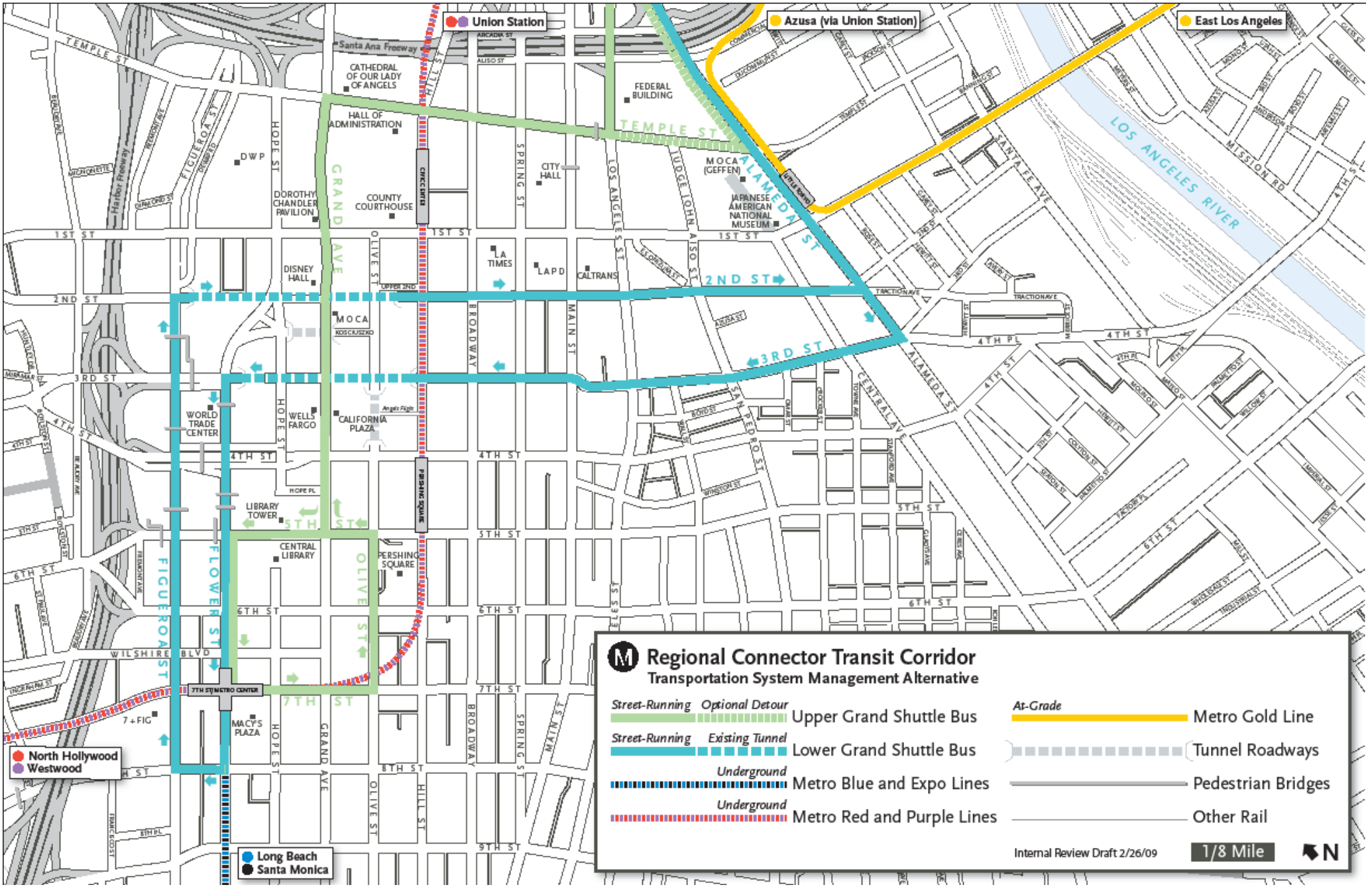
- W: Summary of Agency Comments

Appendix A
Maps of Alternatives

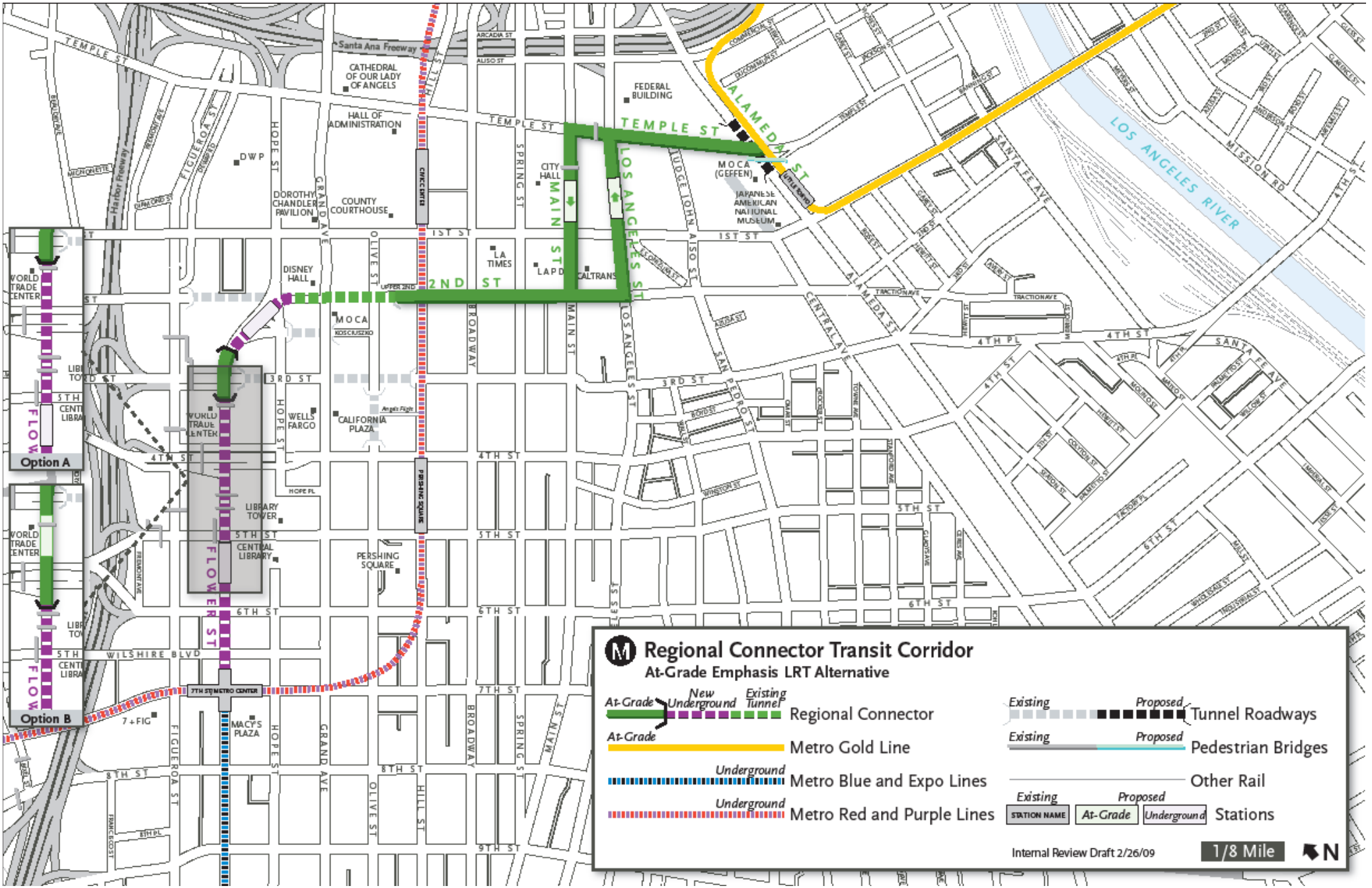


Operator	Line	Destination
AVTA	785	Palmdale
Foothill	481	Wilshire Center - El Monte
Foothill	493	Pomona
Foothill	497	Chino
Foothill	498	Azusa
Foothill	499	San Dimas
Foothill	699	Montclair
Foothill	SS	Montclair
Gardena	1	Gardena
LADOT	CE 409	Sylmar
LADOT	CE 413	Burbank
LADOT	CE 419	Chatsworth
LADOT	CE 422	Thousand Oaks
LADOT	CE 423	Newbury Park
LADOT	CE 430	Pacific Palisades
LADOT	CE 431	Westwood
LADOT	CE 437	Marina del Rey
LADOT	CE 438	Redondo Beach
LADOT	CE 448	Rancho Palos Verdes
LADOT	DASH A	City West
LADOT	DASH B	Chinatown
LADOT	DASH C	South Park
LADOT	DASH CCE	Central City East
LADOT	DASH CH	City Hall Shuttle
LADOT	DASH D	South Park
LADOT	DASH DD	Downtown Discovery (Weekend)
LADOT	DASH E	City West
LADOT	DASH F	Exposition Park
LADOT	DASH MBH	Metrolink - Bunker Hill
Metro	2	Pacific Palisades
Metro	4	Santa Monica
Metro	10	West Hollywood
Metro	14	Beverly Hills
Metro	16	Century City
Metro	18	Wilshire Center
Metro	20	Santa Monica
Metro	28	Hollywood - Artesia Transit Center
Metro	28	Century City
Metro	30	Pico/Rimpau - Monterey Park
Metro	31	Pico/Rimpau - Monterey Park
Metro	33	Santa Monica
Metro	35	Washington/Fairfax
Metro	37	Washington/Fairfax
Metro	38	Washington/Fairfax
Metro	40	South Bay Galleria
Metro	42	LAX City Bus Center
Metro	45	Lincoln Heights - Rosewood
Metro	48	Avalon Station
Metro	50	Hollywood - Artesia Transit Center
Metro	51	Hollywood - Artesia Transit Center
Metro	53	CSU Dominguez Hills
Metro	55	Imperial/Wilmington Station
Metro	60	Artesia Station
Metro	62	Artesia Station
Metro	66	Wilshire Center - Montebello
Metro	68	Montebello - West Los Angeles
Metro	70	El Monte
Metro	71	El Monte
Metro	76	El Monte
Metro	78	Arcadia
Metro	79	Arcadia
Metro	81	Eagle Rock - Exposition Park
Metro	83	Eagle Rock
Metro	84	Montebello - West Los Angeles
Metro	90	Sunland
Metro	91	Sunland
Metro	92	Burbank
Metro	94	Sylmar
Metro	96	Sherman Oaks
Metro	302	Pacific Palisades
Metro	316	Century City
Metro	333	Santa Monica
Metro	335	Washington/Fairfax
Metro	352	Hollywood - Artesia Transit Center
Metro	355	Imperial/Wilmington Station
Metro	366	Wilshire Center - Montebello
Metro	378	Arcadia
Metro	439	Aviation Station
Metro	442	Hawthorne
Metro	444	Rancho Palos Verdes
Metro	445	San Pedro
Metro	446	San Pedro
Metro	447	San Pedro
Metro	450X	Artesia Transit Center
Metro	460	Disneyland
Metro	484	Pomona
Metro	485	Altadena
Metro	487	Sierra Madre Villa Station
Metro	489	Sierra Madre Villa Station
Metro	490	Pomona
Metro	704	Santa Monica
Metro	714	Beverly Hills
Metro	720	Commerce - Santa Monica
Metro	728	Century City
Metro	730	Pico/Rimpau
Metro	740	South Bay Galleria
Metro	745	Harbor Freeway Station
Metro	753	Imperial/Wilmington Station
Metro	760	Artesia Station
Metro	770	El Monte
Metro	794	Burbank
Montebello	40	Whittier
Montebello	50	La Mirada
Montebello	341	Whittier
Montebello	342	Whittier
Montebello	343	Whittier
OCTA	701	Huntington Beach
OCTA	721	Fullerton
Santa Clarita	799	Santa Clarita
Santa Monica	10	Santa Monica
Torrance	1	Torrance
Torrance	2	Torrance

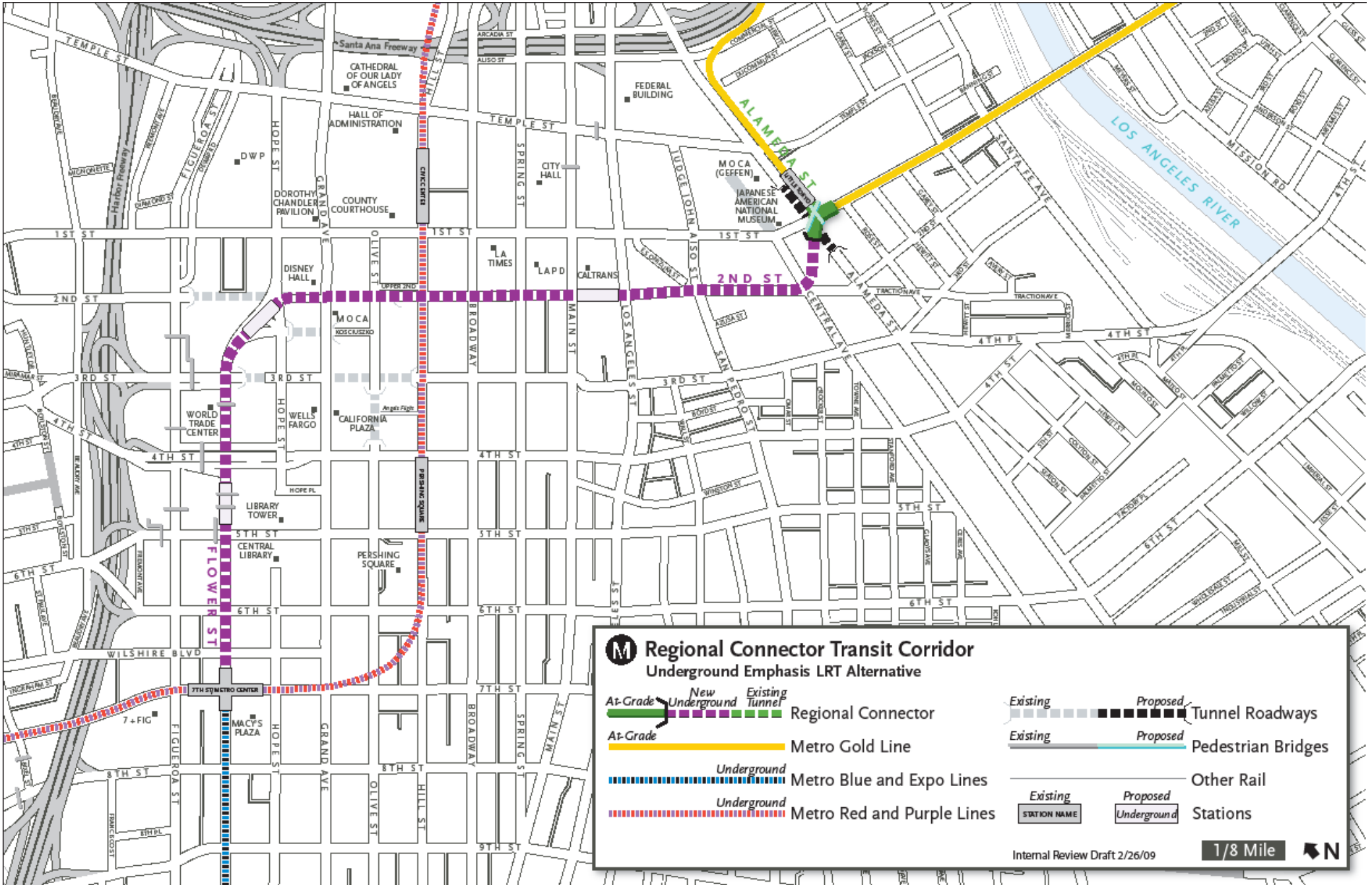
As shown to agencies and the public during scoping



As shown to agencies and the public during scoping



As shown to agencies and the public during scoping


Regional Connector Transit Corridor
Underground Emphasis LRT Alternative
At-Grade
New Underground
Existing Tunnel
Regional Connector
At-Grade
Metro Gold Line
Underground
Metro Blue and Expo Lines
Underground
Metro Red and Purple Lines
Existing
Proposed
Tunnel Roadways
Existing
Proposed
Pedestrian Bridges
Other Rail
Existing
STATION NAME
Proposed
Underground
Stations
Internal Review Draft 2/26/09
1/8 Mile
N
Santa Ana Freeway
TEMPLE ST
1ST ST
2ND ST
3RD ST
4TH ST
5TH ST
6TH ST
7TH ST
8TH ST
9TH ST
WILSHIRE BLVD
ALAMEDA ST
LOS ANGELES RIVER
HILL ST
OLIVE ST
SPRING ST
MAIN ST
BROADWAY
HOPE ST
GRAND AVE
FLOWER ST
FIGUEROA ST
CENTRAL AVE
SAN PEDRO ST
LOS ANGELES ST
JUDGE JOHN ARISO ST
CATHEDRAL OF OUR LADY OF ANGELES
HALL OF ADMINISTRATION
DOROTHY CHANDLER PAVILION
COUNTY COURTHOUSE
CIVIC CENTER
CITY HALL
FEDERAL BUILDING
DWP
DISNEY HALL
LA TIMES
LAPD
CALTRANS
MOCA
MOCA (GEFFEN)
JAPANESE AMERICAN NATIONAL MUSEUM
WORLD TRADE CENTER
WELLS FARGO
CALIFORNIA PLAZA
LIBRARY TOWER
CENTRAL LIBRARY
PERSHING SQUARE
PERSHING SQUARE
7TH ST/METRO CENTER
MACY'S PLAZA
7 + FIG
UNION STATION
Harbor Freeway
ARCADIA ST
ARIZONA ST
ARIZONA ST
UPPER 2ND
TRACTION AVE
TRACTION AVE
4TH PL
6TH PL
8TH PL
HOPE PL
WINSTON ST
WILLOW ST
MISSION RD
SANTA FE AVE
VIGNES ST
ALAMEDA ST
LOS ANGELES ST
CROCKER ST
STANFORD AVE
GLADYS AVE
HILL ST
OLIVE ST
GRAND AVE
BROADWAY
SPRING ST
MAIN ST
HOPE ST
FIGUEROA ST
FLOWER ST
FRANCISCO ST
BEAUDRY AVE
BOYLSTON ST
ST PAUL AVE
HOOVER ST
VERMONT AVE
HOBART BLVD
NORMANDIE AVE
MONTEREY RD
OAKWOOD ST
BELLEVUE AVE
MARMION WAY
ANGELS FLIGHT
ANGELS FLIGHT
COMMERCIAL ST
DECKER CT
ALISO ST
ALISO ST
ALAMEDA ST
MATEO ST
MOLINO ST
SOTO ST
SOTO ST
SOUTH ST
COLYTON ST
DRAMETTO ST
FACTORY PL
MILL ST
IMPERIAL ST
WHITE ROAD ST
INDUSTRIAL ST
MERCURY ST
MERCURY ST
MERCURY

Appendix B
Public Participation Plan

PUBLIC PARTICIPATION PLAN

I. Purpose and Background

The Regional Connector Transit Corridor Project area encompasses approximately 1.6 square miles of downtown Los Angeles within the boundaries of the I-110 freeway to the west, Alameda Street to the east, the US-101 freeway to the north, and 9th Street/Los Angeles Street and 7th Street to the South. It lies entirely within the City of Los Angeles limits in the central city area.

The Regional Connector Project is analyzing options for providing through service between Metro's Blue, Gold, Gold Eastside Extension and Expo Lines, and linking these rail corridors directly to Union Station by connecting the 7th Street/Metro Center station with the Little Tokyo/Arts District station, thereby providing a vital connection through downtown with other light rail service.

Completion of this connector line would provide a number of regional benefits including improved mobility, significantly reduced travel times, increased ridership, greater utilization of all rail lines and more accessibility to regional employment and cultural destinations. Construction of the Regional Connector Project would directly impact a 1.6 square mile geographic area in downtown Los Angeles, while its potential benefits accrue to transit users across the entire region. At the same time, the Regional Connector would also provide much-needed transportation alternatives for downtown Los Angeles's growing residential population and entertainment and cultural centers.

In January 2009, Metro's Board of Directors approved the Regional Connector Transit Corridor Alternatives Analysis Study and authorized staff to proceed with the next phase of the Project. This Draft Environmental Impact Statement (EIS)/ Environmental Impact Report (EIR)/Advanced Conceptual Engineering (ACE) phase follows the 12-month Alternatives Analysis that recommended two Build Alternatives for further study along with the No Build and Transportation System Management (TSM) alternatives. The Alternatives Analysis included an in-depth public participation process that included scoping meetings, community update meetings, key stakeholder meetings and elected officials' briefings, as well as development and dissemination of informational materials, a project website, project information line and media relations.

The Draft EIS/EIR phase of the Regional Connector LRT project will involve an extensive and inclusive community outreach process that builds upon, and enhances the public engagement efforts developed during the Alternatives Analysis phase of the project. This Public Participation Plan includes outreach not only to downtown Los Angeles stakeholders, but also to current and potential light rail riders; a wider population of transit users in Los Angeles County. This effort will also re-engage targeted stakeholder outreach efforts during the Alternatives Analysis while, at the same time, identify and involve potential new interested stakeholders who may now, more than before, have a special interest in this project. This Plan builds upon Metro's experience with the Alternatives Analysis, including lessons learned and identification of potential opportunity areas as well as Metro's best practices in public outreach.

II. Compliance with Federal Requirements (SAFETEA-LU)

The Transportation Equity Act for the 21st Century (TEA-21) was subsequently succeeded by the Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) on August 10, 2005 by Congress. TEA-21 and SAFETEA-LU continue the strong federal emphasis on public participation, requiring that the public participation plans of metropolitan planning processes "be developed in consultation with all interested parties and ... provide that all interested parties have reasonable opportunities to comment on the contents of the transportation plan". As outlined in the bill, methods to accommodate these goals, to the maximum extent possible, include:

- Holding any public meetings at convenient and accessible locations and times;
- Employing visualization techniques to describe plans;
- Making public information available in electronically accessible formats and means, such as the internet, as appropriate, to afford reasonable opportunity for consideration of public information.
- Coordinating local public participation/involvement processes with statewide public involvement processes wherever possible to enhance public consideration of the issues, plans, and programs, and reduce redundancies and costs.

SAFETEA-LU also expanded the definition of participation by "interested parties". Broadly defined it now includes as its partners, groups and individuals who are affected by or involved with transportation in the appropriate County and the surrounding region. Examples stated include citizens, affected public agencies, representatives of public transportation employees, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan.

SAFETEA-LU also requires that public meetings be held at convenient and accessible times and locations, that all plans be available by website and documents be written in easy, understandable language utilizing visual components.

This Public Participation Plan was developed cognizant of compliance with SAFETEA-LU.

III. Goals & Objectives of the Public Participation Process

The Public Participation Plan for the Regional Connector Transit Corridor Project provides an efficient, proactive and comprehensive guide to community outreach efforts throughout the DEIS/DEIR/ACE phase of this project. This Plan builds on the foundation of the public engagement effort developed during the Alternatives Analysis. The public involvement and consensus building effort for this project has several goals and objectives; it will:

- Utilize an inclusive outreach strategy that maximizes input from a broad range of project stakeholders;
- Provide forums for residents, businesses and community leaders to participate in the planning;

- Create multiple opportunities for the generation of ideas, comments and possible mitigation measures; and,

- Establish a forum for educating stakeholders on a regular basis as the project evolves.

The Public Participation Plan is in compliance with the public participation requirements of NEPA, CEQA and for the FTA New Starts program.

The intent of the public involvement process is to work cooperatively with the community toward the development of a preferred alternative that meets the purpose and need of the project.

Issues to be addressed during the DEIS/DEIR/ACE outreach process for the Regional Connector might include further development and refinement of the alternatives, locations of the stations, bus/rail interface and other transit issues, urban design, land use, neighborhood and community impacts, environmental impacts, and potential mitigation measures.

IV. Description of Public Participation/Involvement Activities

a. Schedule Overview

The 18 month schedule for the Draft EIS/EIR is summarized below. A series of community update meetings and formal public hearings will be held at key milestones. In addition, the project team will continue to meet with individual stakeholder groups. The public engagement effort will continue throughout the study as urban design proceeds and targeted stakeholders are involved in the planning process.

b. Stakeholder Identification & Community Profile

Metro will maintain and update the stakeholder database developed during the Alternatives Analysis to track interested individuals and groups, their areas of interest, communication, and other pertinent information for the duration of the project. Building on the database developed during the Alternatives Analysis phase of the study, Metro will continue to provide ongoing maintenance and updates to keep the database current.

The DEIS/DEIR phase will include extended outreach beyond Downtown Los Angeles, including all jurisdictions that potentially benefit from the Regional Connector. There are a variety of existing and potential new project stakeholders; many of these stakeholders were identified during the AA Study, and they will be further engaged during the DEIS/DEIR/ACE process. Stakeholders for this study include, but are not limited to:

- Local, County, Federal & State Elected Officials

- Neighborhood Councils, Associations and Community Councils

- Business and Labor Associations
- Retail & Entertainment Centers/Destinations
- Education, Cultural, Religious, Health Care Institutions along the existing and proposed alignment
- Transit Advocacy and Environmental Groups
- Public Agencies/Officials
- Cities along all existing and proposed alignments

Communication with individuals and organizations beyond the physical study area will be a priority during this phase given the regional significance of the project.

Further, building on information gathered during the Alternatives Analysis, Metro will develop a Community Profile, including an issues assessment, relevant to community participation in the study. The Community Profile will identify:

- key communities and constituencies in the study area;
- key communities and constituencies outside the study area, likely to benefit from the project;
- issues of special interest to communities and constituencies; and,
- strategies and actions to address these communities, constituencies, and issues.

In this way Metro will be able to monitor the issues and priorities of the distinct communities within and of relevance to the project in and beyond the study area.

c. Public Scoping Meetings, Community Updates and Public Hearings

c1. Facilitation of Draft EIS/EIR Scoping Meetings

Metro will conduct four (4) Public Scoping meetings, one (1) Agency meeting and one (1) briefing for local elected officials within the scoping period of the project to solicit comment and input for the DEIS/DEIR prior to the May 11, 2009 deadline for public scoping comments. For Public Scoping, two meetings will be held in Downtown Los Angeles, respectively one daytime meeting to accommodate those stakeholders working in the project area, and one evening meeting to ensure those living in the area are able to attend. Additionally, two more meetings will be scheduled in Pasadena, and the University of Southern California/South Park area: locations outside the project area where transit users will most benefit from construction of the Regional Connector.

The purpose of these meetings is to inform the public about the study, solicit input on the alternatives to be considered and identify issues and areas of concern that will need to be addressed in the DEIS/DEIR. These meetings will be recorded by a court reporter and documented as a part of the DEIS/DEIR/ ACE planning effort.

c2. Formal Public Meeting Coordination and Facilitation

Two rounds of community update meetings will be held during the Draft EIS/EIR and will coincide with key milestones. Metro will schedule and facilitate these public meetings, in up to five (5) locations, for a total of ten (10) community update meetings. A detailed summary of comments and meeting notes will be prepared after each round of meetings. Prior to each round of community update meetings, Metro will schedule one briefing for local elected officials. All presentation materials and meeting handouts will be posted to the Regional Connector website.

c3. Public Hearings

Metro anticipates four (4) public hearings, coordinated with the DEIS/DEIR formal public comment period and consistent with the California Environmental Quality act (CEQA), FTA, and National Environmental Policy Act (NEPA) guidelines. As for the scoping meetings, Metro will schedule a briefing meeting for elected officials prior to the hearings. TRG will be responsible for all logistics related to the hearings for the DEIS/DEIR phase, including schedule, location selection, staffing, presentation materials and handouts, meeting notifications and publicity, and securing a court reporter.

At the conclusion of the public hearings, Metro will develop a written summary which will include the number of attendees, major issues, and concerns raised, and recommended actions to address the issues. All written comments submitted at the public hearing and via email and US mail will be electronically scanned and included in the project documentation.

d. Other Meetings

Metro will proactively continue to coordinate with key project stakeholders groups in the area to engage them in the planning process. At the same time, Metro will respond to requests from community groups and other organizations to participate in their meetings.

e. Events

To reach out to those not active in civic issues or who do not typically attend community meetings, Metro will participate in local events such as festivals, fairs and other grassroots outreach opportunities. In addition to the events that Metro already participates in, other local opportunities to raise the project's visibility and awareness within the study area will be explored such as farmers markets, mall or shopping center booths and other more community-focused events.

f. Public Notice and Review

Public notices and meeting publicity for the Regional Connector will include:

- Placement of display advertisements two weeks prior to the scoping meetings in the Downtown News, Rafu Shimpo (English/Japanese), Garment & Citizen (Spanish/English), Pasadena Star News and the Daily Trojan
- Mail-out of scoping notice in English, Spanish and Japanese two weeks prior to the first scoping meeting to entire project database
- Mail-out of meeting notice to project database

- Email notification to all in the project database two weeks prior to first meeting, as well as email reminders for upcoming meetings two days prior to first meeting

- Post scoping meeting information on the Metro website (www.metro.net/ regionalconnector) two weeks in advance of meetings

- Update Regional Connector Facebook page and distribute meeting invitations via Facebook

- Placement of "Take One" meeting notices on Metro trains and buses serving the project area including the Metro Gold and Blue Lines, and on all downtown bus routes

- Distribution of meeting notices at key downtown Los Angeles gathering places such as the Central Library and Little Tokyo Branch Library, the lobbies of loft buildings and condos, and retail, restaurant and social service venues within the corridor

- Distribution of flyers at Union Station to promote the meetings

- Publicity of scoping meetings to be consistent with FTA requirements

- Development of Project Scoping Presentation Materials in multimedia, easy-to-understand, and multi-language formats

g. Written Materials

Metro will continue to develop text and visuals for collateral materials, specifically Mailers, Brochures, Fact Sheets, "Take Ones", Frequently Asked Questions (FAQs), and other pieces as needed, as well as a quarterly e-bulletin/newsletter. Materials will be translated, at minimum, into Spanish and Japanese and, as requested, Chinese and Korean. Metro will also develop an electronically, easy-to-read and quick-reference project e-bulletin/newsletter to be distributed approximately quarterly.

h. Website

The project website (www.metro.net/ regionalconnector) will be regularly updated to coincide with key milestones. In addition to serving as a source for public information, the website will also serve as a way to gather information. The webpage will facilitate ongoing database additions and provide a means for the community to provide input, ask questions, receive responses and distribute study materials. Metro will monitor web page use, track activity through the project database and respond to inquiries within one business day.

i. Media

Metro takes a proactive role working with the mainstream media to publicize all community meetings and to raise awareness of the Regional Connector Project. This includes the development of press releases and placement of display advertisements. This effort is complemented by outreach to grassroots, ethnic and niche print, broadcast and new media. For the DEIS/DEIR phase, Metro will outreach to wider media such as traffic reporters, as well as the Spanish, Chinese, Japanese and Korean-language media.

Metro will continue to utilize "new" media such as blogs, electronic news outlets, chat rooms, discussion boards, etc. to raise awareness of its projects. Metro will continue to use Facebook and other new media resources (social networking forums) to inform and educate project stakeholders about the study. A complete record of all blogging and other electronic communications on the project will also be maintained.

j. Tours

To help facilitate better understanding of light rail technology, configuration options and community integration, tours of the operational sections of Gold and Blue Lines as well as the construction section within downtown Los Angeles will be held as needed. Tours of other comparable non-Metro systems may also be appropriate.

k. Accommodations

All public meetings will be scheduled at locations accessible by transit users and all buildings for public events are ADA accessible for wheelchairs. Information regarding bicycle lockers/storage can also be researched upon request. Interpreters (language and hearing) or other auxiliary aids will be arranged if requested at least 3 days prior to the meeting.

V. Outreach to Traditionally Underserved Groups

Federal requirements for public participation plans include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low income and/or minority groups. Metro has actively worked with organized business and community groups in Little Tokyo and throughout downtown Los Angeles, contacted homeless service providers in the project area to inform them of community meetings, and will continue outreach efforts to transit users. In addition, materials are translated into Spanish and Japanese, and where requested into Korean and Chinese.

VI. Description of Committees Contributing to the Planning Process

Formation of Regional Connector Working Group

Metro will form a Working Group that will serve in an advisory capacity to the Regional Connector project team. This Working Group in intended to:

- Provide input and feedback at least key decision points
- Offer ongoing guidance about the progress of the project
- Complement the overall community-driven process
- Review the work completed by the geographic sub-groups described below
- Serve as a sounding board to the project team

Geographic Sub-groups within the Working Group, organized by approximate station locations to discuss issues of particular interest and/or concern to their neighborhoods will be created. These sub-groups will reflect the following geographic areas:

- Little Tokyo
- Bunker Hill
- Historic Core
- Financial District

Formation of a Technical Advisory Group

Metro will form a Technical Advisory Group comprised of various City of Los Angeles departments, as well as Los Angeles County, State and Federal agencies that will meet on an as needed basis.

VII. Public Participation Measures of Effectiveness

On a periodic basis, the Public Participation process will be reviewed to determine if modification of any particular strategy is necessary or if additional strategies need to be incorporated into the Plan to reach desired demographic groups.

Appendix C
Notice of Intent

received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

Issued in Washington, DC on March 18, 2009.

Grady C. Cothen, Jr.,

Deputy Associate Administrator for Safety Standards and Program Development.

[FR Doc. E9–6400 Filed 3–23–09; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Intent To Prepare an Environmental Impact Statement for Proposed Transit Improvements in the Regional Connector Transit Corridor, Los Angeles, CA

AGENCY: Federal Transit Administration, DOT.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Federal Transit Administration (FTA) and the Los Angeles County Metropolitan Transportation Authority (LACMTA) intends to prepare an environmental impact statement (EIS) for the Regional Connector Transit Corridor Project in Los Angeles County, California. LACMTA operates the Metro transit system in Los Angeles County. The proposed project would provide a direct link connecting several light rail service lines in operation or in construction through downtown Los Angeles, CA.

The project area lies entirely within the City of Los Angeles and is within the densely developed downtown core that includes multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and private high-rise office towers.

The EIS will be prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) and its implementing regulations. LACMTA will also use the EIS document to comply with the California Environmental Quality Act (CEQA), which requires an Environmental Impact Report (EIR). The purpose of this notice is to alert interested parties regarding the intent to prepare the EIS, to provide information on the nature of the proposed project and possible alternatives, to invite public participation in the EIS process (including providing comments on the scope of the Draft Environmental Impact Statement (DEIS), to announce that public scoping meetings will be conducted, and to identify participating and cooperating agency contacts.

DATES: Written comments on the scope of the EIS, including the project's purpose and need, the alternatives to be considered, the impacts to be evaluated, and the methodologies to be used in the evaluations should be sent to LACMTA on or before May 11, 2009 at the address below. See **ADDRESSES** below for the address to which written public comments may be sent. Public scoping meetings to accept comments on the scope of the EIS/EIR will be held on the following dates:

- Monday, March 30, 2009; 4:30 p.m. to 6 p.m.; at the University of Southern California (USC), Alumni Room, Davidson Conference Center, 3415 S Figueroa St, Los Angeles, CA 90007.
- Tuesday, March 31, 2009; 6:30 p.m. to 8 p.m.; at the Lake Avenue Church, 393 N Lake Avenue, Pasadena, CA 91101.
- Wednesday, April 1, 2009; 6:30 p.m. to 8 p.m.; at the Japanese American National Museum (JANM), 369 E 1st Street, Los Angeles, CA 90012.
- Thursday, April 2, 2009; Noon to 1:30 p.m.; at the Los Angeles Central Library, Board Room, 630 W 5th Street, Los Angeles, CA 90071.

The project's purpose and need and the description of alternatives for the proposed project will be presented at these meetings. The buildings used for the scoping meetings are accessible to persons with disabilities. Any individual who requires special assistance, such as a sign language interpreter, to participate in the scoping meeting should contact Ms. Ann Kerman, Community Relations Manager, LACMTA, at (213) 922–7671, or *kermana@metro.net*.

Scoping materials will be available at the meetings and on the LACMTA Web site (*http://www.metro.net/regionalconnector*). Paper copies of the scoping materials may also be obtained from Ms. Ann Kerman, Community Relations Manager, LACMTA, at (213) 922–7671, or *kermana@metro.net*. An interagency scoping meeting will be held on Thursday, March 26, 2009 at 1:30 p.m. at LACMTA, in the Gateway Plaza Room, One Gateway Plaza, Los Angeles, CA 90012. Representatives of Native American tribal governments and of all Federal, State, regional and local agencies that may have an interest in any aspect of the project will be invited to be participating or cooperating agencies, as appropriate.

ADDRESSES: Comments will be accepted at the public scoping meetings or they may be sent to Ms. Dolores Roybal Saltarelli, AICP, Project Manager, Los Angeles County Metropolitan Transportation Authority, One Gateway Plaza, Mail Stop? Los Angeles, CA 90012, or via e-mail at *roybald@metro.net*. The locations of the public scoping meetings are given above under **DATES**.

FOR FURTHER INFORMATION CONTACT: Mr. Ray Tellis, Team Leader, Los Angeles Metropolitan Office, Federal Transit Administration, 888 South Figueroa Street, Suite 1850, Los Angeles, CA 90017, phone (213) 202–3950, e-mail *ray.tellis@dot.gov*.

SUPPLEMENTARY INFORMATION:

Scoping

The FTA and LACMTA invite all interested individuals and organizations, public agencies, and Native American Tribes to comment on the scope of the EIS, including the project's purpose and need, the alternatives to be studied, the impacts to be evaluated, and the evaluation methods to be used. Comments should focus on: Alternatives that may be less costly or have less environmental or community impacts while achieving similar transportation objectives, and the identification of any significant social, economic, or environmental issues relating to the alternatives.

Project Initiation

The FTA and LACMTA will prepare an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Regional Connector Transit Corridor pursuant to 23 U.S.C. 139 and the California Environmental Quality Act (CEQA). LACMTA is serving as the local lead agency for purposes of CEQA environmental clearance, and FTA is serving as the federal lead agency for purposes of National Environmental Policy Act (NEPA) environmental clearance. This notice shall alert interested parties to the preparation of the EIS/EIR, describe the alternatives under consideration, invite public participation in the EIS/EIR process, and announce the public scoping meetings. FTA and LACMTA will invite interested Federal, State, tribal, regional and local government agencies to be participating agencies under the provisions of section 6002 of SAFETEA–LU.

Purpose and Need for the Project

The purpose of this project is to improve the region's public transit service and mobility. The overall goal of

the project is to improve mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles. Mobility issues throughout the region and the identified need to join the unconnected segments of the light rail system have been documented in several past studies, including the *Pasadena—Los Angeles Light Rail Transit Project Environmental Impact Report* (1993), the *Blue Line Connection Preliminary Planning Study* (1993), and the *Regional Light Rail Connector Study* (2004).

Additional considerations supporting the need for the Regional Connector Transit Corridor project include: Increased travel times and station overcrowding occurring due to multiple transfers required to traverse the project area; a project area that has many transit dependent residents; poor system connectivity that results in reduced system schedule reliability as current system expansions are completed; and investments within the project area could improve system-wide operations in regards to travel times and safety issues.

Project Location and Environmental Setting

The proposed light rail transit (LRT) project lies entirely within the City of Los Angeles and is generally bounded by U.S. Highway 101 on the north, 7th and 9th Streets on the south, Alameda Street on the east, and State Route 110 on the west. Project length is just under two miles and the LRT alternatives would have up to four stations plus ancillary facilities including power substations. The project area is the largest regional employment center in Los Angeles County, and is densely developed with multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and private high-rise office towers.

The proposed Regional Connector project would provide a direct link connecting several light rail service lines in operation or in construction (*i.e.*, the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line). The proposed project would create a connection in downtown Los Angeles that would link the Metro Blue and Expo Lines termini at 7th Street/Metro Center Station (7th Street and Flower Street) to the Metro Gold Line (Pasadena and Eastside) at the Little Tokyo/Arts District Station at 1st Street and Alameda Street. This connection would provide through service between the Metro Blue Line to Long Beach, the Metro Gold Line to Pasadena and East Los Angeles, and the Metro Expo Line to Culver City. With the implementation of the Regional Connector project, these four lines would share tracks and stations in downtown Los Angeles.

The various alternatives to be considered for the Regional Connector project generally traverse Flower Street north from 7th Street, 2nd Street between Flower and Alameda, Main and Los Angeles Streets between Temple Street and 2nd Street, Temple Street between City Hall and Alameda Street, and Alameda Street between U.S. Highway 101 and 2nd Street.

Alternatives

The Regional Connector Transit Corridor Final Alternatives Analysis Report (2009) prepared by LACMTA identified four alternatives for further consideration in the EIS/EIR. The four alternatives include: A No-Build Alternative, Transportation System Management (TSM) Alternative, At-Grade Emphasis LRT Alternative, and Underground Emphasis LRT Alternative.

No-Build Alternative: The No Build Alternative would maintain existing transit service through the year 2030. No new transportation infrastructure would be built within the project area aside from projects currently under construction, or funded for construction and operation by 2030 by recently approved Measure R sales tax. Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. By the projection year of 2030, some bus service would have been reorganized and expanded to provide connections with the new rail lines; however, the transit network within the project area would largely be the same as it is now.

Transportation Systems Management (TSM) Alternative: The TSM Alternative would include the provisions of the No Build Alternative and add two shuttle bus routes from 7th Street/Metro Center station to Union Station providing a link between the region's unconnected LRT services, one along Grand Ave. and 1st St., and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes, where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. Stops would be located every few blocks so as to provide full coverage of the area. Each shuttle route would be one and one-half to two miles in length.

At-Grade Emphasis LRT Alternative: This alternative would extend from the underground 7th Street/Metro Center Station, head north under Flower Street, surface to at-grade north of 5th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street where it would split into an at-grade couplet configuration on Main and Los Angeles Streets (one track on each roadway) to Temple Street. Then it would head east on Temple Street and realign into a dual track configuration just north of the Metro Gold Line Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that would traverse the Regional Connector, an automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts.

There are two options for the configuration on Flower Street. For Option A, trains would transition to underground tracks after crossing 3rd Street and continue to a new underground station just south of 5th Street, then proceed to the 7th Street/Metro Center Station and arrive at the existing Metro Blue Line platform. For Option B, trains would arrive at an at-grade station after crossing 3rd Street, then transition to underground tracks near 4th Street to reach the existing Metro Blue Line platform at 7th Street/Metro Center station. In total, the At-Grade Emphasis LRT Alternative would add 1.8 miles of new double track to the light rail system.

In addition to the Option A and Option B Station configurations, other station locations would include a station adjacent to Bunker Hill, south of 2nd Street and Hope Street, and a split station using Main and Los Angeles Streets between 1st and Temple Streets. A fourth optional station on 2nd Street between Broadway and Los Angeles Street will be analyzed.

Underground Emphasis LRT Alternative: From the 7th Street/Metro Center Station, this alternative would extend north along Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with new underground stations to provide access to Bunker Hill and to the area between Los Angeles Street and Broadway. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets.

At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This Alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

Station locations for this alternative would all be underground and include the area north of 5th Street on Flower Street, adjacent to Bunker Hill just south of 2nd Street and 2nd Street between Los Angeles and Main Streets.

Probable Effects

The purpose of this EIS/EIR process is to study, in a public setting, the effects of the proposed project and its alternatives on the physical, human, and natural environment. The FTA and LACMTA will evaluate all significant environmental, social, and economic impacts of the construction and operation of the proposed project. Impact areas to be addressed include: transportation, land use, zoning and economic development, secondary development, land acquisition, displacements and relocations, cultural resources (including historical, archaeological, and paleontological resources), parklands/recreational facilities, neighborhood compatibility and environmental justice, visual and aesthetic impacts, natural resources (including air quality, noise and vibration, wetlands, water resources, geology/soils, and hazardous materials), energy use, safety and security, wildlife, and ecosystems. Measures to avoid, minimize, and mitigate adverse impacts will be identified and evaluated.

FTA Procedures

The regulations implementing NEPA, as well as provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU), call for public involvement in the EIS process. Section 6002 of SAFETEA–LU requires that FTA and LACMTA do the following: (1) Extend an invitation to other Federal and non-Federal agencies and Native American tribes that may have an interest in the proposed project to become ''participating agencies;'' (2) provide an opportunity for involvement by participating agencies and the public to help define the purpose and need for a proposed project, as well as the range of alternatives for consideration in the EIS; and (3) establish a plan for coordinating public and agency participation in, and comment on, the environmental review process. An invitation to become a participating or cooperating agency, with scoping materials appended, will be extended to other Federal and non-Federal agencies and Native American tribes that may have an interest in the proposed project. It is possible that FTA and LACMTA will not be able to identify all Federal and non-Federal agencies and Native American tribes that may have such an interest. Any Federal or non-Federal agency or Native American tribe interested in the proposed project that does not receive an invitation to become a participating agency should notify at the earliest opportunity the Project Manager identified above under **ADDRESSES**.

A comprehensive public involvement program and a Coordination Plan for public and interagency involvement will be developed for the project and posted on LACMTA's Web site (Regional Connector Transit Corridor Project Web page: *http://www.metro.net/regionalconnector*). The public involvement program includes a full range of activities including the project Web page on the LACMTA Web site, development and distribution of project newsletters, and outreach to local officials, community and civic groups, and the public. Specific activities or events for involvement will be detailed in the public involvement program.

LACMTA may seek New Starts funding for the proposed project under 49 United States Code 5309 and will, therefore, be subject to New Starts regulations (49 Code of Federal Regulations (CFR) part 611). The New Starts regulations also require the submission of certain project-justification information to support a request to initiate preliminary engineering. This information is normally developed in conjunction with the NEPA process. Pertinent New Starts evaluation criteria will be included in the EIS.

The EIS will be prepared in accordance with NEPA and its implementing regulations issued by the Council on Environmental Quality (40 CFR parts 1500–1508) and with the FTA/Federal Highway Administration regulations ''Environmental Impact and Related Procedures'' (23 CFR part 771). In accordance with 23 CFR 771.105(a) and 771.133, FTA will comply with all Federal environmental laws, regulations, and executive orders applicable to the proposed project during the environmental review process to the maximum extent practicable. These requirements include, but are not limited to, the environmental and public hearing provisions of Federal transit laws (49 U.S.C. 5301(e), 5323(b), and 5324); the project-level air quality conformity regulation of the U.S. Environmental Protection Agency (EPA) (40 CFR part 93); the section 404(b)(1) guidelines of EPA (40 CFR part 230); the regulation implementing section 106 of the National Historic Preservation Act (36 CFR part 800); the regulation implementing section 7 of the Endangered Species Act (50 CFR part 402); section 4(f) of the Department of Transportation Act (23 CFR 771.135); and Executive Orders 12898 on environmental justice, 11988 on floodplain management, and 11990 on wetlands.

Issued on: March 19, 2009.

Leslie T. Rogers,

Regional Administrator, Region IX, Federal Transit Administration.

[FR Doc. E9–6421 Filed 3–23–09; 8:45 am]

BILLING CODE 4910–57–P

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Solicitation of Comments and Notice of Availability of Fiscal Year 2009 Funding for Transit Investments for Greenhouse Gas and Energy Reduction Grants

AGENCY: Federal Transit Administration, DOT.

ACTION: Interim notice of funding availability, request for comments.

SUMMARY: The American Recovery and Reinvestment Act of 2009 (ARRA) appropriated $100 million for a new discretionary grant program for public transportation projects that reduce a transit system's greenhouse gas emissions or result in a decrease in a transit system's energy use. Because of time limitations in ARRA funding, this notice announces the availability of the new grant program, application requirements, and deadlines for submitting grant proposals for funding. However, because the Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) program is a new grant program, FTA also is accepting comments on the program's provisions and may alter some of the requirements in response to comments.

DATES: Comments must be received by April 7, 2009. Late-filed comments will be considered to the extent practicable. Complete proposals for the TIGGER Grant Program must be submitted by May 22, 2009.

Appendix D
Notice of Preparation

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY (Metro)

NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT (EIS)/ENVIRONMENTAL IMPACT REPORT (EIR)

TO: AGENCIES, ORGANIZATIONS & INTERESTED PARTIES.

SUBJECT: NOTICE OF INTENT (NOI)/NOTICE OF PREPARATION (NOP) OF AN EIS/EIR

PROJECT TITLE: REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

PROJECT LOCATION AND ENVIRONMENTAL SETTING: The proposed light rail transit (LRT) project lies entirely within the City of Los Angeles and is generally bounded by US Highway 101 on the north, 7th and 9th Streets on the south, Alameda Street on the east, and State Route 110 on the west. The length of the proposed light rail project would be just under two miles. It would have up to four stations plus ancillary facilities including power substations. The project area includes the largest regional employment center of Los Angeles, and is densely developed with multi-family residences, industrial and public lands, commercial and retail establishments, government office buildings, and private high-rise office towers.

The proposed Regional Connector would provide a direct link connecting several light rail lines in operation or in construction, including the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line. The proposed project would create a connection through downtown Los Angeles that would link the Metro Blue and Expo Lines termini at 7th Street/Metro Center Station (7th Street and Flower Street) to the Metro Gold

Line (Pasadena and Eastside) at the Little Tokyo/Arts District Station at 1st Street and Alameda Street. This connection would provide through service between the Metro Blue Line to Long Beach, the Metro Gold Line to Pasadena and East Los Angeles, and the Metro Expo Line to Culver City. With the implementation of the Regional Connector, these four lines would share tracks and stations in downtown Los Angeles.

The various alternatives to be considered for the Regional Connector generally traverse Flower Street north from 7th Street, 2nd Street between Figueroa and Alameda, Main and Los Angeles Streets between Temple Street and 2nd Street, Temple Street between City Hall and Alameda Street, and Alameda Street between US Highway 101 and 2nd Street.

PROJECT INTITIATION: The Los Angeles County Metropolitan Transit Authority (LACMTA or Metro) and the Federal Transit Administration (FTA) will prepare an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Regional Connector Transit Corridor pursuant to 23 U.S.C. 139 and the California Environmental Quality Act (CEQA). Metro is serving as the local lead agency for purposes of CEQA environmental clearance, and FTA is serving as the federal lead agency for purposes of National Environmental Policy Act (NEPA) environmental clearance. This notice shall alert interested parties to the preparation of the EIS/EIR, describe the alternatives under consideration, invite public participation in the EIS/EIR process, and announce the public scoping meetings. FTA and Metro will invite interested Federal, State, tribal, regional and local government agencies to be participating agencies under the provisions of Section 6002 of SAFETEA-LU.

PURPOSE AND NEED FOR THE PROJECT: The purpose of this project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility

within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles. Mobility issues throughout the region and the identified need to join the unconnected segments of the light rail system have been documented in several past studies, including the *Pasadena – Los Angeles Light Rail Transit Project Environmental Impact Report* (1993), the *Blue Line Connection Preliminary Planning Study* (1993), and the *Regional Light Rail Connector Study* (2004).

Additional considerations supporting the need for the Regional Connector Transit Corridor project include: increased travel times and station overcrowding occurring due to multiple transfers required to traverse the project area; a project area that has many transit dependent residents; poor system connectivity that results in reduced system schedule reliability as current system expansions are completed; and investments within the project area could improve system-wide operations in regards to travel times and safety issues.

ALTERNATIVES: The Regional Connector Transit Corridor Final Alternatives Analysis Report (2009) prepared by FTA and Metro identified four alternatives for further consideration in the EIS/EIR. The attached figures depict the No-Build, TSM, and two build alternatives proposed for further consideration. The four alternatives include:

No-Build Alternative: The No-Build Alternative would maintain existing transit service through the year 2030. No new transportation infrastructure would be built within the project area aside from projects currently under construction. Transit service under the No-Build Alternative would be focused on the preservation of existing services and projects. By the

projection year of 2030, some bus service would have been reorganized and expanded to provide connections with the new rail lines; however, the transit network within the project area would largely be the same as it is now.

Transportation System Management (TSM) Alternative: The TSM Alternative would include the provisions of the No-Build Alternative and add two shuttle bus routes from 7th Street/Metro Center station to Union Station, providing a link between the region's unconnected LRT services. One route would run along Grand Avenue and 1st Street, and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes, where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. Stops would be located every few blocks so as to provide full coverage of the area. Each shuttle route would be one and one-half to two miles in length.

At-Grade Emphasis LRT Alternative: This alternative would extend from the underground 7th Street/Metro Center Station, head north under Flower Street, surface to at-grade north of 5th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street where it would split into an at-grade couplet configuration on Main and Los Angeles Streets (one track on each roadway) to Temple Street. Then it would head east on Temple Street, realign into a dual track configuration east of Los Angeles Street, and join the Metro Gold Line just north of the Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that would traverse the Regional Connector, an automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts.

There are two options for the configuration on Flower Street. For Option A, trains would transition to underground tracks after crossing 3rd Street and continue to a new underground station just south of 5th Street, then proceed to the 7th Street/Metro Center Station and arrive at the existing Metro Blue Line platform. For Option B, trains would arrive at an at-grade station after crossing 3rd Street, then transition to underground tracks near 4th Street to reach the existing Metro Blue Line platform at 7th Street/Metro Center station. In total, the At-Grade Emphasis LRT Alternative would add 1.8 miles of new double track to the light rail system.

In addition to the Option A and Option B Station configurations, other station locations would include a station adjacent to Bunker Hill, south of 2nd Street and Hope Street, and a split station using Main and Los Angeles Streets between 1st and Temple Streets.

Underground Emphasis LRT Alternative: From the 7th Street/Metro Center Station, this alternative would extend north along Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with new underground stations to provide access to Bunker Hill and to the area between Los Angeles Street and Broadway. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

PROBABLE ENVIRONMENTAL EFFECTS: The purpose of this EIS/EIR process is to study, in a public setting, the effects of the proposed project and its alternatives on the physical,

human, and natural environment. The FTA and Metro will evaluate all significant environmental, social, and economic impacts of the construction and operation of the proposed project. Impact areas to be addressed include: transportation, land use, zoning and economic development, secondary development, land acquisition, displacements and relocations, cultural resources (including historical, archaeological, and paleontological resources), parklands/recreational facilities, neighborhood compatibility and environmental justice, visual and aesthetic impacts, natural resources (including air quality, noise and vibration, wetlands, water resources, geology/soils, and hazardous materials), energy use, safety and security, wildlife, and ecosystems. Measures to avoid, minimize, and mitigate adverse impacts will be identified and evaluated.

SCOPING MEETINGS: Public scoping meetings to accept comments on the scope of the EIS/EIR will be held on the following dates: 1) Monday, March 30, 2009; 4:30 p.m. to 6 p.m.; at the University of Southern California (USC), Alumni Room, Davidson Conference Center, 3415 South Figueroa Street, Los Angeles, CA 90007; 2) Tuesday, March 31, 2009; 6:30 p.m. to 8 p.m.; at the Lake Avenue Church, 393 North Lake Avenue, Pasadena, CA, 91101; 3) Wednesday, April 1, 2009; 6:30 p.m. to 8 p.m.; at the Japanese American National Museum (JANM), 369 East 1st Street, Los Angeles, CA 90012; and 4) Thursday, April 2, 2009; Noon to 1:30 p.m.; at the Los Angeles Central Library, Board Room, 630 West 5th Street, Los Angeles, CA 90071. The project's purpose and need and the description of alternatives for the proposed project will be presented at these meetings. The buildings used for the scoping meetings are accessible to persons with disabilities. Any individual who requires special assistance, such as a translator or sign language interpreter, to participate in the scoping meeting should contact Ms. Ann Kerman, Community Relations Manager, Metro, at 213-922-7671, or kermana@metro.net.

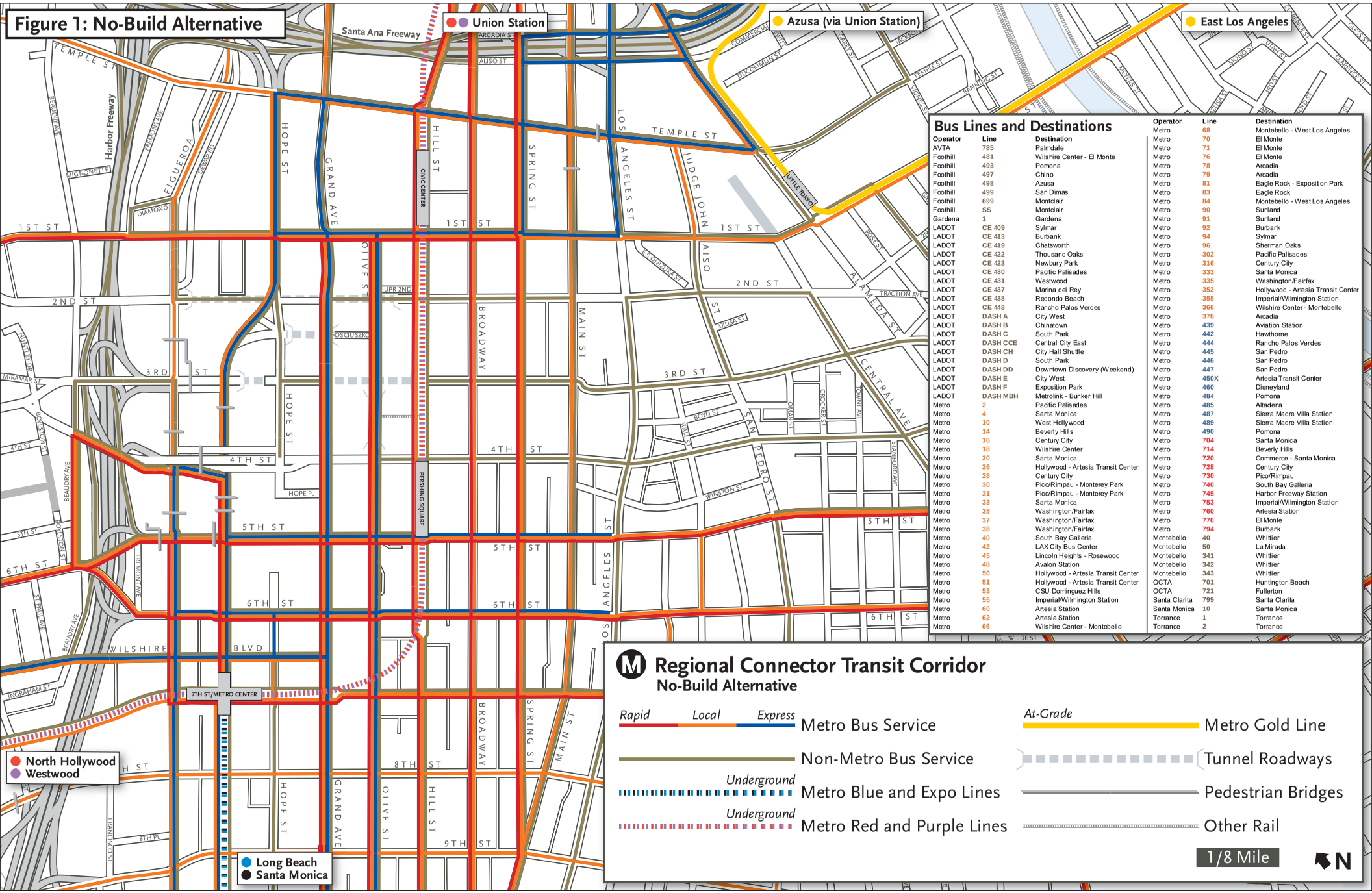
Scoping materials will be available at the meetings and on the Metro website (www.metro.net/regionalconnector). Paper copies of the scoping materials may also be obtained from Ms. Ann Kerman, Community Relations Manager, Metro, at 213-922-7671, or kermana@metro.net. An interagency scoping meeting will be held on Thursday, March 26 at 1:30 p.m. at Metro, in the Gateway Plaza Room, One Gateway Plaza, Los Angeles, CA 90012. Representatives of Native American tribal governments and of all Federal, State, regional and local agencies that may have an interest in any aspect of the project will be invited to be participating or cooperating agencies, as appropriate.

COMMENT DUE DATE: Written comments on the scope of the EIS/EIR, including the purpose and need, the alternatives to be considered, the impacts to be evaluated, and the methodologies to be used in the evaluation should be sent to Metro on or before May 11, 2009 at the address below.

ADDRESSES: Written comments should be sent to Ms. Dolores Roybal Saltarelli, AICP, Project Manager, Los Angeles County Metropolitan Transportation Authority, One Gateway Plaza, Los Angeles, CA 90012, phone 213–922–3024, or e-mail roybald@metro.net. The locations of the scoping meetings are provided above, under SCOPING MEETINGS.

FOR FURTHER INFORMATION CONTACT: Ray Tellis, Team Leader, Los Angeles Metropolitan Office, Federal Transit Administration, 888 South Figueroa Street, Suite 1850, Los Angeles, CA 90017, phone 213-202-3950, e-mail ray.tellis@dot.gov.

Figure 1: No-Build Alternative



Bus Lines and Destinations

Operator	Line	Destination
AVTA	785	Palmdale
Foothill	481	Wilshire Center - El Monte
Foothill	493	Pomona
Foothill	497	Chino
Foothill	498	Azusa
Foothill	499	San Dimas
Foothill	699	Montclair
Foothill	SS	Montclair
Gardena	1	Gardena
LADOT	CE 409	Sylmar
LADOT	CE 413	Burbank
LADOT	CE 419	Chatsworth
LADOT	CE 422	Thousand Oaks
LADOT	CE 423	Newbury Park
LADOT	CE 430	Pacific Palisades
LADOT	CE 431	Westwood
LADOT	CE 437	Marina del Rey
LADOT	CE 438	Redondo Beach
LADOT	CE 448	Rancho Palos Verdes
LADOT	DASH A	City West
LADOT	DASH B	Chinatown
LADOT	DASH C	South Park
LADOT	DASH CCE	Central City East
LADOT	DASH CH	City Hall Shuttle
LADOT	DASH D	South Park
LADOT	DASH DD	Downtown Discovery (Weekend)
LADOT	DASH E	City West
LADOT	DASH F	Exposition Park
LADOT	DASH MBH	Metrolink - Bunker Hill
Metro	2	Pacific Palisades
Metro	4	Santa Monica
Metro	10	West Hollywood
Metro	14	Beverly Hills
Metro	16	Century City
Metro	18	Wilshire Center
Metro	20	Santa Monica
Metro	26	Hollywood - Artesia Transit Center
Metro	28	Century City
Metro	30	Pico/Rimpau - Monterey Park
Metro	31	Pico/Rimpau - Monterey Park
Metro	33	Santa Monica
Metro	35	Washington/Fairfax
Metro	37	Washington/Fairfax
Metro	38	Washington/Fairfax
Metro	40	South Bay Galleria
Metro	42	LAX City Bus Center
Metro	45	Lincoln Heights - Rosewood
Metro	48	Avalon Station
Metro	50	Hollywood - Artesia Transit Center
Metro	51	Hollywood - Artesia Transit Center
Metro	53	CSU Dominguez Hills
Metro	55	Imperial/Wilmington Station
Metro	60	Artesia Station
Metro	62	Artesia Station
Metro	66	Wilshire Center - Montebello
Metro	68	Montebello - West Los Angeles
Metro	70	El Monte
Metro	71	El Monte
Metro	76	El Monte
Metro	78	Arcadia
Metro	79	Arcadia
Metro	81	Eagle Rock - Exposition Park
Metro	83	Eagle Rock
Metro	84	Montebello - West Los Angeles
Metro	90	Sunland
Metro	91	Sunland
Metro	92	Burbank
Metro	94	Sylmar
Metro	96	Sherman Oaks
Metro	302	Pacific Palisades
Metro	316	Century City
Metro	333	Santa Monica
Metro	335	Washington/Fairfax
Metro	352	Hollywood - Artesia Transit Center
Metro	355	Imperial/Wilmington Station
Metro	366	Wilshire Center - Montebello
Metro	378	Arcadia
Metro	439	Aviation Station
Metro	442	Hawthorne
Metro	444	Rancho Palos Verdes
Metro	445	San Pedro
Metro	446	San Pedro
Metro	447	San Pedro
Metro	450X	Artesia Transit Center
Metro	460	Disneyland
Metro	484	Pomona
Metro	485	Altadena
Metro	487	Sierra Madre Villa Station
Metro	489	Sierra Madre Villa Station
Metro	490	Pomona
Metro	704	Santa Monica
Metro	714	Beverly Hills
Metro	720	Commerce - Santa Monica
Metro	728	Century City
Metro	730	Pico/Rimpau
Metro	740	South Bay Galleria
Metro	745	Harbor Freeway Station
Metro	753	Imperial/Wilmington Station
Metro	760	Artesia Station
Metro	770	El Monte
Metro	794	Burbank
Montebello	40	Whittier
Montebello	50	La Mirada
Montebello	341	Whittier
Montebello	342	Whittier
Montebello	343	Whittier
OCTA	701	Huntington Beach
OCTA	721	Fullerton
Santa Clarita	799	Santa Clarita
Santa Monica	10	Santa Monica
Torrance	1	Torrance
Torrance	2	Torrance

Regional Connector Transit Corridor
No-Build Alternative

Rapid / Local / Express — Metro Bus Service

Non-Metro Bus Service

Underground — Metro Blue and Expo Lines

Underground — Metro Red and Purple Lines

At-Grade — Metro Gold Line

Tunnel Roadways

Pedestrian Bridges

Other Rail

1/8 Mile

N

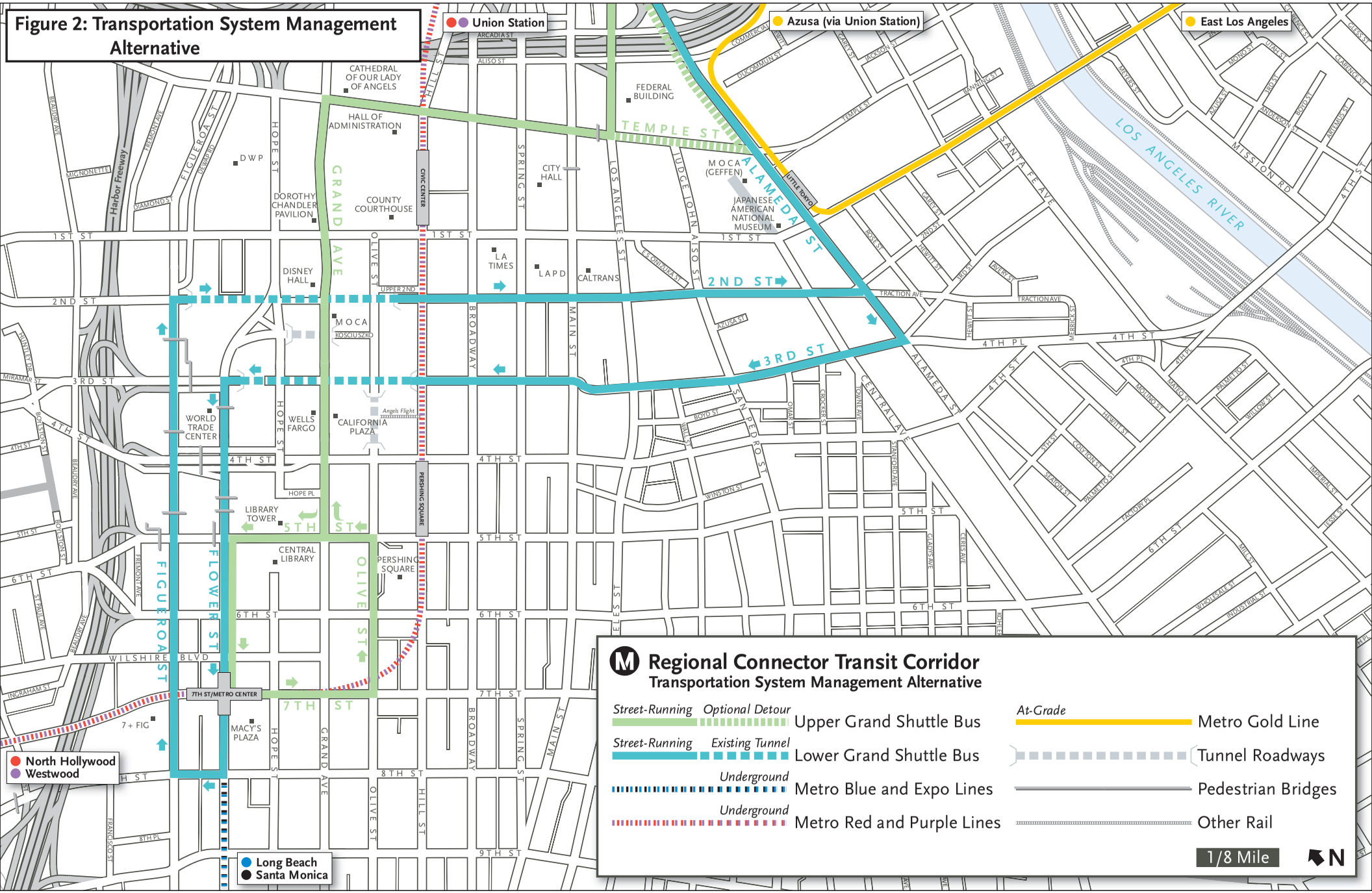


Figure 2: Transportation System Management Alternative
Union Station
Azusa (via Union Station)
East Los Angeles
North Hollywood
Westwood
Long Beach
Santa Monica
Regional Connector Transit Corridor
Transportation System Management Alternative
Street-Running
Optional Detour
Upper Grand Shuttle Bus
Street-Running
Existing Tunnel
Lower Grand Shuttle Bus
Underground
Metro Blue and Expo Lines
Underground
Metro Red and Purple Lines
At-Grade
Metro Gold Line
Tunnel Roadways
Pedestrian Bridges
Other Rail
1/8 Mile
N
TEMPLE ST
ALAMEDA ST
2ND ST
3RD ST
4TH ST
5TH ST
6TH ST
7TH ST
8TH ST
9TH ST
GRAND AVE
HOPE ST
OLIVE ST
FLOWER ST
FIGUEROA ST
HILL ST
SPRING ST
MAIN ST
BROADWAY
LOS ANGELES ST
1ST ST
WILSHIRE BLVD
7TH ST/METRO CENTER
PERSHING SQUARE
CIVIC CENTER
CATHEDRAL OF OUR LADY OF ANGELS
HALL OF ADMINISTRATION
FEDERAL BUILDING
CITY HALL
COUNTY COURTHOUSE
DOROTHY CHANDLER PAVILION
DWP
DISNEY HALL
LA TIMES
LAPD
CALTRANS
MOCA
MOCA (GEFFEN)
JAPANESE AMERICAN NATIONAL MUSEUM
LITTLE TOKYO
WORLD TRADE CENTER
WELLS FARGO
CALIFORNIA PLAZA
Angels Flight
LIBRARY TOWER
CENTRAL LIBRARY
MACY'S PLAZA
7 + FIG
LOS ANGELES RIVER
Harbor Freeway

Figure 3: At-Grade Emphasis LRT Alternative Alignment and Configuration

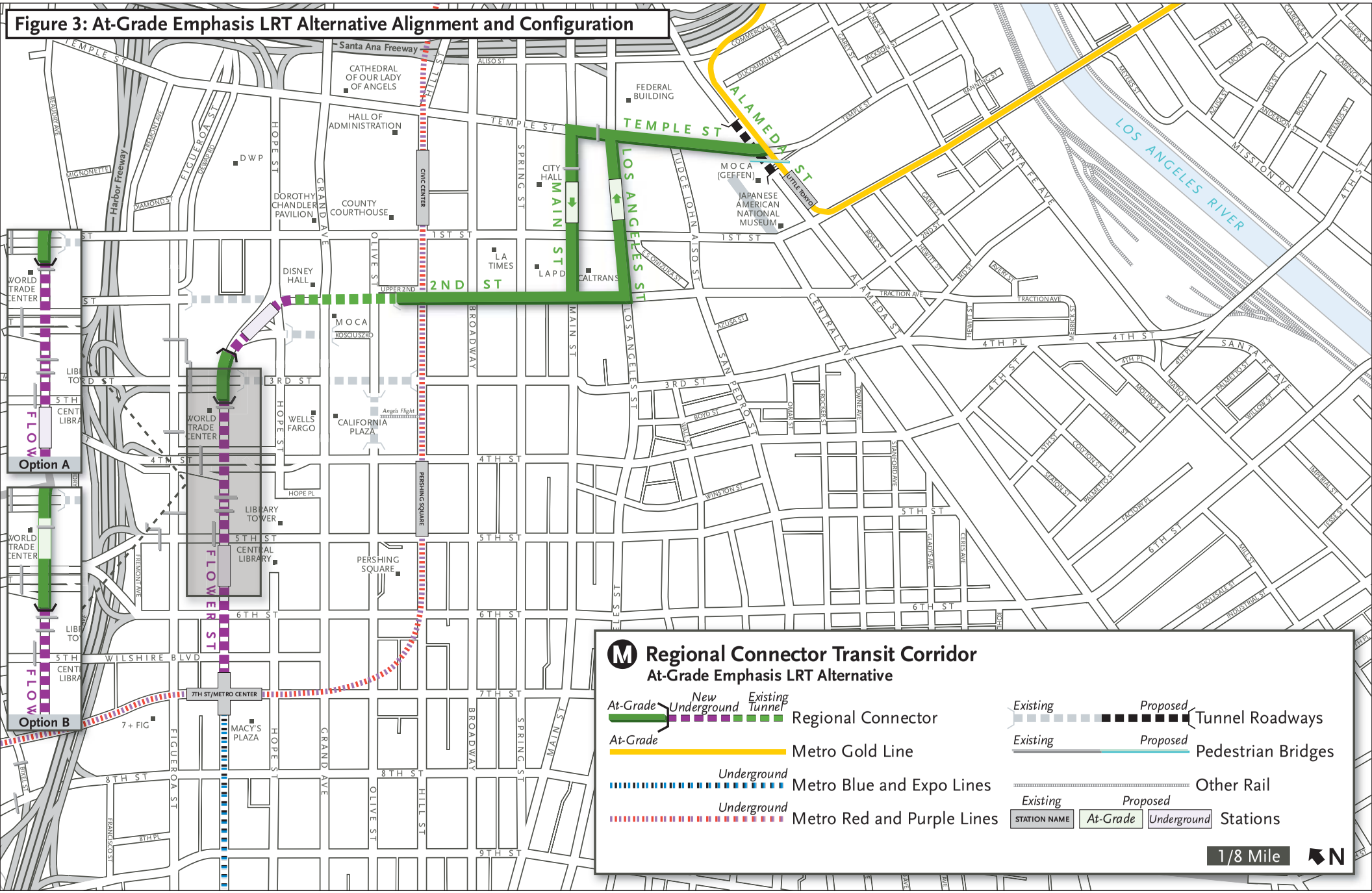
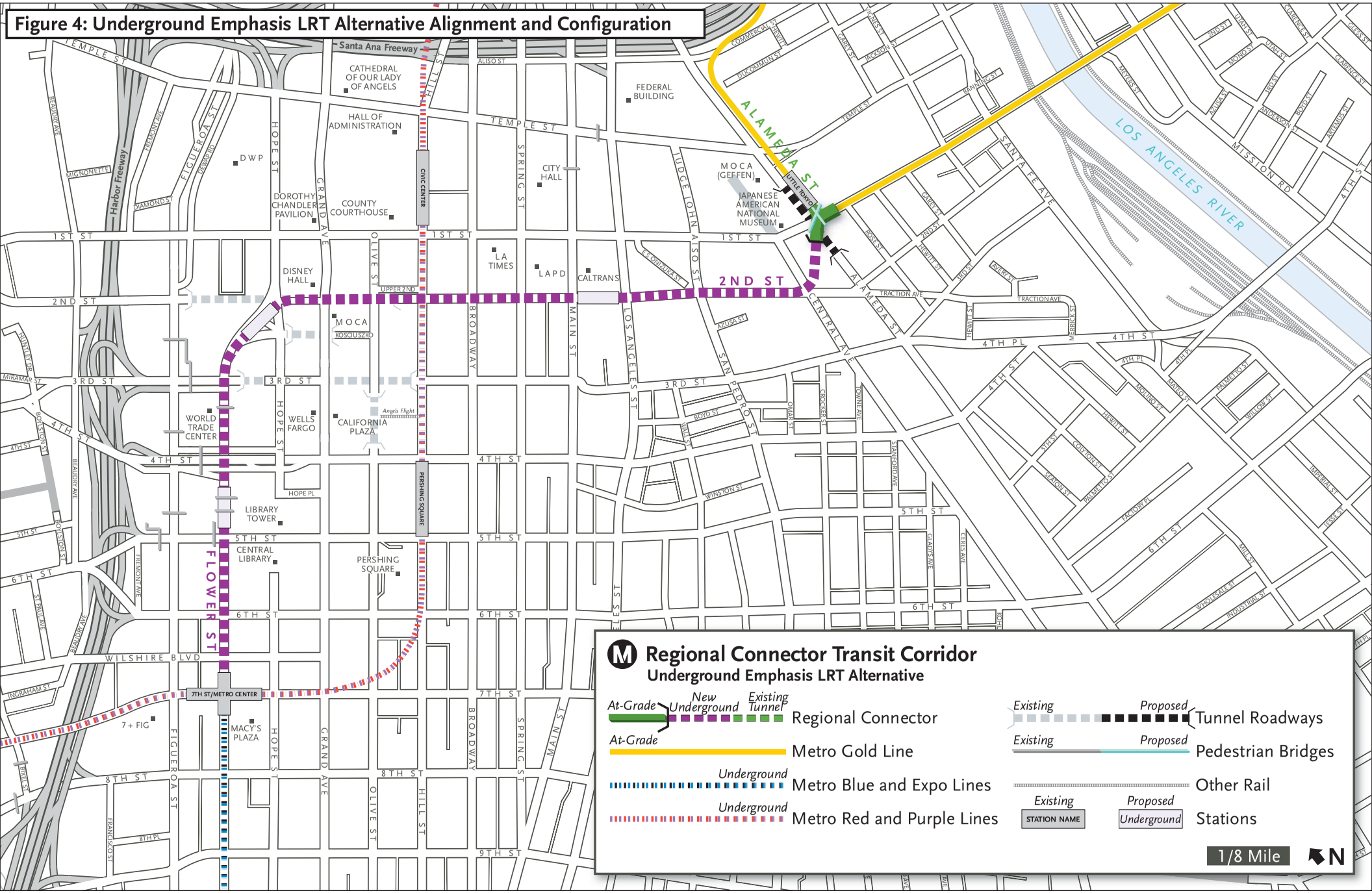


Figure 4: Underground Emphasis LRT Alternative Alignment and Configuration



Appendix E

Newspaper Publications of Legal Notices

This information is available from Metro upon request.
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Appendix F

Agency List

This information is available from Metro upon request.
This appendix has been intentionally left blank.

Appendix G
Participating Agencies

Participating Agencies				
University of California, Los Angeles	555 Westwood Plaza, Suite 102	Los Angeles	CA	90095
City of Los Angeles Department of Transportation, Transit Corridor Development	100 S. Main St., 10th Fl.	Los Angeles	CA	90013
City of Los Angeles Bureau of Engineering	1150 S Broadway, Ste 810	Los Angeles	CA	90015
Los Angeles County Office of Education	9301 E Imperial Hwy, Rm 109	Downey	CA	90402
California Transportation Commission	1121 N Street, MS-52	Sacramento	CA	95814
Southern California Association of Governments	818 W 7th St	Los Angeles	CA	90017
California Department of Transportation, District 7; Division of Environmental Planning	100 S. Main St.	Los Angeles	CA	90013
City of Culver City Redevelopment Agency	9771 Culver Blvd	Culver City	CA	90232
City of Pasadena, Transportation	222 E. Walnut St, Suite 210	Pasadena	CA	91101
California State University, Los Angeles	5151 State University Drive	Los Angeles	CA	90032
California High-Speed Rail Authority	925 L St, Ste 1425	Sacramento	CA	95814
US Department of Energy	1000 Independence Ave SW	Washington	DC	20585
US Department of Health and Human Services	90 7th St, Ste 5-100	San Francisco	CA	94103
US Department of Housing and Urban Development	611 W 6th St, Ste 800	Los Angeles	CA	90017
US Department of the Interior, Office of Environmental Policy	1849 C St NW	Washington	DC	20240
US Environmental Protection Agency	75 Hawthorne Street	San Francisco	CA	94105
Federal Emergency Management Agency	1111 Broadway, Ste 1200	Oakland	CA	94607
Federal Railroad Administration	801 I St, Ste 466	Sacramento	CA	95814
US Army Corps of Engineers	915 Wilshire Blvd, Ste 980	Los Angeles	CA	90017
US Fish and Wildlife Service	6010 Hidden Valley Rd, Ste 101	Carlsbad	CA	92011
Transportation Security Administration	4401 Donald Douglad Dr. #100	Long Beach	CA	90808
Ti'At Society (Gabrielino)	6515 E. Seaside Walk #C	Long Beach	CA	90803

Participating Agencies				
Gabrielino Tongva Indians of California Tribal Council Gabrielino Tongva)	P.O. Box 490	Bellflower	CA	90707
Tongva Ancestral Territorial Tribal Nation (Gabrielino Tongva)	4712 Admiralty Way, Suite 172	Marina Del Ray	CA	90292
Gabrielino/ Tongva San Gabriel Band of Mission (Gabrielino Tongva)	P.O. Box 693	San Gabriel	CA	91778
Gabrielino Tongva Nation (Gabrielino Tongva)	P.O. Box 86908	Los Angeles	CA	90086

Appendix H
Invitation Letters

Mr. ____
Title
Agency
Address
City, CA 90zip

Re: Invitation to Participate in the Environmental Review Process for the Regional Connector Transit Corridor Project

Dear Mr. _____:

The Federal Transit Administration (FTA), in cooperation with the Los Angeles County Metropolitan Transportation Authority (LACMTA), is initiating the preparation of an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed Regional Connector Transit Corridor Project. The Regional Connector project proposes to provide a direct link through downtown Los Angeles that connects the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Exposition Line. The corridor extends for approximately 1.8 miles between the 7th Street/Metro Center Station and the Little Tokyo/Arts District Station.

The purpose of this project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting to the light rail service lines currently in operation or in construction through downtown Los Angeles. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles. The enclosed scoping information packet provides more details including a preliminary schedule.

An Alternatives Analysis has been completed for this project and the final report may be found at http://www.metro.net/projects_studies/connector/final_alternatives_analysis_study.htm. Through the Alternatives Analysis process and with input from the public and agencies, the project area and the range of alternatives has been refined. The project area and alternatives identified in the Alternatives Analysis will be the subject of the Draft EIS/EIR.

Section 6002 of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users establishes an enhanced environmental review process for certain FTA projects, increasing the transparency of the process, as well as opportunities for participation. The requirements of Section 6002 apply to the project that is the subject of this letter.

As part of the environmental review process for this project, the lead agencies must identify, as early as practicable, any other Federal and non-Federal agencies that may have an interest in

the project, and invite such agencies to become participating agencies in the environmental review process.[1]

Your agency has been identified preliminarily as one that may have an interest in this project, because of the sensitive adjacent land uses, and facilities located in many parts of this corridor; accordingly, you are being extended this invitation to become actively involved as a participating agency in the environmental review process for the project.

As a participating agency, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered for the project. These opportunities will build on the early participation opportunities that were provided during the Alternatives Analysis process. In addition, you will be asked to:

- Provide input on the impact assessment methodologies and level of detail in your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

Your agency does not have to accept this invitation. If, however, you elect not to become a participating agency, you must decline this invitation in writing, indicating that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project. The declination may be transmitted electronically to Mr. Ray Tellis of our Los Angeles Metropolitan Office at ray.tellis@dot.gov; please include the title of the official responding. In order to give your agency adequate opportunity to weigh the relevance of your participation in this environmental review process, written response to this invitation are not due until after the interagency scoping meeting. The interagency scoping meeting will be held on the following date and location:

- Thursday, March 26 at 1:30 p.m. at LACMTA, in the Gateway Plaza Room, One Gateway Plaza, Los Angeles, CA 90012.

You or your delegate is invited to represent your agency at this meeting. Your agency will be treated as participating agency unless your written response declining such designation as outlined above is transmitted not later than April 13, 2009.

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[1] Designation as a "participation agency" does not imply that the participating agency supports the proposed project or has any jurisdiction over, or special expertise concerning the proposed project or its potential impacts. A "participating agency" differs from a "cooperating agency," which is defined in regulations implementing the National Environmental Policy Act as "any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment." 40 C.F.R. § 1508.5.

We are providing scoping information materials with this letter that include description of the project area and proposed alternatives. The Scoping information is available at http://www.metro.net/projects_studies/connector. Additional information will be forthcoming during the scoping process. If you have questions regarding this invitation, please contact Ms. Dolores Roybal Saltarelli, AICP, Project Manager, Los Angeles County Metropolitan Transportation Authority, One Gateway Plaza, Los Angeles, CA 90012, email address roybald@metro.net.

Sincerely,

Roger Snoble

LACMTA CEO

Enclosure (1):

1. Scoping Information Packet/Schedule

cc: Federal Transit Administration

Mr. ____
Title
Agency
Address
City, CA 90zip

Re: Invitation to Participate in the Environmental Review Process for the Regional Connector Transit Corridor Project

Dear Mr. _____:

The Federal Transit Administration (FTA), in cooperation with the Los Angeles County Metropolitan Transportation Authority (LACMTA), is initiating the preparation of an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed Regional Connector Transit Corridor Project. The Regional Connector project proposes to provide a direct link through downtown Los Angeles that connects the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Exposition Line. The corridor extends for approximately 1.8 miles between the 7th Street/Metro Center Station and the Little Tokyo/Arts District Station.

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- Provide input on the impact assessment methodologies and level of detail in your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

If you elect to become a participating agency, you must accept this invitation in writing. The acceptance may be transmitted electronically to Ms. Dolores Roybal Saltarelli of LACMTA at roybald@metro.net; please include the title of the official responding. In order to give your agency adequate opportunity to weigh the relevance of your participation in this environmental review process, written responses to this invitation are not due until after the interagency scoping meeting. The interagency scoping meeting will be held on the following date and location:

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You or your delegate is invited to represent your agency at this meeting. Written responses accepting designation as participating agencies should be transmitted not later than April 13, 2009.

---

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Sincerely,

Roger Snoble

LACMTA CEO

Enclosure (1):

1. Scoping Information Packet/Schedule

cc: Federal Transit Administration

Appendix I

Agency Sign In Sheet

This information is available from Metro upon request.
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Appendix J
Agency Scoping Transcript

BEFORE THE

METRO REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Agency Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Thursday, March 26, 2009

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
B1346NC0

BEFORE THE

METRO REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Agency Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS, taken at One Gateway Plaza, Gateway Plaza Room, Los Angeles, California, commencing at 1:30 p.m., on Thursday, March 26, 2009, heard before the METRO REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM, reported by MARCENA M. MUNGUIA, CSR No. 10420, a Certified Shorthand Reporter in and for the State of California.

APPEARANCES:

FACILITATOR:	DOLORES ROYBAL SALTARELLI Transportation Planning Manager, Metro

I N D E X

PAGE

Question/Answer Session 5

E X H I B I T S

(None)

Los Angeles, California, Thursday, March 26, 2009

1:30 p.m.

QUESTION/ANSWER SESSION

MR. GIBBS: With regard to the Little Tokyo Arts District station, so the above-ground is serving one direction and the below-the-ground is serving the other direction? There's --

MS. SALTARELLI: Right.

MR. GIBBS: -- no alternative that ends up serving both?

MS. SALTARELLI: Correct.

MR. GIBBS: And that's what the engineering work is so far? So that's an alternative that is impossible; correct?

MS. SALTARELLI: With that, we're open to questions, comments.

MR. TRAN: On the alternatives that you have here, do any of these alignments fall under MTA right-away or is this going to be on the City right-away?

MS. SALTARELLI: It's going to be on the city right-away.

MR. TRAN: Completely 100 percent; is that correct?

MR. BLAIR: City and private.

MR. TRAN: City and private?

MR. SOSA: That Metro has so far.

MR. TRAN: Is there any way we can get a couple of slides, a copy of your slide like this sheet (indicating) and the schedule one, make that available?

MS. SALTARELLI: If you signed in, we'll be able to send you the complete PowerPoint.

MR. TRAN: Curtis Tran.

MR. GIBBS: Curt Gibbs, CRA/LA's Downtown Region.

With regard to each of those alternatives, as for presenting at the scoping meetings, would you be able to show what the current anticipated cost of each one might be and what the currently anticipated funding sources might be for each of those alternatives?

MR. SOSA: During the environmental analysis, as we go through the next year and a half, that might change dramatically and the idea about presenting the scoping for what we know now for certain is so you can comment on something that's for certain. The costs may fluctuate and the funding sources may fluctuate.

So at this point, we're not prepared to show those at the scoping meeting, public scoping meetings.

We have shown them and presented them at the

Board meeting in January in the A.A. phase. So it'll change over time as we continue the analysis and during

the community meetings, we'll update the community on those particular aspects.

MR. JENKINS: This is Tom Jenkins.

They are available on the Alternatives Analysis Report, which is on the website.

MR. GIBBS: Right, but the numbers keep changing and the funding sources keep changing.

MR. BLAIR: There are no environmental consequences to our funding source.

MR. GIBBS: That's why I asked for an informational item.

MR. BLAIR: But we're going to keep working funding sources, but they do change; and especially since I think they are probably changing monthly and we're going to creatively keep giving you ones, but the ones we gave you

last week probably won't be the ones next week. We'll make it available as part of our normal process, but I don't know if it'll really be germane to this document.

MR. GIBBS: I just wanted --

MR. BLAIR: Curt, I will give you whatever you want, as you know.

MR. GIBBS: I appreciate it. Thank you.

MR. ALLEN: Shane Allen, L.A. Fire.

Is this project -- has this been approved? Is this funded? I mean --

MS. SALTARELLI: No. This is the first -- this is the second phase of the project development process and it's something that we need to do in order to select a project that we will construct and that we will fund.

MR. ALLEN: Well, where does it sit in the queue as far as there's a bunch of different projects that

everyone is talking about, Subway to the Sea, Phase Two Expo, Gold Line expansion, Downtown connector. What are its chances?

MS. SALTARELLI: This project is pretty dynamic in the fact that it closes a two-mile gap in our light-rail system and it's able to reduce transfers and really make a big difference for our system and transit riders.

Operationally, there's a great many benefits which I didn't mention, but we'll be able to connect to various yards that we can't do currently. It really addresses our need for expansion that will -- in terms of population and growth that we're going to be experiencing.

As I mentioned -- I might not have said that we're doing this in connection with the FTA and we have to go through what they call a New Starts Program. We're looking at them to be a partner to potentially fund 50 percent of this project.

Both of these alternatives, the at-grade and

underground, really fared well under their cost-effectiveness criteria. They have a threshold $25 and both of these are under that. So in terms of a project, it does a lot, considering that it's pretty concise and it's less than two miles.

MR. ALLEN: I think you left out probably the most important part of this project, is that it relieves the Seventh and Metro as being a permanent station that can't handle the population that it's been getting, but -- and how are they going to decide?

MR. BLAIR: We actually want you guys to write that part up, "This is definitely an essential thing for safety, fire-light safety, exiting and capacity." So we'll be asking you to speak loudly on that one.

MR. ALLEN: Absolutely. Where and how do you want it?

MR. BLAIR: We'll work with you to make sure it gets done.

MR. ALLEN: Okay.

MR. BLAIR: So you'd like it sooner than later? Is that what you're saying?

MR. ALLEN: Absolutely.

MS. SALTARELLI: And just to add, the regional connector was identified as one of the Measure R projects --

MR. ALLEN: Oh, good.

MS. SALTARELLI: -- so it is there.

MR. BLAIR: And that's in funding years, the early funding years, but there is a practical thing about Federal funding, and Charlene is here, so she's going to offer that. It certainly is a long-reach plan to be proposed. It's in the early stages, as funded by Measure R.

Sorry. I get excited.

MS. SALTARELLI: Comments?

MR. GREIN: Needless to say, there's large differences between at-grade and below grade.

MS. SALTARELLI: Excuse me. Can you say your name for the record.

MR. GREIN: I'm George Grein from the Sheriff's Department.

I do have a question having to do with if you're deciding to go with the at-grade, which is obviously the cheaper of the two solutions. What are you considering as far as at the grid crossings, for the purposes of making sure the trains get where they need to go on time without having any conflict?

Are there going to be -- is there something built into the project where there will be blockades, or is it going to be timed lights or how are you going to be

dealing with that potential, since they're going to be crossing at grade?

MS. SALTARELLI: Well, it's the at-grade alarm that is going to be street running and we'll allow Ray to

expand on that.

MR. SOSA: Yeah. We're going to look at everything we can do to make street running safe, of course, as well as make it as much a reliable system as you can make it for an at-grade system. Timing of the lights is part of that.

We work with the CPUC and Fire Department, Police Department on how we can accomplish that. It's too early to say that, you know, we're putting in grades AA. We have at-grade running segments where we don't utilize gates and we don't currently have that in the design, but throughout the entire process we'll have to go through and confirm that that's the solution to --

MR. GREIN: And that's one of the considerations, because the Eastside extension is going to go revenue and then they're going to put the gates in --

MR. SOSA: That hasn't been decided yet.

MR. GREIN: -- and I hope that something is learned from that, so that we can make a decision so something is done at the right timing.

MR. SOSA: Yeah. There are currently-operating

systems in L.A. County. The Eastside is opening right now, but the Blue Line runs their liner segments without gates as well, so they're -- and around the country, of course, we have segments without train gates. So there is a history of being able to run a light-rail train safely in urban areas.

MR. BLAIR: Which have led to the Environmental Impact.

MR. SOSA: Yeah.

MS. SALTARELLI: Yes.

MR. GIBBS: Curt Gibbs from CRA. With regard to the Little Tokyo Arts District station, those transfers involving one underground and the other aboveground, would the EIR address how people would end up having to transfer as it would be attempting to either come from the Eastside, because they can't transfer, as to how people would actually behave so we understand what Metro is expecting? Will they include that in the analysis?

MR. SOSA: I'm sorry. What was the question?

MS. SALTARELLI: Our operational plan --

MR. JENKINS: Tom Jenkins.

We will know what the number of transfers are.

MR. GIBBS: But the question is --

MR. JENKINS: We will address that.

MR. GIBBS: -- the behavior of people, how do -- you

know, how will people -- will people go all the way to Union Station and make the transfer or switch there, or will they go -- are they going to go, let's say, to the station on Second and Main and make the transfer there and back?

I'm just curious what the thought process is, because it's -- you know, this is a real trade-off because you can't address it from an engineering fashion and people are incompetent, so you're going to have to predict people's behavior. I mean, I think the CRA went

on record, We're real concerned about that station not being both ways. So --

MR. JENKINS: Yeah.

MS. SALTARELLI: In the document itself, we'll be addressing from an operational plan for each of the alternatives to say that -- we'll go into detail about exactly where you need to transfer. We are going to go into that level of detail.

MR. SOSA: Yeah. Yes. Absolutely.

MR. JENKINS: Yes.

MS. SALTARELLI: So the public will have, you know, full disclosure as to how they're going to operate.

MR. POOSTI: Ali Poosti, Bureau of Sanitation.

I'd like to know what the depth is underground that we'll be running.

MS. SALTARELLI: Well, with some stations, the

question is how far down some of the stations will be. For Bunker Hill, it will be quite deep. We're looking at about 130 feet down. Some -- for the underground, we'll have to be underneath the Red Line. So certain areas are going to be quite deep.

MR. ROY: It's on average about 60 to 70 feet average of the tunnel, but the stations will be -- the stations will be higher.

MR. JENKINS: 40 to 50.

MR. ROY: 40 feet.

THE REPORTER: I'm sorry. What is your name, sir?

MR. ROY: Gyrish Roy from Metro.

MR. GIBBS: Just to follow up -- Curt Gibbs with CRA -- with regard to that Bunker Hill station, is it -- is it -- can it be in the EIR as to an exact location of that station?

MS. SALTARELLI: Yes.

MR. GIBBS: So is it going to be underneath CRA's properties?

MS. SALTARELLI: No.

MR. ALLEN: Shane Allen, L.A. Fire.

I have one more question on the intersection. How are -- what's the proposed method to regulate that

intersection where you're going to have the two alignments meet?

MS. SALTARELLI: At First and Alameda?

MR. SOSA: For the underground?

MR. ALLEN: Yes.

MS. SALTARELLI: Sorry. Let me just get that up there. Somehow I bypassed it.

MR. SOSA: Do you want me to answer?

MS. SALTARELLI: Sure.

MR. SOSA: We have a concept that we talked about, but we're going to have to work with LADOT and Fire and everybody on that particular intersection because we have a lot of activity. That's the reason why we included the underpass at Adams.

We'll still have to maintain a frontage road for the subroid development that's on the east side of Alameda, and then there's also a road, right now in terms

of our concept, next to the Japanese American National Museum and because they have an entrance and exit as well.

So far, our design meets the standards, the typical standards, but definitely we have to go through the process of working with everybody during this EIR, the draft of the report. And in addition to that, we have the pedestrian bridge as well. We may restrict pedestrians to move in certain areas across the street.

You know, all that will be detailed after hearing your comments and then working with the industry.

MR. ALLEN: Yeah, because there's a lot right next -- you know, right next to the station there that you could bring a portal up out of the ground and not affect any of that and then just tie it into the bridge going up.

MR. SOSA: Which lot is that?

MR. ALLEN: Just east of the station there.

MR. SOSA: The northeast station? That's the private-company development which has been very active in trying to get development there for the community, and last year the City awarded the development of that site and we're coordinating with them so that there are opportunities to do something like that. But right now we've designed it so that we're not dependent upon the site.

There are issues with doing that which we looked at during the A.A. process as well. There are traffic issues, because your trains have to get into that property to be able to get underneath First and Alameda, which makes that property very difficult to utilize, from the development standpoint.

In addition, we'd have to remove the Little Tokyo Arts District station if we were to do that. So then the community -- when we presented that to the

community as well, they were not in favor of having that station removed.

MR. ALLEN: Well, it would be two separate alignments, wouldn't it?

MR. SOSA: If we had an opportunity to use the property, there may be other ways to go about it, but we're willing to work with them if they're able to allow us to do that.

MR. GREIN: George Grein of the Sheriff's.

What's the thought process you were mentioning about somebody could ride all the way from one point to another without having to get another ticket? How's that going to work? Is that a terminal at First and Alameda or would the rider continue on on the Gold Line extension?

MS. SALTARELLI: Uh-huh.

MR. GREIN: So, in other words, you're going to have the line coming out of Union Station and the line coming through the Downtown connector coming together at that point and the same thing at Seventh and Metro?

MS. SALTARELLI: Possibly. Well, keep -- the initial operating plan is you would be coming from Pasadena,

leaving Union Station -- this would be for the underground alignment -- going to the Little Tokyo Arts District and then going through Downtown; and depending

on which train you're on, you would either go down to Pasadena or -- sorry -- to Long Beach. And then coming back up, you would again have to be on the right train and you would either be going back up to Pasadena or then you would be going to the Eastside.

MR. GREIN: So the existing Gold Line extension, Gold Line -- sorry. The existing Gold Line would be the line you're talking about, and that becomes -- it goes through Downtown, and the East L.A. is a separate line coming in, both using that one short distance?

MS. SALTARELLI: Yes.

MR. GIBBS: You know, that's always been confusing. When you're doing your scoping meetings, maybe you should

just do a slide that really lays it out so people understand when they're coming from Long Beach that these are their choices as to which direction you go, depending on the alternative, so it's really laid out very clearly for everyone, 'cause it's hard to keep track of it.

MR. JENKINS: Yeah. I think if it provides a lot of flexibility -- Tom Jenkins -- a lot of flexibility, but you have to explain how people would use it on that. But, I mean, you could go -- as an example, we're talking about if you were in Downtown Pasadena.

Let's say you got onto the Pasadena line, the Gold Line, and you wanted to go to L.A. Live as an

example. That would be, in essence, one seat. You'd sit down and you'd get off at Pico. Right now, to do that, you would have to transfer twice and that gets to what we've talked about in one of the benefits, is reducing our problems at this station and at Seventh and Metro

with the transfer issues.

So -- and right now, if you pay cash fare, that would cost you $3.75 to do that under the current fare structure. Under this, it would be $1.25 under the current fare structure, but there's a lot of benefits to the rider not only in time but costs, and there's operational efficiencies in there because of reducing our issues at Union Station and Seventh and Metro, not just moving people up and down the corridors to get them back and forth to trains.

MR. GIBBS: So would you have time to do another Board like that, a summary board? I think it really helps people understand what each of these alternatives means, especially for those that actually ride the rail system. MR. BLAIR: You know, the San Francisco system has a series of colored lines that overlap each other and, Curt, if we're not explaining it clear, we've got to do it better. So the answer is we'll work on it on this site.

MR. JENKINS: This way, the basic operating plan is

if you lived on the Eastside in Boyle Heights and you wanted to, say, go to USC, if you were to go to school there or L.A. Trade or more to USC, that would be a single ride across Downtown on that, clear to the USC station, or go clear to Santa Monica when Expo phase two is up.

And even from Pasadena, it would only be one transfer from that. You could come from Pasadena and come down. You might -- and you could transfer at any of those stations in Downtown. You don't have to transfer at Seventh and Metro or Union Station. You could transfer at the one at Bunker Hill and catch the train out to Santa Monica. So you have to have -- that's where you were talking about where you might transfer. There's many opportunities to do the transfer to sort of spread the grief of the transfer, and some might be easier than others, but in Downtown those trains would each run five-minute headways. Combined, you would have two-and-a-half -- every two-and-a-half minutes, you'd see

a train coming through Downtown.

MR. GREIN: Just a clarification. George Grein again. If you're coming from the Eastside from the soon-to-be-built Gold Line extension, if you're coming from Boyle Heights and you want to go to SC, it's still going to be a connection at First and Alameda; correct?

MS. SALTARELLI: No.

MR. JENKINS: No. You'd go straight through.

MR. GREIN: So we've got some trains --

MR. JENKINS: If you got on the train at Boyle Heights, and the concept that we had laid out on the first or second slide there, the east-west line, you would get on that train and the next time you want to get off of it would be at SC.

MR. GREIN: So what you're saying is that, what, every other train would be doing that and the other half --

MR. JENKINS: No.

MR. GREIN: -- is going to be going to Union Station?

MR. JENKINS: No. In this operation --

MR. GREIN: I'm confused.

MR. JENKINS: -- you would not be able to go to Union Station, coming from the Eastside, in this concept.

MR. BLAIR: I think, George -- if I can, whatever we're operating today, once the original connector is in, it will operate differently.

MR. JENKINS: It will operate differently.

MR. GIBBS: That's something people don't realize.

MR. JENKINS: I know what you mean and right now --

MR. GREIN: And I'm familiar with the system and I'm confused, 'cause I don't know how they're going to do

that connection.

MR. JENKINS: If you go back -- and remembering doing

the Red Line extension to the Eastside, that's what it would be.

MR. GIBBS: You doing that, do the colors of the lines have to change?

MR. BLAIR: I think we'll have to redefine the system, but the easiest way to make this issue clear, we are going to run, based upon this environmental document, a north-to-south run and an east-to-west run. That's it. We have the options and the flexibilities of doing all kinds of things; but for practical purposes, it's Pasadena to Long Beach and it's East L.A. to the Westside, and those are the two lines. In the middle you've got four or five opportunities to change any time you want, but there's no one station you have to change at. We're going to overlap several of them.

As you mentioned, Shane, we've got some concerns now at Seventh and Metro now for transferring. This will allow us to disburse some of those populations to four or five other stations. This is a chance to do that, work through a few. But what we operate today is different than what we're going to operate once the system is in place.

The huge advantage that has been mentioned, this

is fast. Instead of 20-minute transfer times for various locations, you can sit down one time to get to your destination and save yourself anywhere from 10 to 20 minutes or so per direction. So if you're doing this every day, that's somewhere between 20 and 40 minutes transportation time saved every single day. So the whole system runs faster, it runs quicker north, south, east, west, and the operations are better.

MS. SALTARELLI: And I would like to add that this is our initial operating plan. As I mentioned earlier, we're going to have a lot of changes in the next 20 years. The regional connector closing the gap in the light-rail system gives us a lot of flexibility and we can change our operating plan based on what our needs are, so that's the beauty of this project.

Any other questions?

Well, as a conclusion -- thank you -- I'd just

like to remind everybody to please submit comments to us during the scoping period, which ends on May 11th. As I said earlier, we're going to engage you throughout this process. If you have any questions, comments, you know, outside of May 11th, please call me and, you know, we look forward to working with you during this phase of the project. Thank you.

And just to add, you know, please sign in and

we'll be sending everybody a copy of the presentation. So thank you very much.

(Proceedings concluded at 2:10 p.m.)

Appendix K
Notification Database

100 Black Men of LA
1010 Development Corporation
330 Alameda LLC
953 Associates LLC
A Range Ments Special Event Planning
ABC's 123
Access Services Inc.
Advanced Investment Group
Advanced Parking Systems
Advisory Council on Historic Preservation
AFSCME
Alameda Corridor Jobs Coalition
Aldaron: Inc.
Aldaron: Inc.
Altadena Senior Center
American Holiday Travel
American Lung Cancer Association
AMTRAK
Angelenic
Anschutz Entertainment Group
APT Parking Technologies
Architecture Tours Los Angeles
Arnie Berghoff & Associates
Artisan on Second Management Office
Asian American Architects & Eng.
Automobile Club of Southern California
Avalon Gardens
Backstage 21 / May 15
Banerjee & Associates
Bank of the West
Barker Block Management Office
Barrio Planners: Inc.
Bethesda Missionary Baptist
Beulah Baptist
Bikestation Coalition
Biscuit Company Lofts Management Office
Black Business Assocation of LA
Black Women's Forum
BNSF Railway
Bonaventure
Bradley Multipurpose Center
Breathe California of Los Angeles County
Brookfield Properties Corporation
Brotherhood Crusade
Bruins for Transit
Building LLC Binford
Building Owners and Management Association
Bunker Hill Towers Management Office
Burke, Williams, & Sorensen
Bus Riders Union
CAKCO Management
California Bank & Trust
California Coastal Commission
California Community Economic Development Association
California Endowment
California High-Speed Rail Authority
California Hospital
California League of Conservation Voters
CALPIRG/Environment California
Calstart
Cambodian American Chamber of Commerce
Cameo Woods Homeowners Association
Carpenters-Contractors Cooperation Committee
Carson Chamber of Commerce
Casa Heiwa Tenants Council
Catellus Development Corporation
Cathedral of Our Lady of the Angels
CB Richard/Ellis
Centenary Church
Center for the Study of Los Angeles
Central City Association of Los Angeles
Central City East Association
Cherrywood Ave Block Club
Chow Mark & N Trust
Christ Unity
Cinema Properties Group
Citibank
Citizens United to Save South Pasadena
City of Carson
City of Commerce
City of Commerce
City of Commerce Industrial Council
City of Commerce Municipal Bus Lines
City of Compton
City of Culver City
City of Culver City Engineering: Department of Public Works
City of Culver City: Culver City Bus
City of Culver City: Department of Public Works
City of El Monte
City of Gardena
City of Huntington Park
City of Industry
City of Long Beach
City of Long Beach: Traffic & Transportation Bureau
City of Long Beach: Transit
City of Los Angeles
City of Los Angeles: City Council: District 2
City of Los Angeles: City Council: District 5
City of Los Angeles: City Planning
City of Los Angeles: Community Development
City of Los Angeles: Community Redevelopment Agency
City of Los Angeles: Cultural Affairs
City of Los Angeles: Department of Engineering
City of Los Angeles: Department of Neighborhood Impowerment
City of Los Angeles: Department of Planning
City of Los Angeles: Department of Public Works: Bureau of Engineering: Bridge Improvement Program
City of Los Angeles: Department of Public Works: Bureau of Street Sertices
City of Los Angeles: Department of Transportation
City of Los Angeles: Department of Transportation: ATSAC
City of Los Angeles: Department of Transportation: Bike Program

City of Los Angeles: Department of Water and Power
City of Los Angeles: Emergency Preparedness
City of Los Angeles: Environmental Affairs Department
City of Los Angeles: Fire Department
City of Los Angeles: Office of Council President Eric Garcetti
City of Los Angeles: Office of Councilmember Bernard Parks
City of Los Angeles: Office of Councilmember Bill Rosendahl
City of Los Angeles: Office of Councilmember Dennis Zine
City of Los Angeles: Office of Councilmember Ed Reyes
City of Los Angeles: Office of Councilmember Greg Smith
City of Los Angeles: Office of Councilmember Herb Wesson
City of Los Angeles: Office of Councilmember Jan Perry
City of Los Angeles: Office of Councilmember Janice Hahn
City of Los Angeles: Office of Councilmember Jose Huizar
City of Los Angeles: Office of Councilmember Richard Alarcón
City of Los Angeles: Office of Councilmember Tom LaBonge
City of Los Angeles: Office of Councilmember Tony Cardenas
City of Los Angeles: Office of the Mayor
City of Los Angeles: Parks and Recreation
City of Los Angeles: Police Department
City of Los Angeles: Public Works
City of Lynwood
City of Monterey Park
City of Norwalk
City of Pasadena
City of San Marino
City of Signal Hill
City of South Gate
City of South Pasadena
City of Vernon
Civic Alliance c/o Manatt Phelps & Phillips: LLP
Coalition for Clean Air
Coalition for Clean and Safe Ports
Coalition for Humane Immigrant Rights of Los Angeles
Colfax Consulting
Communities for a Better Environment
Communities for Clean Ports
Community Health Council
Compton Chamber of Commerce
Compton Latino Chamber of Commerce
Concerned Citizens of South Central Los Angeles
Consensus Planning Group
Consensus Planning Group
Consulate General of Japan at Los Angeles
Copy Best: Inc.
Cornerstone Theater Company
CORO
County of Los Angeles Department of Public Works
County of Los Angeles Regional Planning
Crain & Associates
Crenshaw Chamber of Commerce
Crenshaw Christian Center
Crenshaw Economic Development Departmet
Culver City Chamber of Commerce
Curry Temple Community Development Corporation
Dakota Communications
Davis Christian
Debbie's Day Care
Debris Free: Inc.
Diverse Strategies
Downtown Women's Center
East Los Angeles Chamber of Commerce
East Los Angeles Remarkable Citizens' Association, Inc.
East West Development Corporation
East West Eye Institute Third Street Medical Building
East West Players
East Yard Communities for Environmental Justice
Edison
Electric Railway Historical Association
Elizabeth Peterson Group: Inc.
Emerson & Associates
Emi Yamaki: K. Shishido
Empowerment Congress Central Area Neighborhood Developmment Congress
Empowerment Congress South West Neighborhood Development Congress
Empowerment Congress West Neighborhood Development Council
Endangered Habitats League
Engineers & Architects IUPA 8000
Environmental Defense
Equity Office
Ethnic Coalition
Euclid Avenue Elementary School
Evergreen Academy
Evergreen Avenue Elementary School
Exposition Construction Authority
Factory Place Lofts Management Office
Fair Housing Foundation
Fair Housing Foundation
FAME Renaissance Program
Fansteel Inc
Far East Café Management Office
Fashion Institute of Design & Merchandising
Fifth Street Dicks Coffee House
Figueroa Corridor Partnership
Film L. A. Inc.
Film This!
First AME Church
First Street Elementary School
First Street South Plaza
First United Methodist Church of Los Angeles
Flanigan Farms

Foc Electronics Inc
Ford Boulevard Elementary School
Fourth Street Elementary School
Frank D. Lanterman Regional Center
Freda Mohr Multiservice Center - JFS
Friedman Bag Company
Friedman Occupational Center - LAUSD
Friends of the Little Tokyo Library
Friends of the Los Angeles River
Fukui Mortuary
Gabrielino Tongva Indians of California Tribal Council
Garboard/Keelson Asset and Property Management Company
Garfield High School
Gascon Elementary School
Gateway to Los Angeles Business Improvement District
Gilmore Associates
Go for Broke National Education Center
Gonzaque Village
Grand Avenue Medical Joint Venture
Grand Tower Management Office
Greater Leimert Park Village/Crenshaw Corridor BID
Greater Los Angeles African American Chamber of Commerce
Greater Los Angeles African American Chamber of Commerce
Green Tech Coast, LLC
Griffith Middle School
Groundwork Café
Grubb & Ellis Management Services
GVA Charles Dunn
GVA Daum
Hacienda La Puente Unified School Distrit
Hamasaki Elementary School
Hammel Street Elementary School
Happy Day, Inc.
Harrison Elementary School
Hewitt St Lofts Management Office
Higashi Honganji Buddhist Temple
Higgins Building Homeowners Association
Hikari Management Office
Hillcrest Elementary School
Hilton Checkers
Hiroshima Kenjinkai Of Southern California
Historic Cultural Neighborhood Council
HNTB Corporation
Hollenbeck Middle School
Hollenbeck Police Station
Hollywood Business Improvement District
Hollywood Chamber of Commerce
HomeBoy Industries
Honda Plaza Merchants
Hotel Llc Sogo
House of Trophies
Housing Authority of Los Angeles
Humphreys Avenue Elementary School
Huntington Park Chamber of Commerce
Imperial Courts
Industry Manufacturers Council (Chamber)
Infinity Insurance/Staff Counsel
International Brotherhood of Teamsters
International Enterprise Singapore
Itsuo & Fusako Tachibana
J-Town Voice
J-Town Voice
J-Town Voice
Japan America Television: Inc.
Japan Exposition Foundation
Japan Travel Bureau Intl Inc
Japanese Amercian Citizens League - Pacific Southwest District
Japanese American Community Services
Japanese American Cultural & Community Center
Japanese American National Museum
Japanese American Optimist Club
Japanese Chamber of Commerce of Southern California
Japanese Community Pioneer Center
Japanese Evangelical Missionary Society
Japanese Village Plaza Tenant Association
Japanese Women's Society of Southern California
Jeffer Mangels Butler and Marmaro
Jeffer Mangels Butler and Marmaro
Jodoshu N.A. Buddhist Missions
Jones Lang LaSalle
Kaiser Permanente
Kaiser Permanente: Public Affairs
Kaji & Associates
Katz Fram and Company
Keiro Sr. Health Care
Keller Williams Beverly Hills Commercial
Kennedy Elementary School
Kimota Photomart
King Taco
Koraku
Korean Business & Professional Women's Association
Korean Resource Center
Korean-American Coalition
Koreatown Youth & Community Center
Kosmont Companies
Koyasan Buddhist Temple
Kumamoto Associates
LA ArtCore
LA City/County Native American Indian Committee
LA OPERA
Labor/Community Strategy Center
Lafayette Square
Laguna Nueva Elementary School
Lane Elementary School

Larchmont Boulevard Association
Latham & Watkins
LBA Realty
Leadership Education for Asian Pacifics: Inc.
Lee Andrews Group
Legal Aid Foundation of Los Angeles
Leimert Park Village Farmers Market
Little Tokyo Branch Library
Little Tokyo Business Association
Little Tokyo Community Council
Little Tokyo Lions Club
Little Tokyo Public Safety Association
Little Tokyo Recreation Center
Little Tokyo Serivce Center Community Development Corporation
Little Tokyo Service Center
Little Tokyo Towers Residents Council
Loft Appeal
Lofts at the Security Building Management Office
Long Beach Alliance for Children with Asthma
Long Beach Area Chamber of Commerce
Long Beach Area Convention and Visitors Bureau
Long Beach City College
Long Beach Community Partner Council
Lorena Street Elementary School
Los Angeles Alliance for a New Economy
Los Angeles Area Chamber of Commerce
Los Angeles Business Council
Los Angeles Community College District
Los Angeles Convention Center
Los Angeles Council of Black Professional Engineers
Los Angeles County
Los Angeles County Bicycle Coalition
Los Angeles County Department of Public Health
Los Angeles County Department of Social Services
Los Angeles County Fire Department
Los Angeles County Health Services Administraton
Los Angeles County Museum of Art
Los Angeles County Office of Education
Los Angeles County Sheriff's Department
Los Angeles County: Office of Mark Ridley-Thomas
Los Angeles County: Office of Supervisor Don Knabe
Los Angeles County: Office of Supervisor Gloria Molina
Los Angeles County: Office of Supervisor Michael Antonovich
Los Angeles County: Office of Supervisor Zev Yaroslavsky
Los Angeles Economic Development Council
Los Angeles Fashion District
Los Angeles Gay & Lesbian Center
Los Angeles Hompa Hongwanji Buddhist Temple
Los Angeles Housing Department
Los Angeles Junior Chamber of Commerce
Los Angeles League of Conservation Voters
Los Angeles LIVE
Los Angeles Metropolitan Hispanic Chambers of Commerce
Los Angeles Music & Art School
Los Angeles Neighborhood Initiative (LANI)
Los Angeles Regional Water Quality Control Board
Los Angeles Sentinel
Los Angeles Sentinel
Los Angeles Theatre
Los Angeles Tofu Festival
Los Angeles Trade Tech College
Los Angeles Unified School District
Los Angeles Urban League
Los Angeles Visitors and Conventions Bureau
Los Angeles World Airports
Los Angeles World Airports Government Affairs
Lost Souls
Love of God Missionary
Lowe International
Loyola Law School
LTSS - (Jewish Family Services)
Lynwood Chamber of Commerce
M. Okamoto & Associates Inc.
Macy Intermediate
Madres del Este de Los Angeles Santa Isabel
Maguire Properties
Majestic Realty
Makoto America Inc
Malabar Street Elementary School
Manufacturers Bank
Manulife Financial
Mar Vista Gardens
Marianna Avenue Elementary School
Martin Building Company
Mary's Child Care
Maryknoll Japanese Catholic Center
Masayuki & Taka Ohashi
Mayer: Brown: Rowe & Maw LLP
Mayzels Chiropracic Clinic: Inc.
Meher Montessori School
Melendrez
Meruelo Maddox Properties
Met Lofts Management Office
Metro
Metro
Metro: Board of Directors
Metropolitan Water District of Southern California
Mexican American Health and Educational Services
Meyers Mohaddes & Associates
Milbank Real Estate Services
Miracle Baptist
Mitsuru Sushi & Grill
Miyako Gardens Tenant Council
Miyako Hotel Los Angeles
Mobility 21

MOCA - Geffen Contemporary
Montakan Mathiyakom
Montebello Park Elementary School
Monterey High School
Monterey Highlands Elementary School
Monterey Park Chamber of Commerce
Monterey Park Hospital
Monterey Vista Elementary Scoool
Moore: Iacofano & Goltsman
Morlin Asset Management
Morlin Asset Management
Mothers of East Los Angeles
Mt Olive Second Missionary
Mura Management Office
Museum Tower Management Office
Muslim Public Affairs Councils
Mutual Trading Co Inc
MV Child Care
Nanka Kenjinkai Kyogikai
National Association for the Advancement of Colored People
National Council-Negro Women
National Marine Fisheries
Neighborhood Music School Association
Network Public Affairs
New Avenue School
New Jerusalem
Nickerson Gardens
Nikkei Bridge
Nikkei for Civil Rights and Redress
Nisei Week
Nishi Hongwanji Buddhist Temple
Obayashi Corporation OC America Construction: Inc.
Office of Clients' Rights Advocacy Protecting & Advocacy Inc
Operation Hope
Orpheum Lofts Management Office
Our Lady of Guadalupe Elementary School
Our Lady of Lourdes Parish
Our Lady of Lourdes School
Our Lady of Soledad School
Our Lady of Talpa Elementary School
P T C Partnership
Pacific Commerce Bank
Pacific Electric Management Office
Payne & Fears LLP
Pegasus Management Office
People Coordinated Services
Phoenix Realty Partners
Physicians for Social Responsibility - Los Angeles
Pico Gardens
Pico Neighborhood Council
Pilgrim Tower North
Pitfire Pizza
Plains All American Pipeline: L.P.
Planning Company Associates
Port of Long Beach
Prayer Assembly COGIC
Pride at Work: LA Chapter
Program in American Studies & Ethnicity College of Letters: Arts & Sciences
Project Amiga
Promenade West Management Office
Pueblo del Rio
Puente Learning Center
Rafu Shimpo
Ramona Gardens
Raw Inspiration Inc.
Reason Foundation
Reconnecting America/Subway to the Sea Coalition
Repetto Elementary School
Resurrection Elementary School
Rico Suave Productions
RNL Design
Roger Williams Baptist
Roosevelt High School
Rose Hills Court
Rosewood Park Elementary School
Rowan Avenue Elementary School
Safe Cycling
Saint Thomas Aquinas Elementary School
San Antonio De Padua Elementary School
San Gabriel Valley COG
San Gabriel Valley Journal
San Pedro Firm Building Tenants Council
Santa Isabel Elementary School
Santa Teresita Elementary School
Santee Court Management Office
Save Leimert
Savoy Management Office
SB Manhattan Management Office
SCI-ARC Architectural College
SCLARC Education Empowerment Program
SCRRA/Metrolink
Second Street Elementary School
Senior Sites
Senka International Inc
Share Los Angeles Art
Sheridan Street Elementary School
Shrine Auditorium
Sierra Club
Sierra Club Ageles Chapter - Harbor Vision Task Force
Sierra Club: Angeles Chapter
Signal Hill Chamber of Commerce
Skid Row Housing Trust
So Cal Gardeners Federation
Songs of the Cross Temple
Soto Mission Zenshuji
Soto Street Elementary School
South Alameda Properties Inc
South Central Multi Purpose Center
South Coast Air Quality Management District
South Coast Interfaith Council
South Gate Chamber of Commerce
South Park Stakeholders
Southern California Association of Governments
Southern California Gas Company
Southern California General Contractors
Southern California Transit Advocates

Southern Christian Leadership Conference LA
Southwestern School of Law
St Mary Tower
St. Alphonsus Elementary School
St. Francis Center
St. Mary Elementary School
St. Stephens Martyr School
St. Vincent Medical Center
State Board of Mining and Geology
State Farm
State of California: Air Resources Board
State of California: Department of Conservation
State of California: Department of Fish and Game
State of California: Department of Forestry & Fire Protection
State of California: Department of Housing and Community Development
State of California: Department of Parks and Recreation
State of California: Department of Toxic Substances Control
State of California: Department of Water Resources
State of California: Energy Commission
State of California: Environmental Protection Agency
State of California: Health & Human Services
State of California: Highway Patrol
State of California: Los Angeles Regional Water Qualtiy Control Board
State of California: Native American Heritage Commission
State of California: Office of Emergency Services
State of California: Office of Governor Arnold Schwarzenegger
State of California: Office of Historic Preservation
State of California: Public Utilities Commission
State of California: State Assembly
State of California: State Clearinghouse
State of California: State Lands Commission
State of California: State Senate
State of California: State University Long Beach
State of California: Transportation (Caltrans): District 7
State of California: Transportation (Caltrans): Division of Transportation Planning
State of California: Transportation (Caltrans): Office of Environmental Analysis
State of California: Transportation Commission
State Senator Gloria Romero
Stevenson Middle School
Stonefield Josephson: Inc. Strategic Planning/Access Services
Strategy Workshop: Inc.
STS-Round Table Members
Stuart Ketchum YMCA
Sunrise Elementary School
Sushi Gen
System Metrics Group: Inc.
Taira Services Corp.
TCI Leasing
Team CFO
Ted Tokio Tanaka Architects
Teramachi Housing
The Bakewell Company
The California Endowment
The Chicago School
The Fashion Institute
The Festival Companies (Baldwin Hills Crenshaw Plaza)
The Home Depot
The Interfaith Environment Council
The Kor Group
The Loft Exchange
The Music Center
The New Otani Hotel
The Oldtimers Foundation
The Related Companies of California
The Robert Group
The Standard Hotel
The Transit Coalition/Friends of the Green Line
Thomas Properties Group
Tokyo Cleaners
Tokyo Villa Tenants Association
TransCore
Transit Coalition
Transit Coalition & Westside/Central Governance Council
Transportation & Land Use Collaborative
Transportation Foundation of LA
Transportation Management Services
Transportation Security Administration
Tri Modal Express
Trust for Public Lands
UCLA Government & Community Relations
UCLA Institute of the Environment
UCLA Nikkei Student Union
UCLA Transportation Services
Union Bank of California
Union Church of Los Angeles
Union De Vecinos
Union Pacific Railroad
Union Rescue Mission
United Gospel
United Homeowners Association of Crenshaw
United Neighborhoods of Historic Arlington Heights: West Adams & Jefferson Park Communities
United States: Army Corps of Engineers
United States: Department of Defense
United States: Department of Energy
United States: Department of Health and Human Services
United States: Department of Housing and Urban Development

United States: Department of Justice
United States: Department of the Interior
United States: Environmental Protection Agency
United States: Federal Aviation Adminstration
United States: Federal Railroad Administration
United States: Federal Transportation Administration
United States: Fish and Wildlife Service
United States: House of Congressman Henry Waxman
United States: House of Congresswoman Diane Watson
United States: House of Congresswoman Maxine Waters
United States: Office of Congressman Adam Schiff
United States: Office of Congresswoman Lucille Roybal-Allard
United States: Office of Senator Barbara Boxer
United States: Office of Senator Diane Feinstein
University of California: Los Angeles Transportation
University of Southern California
University of Southern California School of Policy, Planning and Development
University of Southern California Keck School of Medicine
Urban Design Technology
Strategic Planning
Urban Foundation
Urban Land Institute LA
Urban Partners
US Bank
US Department of Commerce
US Environmental Protection Agency
Uyeda S K Investment Corp
Valencia, Perez & Echeveste
Vernon Chamber of Commerce
Village Green Owners Association
Visual Communications
Volk Properties
Walmart
Watson Land Company
Watts Community Housing Corporation
Watts Towers Arts Center
Weingart Center
Wesley United Methodist
West Angeles Church
West Angeles Community Development Corporation
West Los Angeles Chamber of Commerce
West Los Angeles College
Westchester Playa Del Rey Neighborhood Council
Westfield Fox Hills Mall
Westside Center for Independent Living
Westside Cities Council of Governements
Westside/Central Governance Council
White Memorial Medical Center
William Mead Homes
Wilshire Center-Koreatown Neighborhood Council
Windsor Square Association
Winter Gardens Elementary School
WOW Productions
Wyndham Commerce Hotel
Yamato Travel Bureau
Ynez Elementary School
Young Communications Group: Inc.
Zenshuji Soto Mission

Appendix L

Direct Mail Scoping Letter

This information is available from Metro upon request.
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Appendix M

“Take Ones”

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Appendix N

Electronic Meeting Notice

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Appendix O

Newspaper Advertisements

This information is available from Metro upon request.
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Appendix P

Public Scoping Meeting #1 Sign In Sheet

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Appendix Q

Public Scoping Meeting #2 Sign In Sheet

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This appendix has been intentionally left blank.

Appendix R

Public Scoping Meeting #3 Sign In Sheet

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Appendix S

Public Scoping Meeting #4 Sign In Sheet

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Appendix T
Meeting Boards and Scoping Packet

Welcome!

Thank you for attending this public scoping meeting for the Regional Connector Transit Corridor project. The public scoping meetings start the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) process.

Agenda

- Open House – 20 Minutes
- Formal Presentation – 20 Minutes
- Public Comment Period – 60 Minutes

Project Purpose

The project purpose is to improve the region's public transit service and mobility by providing a connection through downtown Los Angeles that links the region via the Metro Gold Line to Pasadena and East Los Angeles, Metro Blue Line to Long Beach, and Metro Expo line to Culver City.

- Support Community Planning Efforts
- Public Involvement and Community
- Improve Local and Regional Mobility and Accessibility
- Provide a Cost Effective Transportation Alternative
- Provide a Financially Feasible Project
- Provide a Safe and Secure Transportation Alternative

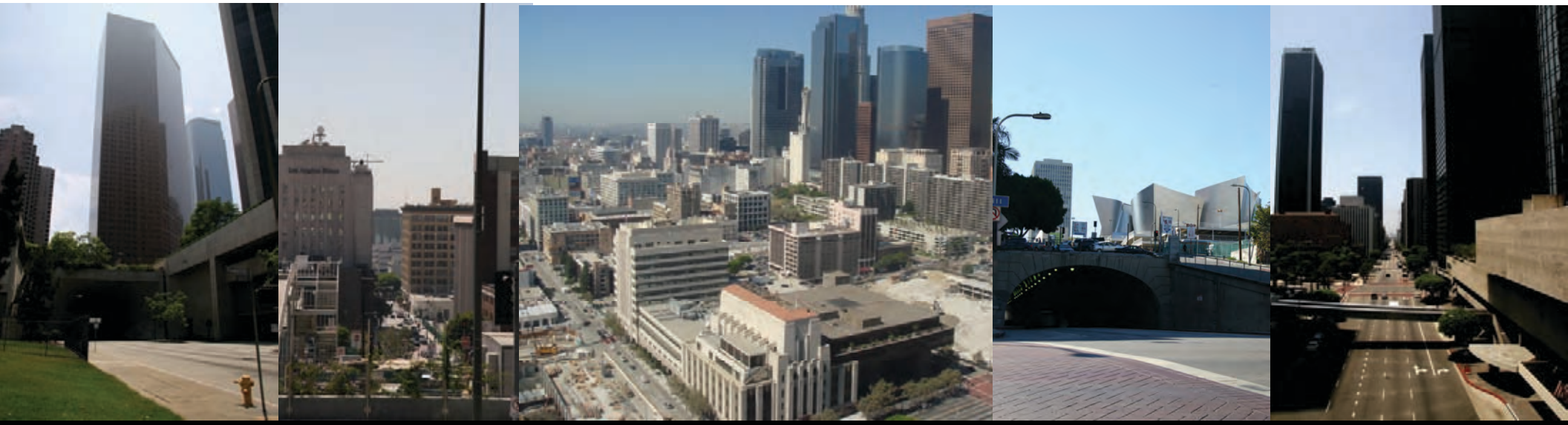
Project Need

- Multiple transfers to travel across downtown result in overcrowding at stations and increased travel times
- Project area has many transit-dependent residents
- As the Metro Expo Line and Metro Gold Line Eastside Extension are completed, the lack of regional connectivity may result in reduced schedule reliability
- Improved system-wide operations could result in improved travel times and safety throughout the entire system
- Employment & residential growth and traffic congestion in the region expected to increase over the next 20 years

Environmental Issues to be Analyzed

The purpose of the DEIS/DEIR is to study the potential effects of the construction and operation of the proposed project alternatives. Measures to avoid, minimize, and mitigate adverse impacts will be identified and evaluated.

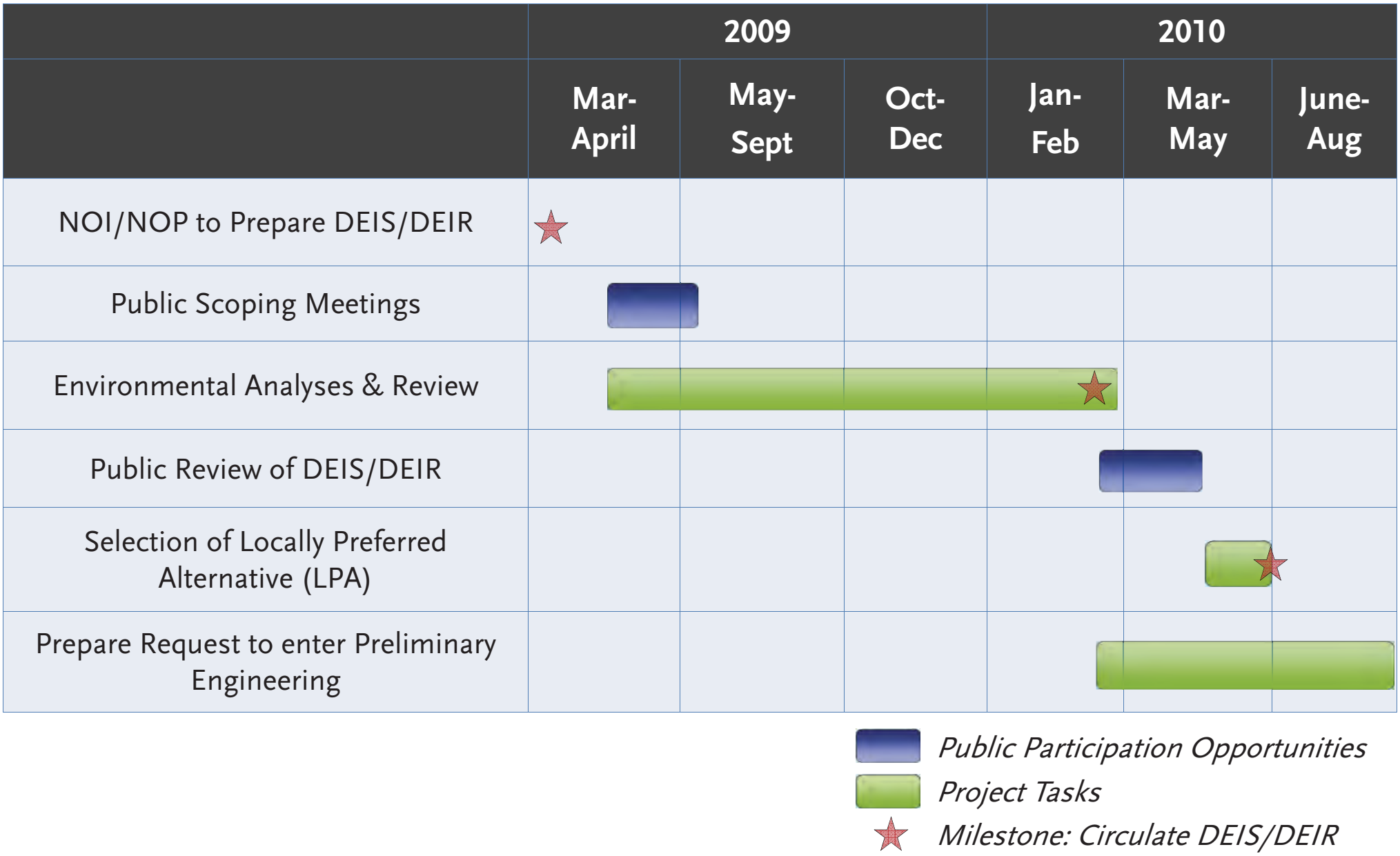
- Traffic, Transit & Parking
- Visual & Aesthetics
- Air Quality
- Cultural/Historic Resources
- Safety & Security
- Geology & Soils (Subsurface & Seismic)
- Water Resources
- Biological Resources
- Noise & Vibration
- Energy Use
- Hazardous Materials
- Parks & Other Community Facilities
- Land Use
- Displacement/Relocation of Uses
- Community Impacts
- Economic Development
- Fiscal Impacts
- Environmental Justice
- Growth Inducing Impacts



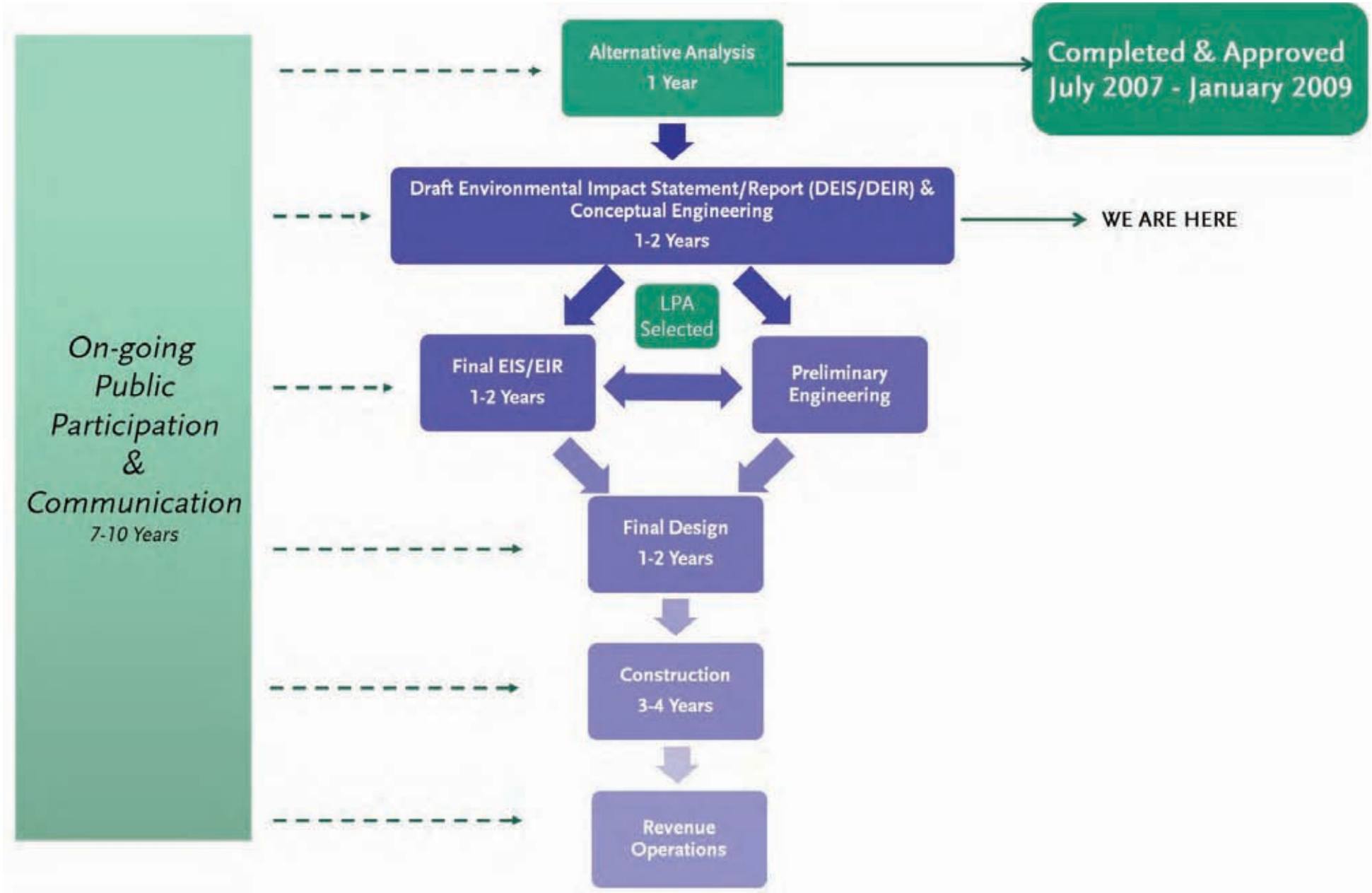
Mode: Light Rail Transit (LRT)

- At grade, below grade
- Exclusive lane
- Overhead electrical power
- Up to 55 mph/up to 35 mph or posted speed if street running
- Up to 3 cars/train
- Up to 500 passengers/train
- Approximately one mile station spacing (closer in urban areas)
- Approximately 270-foot long high platform stations

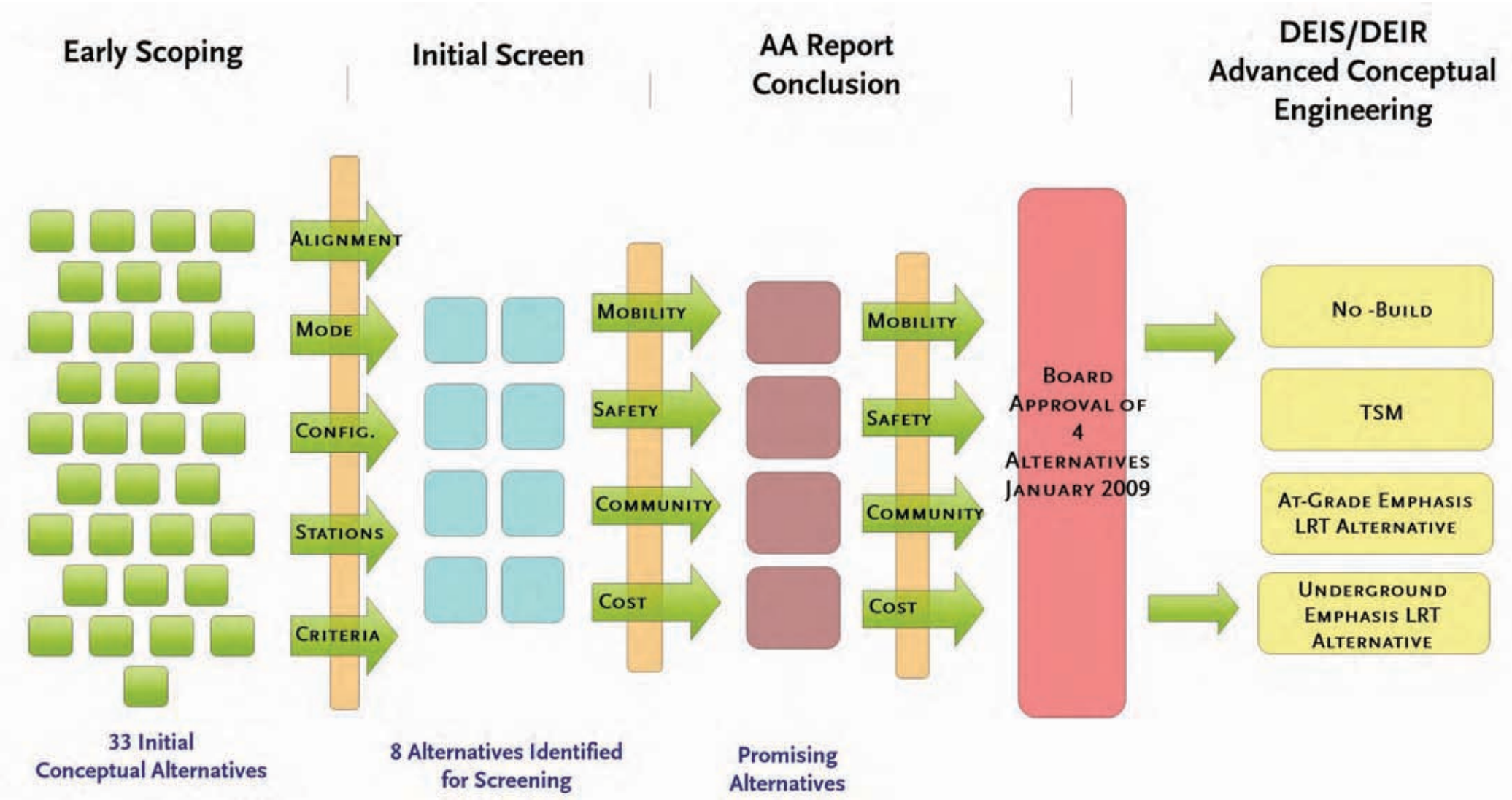
Environmental Review Schedule



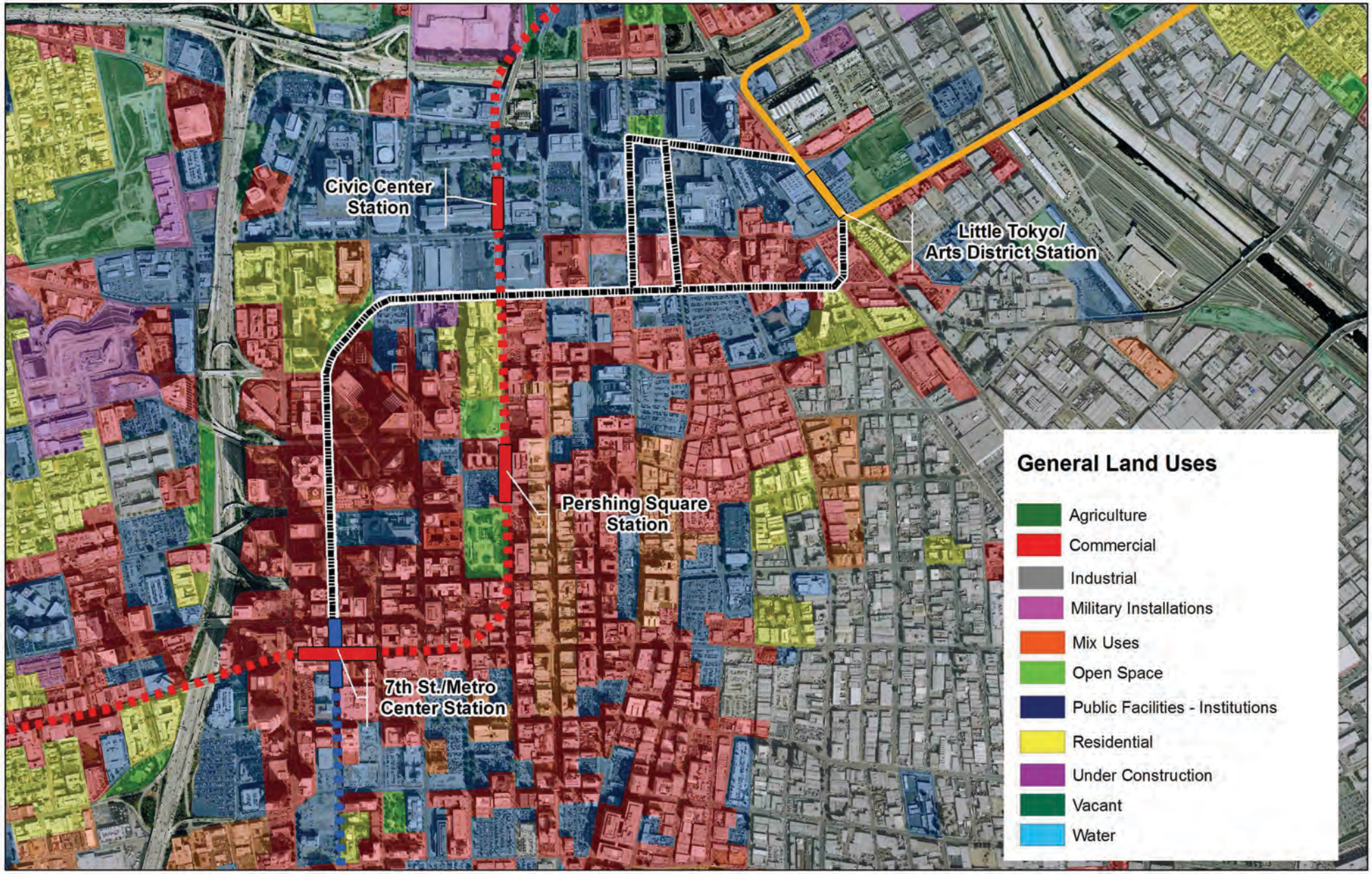
Project Development Process



Alternatives Analysis Process

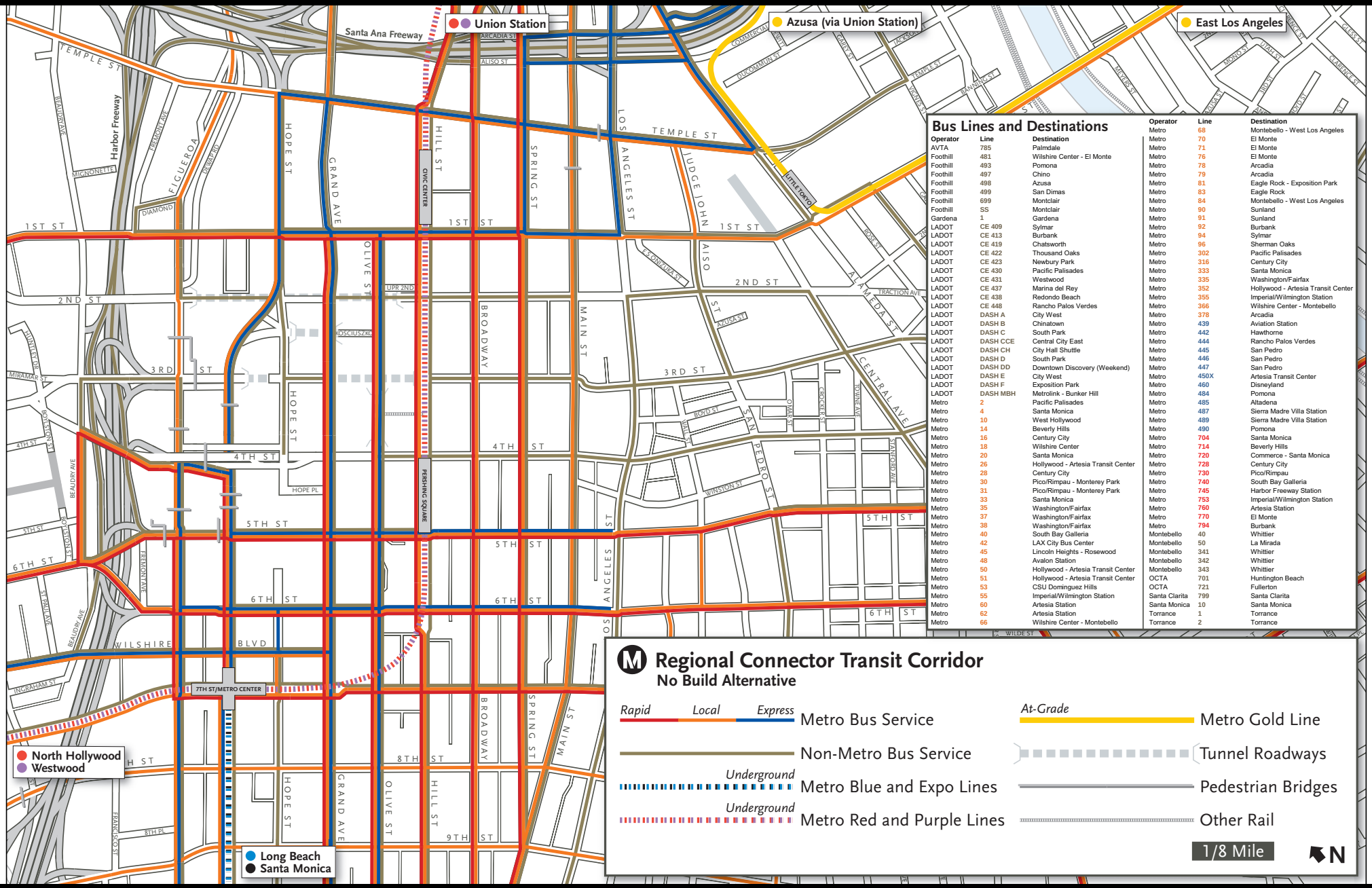


Land Use


Civic Center Station
Little Tokyo/ Arts District Station
Pershing Square Station
7th St./Metro Center Station
General Land Uses
Agriculture
Commercial
Industrial
Military Installations
Mix Uses
Open Space
Public Facilities - Institutions
Residential
Under Construction
Vacant
Water

No Build Alternative

Upon Metro Board Approval, January 2009



Bus Lines and Destinations

Operator	Line	Destination
AVTA	785	Palmdale
Foothill	481	Wilshire Center - El Monte
Foothill	493	Pomona
Foothill	497	Chino
Foothill	498	Azusa
Foothill	499	San Dimas
Foothill	699	Montclair
Foothill	SS	Montclair
Gardena	1	Gardena
LADOT	CE 409	Sylmar
LADOT	CE 413	Burbank
LADOT	CE 419	Chatsworth
LADOT	CE 422	Thousand Oaks
LADOT	CE 423	Newbury Park
LADOT	CE 430	Pacific Palisades
LADOT	CE 431	Westwood
LADOT	CE 437	Marina del Rey
LADOT	CE 438	Redondo Beach
LADOT	CE 448	Rancho Palos Verdes
LADOT	DASH A	City West
LADOT	DASH B	Chinatown
LADOT	DASH C	South Park
LADOT	DASH CCE	Central City East
LADOT	DASH CH	City Hall Shuttle
LADOT	DASH D	South Park
LADOT	DASH DD	Downtown Discovery (Weekend)
LADOT	DASH E	City West
LADOT	DASH F	Exposition Park
LADOT	DASH MBH	Metrolink - Bunker Hill
Metro	2	Pacific Palisades
Metro	4	Santa Monica
Metro	10	West Hollywood
Metro	14	Beverly Hills
Metro	16	Century City
Metro	18	Wilshire Center
Metro	20	Santa Monica
Metro	26	Hollywood - Artesia Transit Center
Metro	28	Century City
Metro	30	Pico/Rimpau - Monterey Park
Metro	31	Pico/Rimpau - Monterey Park
Metro	33	Santa Monica
Metro	35	Washington/Fairfax
Metro	37	Washington/Fairfax
Metro	38	Washington/Fairfax
Metro	40	South Bay Galleria
Metro	42	LAX City Bus Center
Metro	45	Lincoln Heights - Rosewood
Metro	48	Avalon Station
Metro	50	Hollywood - Artesia Transit Center
Metro	51	Hollywood - Artesia Transit Center
Metro	53	CSU Dominguez Hills
Metro	55	Imperial/Wilmington Station
Metro	60	Artesia Station
Metro	62	Artesia Station
Metro	66	Wilshire Center - Montebello
Metro	68	Montebello - West Los Angeles
Metro	70	El Monte
Metro	71	El Monte
Metro	76	El Monte
Metro	78	Arcadia
Metro	79	Arcadia
Metro	81	Eagle Rock - Exposition Park
Metro	83	Eagle Rock
Metro	84	Montebello - West Los Angeles
Metro	90	Sunland
Metro	91	Sunland
Metro	92	Burbank
Metro	94	Sylmar
Metro	96	Sherman Oaks
Metro	302	Pacific Palisades
Metro	316	Century City
Metro	333	Santa Monica
Metro	335	Washington/Fairfax
Metro	352	Hollywood - Artesia Transit Center
Metro	355	Imperial/Wilmington Station
Metro	366	Wilshire Center - Montebello
Metro	378	Arcadia
Metro	439	Aviation Station
Metro	442	Hawthorne
Metro	444	Rancho Palos Verdes
Metro	445	San Pedro
Metro	446	San Pedro
Metro	447	San Pedro
Metro	450X	Artesia Transit Center
Metro	460	Disneyland
Metro	484	Pomona
Metro	485	Altadena
Metro	487	Sierra Madre Villa Station
Metro	489	Sierra Madre Villa Station
Metro	490	Pomona
Metro	704	Santa Monica
Metro	714	Beverly Hills
Metro	720	Commerce - Santa Monica
Metro	728	Century City
Metro	730	Pico/Rimpau
Metro	740	South Bay Galleria
Metro	745	Harbor Freeway Station
Metro	753	Imperial/Wilmington Station
Metro	760	Artesia Station
Metro	770	El Monte
Metro	794	Burbank
Montebello	40	Whittier
Montebello	50	La Mirada
Montebello	341	Whittier
Montebello	342	Whittier
Montebello	343	Whittier
OCTA	701	Huntington Beach
OCTA	721	Fullerton
Santa Clarita	799	Santa Clarita
Santa Monica	10	Santa Monica
Torrance	1	Torrance
Torrance	2	Torrance

Regional Connector Transit Corridor

No Build Alternative

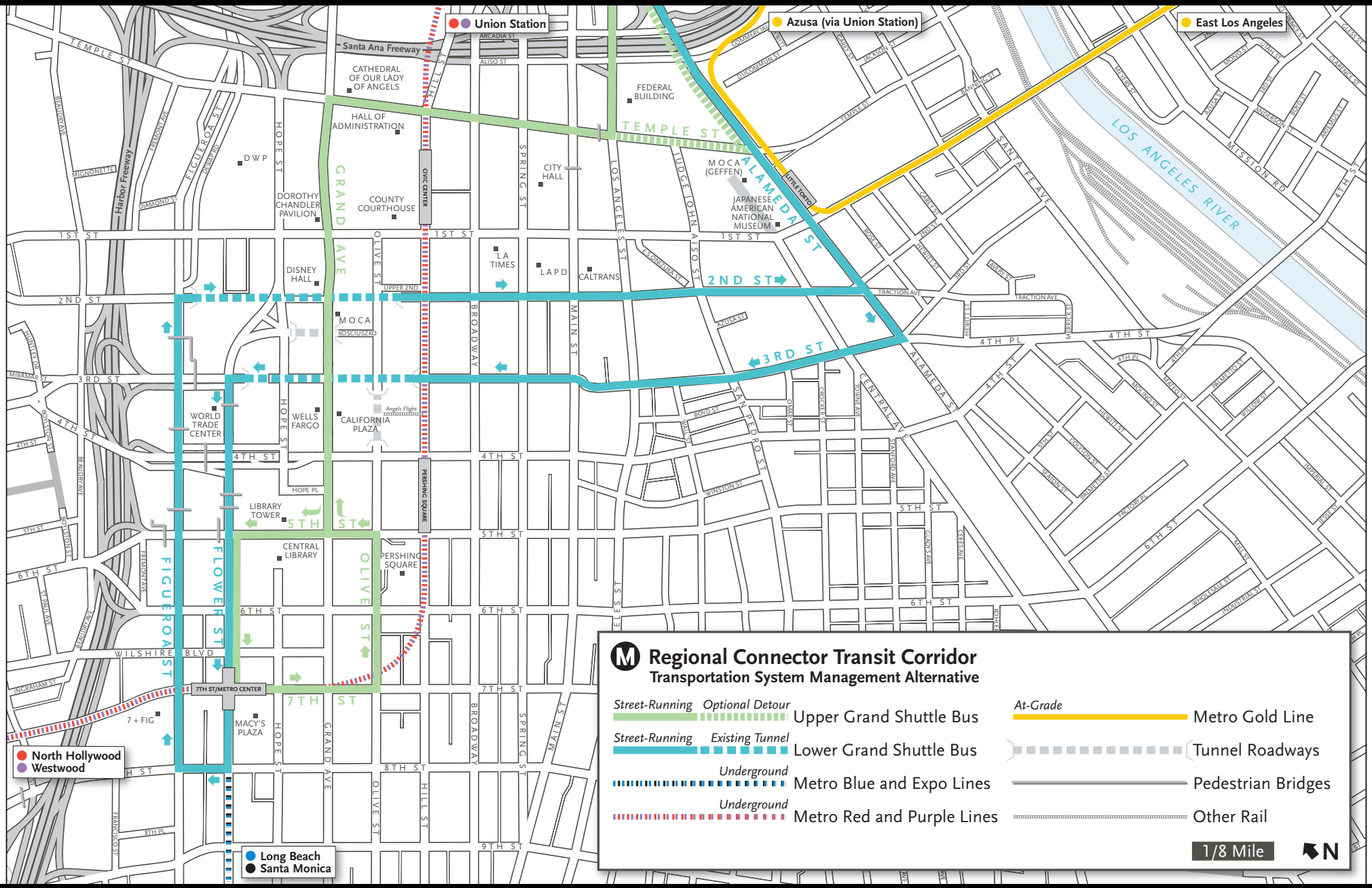
- Rapid / Local / Express — Metro Bus Service
- Non-Metro Bus Service
- Underground — Metro Blue and Expo Lines
- Underground — Metro Red and Purple Lines
- At-Grade — Metro Gold Line
- Tunnel Roadways
- Pedestrian Bridges
- Other Rail

1/8 Mile

N

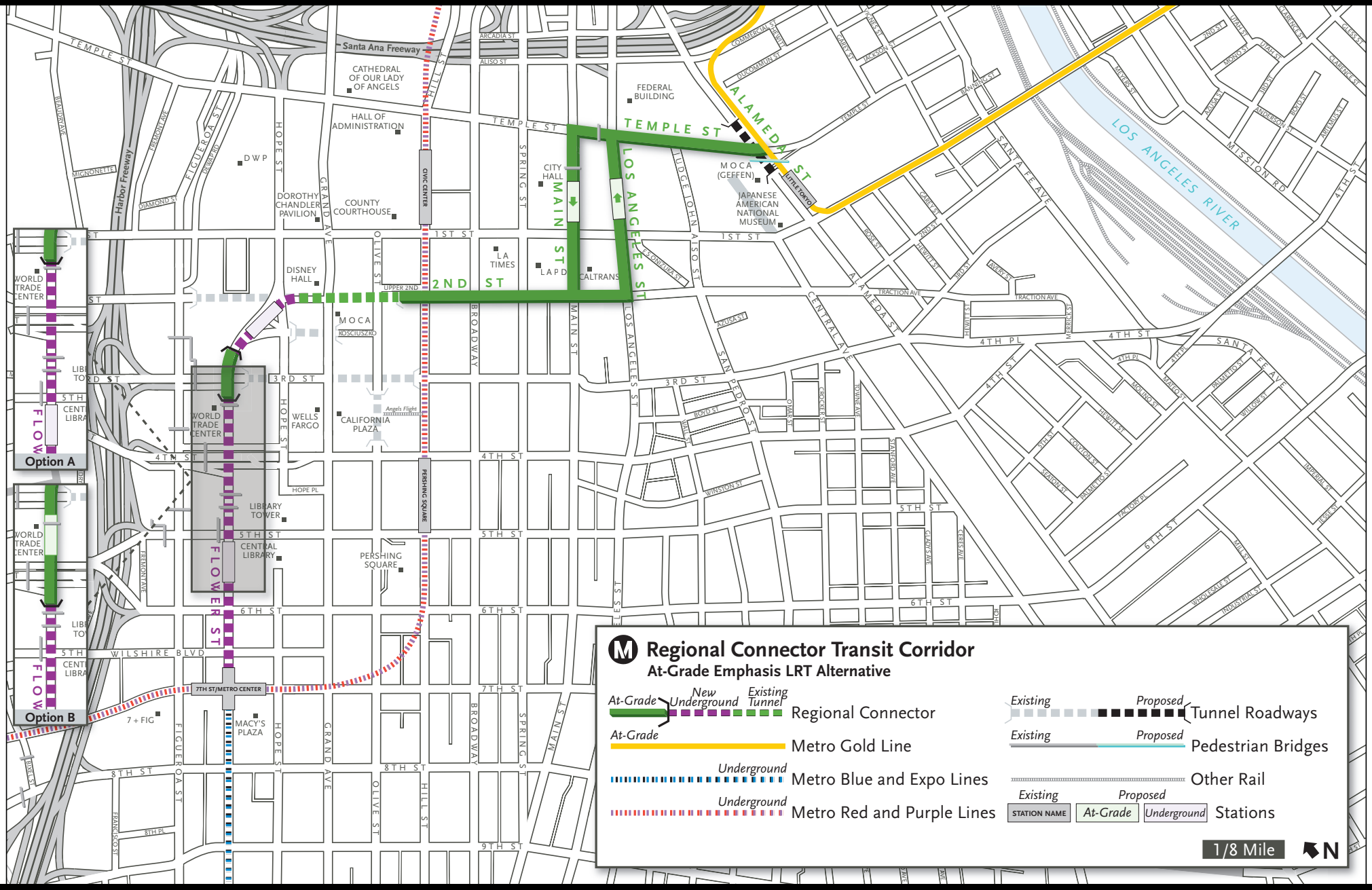
Transportation System Management (TSM) Alternative

Upon Metro Board Approval, January 2009



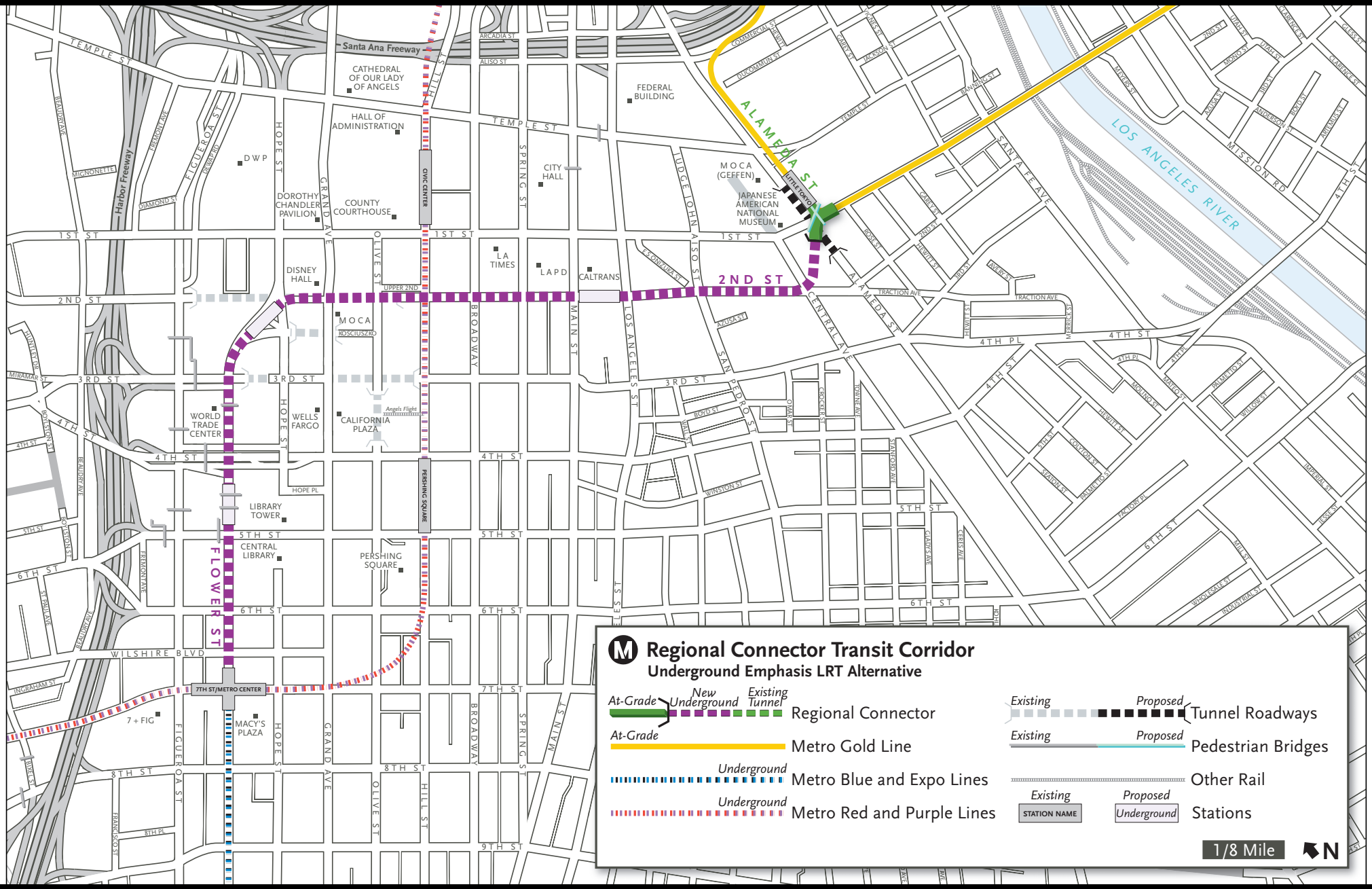
At-Grade Emphasis LRT Alternative

Upon Metro Board Approval, January 2009



Underground Emphasis LRT Alternative

Upon Metro Board Approval, January 2009



Metro

Regional Connector Transit Corridor Study

SCOPING INFORMATION PACKET

Project Description

The proposed Regional Connector Transit Corridor project would provide a direct link connecting several light rail lines in operation or in construction, including the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line to Long Beach, and the Metro Expo Line to Culver City. The proposed project would create a connection through downtown Los Angeles that would link the Metro Blue and Expo Lines termini at 7th Street/Metro Center Station (7th Street and Flower Street) to the Metro Gold Line at the Little Tokyo/Arts District Station at 1st Street and Alameda Street. With the implementation of the project, these four lines would share tracks and stations in downtown Los Angeles. The project corridor length varies slightly by alternative and is approximately 1.8 miles long.

Project Purpose and Need

The purpose of this project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

Additional considerations supporting the need for the Regional Connector Transit Corridor project include: increased travel times and station overcrowding occurring due to multiple transfers required to traverse the project area; a project area that has many transit dependent residents; poor system connectivity that results in reduced system schedule reliability as current system expansions are completed; and investments within the project area could improve system-wide operations in regards to travel times and safety issues.

Proposed Alternatives

The Regional Connector Transit Corridor Final Alternatives Analysis Report (2009) prepared by the Los Angeles County Metropolitan Transportation Authority (Metro) identified four alternatives for further consideration in the DEIS/DEIR. The four alternatives include: a No-Build Alternative, Transportation System Management (TSM) Alternative, At-Grade Emphasis Light Rail Transit (LRT) Alternative, and Underground Emphasis LRT Alternative.

No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2030. No new transportation infrastructure would be built within the project area aside from projects currently under construction, or funded for construction and operation by 2030 by the recently

approved Measure R sales tax. Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. By the projection year of 2030, some bus service would have been reorganized and expanded to provide connections with the new rail lines; however, the transit network within the project area would largely be the same as it is now.

Transportation Systems Management (TSM) Alternative

The TSM Alternative would include the provisions of the No Build Alternative and add two shuttle bus routes from 7th Street/Metro Center station to Union Station, providing a link between the region's unconnected LRT services. One route would run along Grand Avenue and 1st Street, and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes, where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. Stops would be located every few blocks so as to provide full coverage of the area. Each shuttle route would be one and one-half to two miles in length.

At-Grade Emphasis LRT Alternative

This alternative (**Figure 1**) would extend from the underground 7th Street/Metro Center Station, head north under Flower Street, surface to at-grade north of 5th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street where it would split into an at-grade couplet configuration on Main and Los Angeles Streets (one track on each roadway) to Temple Street. Then it would head east on Temple Street and realign into a dual track configuration east of Los Angeles Street and join the Metro Gold Line just north of Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that would traverse the Regional Connector, an automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts.

There are two options for the configuration on Flower Street. For Option A, trains would transition to underground tracks after crossing 3rd Street and continue to a new underground station just south of 5th Street, then proceed to the 7th Street/Metro Center Station and arrive at the existing Metro Blue Line platform. For Option B, trains would arrive at an at-grade station after crossing 3rd Street, then transition to underground tracks near 4th Street to reach the existing Metro Blue Line platform at 7th Street/Metro Center station. In total, the At-Grade Emphasis LRT Alternative would add 1.8 miles of new double track to the light rail system.

In addition to the Option A and Option B Station configurations, other station locations would include a station adjacent to Bunker Hill, south of 2nd Street and Hope Street, and a split station using Main and Los Angeles Streets between 1st and Temple Streets.

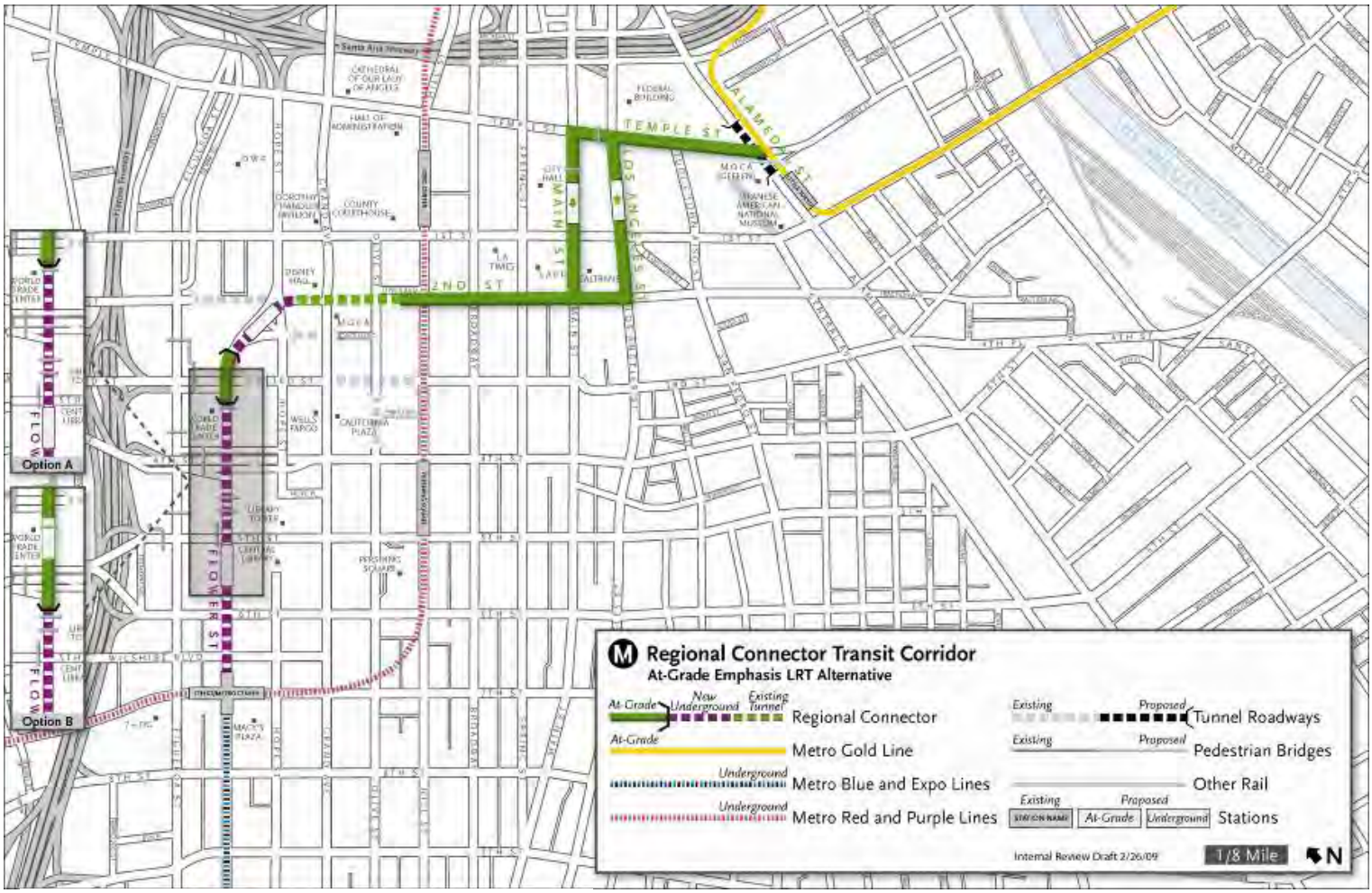


Figure 1: At-grade Emphasis LRT Alternative

Underground Emphasis LRT Alternative

From the 7th Street/Metro Center Station, this alternative (**Figure 2**) would extend north along Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with new underground stations to provide access to Bunker Hill and to the area between Los Angeles Street and Broadway. The tunnel would emerge to at-grade connections with the Metro Gold Line just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This

alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

Station locations for this alternative would all be underground and include the area north of 5th Street on Flower Street, adjacent to Bunker Hill just south of 2nd Street and 2nd Street between Los Angeles and Main Streets.

Figure 2: Underground Emphasis LRT Alternative

Preliminary Schedule

The preliminary schedule is provided below for discussion at the agency scoping meeting.

Action	Date
Agency Scoping Meeting	March 26, 2009
Public Scoping Meetings	March 30, 2009 to April 2, 2009 (see below for specific dates)
Scoping Comment Period Ends	May 11, 2009
Development of DEIS/DEIR	Spring – Winter 2009
Public Hearings/Comment on DEIS/DEIR	Spring 2010
Adoption of Locally Preferred Alternative	Summer 2010

What is an EIS/EIR?

An Environmental Impact Statement/Environmental Impact Report (EIS/EIR) must be prepared for all major projects that may significantly affect the environment. The EIS is prepared in compliance with the National Environmental Policy Act (NEPA) and the EIR is prepared in compliance with the California Environmental Quality Act (CEQA). The purpose of the EIS/EIR is to provide full an open evaluation of environmental issues and alternatives, and to inform decision-makers and the public of reasonable alternatives that could avoid or minimize adverse impacts and enhance the quality of the environment.

Scoping Meeting Schedule

Four public scoping meetings will be conducted by FTA and Metro for the public to learn more about the project and provide comments. The scoping meetings will be held at the following locations:

- Monday, March 30, 2009 from 4:30 p.m. to 6 p.m. at the University of Southern California (USC), Alumni Room, Davidson Conference Center, 3415 S Figueroa St, Los Angeles, CA 90007.
- Tuesday, March 31, 2009 from 6:30 p.m. to 8 p.m. at the Lake Avenue Church, 393 N. Lake Ave, Pasadena, CA 91101.
- Wednesday, April 1, 2009 from 6:30 p.m. to 8 p.m. at the Japanese American National Museum (JANM), 369 E 1st St, Los Angeles, CA 90012.
- Thursday, April 2, 2009 from Noon to 1:30 p.m. at the Los Angeles Central Library, Board Room, 630 W 5th St, Los Angeles, CA 90071.

Written comments will be accepted until May 11, 2009. Comments may also be submitted at the scoping meetings, sent via email to regionalconnector@metro.net, or mailed to:

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Los Angeles, CA 90012

Project Information

Additional information may be found on the project website at:
http://www.metro.net/projects_studies/connector

PAQUETE DE INFORMACIÓN SOBRE EL ALCANCE

Descripción del proyecto

El proyecto propuesto sobre el Corredor de tránsito para el conector regional brindaría una conexión directa entre diversas líneas del ferrocarril ligero que están en funcionamiento o en construcción, incluyendo la Línea Metro Gold hacia Pasadena, la Línea Metro Gold hacia el Este de Los Ángeles, la Línea Metro Blue hacia Long Beach y la Línea Metro Expo hacia Culver City. A través de Downtown Los Ángeles, el proyecto propuesto conectaría las terminales de las Líneas Metro Blue y Expo en la estación de 7th Street/Metro Center (calles 7th y Flower) con la Línea Metro Gold en la Estación Little Tokyo/Arts District de las calles 1st y Alameda. Con la implementación del proyecto, estas cuatro líneas compartirían carriles y estaciones en Downtown Los Ángeles. La longitud del corredor del proyecto varía ligeramente según la alternativa y es de aproximadamente 1.8 millas.

Propósito y necesidad del proyecto

El propósito de este proyecto consiste en mejorar el servicio de tránsito público y la movilidad de la región. El proyecto tiene como objetivo general mejorar la movilidad dentro del corredor mediante la conexión con el servicio de ferrocarril ligero de la Línea Metro Gold hacia Pasadena, la Línea Metro Gold hacia el Este de Los Ángeles, la Línea Metro Blue y la Línea Metro Expo. Esta conexión prestaría servicios a las comunidades de toda la región, ya que permitiría una mayor accesibilidad y colaboraría con la población y el crecimiento laboral en Downtown Los Ángeles.

Las consideraciones adicionales que sustentan la necesidad de un proyecto del Corredor de tránsito para el conector regional incluyen: la mayor cantidad de horarios de viaje y el hacinamiento en la estación debido a los traslados múltiples exigieron desplazar el área del proyecto; un área de proyecto que tiene muchos residentes dependientes; una mala conectividad del sistema que ocasiona una menor confiabilidad en el cronograma del sistema mientras se completan las expansiones actuales del sistema; y las inversiones dentro del área del proyecto podrían mejorar las operaciones en todo el sistema en cuanto a los horarios de viajes y las cuestiones de seguridad.

Alternativas propuestas

El Informe analítico sobre las alternativas finales para el Corredor de tránsito del conector regional (2009) preparado por la Autoridad de Transporte Metropolitano del Condado de Los Ángeles (Metro) identificó cuatro alternativas para una mayor consideración en el

DEIS/DEIR. Las cuatro alternativas incluyen: una Alternativa de no construcción, una Alternativa de Administración del sistema de transporte (TSM), una Alternativa de tránsito del ferrocarril ligero (LRT) con énfasis en el nivel de la superficie, y una alternativa de LRT con énfasis en el subterráneo.

Alternativa de no construcción

La Alternativa de no construcción mantendría el servicio existente de tránsito hasta el año 2030. No se construiría una nueva infraestructura de transporte dentro del área del proyecto aparte de los proyectos que actualmente están en construcción o que se están financiando para su construcción y funcionamiento antes de 2030 por el recientemente aprobado impuesto sobre ventas de la Medida R. El servicio de tránsito del autobús conforme a la Alternativa de no construcción se concentraría en la preservación de los servicios y proyectos existentes. Antes del año 2030 de proyección, algunos servicios de autobús habrán sido reorganizados y ampliados para prestar conexiones con las líneas nuevas de ferrocarril; sin embargo, la red de tránsito dentro del área del proyecto sería en gran medida la misma que la actual.

Alternativa de administración de sistemas de transporte (TSM)

La Alternativa de TSM incluiría las disposiciones de la Alternativa de no construcción y añadiría dos rutas de autobuses de enlace desde la estación 7th Street/Metro Center hasta la estación Union, brindando una conexión entre los servicios desconectados de la región. Una ruta iría por la avenida Grand y la calle 1st, y una iría por las calles Figueroa, Flower, 2nd y 3rd. Los autobuses de enlace usarían los carriles exclusivos para autobuses, donde estén disponibles, y se les colocarán dispositivos de señalización con prioridad de tránsito similares a los usados en Metro Rapid. Las paradas se ubicarían cada pocas cuadras, a fin de brindar una cobertura completa del área. Cada ruta del servicio de enlace tendría una longitud de una milla y media a dos millas.

Alternativa de LRT con énfasis en el nivel de la superficie

Esta alternativa (**Figura 1**) se extendería desde la estación subterránea de 7th Street/Metro Center hacia el norte por debajo de la calle Flower, saldría a la superficie en el norte de la calle 5th, cruzaría la calle 3rd, ingresaría en Bunker Hill y giraría hacia el noreste por una nueva entrada al túnel existente de la calle 2nd. La alineación continuaría por la calle 2nd, donde se dividiría en una configuración par al nivel de la superficie en las calles Main y Los Ángeles (un carril en cada calzada) hacia la calle Temple. Luego se dirigiría hacia el este en la calle Temple y se alinearía nuevamente en una configuración de calzada dual en el este de la calle Los Ángeles y se uniría a la Línea Metro Gold justo al norte de la estación Little Tokyo/Arts District en la calle Alameda. Debido al alto volumen de trenes que se

desplazarían al Conector Regional, se construirían un paso bajo nivel para automóviles y un paso sobre nivel para peatones en la intersección de las calles Temple y Alameda para eliminar conflictos entre peatones y trenes y entre automóviles y trenes.

Existen dos opciones para la configuración en la calle Flower. Para la Opción A, los trenes harían una transición a los carriles subterráneos luego de cruzar la calle 3rd y continuarían hacia una nueva estación subterránea justo al sur de la calle 5th, luego continuarían hacia la estación de 7th Street/Metro Center y llegarían a la plataforma existente de la Línea Metro Blue. Para la Opción B, los trenes llegarían a una estación al nivel de la superficie luego de cruzar la calle 3rd, después harían una transición hacia los carriles subterráneos cercanos a la calle 4th para alcanzar la plataforma existente de la línea Metro Blue en la estación 7th Street/Metro Center. En total, la alternativa de LRT con énfasis en el nivel de la superficie añadiría 1.8 millas de un nuevo carril doble al sistema de ferrocarril ligero.

Además de las configuraciones de la Opción A y la Opción B, otras estaciones incluirían una estación adyacente a Bunker Hill, al sur de las calles 2nd y Hope, y una estación divisoria usando las calles Main y Los Ángeles entre las calles 1st y Temple.

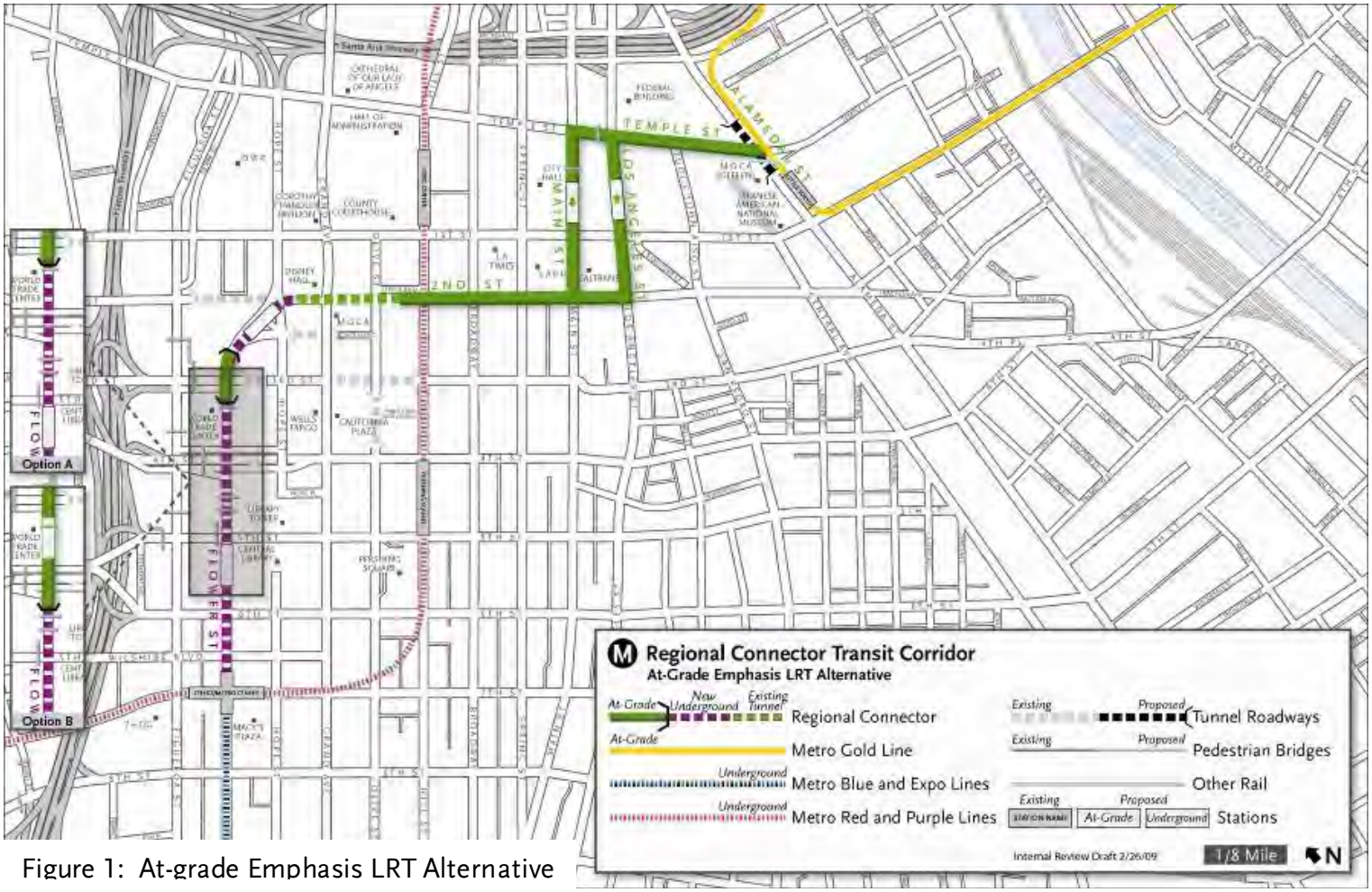


Figure 1: At-grade Emphasis LRT Alternative

Alternativa de LRT con énfasis en el subterráneo

Desde el estación de 7th Street/Metro Center, esta alternativa (**Figura 2**) se extendería al norte por la calle Flower con una nueva estación subterránea al norte de la calle 5th. En la calle 2nd, el túnel subterráneo se extendería al este con nuevas estaciones subterráneas para brindar acceso a Bunker Hill y al área entre las calles Los Ángeles y Broadway. El túnel emergería hacia conexiones al nivel de la superficie con la Línea Metro Gold justo al suroeste de la intersección de las calles 1st y Alameda. En las calles 1st y Alameda, circularía el tráfico de automóviles y camiones por un nuevo paso bajo nivel en la calle Alameda por debajo de la unión de ferrocarriles, y una nueva estructura de un puente elevado para peatones eliminaría la mayoría de los conflictos entre los peatones y los ferrocarriles. Esta alternativa tendría un cruce simple al nivel de la superficie en la intersección de las calles 1st y Alameda. El resto de la ruta sería subterránea. La longitud de esta ruta propuesta sería de 1.6 millas.

Todas las estaciones para esta alternativa serían subterráneas e incluirían el área al norte de las calles 5th y Flower, adyacentes a Bunker Hill justo al sur de las calles 2nd y 2nd entre las calles Los Ángeles y Main.

Figura 2: Alternativa de LRT con énfasis en el subterráneo

Cronograma preliminar

A continuación se presenta el cronograma preliminar para ser discutido en la reunión sobre el alcance de la agencia.

Acción	Fecha
Reunión sobre el alcance de la agencia	26 de marzo de 2009

Reuniones públicas sobre el alcance	30 de marzo a 2 de abril de 2009 (ver más abajo para conocer las fechas específicas)
Finaliza el período de comentarios sobre el alcance	11 de mayo de 2009
Desarrollo del DEIS/DEIR	Primavera – invierno de 2009
Audiencias públicas / Comentarios sobre el DEIS/DEIR	Primavera de 2010
Adopción de la alternativa preferida a nivel local	Verano de 2010

¿Qué es una EIS/EIR?

Se debe preparar una Declaración sobre el impacto ambiental / Informe sobre el impacto ambiental (EIS/EIR) para todos los proyectos importantes que podrían afectar significativamente el medio ambiente. La EIS se prepara en cumplimiento con la Ley nacional sobre la política ambiental (NEPA) y el EIR se prepara en cumplimiento con la Ley de California sobre la calidad ambiental (CEQA). El propósito de la EIS/EIR consiste en brindar una evaluación abierta y completa de los asuntos y las alternativas ambientales, y en informar a quienes toman decisiones y al público sobre las alternativas razonables que podrían evitar o minimizar los impactos perjudiciales y mejorar la calidad del medio ambiente.

Cronograma de la reunión sobre el alcance

Se llevarán a cabo cuatro reuniones públicas sobre el alcance a cargo de FTA y Metro para que el público conozca más sobre el proyecto y haga comentarios. Las reuniones sobre el alcance se celebrarán en los siguientes sitios:

- Lunes 30 de marzo de 2009 de 4:30 p.m. a 6 p.m. en: University of Southern California (USC), Alumni Room, Davidson Conference Center, 3415 S Figueroa St, Los Angeles, CA 90007.

- Martes 31 de marzo de 2009 de 6:30 p.m. a 8 p.m. en: Lake Avenue Church, 393 N. Lake Ave, Pasadena, CA 91101.

- Miércoles 1 de abril de 2009 de 6:30 p.m. a 8 p.m. en: Japanese American National Museum (JANM), 369 E 1st St, Los Angeles, CA 90012.
- Jueves 2 de abril de 2009 desde el mediodía hasta la 1:30 p.m. en: Los Angeles Central Library, Board Room, 630 W 5th St, Los Angeles, CA 90071.

Se aceptarán comentarios escritos hasta el 11 de mayo de 2009. También se podrán presentar comentarios en las reuniones sobre el alcance por correo electrónico a regionalconnector@metro.net o por correo postal a:

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Los Angeles, CA 90012

Información sobre el proyecto

Se puede encontrar información adicional en el sitio de Internet del proyecto: http://www.metro.net/projects_studies/connector

審査関連情報

プロジェクト概要

今回提案される「地域接続交通路」プロジェクトでは現在稼動中もしくは建設中のライト・レール路線を直接接続することとなる。これにはパサデナ方面のメトロ・ゴールド・ライン、イースト・ロサンゼルス方面のメトロ・ゴールド・ライン、ロングビーチ方面のメトロ・ブルー・ライン、カルヴァーシティー方面のメトロ・エクスポ・ラインが含まれる。各路線はロサンゼルス・ダウンタウンで接続する。ブルー・ラインのターミナルとエクスポ・ラインのターミナルは7thストリート/メトロ・センター・ステーション（7 thストリートとフラワー・ストリート）で接続し、さらに両ラインはリトルトーキョー/アート・ディストリクト・ステーション（1stストリートとアラメダ・ストリート）でゴールド・ラインに接続する。これらの４路線はロサンゼルス・ダウンタウンで線路および駅を共有することとなる。提案される路線の距離は選択肢により多少異なるがおよそ1.8マイルとなる。

プロジェクトの目的と必要性

本プロジェクトの目的は地域の公共交通サービスと移動性の改善にある。プロジェクトの全体的な目的はパサデナとイースト・ロサンゼルス両方面のメトロ・ゴールド・ライン、メトロ・ブルー・ライン、メトロ・エクスポ・ラインを接続することにより移動性を改善することにある。この接続により地域全体がメリットを受け、より多くの人口がサービスを利用できるようになりロサンゼルス・ダウンタウンの人口増加、就業増加にのニーズにも貢献する。

これ以外にも「地域接続交通路」プロジェクトを必要とする以下の理由がある。プロジェクト対象地域においては現在複数の乗換が必要であり移動時間、また駅の混雑の増加の問題がある。プロジェクト対象地域には公共交通機関を必要とする住民が多くいる。現在の接続システムのままでは路線延長が完了する時点で路線スケジュールの信頼性が減少してしまう。プロジェクト対象地域内での投資により移動時間および安全性の面で路線全体での稼動が改善する。

選択肢

ロサンゼルス郡メトロ運輸局（Metro）が作成した「地域接続交通路最終選択肢分析報告(2009)」ではDEIS/DEIRにおけるさらなる審査のための以下の４つの選択肢が提示される。「無工事オプション」、「交通機関管理オプション（TSM）」、「路面LRTオプション」、「地下LRTオプション」

無工事オプション

「無工事オプション」では2030年まで現存の交通機関が維持される。現在工事中もしくは最近承認された対策R販売税により2030年までまかなわれる工事および稼動経費の対象プロジェクト以外、新規交通インフラはプロジェクト対象地域内では一切建設せず、現存のサービスおよびプロジェクトの維持に焦点をおく。2030予想年度までにはバス・サービスの一部を再組織、拡張し新規のレール・ラインとの接続を提供するが、プロジェクト対象地域内での交通網は大方現状維持となる。

交通機関管理（TSM）オプション

TSMオプションには「無工事オプション」の条項が含まれ、７thストリート/メトロ・センター・ステーションからユニオン・ステーションまで２つのシャトルバス路線を加えて対象地域のLRTサービスの接続を補う。ひとつの路線はグランド・アヴェニューと1stストリートを通り、もうひとつの路線はフィギュロア、フラワー、２ndストリート、３rdストリートを通る。シャトルバスは利用できるところでは現存のバス専用斜線を使い、メトロ・ラピッドで使用されているような交通優先シグナル装置を搭載する。停留所を数ブロックごとに設置し地域を満遍なくカバーする。各シャトル路線は1.5マイルから2マイルの距離となる。

路面LRTオプション

本選択肢 (図1) は地下の７thストリート/メトロ・センター・ステーションに発し、フラワー・ストリートの下を北に走り、５thストリートの北で地上に出３rdストリートと交差し、バンカー・ヒルに入り、北東に曲がり新しい入口から現存の２ndストリート・トンネルに入る。路線は２ndストリートに沿ってさらに走り、メイン・ストリートとロサンゼルス・ストリート上で路面平行線に分かれ（各線は単線）テンプル・ストリートに入る。そこからテンプル・ストリート上を東に走り、ロサンゼルス・ストリートの東で再び複線となり、リトル・トーキョー/アート・ディストリクト・ステーションの北でアラメダ・ストリート上でメトロ・ゴールド・ラインに接続する。「地域接続交通路」ではかなりの列車交通量が予想されるためテンプル・ストリートとアラメダ・ストリートの交差点に自動車専用低架線と歩行者専用高架線を設置し、歩行者対列車、自動車対列車の障害を避ける。

フラワー・ストリートの設計には２つのオプションがある。オプションAでは列車は３rdストリートを交差した後に地下に入り、５thストリートの南に新しくできる地下駅に行き、そこから７thストリート/メトロ・センター・ステーションへと進み現存のメトロ・ブルー・ラインのプラットホームに到着する。オプションBでは列車は３rdストリートを交差後平面駅に到着し、４thストリートの近くで地下線路に入り７thストリート/メトロ・センター・ステーションの現存のメトロ・ブルー・ラインのプラットホーム

に到着する。全体として平面LRTオプションではライト・レール・システムに約1.8マイルの複線が追加されることになる。

オプションA、オプションBの駅設計以外に、2nd　ストリートとホープ・ストリートの南でバンカー・ヒルに隣接した駅と、１stストリートとテンプル・ストリートの間でメイン・ストリートとロサンゼルス・ストリートを利用した分岐駅も含まれる。

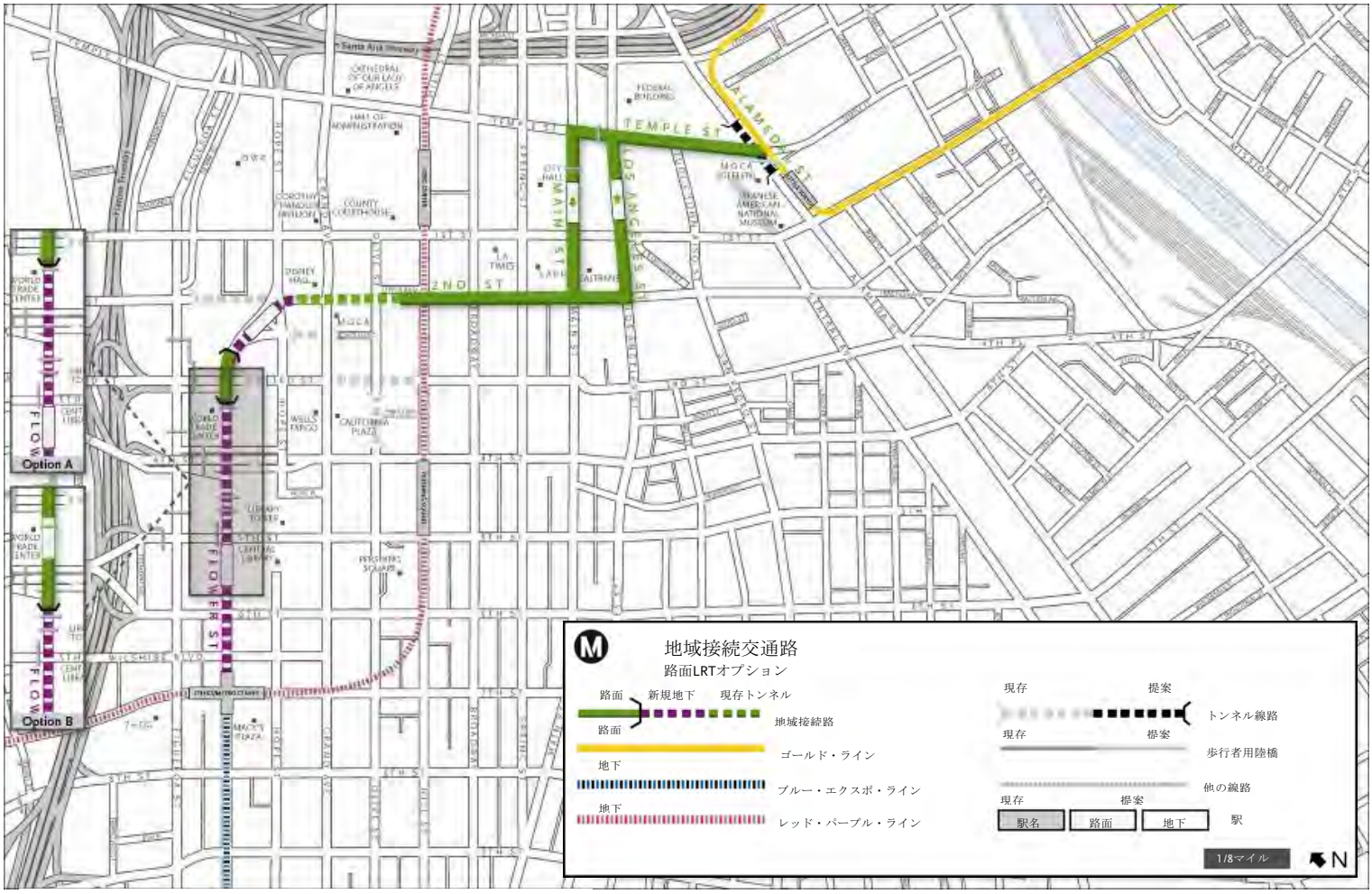


図1: 路面LRT オプション

地下URTオプション

7thストリート/メトロ・センター・ステーションから、このオプション（図２）ではフラワー・ストリートに沿って北に延長し、５thストリートの北に新しい地下駅を創設す

る。２ndストリートで地下トンネルは東に延長しバンカー・ヒルおよびロサンゼルス・ストリートとブロードウェイの間の地域にアクセスできるよう新しい地下駅がいくつか創設される。トンネルは１stストリートとアラメダ・ストリートの交差点の南西で地上に出てメトロ・ゴールド・ラインに路面接続する。1st ストリートとアラメダ・ストリートの交差点にはアラメダ・ストリートに沿って線路交差点の下に自動車・トラック専用の新しい低架線が設けられまた歩行者対列車の障害を避けるための歩行者専用高架橋も設けられる。このオプションでは１stストリートとアラメダ・ストリートの交差点のみでの路面交差となる。路線のその他の部分はすべて地下となる。この路線の距離は1.6マイルとなる。

このオプションでの駅はすべて地下となり、これにはフラワー・ストリート上の５thストリートの北、ロサンゼルス・ストリートとメイン・ストリート間の２ndストリートのすぐ南のバンカー・ヒルに隣接した地域も含まれる。

図2: 地下LRT オプション

予備スケジュール

審査会議の予備スケジュールは以下のとおりである。

内容	期日
局審議会議	2009年3月26日
公開審議会議	2009年3月30日から2009年4月2日(具体的期日は以下参照)
審議コメント期間終了	2009年5月11日

DEIS/DEIRの構築	2009年春から冬
DEIS/DEIRに関する公開聴講・コメント	2010年春
地域選択オプションの適応	2010年夏

EIS/EIRとは?

環境に大きな影響を及ぼす可能性のある主要なプロジェクトはすべて「環境に対する影響に関する説明書・環境に対する影響に関する報告書 (EIS/EIR)」の作成が義務づけられている。EISは連邦環境方針法(NEPA)に準じ、EIR はカリフォルニア州環境質法(CEQA)に準じ作成される。EIS/EIRの目的は環境にかかわる事項および選択肢の開かれた評価をし、悪影響を回避または最小限に止め、環境の質を強化できる合理的な選択肢を決定権を持つ者および一般市民に知らせることにある。

審査会議スケジュール

一般市民に対するプロジェクトの説明およびコメントの機会としてFTAおよびメトロ当局による公開審査会議が以下の4箇所で開催される。

2009年3月30日（月） 4:30 p.m. – 6 p.m.
Alumni Room, Davidson Conference Center, University of Southern California (USC)
3415 S Figueroa St, Los Angeles, CA 90007

2009年3月31日（火）6:30 p.m. – 8 p.m.
Lake Avenue Church
393 N Lake Ave, Pasadena, CA, 91101

2009年4月1日（水）6:30 p.m. – 8 p.m.
Japanese American National Museum (JANM)
369 E 1st St, Los Angeles, CA 90012

2009年4月2日（木）正午– 1:30 p.m.
Board Room, Los Angeles Central Library
630 W 5th St, Los Angeles, CA 90071

文書でのコメントは2009年5月11日まで、以下で受付。
審査会議当日
電子メール：regionalconnector@metro.net

郵送：Ms. Dolores Roybal Saltarelli, AICP, Project Manager, Los Angeles County Metropolitan Transportation Authority, One Gateway Plaza, Los Angeles, CA 90012

プロジェクト関連情報

追加情報は以下のホーム・ページを参照:
http://www.metro.net/projects_studies/connector

Appendix U
Powerpoint Presentation

Los Angeles County
Metropolitan Transportation Authority

Regional Connector Transit Corridor Project Draft Environmental Impact Statement/ Draft Environmental Impact Report

Public Scoping Meeting
University of Southern California
Alumni Room, Davidson Conference Center
March 30, 2009

Metro

Agenda

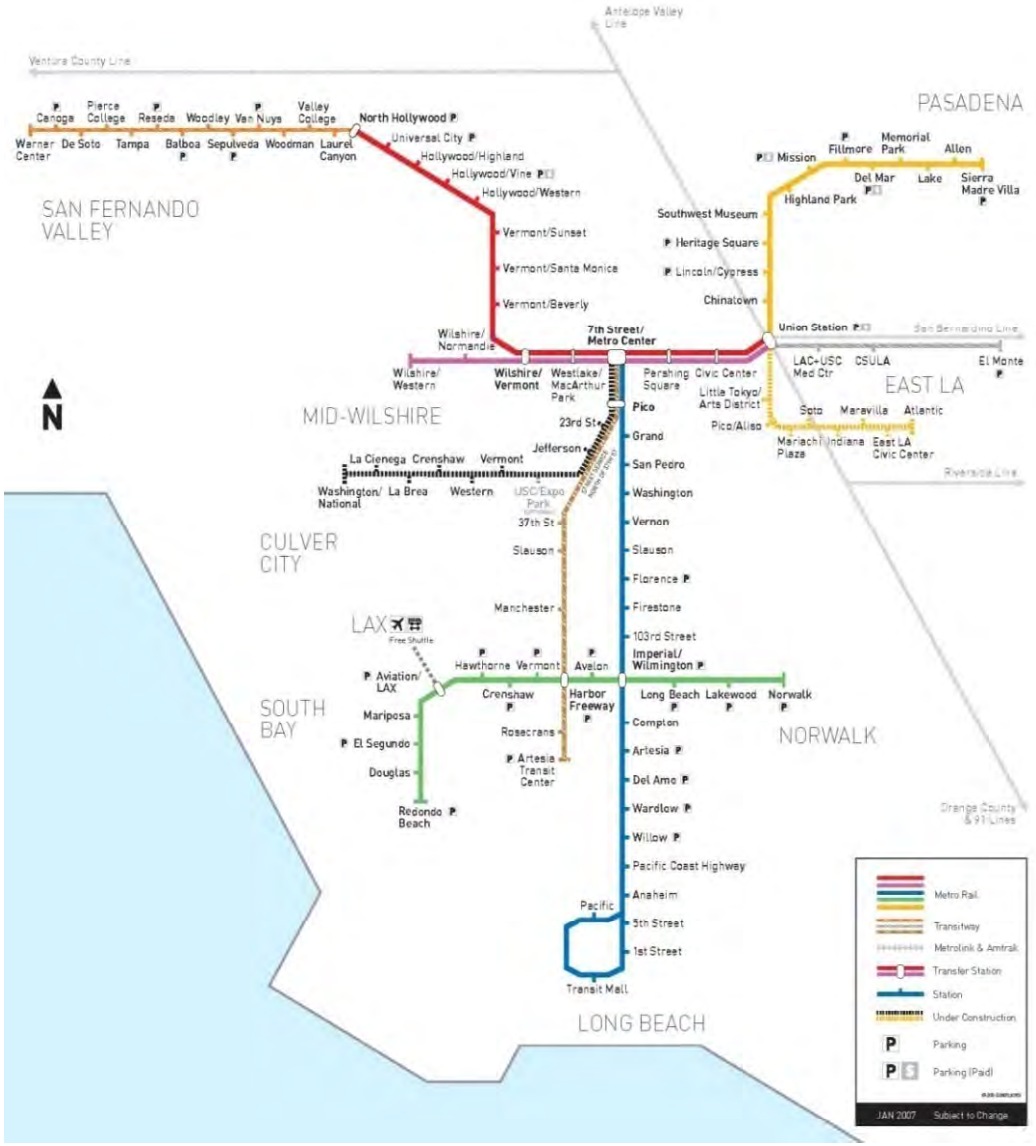
- Open House — 20 Minutes
- Presentation — 20 Minutes
- Public Comment — 50 Minutes

Metro

Metro Corridor Studies

Metro has initiated multiple corridor studies for LA County

- **Regional Connector Transit Corridor**
- **Westside Extension Transit Corridor**
- **Eastside Extension Phase 2 Transit Corridor**
- **Crenshaw-Prairie Transit Corridor**
- **Harbor Subdivision Transit Corridor**



Metro

Regional Connector Project

- The Regional Connector will directly connect:

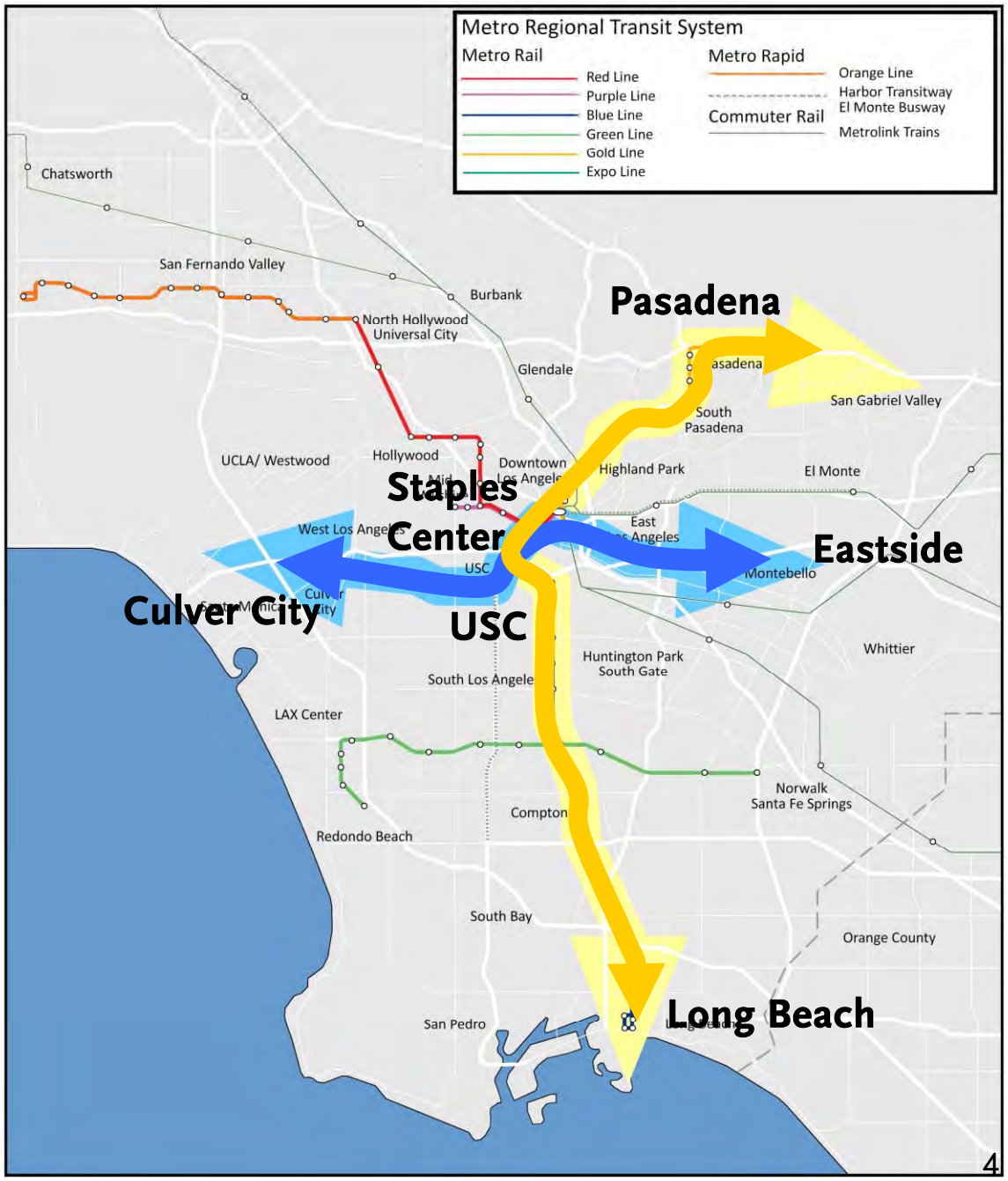
  Metro Gold Line

  Metro Expo Line

  Metro Blue Line

- This will allow a “one seat ride” for riders traveling on Light Rail Trains between Pasadena and Long Beach

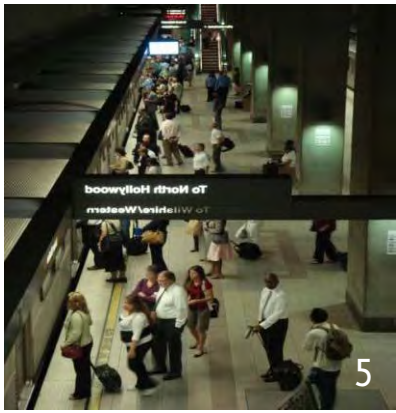
- Also provides “one seat ride” for riders traveling on Light Rail Trains between Culver City and the Eastside



Metro

Project Purpose

To improve the region's public transit service and mobility by providing a direct connection through downtown Los Angeles that links the region via the Metro Gold Line to Pasadena and East Los Angeles, Metro Blue Line to Long Beach, and Metro Expo Line to Culver City



Project Need

- Multiple transfers required to travel across downtown increasing travel time
- Station overcrowding occurs at transfer stations
- Schedule reliability reduced with system expansion
- Improved system-wide operations in regards to travel times and safety issues
- Better serve transit-dependent residents
- Expected increases in employment & residential growth and traffic congestion over the next 20 years

Metro

Study Background (1990 – 2004)

- In early 90's, this project was originally planned as an extension of the Metro Blue Line to Pasadena.
  (Pasadena to Los Angeles Light Rail Transit Project, 1993)

- Instead, Metro Gold Line to Pasadena was planned and built to Union Station with a connection to the Metro Blue Line to be pursued at a later time.
  (Pasadena to Los Angeles Light Rail Transit Project, 1993)

- Metro Gold Line Eastside Extension, approved in 2002, narrows the gap between rail lines.

- Metro performs feasibility and cost studies in 2004 on Regional Connector.
  (Regional Light Rail Connector study, 2004)

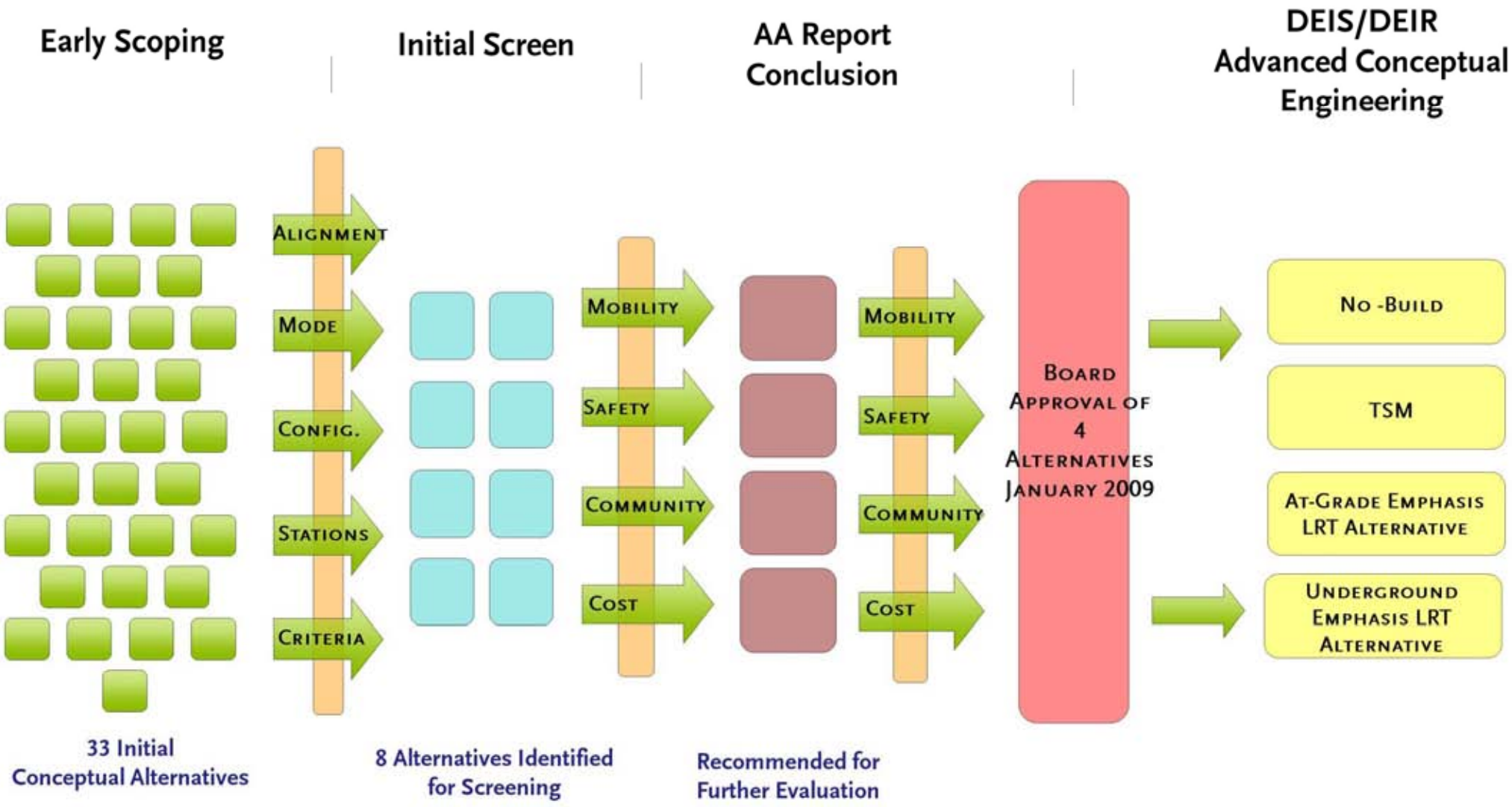
Metro

Recent Progress

- In July 2007, Metro initiated the Alternatives Analysis (AA) Study for the Regional Connector Transit Corridor.
- In November 2008, Measure R was approved and included funding for the Regional Connector Project.
- In January 2009, Metro Board of Directors approved alternatives for further study in a Draft Environmental Impact Statement/ Draft Environmental Impact Report (DEIS/DEIR)

Metro

Alternative Analysis Process



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AA Community Engagement

- 3 rounds of Public Meetings
- Targeted outreach conducted with key stakeholders such as
  - Downtown Los Angeles Neighborhood Council, Little Tokyo Community Council, Bringing Back Broadway, Grand Ave., South Park Stakeholders, Central City Association, Downtown Center BID, Central City East Association, and Historic Core BID
- Community engagement will continue throughout the development of the project.

Metro

What we learned so far

The Regional Connector provides

- Travel time savings of 12-21 minutes for those currently transferring to the Metro Red Line
- Increases new transit trips by 8,000-10,000
- Cost savings to riders resulting from reduced number of transfers

Metro

Why are we here?

- The Public Scoping Period is the first step in a DEIS/DEIR process, which concludes on May 11, 2009

- Consistent with the National Environmental Protection Act and the California Environmental Quality Act (NEPA/CEQA) as well as the Federal Transit Administration's New Starts Program

- Solicit comments from the general public, agencies and organizations on the alternatives, impacts and mitigations to be studied in a DEIS/DEIR

Metro

Public Scoping Period

Notice of Intent to Prepare DEIS/DEIR published in the Federal Register

Publications:

- **LA Times, La Opinion, Rafu Shimpo, Downtown News, Daily Trojan, Garment Citizen, Pasadena Star News**

Total Mailings:

- **174 Agency Mailings**
- **1543 Postal Addresses**
- **721 Email Addresses**

Metro

Regional Connector Transit Corridor Project

PUBLIC SCOPING MEETINGS

You are invited to a Metro Public Scoping Meeting for the Regional Connector Transit Corridor Project. This project will connect the Metro Gold Line with the Blue and Expo lines through Downtown Los Angeles.

The scoping meetings start the Draft Environmental Impact Study/Environmental Impact Report process per the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) of the Regional Connector. Moving forward for further environmental review are two Build alternatives – an at-grade emphasis alternative, and an underground emphasis alternative, as well as a No-Build and a Transportation Systems Management alternative.

Content presented at the meetings will be identical, so make sure you attend at the time most convenient for you.

Please join us to provide your comments on this next phase of the project.

Monday, March 30, 2009
4:30pm – 6pm
Alumni Room, Davidson Conference Center
University of Southern California (USC)
3415 S Figueroa St, Los Angeles, CA 90007

Tuesday, March 31, 2009
6:30pm – 8pm
Lake Avenue Church
393 N Lake Av, Pasadena, CA 91101

Wednesday, April 1, 2009
6:30pm – 8pm
Japanese American National Museum (JANM)
369 E 1st St, Los Angeles, CA 90012

Thursday, April 2, 2009
Noon – 1:30pm
Board Room, Los Angeles Central Library
630 W 5th St, Los Angeles, CA 90071

Metro

For more information, visit
metro.net/regional connector or call 213.922.7277.

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Scoping Meetings

University of Southern California
3415 S. Figueroa St., Los Angeles

March 30, 2009
4:30 p.m. to 6:00 p.m.

Lake Avenue Church
393 N. Lake Avenue, Pasadena

March 31, 2009
6:30 p.m. to 8:00 p.m.

Japanese American National Museum
369 E. 1st St., Los Angeles

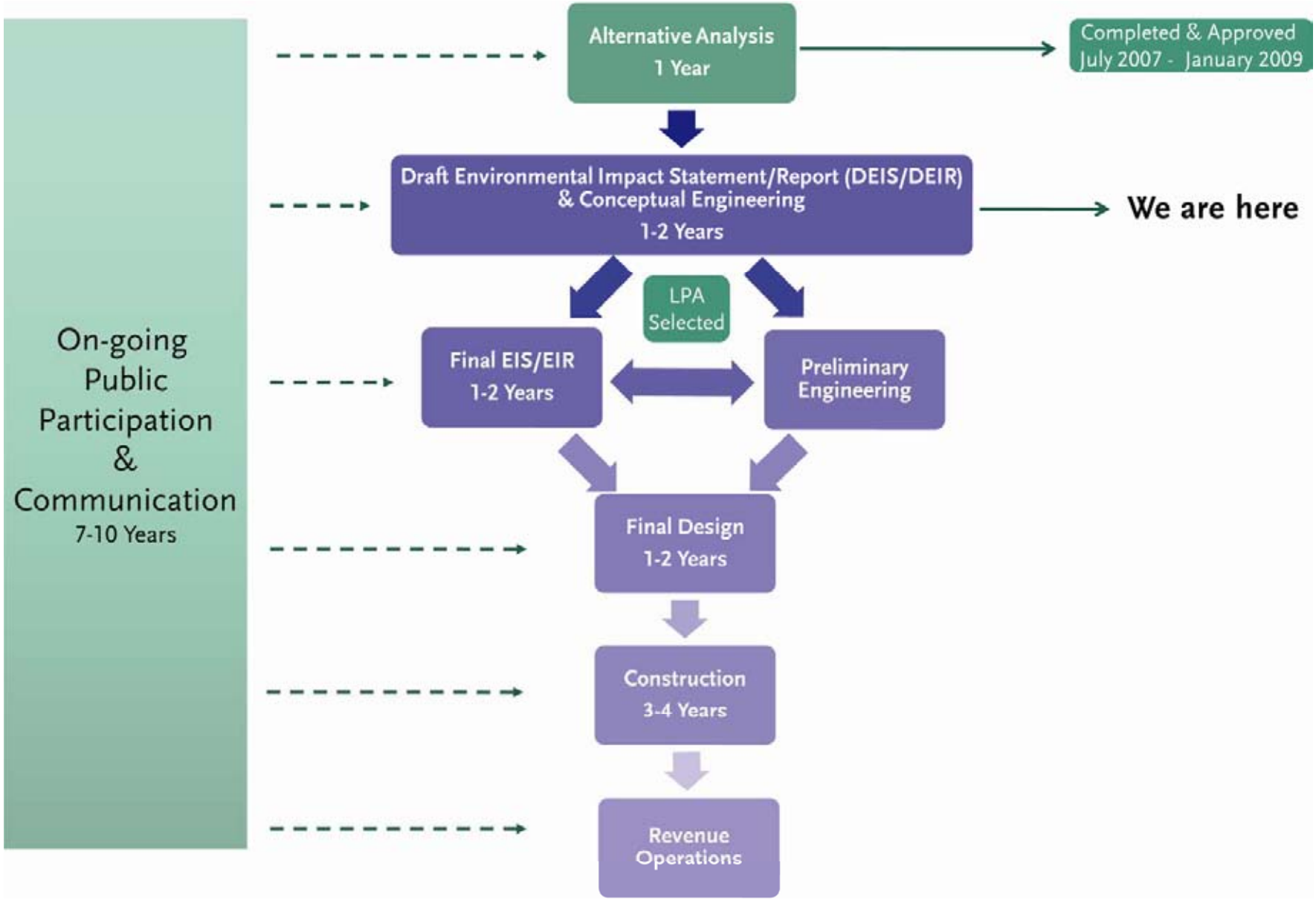
April 1, 2009
6:30 p.m. to 8:00 p.m.

Central Public Library
630 W. 5th St., Los Angeles

April 2, 2009
Noon to 1:30 p.m.

Metro

Project Development Process



Metro

Alternatives Under Evaluation

- No Build
- Transportation Systems Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Metro

No Build and TSM Alternatives

No Build

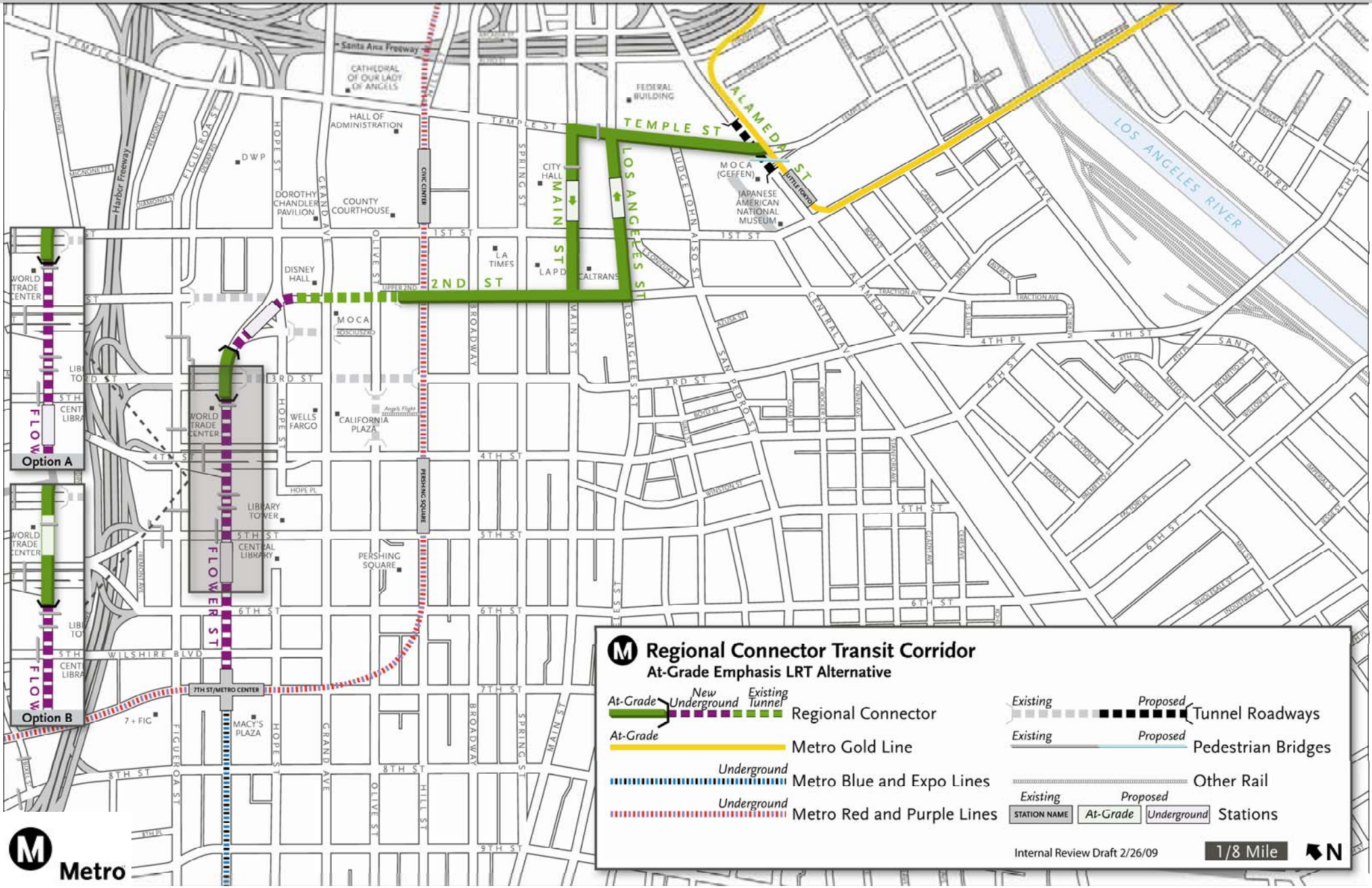
- No rail improvements other than those planned and included in Metro's 2009 Long Range Transportation Plan (Draft)
- No bus improvements other than normal bus operation growth and adjustments
- Bus operation adjustments for connections to Metro Expo Line & Metro Gold Line Eastside Extension

TSM

- Includes No Build and the addition of 2 shuttle buses linking 7th St. Metro Center Station and Union Station– operating every 2.5 min during peak hours
- Transit Priority System (TPS) could be employed to increase bus speed as well as bus-only lanes where possible

Metro

At-Grade Emphasis LRT Alternative

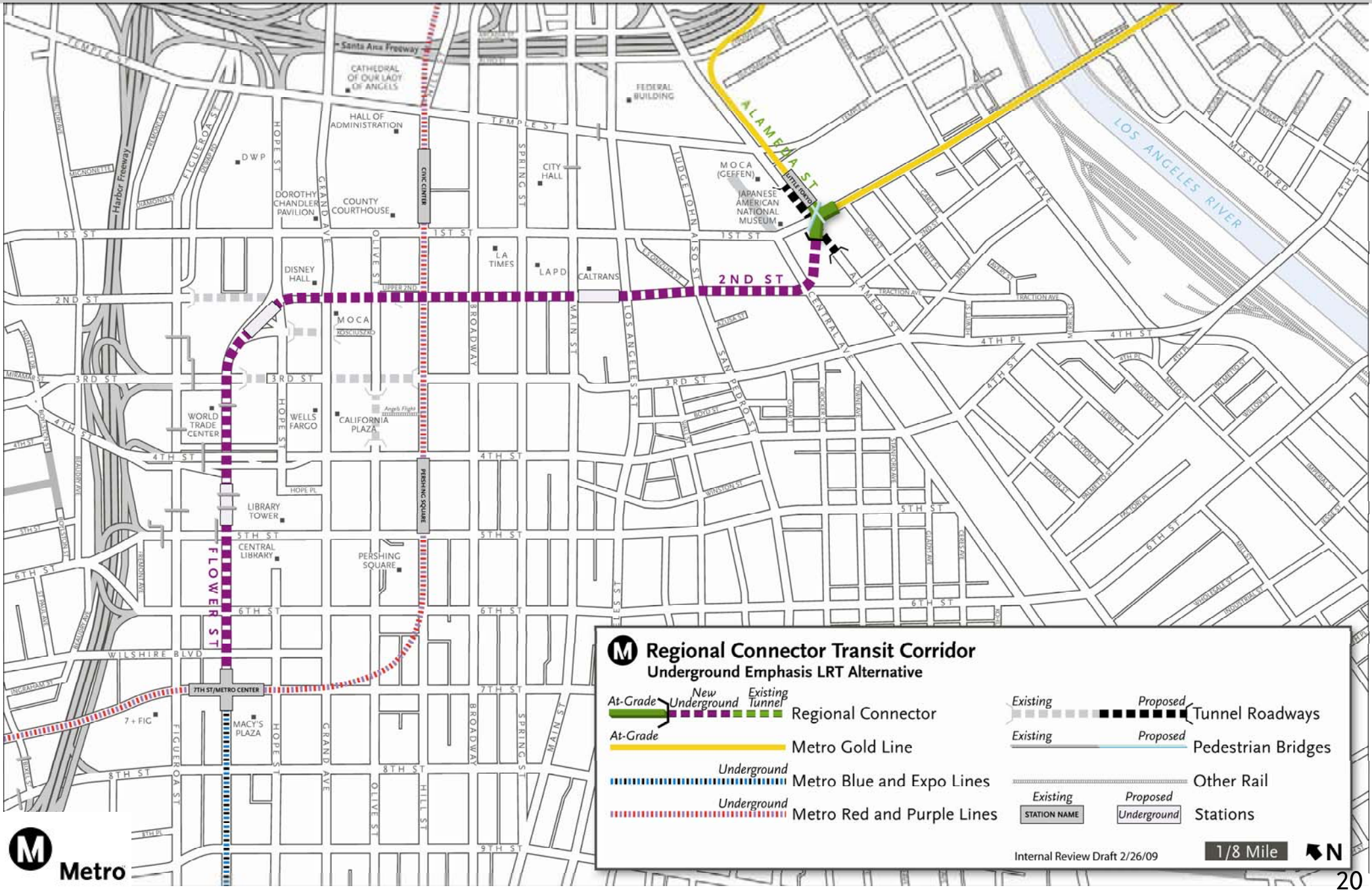


At-Grade Emphasis LRT Characteristics

- Length of new track: 1.8 miles
- Arriving 2.5 minutes during peak hours
- Operates with overhead wires
- Power substations/ancillary facilities
- Underpass at Temple and Alameda, with pedestrian bridge crossing
- Approximate station locations:
  - On Flower between 3rd & 5th Streets (underground or at grade)
  - 2nd & Hope St. (underground)
  - Split station on Los Angeles & Main Streets between 1st & Temple Streets (at grade)
- Existing Little Tokyo/Arts District Station is served by the East/West operation only

Metro

Underground Emphasis LRT Alternative



Underground Emphasis LRT Characteristics

- Length of new track: 1.6 miles
- Arriving 2.5 minutes during peak hours
- Operates with overhead wires
- Power substations/ancillary facilities
- Underpass at 1st and Alameda, with pedestrian bridge crossing
- Approximate station locations:
  - On Flower between 4th & 5th Streets (underground)
  - 2nd & Hope Street (underground)
  - On 2nd Street between Main & Los Angeles Streets (underground)
- Existing Little Tokyo/Arts District Station will be served by the north/south operation only

Metro

Environmental Issues to be Analyzed

The purpose of the DEIS/DEIR is to further refine the project alternatives and demonstrate project benefits while identifying the potential effects of construction and operation. Measures to enhance project alternatives and to avoid, minimize, and mitigate adverse impacts will be identified and evaluated so that the best project alternative is selected.

- Traffic, Transit & Parking
- Visual & Aesthetics
- Air Quality
- Cultural/Historic Resources
- Safety & Security
- Geology & Soils (Subsurface & Seismic)
- Water Resources
- Biological Resources
- Noise & Vibration
- Energy Use
- Hazardous Materials
- Parks & Other Community Facilities
- Land Use
- Displacement/ Relocation of Uses
- Community Impacts
- Economic Development
- Fiscal Impacts
- Environmental Justice
- Growth Inducing Impacts

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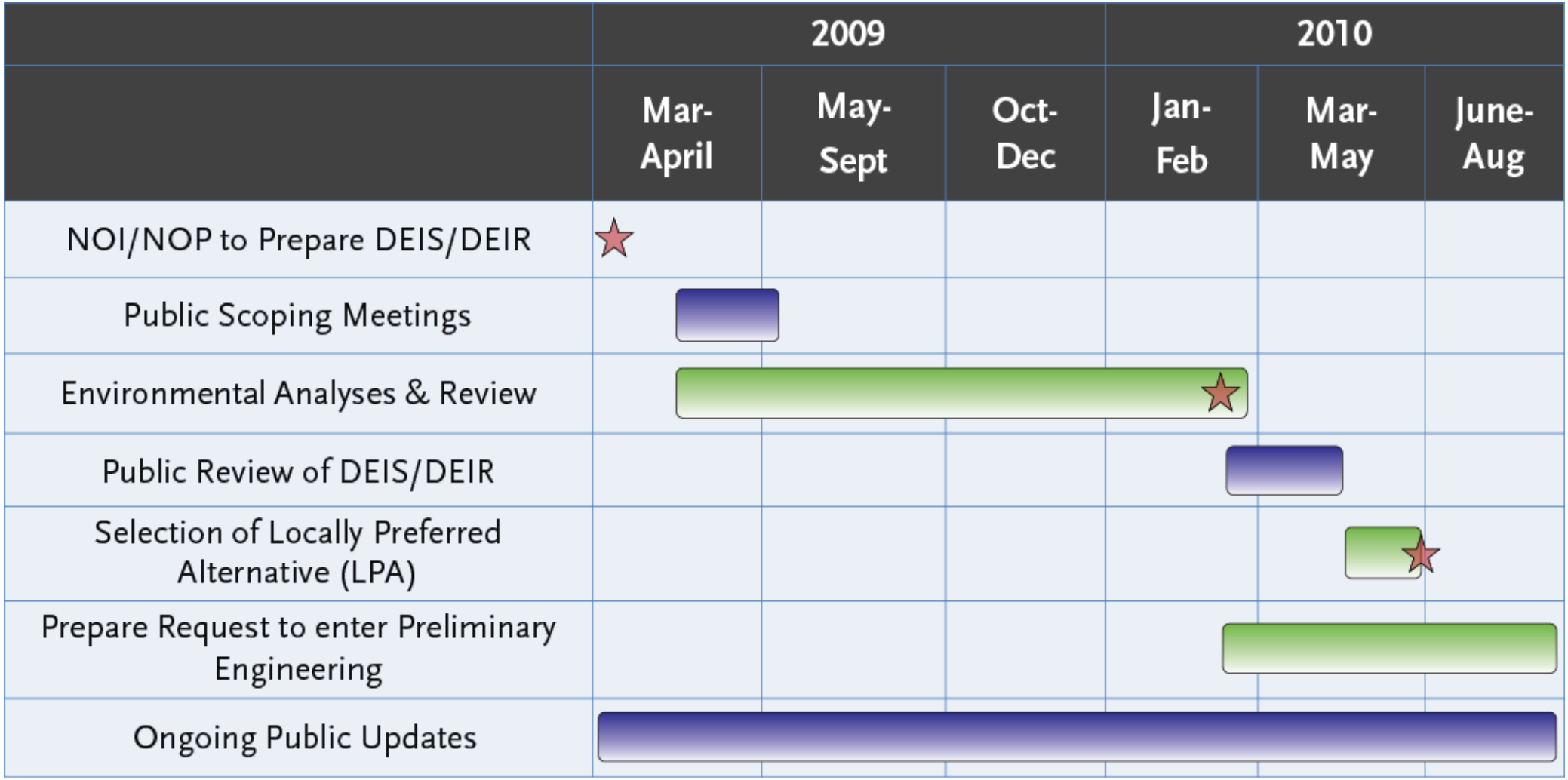
DEIS/DEIR Schedule



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Public Participation Opportunities

Project Tasks

Milestone: Circulate DEIS/DEIR

Results of Scoping and DEIS/DEIR

- Comments will be collected for the record until May 11, 2009
- Comments will be addressed in the DEIS/DEIR
- Continued public updates and participation
- Selection of a Locally Preferred Alternative (LPA) by Metro Board at conclusion of public review process

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Public Comments

- Scoping comment period through May 11, 2009
- Complete comment form
  - At a scoping meeting
  - By Mail: Dolores Roybal Saltarelli, Project Manager

    One Gateway Plaza – MS 99-22-2,

    Los Angeles, CA 90012
  - Via web: www.metro.net/regionalconnector
  - Email: regionalconnector@metro.net

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Environmental Issues to be Analyzed

The purpose of the DEIS/DEIR is to further refine the project alternatives and demonstrate project benefits while identifying the potential effects of construction and operation. Measures to enhance project alternatives and to avoid, minimize, and mitigate adverse impacts will be identified and evaluated so that the best project alternative is selected.

- Traffic, Transit & Parking
- Visual & Aesthetics
- Air Quality
- Cultural/Historic Resources
- Safety & Security
- Geology & Soils (Subsurface & Seismic)
- Water Resources
- Biological Resources
- Noise & Vibration
- Energy Use
- Hazardous Materials
- Parks & Other Community Facilities
- Land Use
- Displacement/ Relocation of Uses
- Community Impacts
- Economic Development
- Fiscal Impacts
- Environmental Justice
- Growth Inducing Impacts

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Appendix V

Summary of Public Comments, Matrix & Transcripts

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Monday, March 30, 2009

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
B1359NC0

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS, taken at University of Southern California, Davidson Conference Center, Alumni Room, 3415 South Figueroa Street, Los Angeles, California, commencing at 4:50 p.m., on Monday, March 30, 2009, heard before the METRO REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM, reported by MARCENA M. MUNGUIA, CSR No. 10420, a Certified Shorthand Reporter in and for the State of California.

APPEARANCES:

Metro Presenter:	DOLORES ROYBAL SALTARELLI Transportation Planning Manager, Metro

Facilitator:	ANN KERMAN Community Relations Manager, Metro

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Los Angeles, California, Monday, March 30, 2009

4:50 p.m.

MS. KERMAN: I see I have a card back there, and the Councilman wanted to make --

COUNCILMAN LA BONGE: Can I borrow your red pen? Can you get a map up there, where the map is, you know, where it shows --

MS. ROYBAL SALTARELLI: Which map?

COUNCILMAN LA BONGE: Any one of them. They're all the same.

Anybody ever go to the San Diego Stadium to see the Chargers play? They run trains there, sometimes up to 25,000 people. So I think our argument here is the Expo Line is going to allow people to park in Downtown and take the Expo Line to the stadiums, whether it's an SC game or a soccer game or an event.

And the other thing I do want to say loud and clear, can we -- how can we get Dodger Stadium into this discussion, truthfully? Do I got to talk to Roger Stoble? He's got six more days, I think. I'll talk real fast. I think it's real important we get Dodgers in there.

The other point I want to make here is the

concept -- it's a very good presentation that you made, Dolores, and I want to say most people give a PowerPoint presentation and they read everything. You actually highlighted the important things and we all read it by there. That was a very good presentation.

Give her a hand.

Now, our concept is to go from Pasadena and Long Beach as fast as possible. If I live in Pasadena and work in Long Beach, I don't need to go through Downtown L.A. What if there was some thinking here that got you down Alameda to Hooper and into the regular line or over to Central, because I think the transformation of Alameda and Central will take place in the next few years as it is.

So I just wanted to make those two points and thank everybody for being a part of the public process. It's amazing when few people speak, they have a louder voice. So it's important that you're all here.

I thank you, Ann. Very good presentation.

MS. KERMAN: Thank you, Tom.

As we said before, there's going to be three ways -- three or many ways for you to participate in this public process, but the first way we're going to actually

do right now is hear your public comments.

What I'm going to do is call up three people,

just to be ready on deck, and then you'll be able to come up to this mike. We'll be setting the timer for two minutes and then hear you, and we have our court reporter. So the first thing I'm going to ask is for you to state your name clearly and then we'll hear from you.

So first up will be Craig Thompson. Second, Professor Najm Meshkati, and then Justin Walker.

So Craig?

MR. THOMPSON: Well, Mr. LaBonge, you stole the words right out of my mouth here with that Downtown connector proposal to run it down Alameda to Washington, west on Washington, hook in with the Y connection to the Blue Line.

It will be very cheap. The taxpayers would swallow this up like it was an M&M in it without a burp,

because it looks like the cost of such a connector would only be about maybe 500 million or less, rather than the 2 to 3 billion that this would cost.

Plus, if you wanted to save the Seventh and Metro tunnel for any other purpose, that could be used for going up to Dodger Stadium and beyond, all the way into Glendale and Burbank.

The thing here is to get the connector built as quickly as possible and as cheaply as possible, and those two alternatives are not the way.

Going down Alameda to Washington with a Y connector at Long Beach Boulevard, another Y connector at Flower and Washington, would fit the bill perfectly.

Thank you very much.

MS. KERMAN: Thank you, Mr. Thompson.

Next up, Professor Meshkati.

PROFESSOR MESHKATI: Thank you, ma'am. Thank you very much for coming here. I would like to welcome you to our beautiful campus.

I'm a professor of engineering here and I know a little bit about light rail and light-rail safety. I have been having two grants on grade crossing and then I've been appointed to review and develop the new update Manuel 57 by TCRB on light-rails design.

I would like to really ask MTA this time, with all due respect, to do it right. I've been involved in the case of Exposition light rail as a pro bono expert witness. We fought the Exposition line construction alternative and we won, and I don't want to work another 3-, 4-, or 500 hours pro bono to fight MTA to teach them what to do.

This report that MTA did on the hazard analysis for the Exposition light rail, my student is here and knows that it wouldn't get more than a C minus in my class, and that's only if I'm in a good mood.

Please make sure that your consultants do a great job on hazard and risk analysis. We know how to do it, and don't let us and some other attorneys go and fight MTA again during the evidentiary hearing of the CPUC to convince them that what's the right way to design a light rail.

As I said, I speak from experience. I'm a professor of engineering here. I've been recently appointed to the Transportation Research Board, TCRB, panel to do that.

By the way, I'm not beating my own drums. I'm not going to be here. I'm not looking for consulting for myself. I have greater students. Next year at this time, I will be at the State Department as a Jefferson science fellow for a year or two years. I'm not doing that for myself. I just want to make sure that MTA does it right, this time at least.

Thank you.

MS. KERMAN: Thank you, Professor.

Next up is Justin Walker, followed by Spencer Kassimir, followed by Roasina Suvaroporn.

MR. WALKER: Hello. My name is Justin Walker. I'm a student volunteer with the USC Chapter of CALPIRG, on the Public Transit Campaign.

L.A. County, over the last 19 years, we've

developed a substantial light-rail system, branching throughout most parts of the County; but as we all know, there's a big gap in the middle, and this is a great way to link the gap in the middle of the system. But it's important to recognize that this regional connector will be a core to a system and it must be the most robust part of the system and, therefore, we have to do it right the first time.

Digging Downtown is expensive. Disrupting traffic and putting in stations is expensive. So we have to make sure we do it correct with the underground alternative of some sort, and when I say "underground

alternative," I'm not referring to the Underground Emphasis Alternative that we see here, but rather a complete underground alternative that involves a grade separation, a complete grade separation, at First and Alameda, 'cause presently there could potentially be trains running from Long Beach to Pasadena, from East L.A. to Culver City, and there's even some interest for trains running directly from East Los Angeles to Pasadena.

So that would involve six different train movements moving through the intersection at First and Alameda and, therefore, that would clog up First Street. The current underground alternative involves an at-grade

crossing with all six movements at First and Alameda going into the transition to the subway section. So, therefore, we have to make sure we do an underground alternative that is strong enough to support

two-and-a-half-minute headways. When you have six different directions, you have headways equaling about a minute.

So please go with the underground alternative and make sure this is a strong core of the system, with complete grade separation. We can't afford to do it again if we mess up (indicating).

MS. KERMAN: Thank you, Mr. Walker.

Next up, Spencer Kassimir.

MR. KASSIMIR: I also want to voice my support of a fully underground route. This is a major metropolitan area. Coming from New York, I'm surprised that anything is done at grade. With the capacities we have in Tokyo, everything is underground.

I just don't see any success in doing it at grade at all, if it's going to increase traffic, not just for cars but buses, at all. I think part of a mass-transit project is not to exacerbate a preexisting problem, but to help assuage it. I mean, definitely it won't cause or encourage more people to ride, but the people who won't ride still won't and then there will be

more traffic and more pollution.

I think, also, I agree it should be fully underground, mainly for the reason that if you are going to have all these routes coming through, yes, it's going to increase train congestion; but in addition to that, there have been problems with safety in the past at grade, with cars hitting Gold Line trains and Blue Line trains.

In addition, those areas do not have safety arms, and still continue not to, in Highland Park and areas of Washington Boulevard.

So my confusion again with this is why would we need to choose if we just want a north-south station for Little Tokyo or an east-west? I think we should even maybe wait a little until we have the funds to do it completely and do it right.

Thank you.

MS. KERMAN: Thank you very much. Next up -- go

ahead.

MS. SUVAROPORN: I'm Roasina Suvaroporn. I'm a student here at the Engineering Department. I'm also in Dr. Meshkati's class.

We're considering human factors in engineering. I also support the underground system, 'cause we've been analyzing the at-grade causing accident for a bit, for a

semester, last semester, and we've seen at least three accidents that shouldn't have been happened if Metro was really considering safety of our community better than they have been. So, yes, I support the underground system. And correct me if I'm wrong, but isn't the day pass for the Metro $3 to get --

MS. KERMAN: $5.

MS. SUVAROPORN: It went up now? So I think connecting it --

MS. KERMAN: It may be for students. It may be less

for students.

MS. SUVAROPORN: Okay. So I think you're thinking right in connecting all the connections together in one point. That's a way to save money, but my question is how are you guys going to raise money for this project? Like, who's the sponsor and who's going to take charge of this? Thank you.

MS. KERMAN: Okay. Thank you very much.

Next up is Steve Bagby, Sr., followed by Pat Jones.

And I'd like to also invite anyone else that would like to speak tonight to fill out a speaker card. They're available at the back desk. Raise your hand and we'll get you one. And, again, we're very interested in hearing from you on the project purpose, the need, the

project alternatives, the potential impacts, and

mitigations that you think we need to be looking at in this project.

So with that, Mr. Bagby.

MR. BAGBY: Thank you so much.

My name is Steve Bagby, Sr. I'm a member of the Dorsey High Alumni Association and the Fixed Expo Coalition. I'm also the former director of Transportation of Housing for the late Congresswoman Juanita Millender McDonald.

I oversaw the Alameda Corridor, so I know a little bit about below grade.

I want to commend USC -- first of all, I want to express my regrets for the two students that were injured by a car accident on Hoover and Jefferson yesterday. Any life is too much to lose.

We are concerned about -- well, first of all, let me say on a positive note, for the inner-city Los Angeles community, we are very much for the Expo Line. We see its value. We just think it needs to be built safe. I did live in New York for ten years. I don't know why Los Angeles cannot do something that's user-friendly and safe. Your wonderful professor has done a magnificent job going to Dorsey High and Foshay at

public meetings, explaining some of the problems, some of

the faults with the EIR that's been done, and he's to be commended, 'cause he's been doing it pro bono.

Let me say that we have a letter that we are soliciting signatures for that is asking the Mayor and the Governor to use Proposition R money to be used for the Expo rail and the H.R. money, the Reinvestment Reconstruction, the Stimulus Package, because technically the Expo Line is shovel ready. It will provide jobs. It will do it safely. Right now, only -- Farmdale at Dorsey is the only location that's left in play that it might remediate students getting injured. Okay?

This coming Saturday, from Foshay Middle School, where the California Public Utilities Commission voted not to extend a bridge, we are going to be marching from Foshay to Dorsey from 9:00 to 12:00.

MS. KERMAN: Thank you, Mr. Bagby.

Next up, Pat Jones, followed by Mike Metcalfe.

MS. JONES: Hi. My name is Pat Jones, and the reason why I came today is because this is so vitally important for our seniors. Our seniors and our disabled can't do a lot of walking. So wherever you have this Metro rail, it has to be ADA accessible because, you see, now, more than often, you have seniors coming out and you have seniors doing their laundry, doing their shopping, and they are taking these buses. They are taking these Metro rails.

It has to be safe for these individuals, the senior and disabled. You have blind taking these buses and these Metro rails and the concern that I have is that they're not connecting these buses, number 1. So if they're not connecting the buses right now, what do you think is going to happen when the Metro rail comes into light? Are they going to be connected, where these people don't

have to stand and wait?

There is a lot of gang retaliation, a lot of gang members going out there shooting and carrying on. These seniors and these disabled individuals, they can't run, so they're in harm's way of whatever is out there on the streets. So we have to take that into consideration.

Another thing we're looking at is that we're dealing with -- I live in South Central L.A., so we're dealing with the south, we're dealing with the west, we're dealing with the east, we're dealing with Central, we're dealing with Harbor Gateway, and we're dealing with Wilmington; and if these buses and these connectors are not connecting to fit our needs, it's like this is useless for us in South L.A. because we need to make sure we're connected from point A to point B, because a lot of individuals -- I have a car, but a lot of individuals don't.

I'm looking at -- I'm an advocate for these

individuals and they can't speak up for themselves because they don't know what they need, but I know basically what they need. They need to get from point A to point B, and if those allegations (sic) are not affordable for them, then what do they do? They're like left out of the mix.

So I just hope you consider the seniors and disabled. Thank you so much.

MS. KERMAN: Thank you very much, Ms. Jones.

Next we have Mike Metcalfe, followed by Damien Newton.

MR. METCALFE: Thank you very much.

I was able to work on it a bit during the Alternatives Analysis and participated in drafting the Urban Design and Planning Report, and I would like to put in a personal plug for the underground system as well and ask everyone to remember that the underground alternative does have the potential to generate terrific revenue-generating public/private/joint development projects, where the at-grade system is very limited, perhaps Bunker Hill near the Grand Avenue Disney Hall site.

But the underground system has that plus two to three other major sites for major public/private real estate transactions with Metro that would ultimately

generate fiscal revenues and revenues that would go to help pay debt service for the construction costs of the system, and that's an extremely important economic advantage, the idea of leveraging our public taxpayer investment and making it generate additional funds.

Thank you.

MS. KERMAN: Thank you, Mr. Metcalfe.

Next, Damien Newton.

MR. NEWTON: Hi. I'm Damien Newton.

Three points, real quick. One, support underground rail. As someone that lived and worked in New York City, it's better, easier, faster. It's simple.

Second, I know the Alternatives Analysis is over

so you're unlikely to start studying new routing to Dodger Stadium, but just in case, to heck with the Dodgers. They were unwilling to raise parking by four cents a customer, which would have funded the trolley bus shuttle. So if they're not willing to pay up four cents or work with their contractors, they don't deserve transit anyway. And if you're a baseball fan and you're saying, "That's not fair to me," well, you can take Metrolink straight to Anaheim.

The last thing, you've heard a little bit about multi-modalism tonight with buses. I want to throw in a quick pitch for multi-modalism for bikes. Metro Board

just passed a resolution last week that's going to add almost 400 racks and lockers to Metro stations, but you know what? It would be easier just to put them right in as you're building the stations. So let's put those in on the plans. That would be great.

MS. KERMAN: Thank you very much. Do I have any other public comments?

Well, with that, on behalf of Metro, I would like to thank you for joining us this evening -- no, it's still this afternoon. I would like to thank you for joining us this afternoon and providing your continued input.

If you would like to provide further input, there are a number of ways to do so. You may complete a comment form that we have available on the back table. You may also e-mail us at regionalconnector@metro.net. You may write us a letter and the information, I believe, is on the comment form in the back. Make sure that you get us your comments before May 11th and continue to stay in touch with us, because we are going to continue to inform you as we progress on this portion of the study.

You may log on to the website, metro.net/regionalconnector and follow the study progress. We will be continuing to engage the community throughout this process. Stay tuned for future meetings,

and we encourage you to visit the website. We encourage you to visit the registration table to make sure that we have your most current information so that we may keep you informed.

And, again, I thank USC for their hospitality and I thank all of you for coming this afternoon.

Thank you.

(Pause in the proceedings)

MS. KERMAN: Ken, you can state your name.

We have another speaker.

MR. ALPERN: Hi. My name is Ken Alpern. I'm president of the Transit Coalition.

First off, I want to thank the Metro staff doing this project for a more comprehensive outreach program to different parts of the region. I think just as this regional connector will affect people from throughout the county, I do appreciate you doing outreach to the different populations to be affected throughout the county.

I think this connector will be sorely missed in about the next one to two years when the East side and first phase of the Expo Line opens.

People that don't quite understand the need for this will suddenly realize in a very big way how important this project is, and it is my understanding

from speaking to my other colleagues on the Board of the Transit Coalition that the subway portion is what is preferred. Certainly we want to do things at grade and inexpensively whenever we can, but for something of this nature where I think the headways and ridership will be something that will be much higher than any of us ever could have dreamed, just as within a few years the Orange Line bus way suddenly became at capacity in ways nobody could have dreamed, I think the subway will be a project we'll be glad we did; and if we do not do the subway, we will sorely miss it because, again, the ridership and

headways and capacity will be much greater than any of us ever could have appreciated.

And I appreciate again your outreach and wish you all the best of luck as you pursue this vital project. Thank you.

MS. KERMAN: Thank you. We still have two minutes taking public comments.

I'm going to give Steve Bagby two more minutes.

We have two minutes, so go ahead, Steve.

MR. BAGBY: Thank you so much.

For the sake of objectivity, I just wanted the Expo Line and MTA to be aware of the potential perception of environmental racism involved in this. And I'm not real comfortable using that word; however, the reality is

that as best I understand, there's 140 million dollars being spent to go from Vermont and Exposition to La Brea

and Exposition, 140 million dollars to go 4.5 miles.

It's 185 million, 45 million dollars more, to go one mile from La Cienega to Robertson.

Now, where is the equity there?

At the same time, we're hearing other projects, the proposed Subway to the Sea starting at the Miracle Mile on Fairfax and Wilshire going to Santa Monica, totally underground, where the minority community at Vermont, Normandie, Western, Arlington and Crenshaw, our major corridor which is wider and does more traffic than La Brea or La Cienega, is being impacted with trains, maybe up to 30 times an hour.

Now, at La Brea and La Cienega, where you have a lot of Anglo-Saxons, more upperly mobile people going from Palisades -- excuse me, from Palos Verdes to Hollywood, they can -- it's a flyover at La Brea and it's a flyover at La Cienega, but we can't get a flyover at Vermont, at Western, at Crenshaw. So the answer to this would be ideally below grade. That would be the ideal situation. But at the very least, where it impacts schools like Ted Alexander Medical Magnet right here at Figueroa and Exposition, Foshay Learning Center and Dorsey High where students are impacted, it should be

either below grade and under grade, and it should be flyover like La Brea and La Cienega at those major corridors that I alluded.

Thank you so much.

MS. KERMAN: Thank you very much.

It's now 6:00 o'clock. I will officially close our public hearing. Thank you all for coming and goodnight.

(Proceedings concluded at 6:00 p.m.)

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BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS

Pasadena, California

Tuesday, March 31, 2009

Reported By:

SHANNON MC KEIGHAN,
CSR No. 13397

Job No.:
B1374NCO

WORKERS' COMPENSATION APPEALS BOARD

FOR THE STATE OF CALIFORNIA

Public Hearing in the Matter of:	)
	)
EXPOSITION CORRIDOR TRANSIT PROJECT - PHASE 2	)
	)

TRANSCRIPT OF PROCEEDINGS, taken at 393 North Lake Avenue, Pasadena, California, commencing at 6:00 p.m., on Tuesday, March 31, 2009, heard before the EXPOSITION CORRIDOR TRANSIT PROJECT TEAM, reported by SHANNON MC KEIGHAN, CSR No. 13397, a Certified Shorthand Reporter in and for the State of California.

APPEARANCES:

METRO PANEL MEMBERS:	ANN KERMAN, Constituent Program Manager DOLORES ROYBAL SALTARELLI, Transportation Planning Manager
FACILITATOR:	GINNY CASE, The Robert Group

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Pasadena, California, Tuesday, March 31, 2009

6:00 p.m.

ANN KERMAN: Thank you, Dolores.

At this point we're going to open up the meeting to public comment, and we're going to do so for the next 50 minutes, or so. We are going to be here and take comments until eight o'clock.

So, you know, feel free to make those comments. Again, if you would like to speak, please fill out one of these cards. They're available at the back table. Raise your hand, and we'll get you one.

What I'm going to do is I'm going to review the protocol with you quickly. And again, I'm going to call three people up at a time, just so you're ready to come on up. We will have two minutes for each presentation, for each speaker. Please state your name clearly.

We have a court reporter with us who would like to take down every word that you say tonight. And please, again, address your comments to the project purpose and need. The project alternates, and potential impacts and mitigations that you think we should be looking at in this portion of our study.

So with that, I would like to begin our public

comment portion, and I will call up Craig Thompson, followed by Jerard Wright, followed by Elisabetta Taffoni-Burke.

CRAIG THOMPSON: Okay. Craig Thompson, from the Citizens For Better Mobility. And the one thing I see here is that there has been a route that has never been considered. And that is taking the connector down Alameda Street to Washington Boulevard, making a Westwood turn onto Washington Boulevard to connect to the pre-existing Blue Line. And also, to have a double-track wide connected not only at that location, but also Washington and Flower Streets to connect with the Expo Line.

Since I see that the purpose of a downtown connector is to connect to all of rail lines, all the Light Rail lines. This would look like it would be the connector that would be the lowest in cost, and would allow for money to be put forward -- put toward the grade-separation of the extraction on Washington Boulevard and along Flower Street to be placed in the covered tunnel, that way we would have an improved Light Rail Transit System with higher speeds, greater reliability, great safety, and higher passenger capacity.

We do not need to take this line through the

heart of downtown simply because of the fact that we have the Red Line doing that. If you want to make a connection

through the heart of downtown, the Red Line will be there.

Furthermore, if you're going to complain about the money you're going to spend, why not petition the MTA to allow that to be become a free transfer zone? Anyone buying a rail ticket could ride that segment of subway between Union Station and 7th and Metro Center absolutely free.

Thank you.

ANN KERMAN: Thank you, Mr. Thompson. Next up, Jerard Wright, followed by Elisabetta Taffoni-Burke, followed by Albert Taffoni.

JERARD WRIGHT: All right. Good evening, everybody. I hope you can hear me. I'm just glad this process is actually out here in Pasadena and outside of downtown because this is more than just a downtown project. It does impact Pasadena. It impacts Long Beach and it impacts other future rail corridors that the system will connect to. The one main interest the Interest Transit Coalition has first of all, is that particular Y.

Just looking at what type of mitigation, other than pedestrian bridges, you know, looking at the -- working with the L.A. DOT with implementing a traffic study or traffic plan while on Temple or Second to kind of do a one-way street. Something to mitigate that particular

crossing and even just close off the First Street portion

for auto traffic and just leaving that as a pure train walk uninterrupted, unimpeded.

So that's the main interest, but I'm so glad to see this process pushed forward and I would like -- love to see this open by 2016. We need this desperately. We desperately need this project. And thank you for your time.

ANN KERMAN: Thank you, Mr. Wright. And next, Elisabetta Taffoni-Burke, followed Albert Taffoni, followed by John Laur.

ELISABETTA TAFFONI-BURKE: Hello. My name is Elisabetta Taffoni-Burke. I'm a resident of Pasadena and I came here because I would like to bring to your attention and bring in consideration, to not to have the Light transportation above ground.

I see that directly leaving here in Pasadena, on California Boulevard, I see the impact that the Light Rail has when it comes out of Old Town and goes to Del Mar, California and Glenn. Where there is a back up of traffic in the rush hours for long time.

And Pasadena will have much more inhabitants in the near future. So I really think downtown being such a busy center would really be ineffective by the Light Rail on the ground.

25 I am Italian and I come from Rome and I was born

and raised there. And we have a Metro, and Metro has been built through difficult time, to begin. Because Rome has monuments underground, but it is underground. I really think you should consider not to have anything on the surface. This is my suggestion.

ANN KERMAN: Thank you so much, Ms. Taffoni-Burke. Albert Taffoni, followed by John Laur, followed by Ken Ruben.

ALBERT TAFFONI: Well, as a senior citizen, I feel that I represent probably seems to be the oldest person here. I remember Los Angeles, especially downtown when it was Old Los Angeles, the tunnels and hills and Bunker Hill. Practically that's all been destroyed.

Now, they're deciding to put a surface line on Second Street tunnel, when I've seen all the other ones destroyed. If they're insisting that they go that route on Second Street, underground is the only way to go.

Light Rail or not or keep it the way it is. Mr. Thompson had a very good point if it's above ground, we all need it. And the other street where the Blue Line is located, we're discussing right in the center and it should be underground, no other choice.

No way in destroying that tunnel. We don't need heavy passages. We want the people to be able to

walk. We want the cars to have a place to park, and the

parking structures, but we need an underground system.

That is the only way to go. It will cost a little bit more money. We've already destroyed -- because we never connect with anything, over and over and over and over. Thank you.

ANN KERMAN: Thank you Mr. Taffoni. Next up John Laur, followed by Ken Ruben, followed by Harold Leacock. I'm sorry. John Laur?

JOHN LAUE: L-a-u-e, is the last name. And I used to work as a transit coordinator for the City of Pasadena, so I'm pretty familiar with the early planning stage. And it's a real crime and tragedy that the thing wasn't done in the beginning because now we have to rebuild it, but that's water under the bridge.

I am actually in favor the at-grade alternate. Because I think that Downtown L.A., one thing -- I mean, downtown L.A. after 5:00 o'clock is pretty dead and there is a need for a life there.

If you go to San Diego, Sacramento, there are many, many cities where Light Rail -- Light Rail is -- Heavy Rail is for subways, Light Rail is for at-grade, and it could be done -- if it's done in the right way, Light Rail through downtown with additional stops, I really believe that there

needs to be a stop in the Broadway area between Broadway and Spring Street.

If you're going to use Light Rail downtown, make sure it has stops where people need it. And the below-grade is a viable alternative, but the cost needs to be looked at. I don't believe that there's just a $200,000,000 difference in cost between these two. I can't believe when somebody said it's $700,000,000 for the at-grade and $900,000,000 for the below-grade. I don't believe those costs are accurate.

I also think this the gentleman here had a really good suggestion as far as another alternative -- I don't know why this wasn't looked at, but they're talking about getting transit through one end to the other. That would be the way to go.

But I think that the idea, you know, go to Downtown L.A., you don't really see any sign of the transit. And, I mean, at that time -- rail transit -- so you see subway stairs. We want to get people out of their cars and using the system. You need to have some visibility, which we don't have right now.

And I don't think we should be designing systems for the benefit of the car. So the cars have to wait for a while at certain stops at-grade, too bad. You know, we need to be putting transit at forefront and pedestrians, and not the convenience of cars in Downtown L.A. Thank you.

ANN KERMAN: Thank you very much, Mr. Laue. Ken Ruben, followed by Harold Leacock, followed by Brigham Yen. And

I'd like to also invite, if anyone else would like to speak, please fill out a card.

KEN RUBEN: Ken Ruben, I've lived in L.A. most of my life and there are several friends of mine here tonight. Some are more expert on the downtown connector than I am, but I've read putting the Gold Line here. Today, taking the Red Line to the Gold Line, walking to Union Station, something that would be eliminated with the connector.

They asked Ray earlier about if the lines would actually operate from the connector to the Blue Line going to the connection with the Gold Line. And then, would you go to East L.A., Pasadena, or both, and he said it would be both.

And it's the same, I've been told, going south, it would go to Long Beach and Culver City. Incidentally, I live in Culver City and the Expo Line will only open as of right now, unless there's somebody at the meeting -- Jerard and I were talking about Thursday at the Exposition Authority, whether it would open -- it would open at Crenshaw, not Culver City, till 2011, that was mentioned earlier.

Anyway, my point was that there's so many different aspects. As far as the connections are concerned, just really in the last few days, I like an underground only

because I know the traffic on the bus through downtown.

I've ridden every major -- I think most of the major lines to downtown and there's too much traffic.

I know subway would be a lot more expensive, and I don't argue that. If you have it through the subway, and then connect with the Gold Line down Alameda and what, First?

So far where it's being built now, you have a better chance of less traffic. Personally, I like Light Rail all over the place. Like I said, I was on -- in fact, I think I'm the only one here who was actually on the first run of the Gold Line out of Union Station with 36 others.

And that -- well, I wasn't mentioned. Well, others were, as far as back in 2003. So there's a lot of factors. I'll have to talk to Craig about his proposal. I think I'm out of time so anyway those are some of my comments. Thank you very much.

ANN KERMAN: Thank you, Mr. Ruben. Harold Leacock, followed by, Brigham Yen, followed by Richard Powers.

HAROLD LEACOCK: Good evening, everybody. My name is Harold Leacock, for the record. I'm associated with the Citizens Of Better Mobility. It's known as a think tank for better rail travel around Los Angeles.

And I appreciate coming -- this my first time speaking at one of these. I've been to many of the scoping

meetings, but I'm just a listener, but not really a

commenter. I'm glad I have a chance to comment.

My take on this, on your page four, on your sheets here, is the underground portion. I know I disagree with my co-partner, Craig Thompson, because he's a rail lover from New York, like I am.

And my take on the underground is better because right now the system is going to go through a dense population. When you have dense population, it's the best thing. And it's a low impact system underground. You don't want to be coming above ground in a highly dense population because right now, the Gold Line is built in east side.

It took a great impact because it's a surface extension. A lot of businesses suffered. So I'm in favor of the underground portion of this connection problem, or solution here because it's low impact for businesses.

The line is already underground at 7th Street. It's just a matter of digging a tunnel to connect over to Little Tokyo. And the portion that was dug for the Gold Line going to the east side was 1.8 miles, I think it was. And it didn't take very long to dig that tunnel through. I'm sorry. I'm out of time, but I am for the underground portion. Thank you.

ANN KERMAN: Thank you Mr. Leacock. Brigham Yen,

followed by Richard Powers, followed by Whitman Lam.

Brigham left? Okay. Richard Powers.

RICHARD POWERS: My name in Richard Powers. I'm an instructor at Los Angeles Trade Tech. For the past 14 years I've been commuting from Pasadena to Trade Tech to give classes nine months a year.

I -- at the beginning, I used to go completely by bus from San Marino to the 79 Line. When the Gold Line became available, I began taking the Gold Line, but it actually means taking a bus to the Gold Line to the Red Line to the Blue Line.

From my experience, I find it would be marvelous if I could be taking the Gold Line to Trade Tech or when I go to LAX. I would have at least two less transfers. When I fly, I have to transfer five times to get to the airport, and it takes two-and-a-half hours.

And I'm concerned about any at-grade alternative because from any experience on the bus, whenever there was a demonstration from the city hall, or there was a major funeral at the cathedral, traffic downtown was disturbed and buses ended up going various places.

You don't want that. You want to be able to the depend to get to where you need to go and know that there won't be about demonstration or funeral stopping from beginning your class on time. Thank you.

ANN KERMAN: Thank you Mr. Powers. Next we have

Whitman Lam, followed by Jim Shafer, followed by Joel Covarrubias.

WHITMAN LAM: Hi my name is Whitman Lam. I'm a member of the Transit Coalition. Now, I mean, look at other cities. You know, we have been to other cities; right? And, you know, you see how useful their transit systems are, how efficient they are, how many people are using them.

Not just, you know, just on the weekends, but actually using them in their daily lives. I've been to New York. I've been to Boston. I've been to San Francisco, London, Paris, you know, Berlin. And I mean, it's a totally different world out there.

And none of the people here -- a lot of us an Angelinos don't realize that way of life, you know. London has an underground. New York City, underground. Okay. Paris, underground. Why not us? Why do we have low expectations for transit systems?

You know, I think that we need to invest more. I think that people -- you know, this is a good thing. People are here. People know the importance of mass transportation. You know, all of you bring your friends, bring your family next time, okay.

You know what, let's get on the bus. Let's get on the train. Okay. Let's get the city moving. This is a

very positive thing to have all you guys here. And you know,

I think that, you know, when we empower ourselves, when we come to these meetings, when we bring out ideas, you know, ideas -- I mean, all over the world, Tokyo.

Everywhere they've already got their thing built. Okay. They've got their, you know, they're connecting systems. They've got high speed rails, which we don't have. I mean, they have trains that actually go to the airport, not just stop, like, a mile away. Come on, let's hop on the bandwagon on here. Yeah, go team.

ANN KERMAN: Thank you, Mr. Lam. Jim Shafer, followed by Joel Covarrubias. And again, I invite anyone that would like to make a comment, raise your hand, we will get you a comment card.

JIM SHAFER: Hi, my is Jim Shafer. I want to speak very enthusiastically in favor of the project in general, especially the underground alternative.

I live a couple of blocks away from -- well, I live at Fourth and Main, so this would be incredibly useful to me and all the other people who live downtown or moved downtown in the last ten years. Not to mention the people who already were living there.

And the idea of having a train go down Alameda to Washington is a great idea, but to me, in addition to

this project, to give more access to parts of downtown. And I also like the station placement that you're thinking of.

Especially the one serving Bunker Hill and the office workers up there and the cultural buildings, Disney Hall Music Center, as well as the one right by the new police station at Second and Main and the one over by the library.

So I've also lived in a place that has really good public transportation. I lived in Mexico City for three years. It's not a perfect system, but it is very easy to get around the city using their Metro. Like, I don't know, 200 stations that cost a dime, and you can transfer as many times as you want. So I also agree to move in that direction. Thanks.

ANN KERMAN: Thank you very much, Mr. Shafer. Next I have Joel Covarrubias. And again, I invite anyone that would like to speak, raise your hand, we will get you a speaker card.

JOEL COVARRUBIAS: Hi, I don't have any prepared remarks. I just dropped in here, but I did -- I am a long time transit rider. I took the Blue Line on it's first day and was disappointed when I only got to Pico Station. Didn't quite make it all the way underground. And it took a little while before they eventually built it all the way under to Metro center.

And even when that happened -- even when that opened up, you know, you couldn't help but think about the

possibilities of just continuing on to Pasadena. They had

the little sign up there at the top that said, "Blue Line to Pasadena." Eventually, they -- I don't know if they took that out or what.

Anyway, it will be good to see this train when it eventually gets built. Travel all the way through downtown and get to the other side. It's a long time coming. And as other people have said, you know, this is a no-brainer.

You know, this is the type of thing that other cities have had for decades. So, it's real good to see all of the enthusiasm in L.A. right now for transit measure or passing.

So let's not skimp on it. Let's do to right. Let's put it underground. I like the underground option. It hits some good locations, Bunker Hill, the Central Library, the City Hall, all of that. So let's do to right and not cut corners. Thank you.

ANN KERMAN: Thank you very much. Well, it's now 7:30. We are going to be here until 8:00 o'clock. So if anybody else is brave enough to come to the mic, we'd be delighted to hear from you.

If you prefer to put your comments in writing, again, we will be here for another half hour. Take the time. Write them out for us. There will certainly be

other ways for you to be in touch with us. Again, we

are taking comments through May 11th and we want you to stay informed with this project.

So to do so, you may log into our web site. It is Metro.net/regionalconnector. We will be engaged in the community throughout the process. So stay tuned because there will be further follow-up meetings for all of you that would like to attend.

And make sure that we have your correct contact information at the registration desk so we can keep you on our e-mail list; keep you posted when our following meetings will be. And again, feel free to check in at the web site.

So with that, we're here. The boards are in the back. There's cookies, coffee, water. So please, help yourself and I thank you all for being here tonight.

(Proceedings concluded at 8:00 p.m.)

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BEFORE THE LOS ANGELES COUNTY

METROPOLITAN TRANSPORTATION AUTHORITY

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Hearing in the Matter of:)
)
REGIONAL CONNECTOR TRANSIT)
CORRIDOR PROJECT)
_____)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Wednesday, April 1, 2009

Reported by:

MELISSA TRESSEN
CSR No. 13367

Job No:

BEFORE THE LOS ANGELES COUNTY

METROPOLITAN TRANSPORTATION AUTHORITY

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Hearing in the Matter of:)
)
REGIONAL CONNECTOR TRANSIT)
CORRIDOR PROJECT)
_____)

TRANSCRIPT OF PROCEEDINGS taken at 369 East First Street, Los Angeles, California, commencing at 6:30 p.m., on Wednesday, April 1, 2009, heard before the REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM, reported by MELISSA TRESSEN, CSR No. 13367, a Certified Shorthand Reporter in and for the State of California.

APPEARANCES:

METRO PANEL MEMBERS:	CLARISSA FILGIOUN DOLORES SALTARELLI
FACILITATOR:	GINNY CASE THE ROBERT GROUP

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Los Angeles, California, Wednesday, April 1, 2009

6:30 p.m.

MR. AGNEW: Hi. My name is John Agnew, no relation. Firstly, I'd like to say that I'm a huge fan of Transit and Light Rail. I'm originally from Australia, where we have a lot of light trains. So I'm a big fan of this, and I regularly ride both of these lines.

I go out to Arcadia to get my car serviced, and I've ridden my bike down to Long Beach a number of times, and I even caught the train back. So I'm familiar with both of the lines that you guys are proposing in connecting.

I'm very much in favor of the system being built out; however, with that being said, I'm very much in favor of the below-ground option. Mostly, I see, driving around town, the Blue Line and the traffic congestion that happens.

I think it's also going to be safer to be below ground, quieter, and also for aesthetic reasons, it would be nice if it was below ground.

Thank you.

MS. FILGIOUN: Thank you very much, Mr. Agnew.

Joan Springhetti, Russell Brown.

Sorry. We'll start you off at two minutes.

MS. SPRINGHETTI: Good evening. My name is Joan Springhetti. I'm here representing the Higgins Building, which is at the intersection of 2nd and Main, which is on the route.

The homeowners' association, like many of our neighborhood residents and business leaders, and stake holders, wants to reiterate in the strongest terms our support for the responsible building of the Regional Connector below-grade project and our categorical objection to opening it as an at-grade project.

As you consider your proposal, we ask that you consider the many benefits of the below-grade project over the at-grade project. The below-grade option will allow for greater efficiency of the regional transit system. It will be safer. It will be less disruptive. It will encourage a pedestrian-friendly downtown.

It will cost the city less in the long run, and it will improve the quality of life for existing and future downtown residents. 2nd Street is part of the functional historic and fine fabric of downtown. Converting it into a rail corridor would be devastating.

While building this project below grade will

also create significant disruptions, we believe many of

those can be mitigated. If built responsibly, this project can be an asset for downtown residents, workers, and businesses as well as for cross-county travelers.

Thank you.

MS. FILGIOUN: Thank you.

Russell Brown, Dennis Allen, and James Okazaki.

MR. BROWN: Russell Brown. I'm president of the Downtown L.A. Neighborhood Council, also executive director to the Historic Downtown B.I.D., and chair of the district for our community for downtown.

All three groups have been very involved in this process and unanimously support the underground proposal and have very, very significant concerns about the above ground.

Any demonstration that happens all the time; filming, a single car blockage, a pedestrian, a dropped package, a stroller, any kind of traffic accident will literally paralyze the entire system in the county.

All you have to do is look at Washington Boulevard, and you can see what an unfriendly neighbor the rail down the middle of the street -- now, if this will be the entrance to the related project, Grand Avenue Park, and the Historic District, you'll literally be bisecting the neighborhood.

Also, if you look at what this will do in

splitting Purple Tokyo, that's not very pedestrian friendly. Also, we have significant concerns about the location of the station near Caltrans and Vibiana with the 150-year-old cathedral, and we suggest a linkage much closer to Broadway and Hill that would align the two lines of the proposed street car would also connect with the Red Line.

So you could have stations both in the north and south in order to connect up with the Red Line, and also, to offer significant transporting and development opportunity near the gateway that is at 2nd and Broadway.

Also, all you have to do is look at safety and security concerns at City Hall. To have transit on both sides of the City Hall, you can also block the entire system.

Thanks.

MS. FILGIOUN: Thank you, Mr. Brown.

Followed by James Okazaki and then Mizue Katayama.

MR. DENNIS ALLEN: Hi. My name is Dennis Allen. I'm with Los Angeles Streetcar, Inc. We are a nonprofit organization with the goal and intention of building a modern day streetcar system in downtown Los Angeles.

First of all, I'd like to give our absolute

support of the Regional Connector. We're obviously big fans of public transit, and I think the Regional Connector makes a lot of sense for connecting all of the transit projects in Los Angeles.

Secondly, we would like to express also our preference for the underground alternative for the Regional Connector. One of our goals as a regional circulator -- or an internal circulator in the downtown area, we've tied into transit as well as we possibly can.

I think that the underground alternative does that best, as well as puts the station a little closer to Broadway and Hill and some of the other proposed routes that we're looking at as well. So all those things in mind, I think we definitely prefer the underground alternative.

Thank you.

MS. FILGIOUN: Thank you very much, Mr. Allen.

Do we have any more speakers cards that I can add to my stack as we wait for Mr. Okazaki?

Thank you, Mr. Okazaki.

MR. OKAZAKI: James Okazaki. I'm representing the Nisei Week Foundation. I'm also a member of the community council. Myself, being a professional

transportation, having worked on every single rail type

projects, I support and our organization supports the subrail, not the at-grade and definitely not the T.S.M. existing system.

Obviously, for safety, schedule reliability, and performance, as well as disruption -- having less disruption and construction, I do want to stress some of the things that need to be done in work that the A.A. did not do, and that is both detail analysis of traffic.

Particularly, the capacity and operation on analysis on 1st and Alameda, where you're going to have an at-grade alignment across Alameda. The station location also is a little problematic for little Tokyo because east side Light Rail is not going to stop at Little Tokyo.

And I know you're calling the station between Main and L.A. Little Tokyo Station, I think Little Tokyo would be between L.A. and San Pedro. And T.O.D.'s possibly there, too, on the related project site.

I know you got to push to the West and you gotta push to the East. And maybe that's why you selected the site, right in the middle, opposite the -- we would like -- the Little Tokyo community would like to have the station further east considered.

The last thing is the concern about

construction impact. Even if you do your tunnel work,

there's going to be some impact, and we want to make sure that doing the construction with the station as well at the tunnel operation, that you definitely work towards mitigating all the impacts.

Thank you.

MS. FILGIOUN: Thank you very much, Mr. Okazaki.

We have Mizue Katayama, Ryan Stern, and then Edie Glass.

Mr. Stern -- Ryan Stern, do you mind coming up next?

Edie Glass, and then Debbie Kim.

MR. STERN: Hi. I'm Ryan Stern, and I'm a neighbor here at Little Tokyo, and like everyone whose come forward here, I absolutely support -- I'm ecstatic about this project.

I was helping to convince people to vote yes on Measure R. I would show them a picture of the Regional Connector map. And sometimes they would confuse it for B.A.R.T. up in San Francisco. I say, "No, this isn't San Francisco. This is what L.A. could become."

To the people that are using doom and gloom to describe the above-ground covert, let's not go really crazy. I used to live in Culver City, and there were a

lot of people that were freaked out about the Expo, and

a lot of people are still freaked out about the Expo Line and describing the above ground as highly disruptive.

Guess what? We've got sirens; we've got busy streets. We live in downtown. Downtown is disruptive, but downtown is also very dense, and I think that the density of downtown, unlike Culver City, where I used to live, does make the underground option of a little bit more of a useful thing to explore surface rail down here to be frequently stopping and should give a lot of possibility to commercial businesses.

And I think that from the Regional Connector, we need to preserve the rapid transitness (sic) of the current Blue Line and Gold Line. So there's a balance that needs to be struck. I wouldn't say that we shouldn't get all bent out of shape about the above ground option.

It has to be explored, but I think that the preference, at least in my opinion, again, would be going for going below grade, and I think that's all I have.

Thank you.

MS. FILGIOUN: Thank you very much, Mr. Stern.

Edie Glass, Debbie Kim, and then Bryan Allen.

MS. GLASS: Hello. My name is Edie Glass. I've

been a rider of public transportation for many years. I would like to say that I'm very much in favor of this project; however, where it's necessary for an at-grade construction, I'd really like to see more green spaces.

I spend a lot of time waiting in the area where I'm taking public transportation, standing in the sun where there is absolutely no shelter. I think that if we're really concerned about the environment, we would create more green spaces around the areas where the buses stop so that we're not sitting, waiting in no shade, rather than making those spaces into parking lots where more congestion would exist. We should have an opportunity to sit and have more shade and green.

MS. FILGIOUN: Thank you very much, Ms. Glass.

Debbie Kim, followed by Bryan Allen.

Before Ms. Kim starts, do I have any more speakers cards that I can gather up?

Thank you, Ms. Kim. Go ahead.

MS. KIM: Good evening. I just wanted to share with you just the perspective from someone who lives at the Higgins Building. We're on the route on the 2nd Street and Main Street, and I live on the second floor.

So that would be exactly -- if we were to go

with the at-grade, I would be looking right out my

window at the cables, I think, and the cars going by. And I think the hours were all week. I think -- I don't know -- past nine o'clock. I mean, it would be all night.

So basically, I live on the second floor. That's my house, my home, and I would be looking out my window, and this is what I would see. So obviously, the underground option would work for me, and, I think, for everyone that lives there. And that's just from my perspective of course.

But as Joan pointed out, that's our little neighborhood. I have a dog. We walk our dogs right there. I see neighborhood families with their children, and we know those accidents that happen up in those areas where the metros have accidents easily.

And I can't imagine having something like that right at 2nd and Main. That would be a disaster. So underground is definitely the way to go.

Thank you.

MS. FILGIOUN: Thank you, Ms. Kim.

Mr. Allen.

MR. BRYAN ALLEN: My name is Bryan H. Allen. Obviously, I'm a bicyclist. And I have a 31-year history of observing the institutional investigations in

this county since 1978.

First, I must protest -- legal -- I must lodge a legal protest against the two-minute limit described here. The C.E.Q.A. document and the N.P.A. document will be comprised of tens of thousands of words. To limit people's testimony on that scope to two minutes is legally not reasonable, especially considering the small number of speakers here tonight. I expect having to engage attorneys to represent me on this point, and I solidify here.

Ladies and gentlemen, the formal purpose of this meeting is to refine the scope of the C.E.Q.A. document, the Environmental Impact Report, and the N.E.P. document, the Environmental Impact Statement.

How many of you here have actually bothered to read the guidelines of -- or speculate under the California Code of Regulations that actually bothered to read the guidelines for the preparation of the E.I.S. and the Code of Regulations?

I have.

Let me see the hands of those of you who have also reviewed these documents.

Uh-huh, as I expected.

Ladies and gentlemen, especially the C.E.Q.A. document -- the state document -- the scope of it is

limited to considering only the potential adverse

impacts upon the physical environment. It is not even permitted to consider the social impact or social benefits of a project except in considering the significance or insignificance of a proposed impact or predicted impact upon the physical environment.

Ladies and gentlemen, most of the comments, excuse me, here today, unfortunately, are legally not relevant. I have seen many reports in the past. I've participated in many. Most of your comments will say something like "comment noted" and do nothing more than that. Because unfortunately, they have not bothered to inform you of your duty under law to testify and moreover --

MS. FILGIOUN: Mr. Allen, your time is up.

MR. BRYAN ALLEN: They refuse to --

MS. FILGIOUN: Mr. Allen, I'm asking you --

MR. BRYAN ALLEN: I shall conclude by saying that I request --

MS. FILGIOUN: -- to keep your comments under two minutes like everyone else --

MR. BRYAN ALLEN: I request that all non-C.E.Q.A., non-N.E.P.A. documents be addressed by the F.T.A. and the L.A.C.M.T.A. in an appendix --

MS. FILGIOUN: Your comments are being recorded.

Thank you very much, Mr. Allen.

Mr. Charles A. Adelman. Thank you, sir.

MR. ADELMAN: Hi. My name is Charles Adelman, and I've ridden transit all over the world, basically. And my first comment is: Picture a train coming down 2nd Street every two-and-a-half minutes in each direction. It's already a busy street. That doesn't work. Major traffic tie up and major traffic congestion. It needs to go underground.

Second problem, the proposed junction, Alameda and 2nd. A single-level junction, as it is being proposed here, is either going to bring separate streets by elevating the street over it or running the street under it, still cannot accommodate a train every two-and-a-half minutes in each direction.

It really needs to be split-level junction underground. And it needs to be predesigned so that that station can preserve all trains.

Thank you.

MS. FILGIOUN: Thank you, Mr. Adelman.

We are here through eight o'clock. So we will continue to take comments up until then. So, again, we ask that you limit your comments to two minutes, should you like to speak.

Please state your name.

MR. PASS: Gerald Pass. Just real quickly, I did

write the -- and I never got the chance to actually say it.

I just really believe that the east-west alignment, the actual names of the routes should be reflective of single directions one way, which is to say that the east L.A. extension, the Gold Line, I think, should remain Gold; whereas, the Expo Line can take on -- remain Gold.

MS. FILGIOUN: Thank you, sir.

It's now about 7:30, and we will continue to take your comments, as I mentioned earlier, until 8:00.

We have JoAnne Kumamoto. Thank you, JoAnne.

MS. KUMAMOTO: Thank you. My name is JoAnne Kumamoto, and I'm with the Little Tokyo Community Advisory Council. I was going to give my time to James. I think we both agree on this discussion, but James has the notes.

MR. OKAZAKI: Thank you, JoAnne.

MS. FILGIOUN: Keep it to two minutes, please.

MR. OKAZAKI: I would like to put on the record that JoAnne and I have been talking for a while, and we've been analyzing the station spacing, and we thought the east-west alignment along 2nd Street kind of got gypped in choice of number of stations.

25 The proposal talks about a single station

between L.A. Station and San Pedro, and I think the Little Tokyo community wants to support the -- all the activities that have been proposed to Broadway, including the trolley rail.

So I think they should give a station near Broadway, but Little Tokyo would still like to get a station. We think there should be two stations along the east-west alignment between the Music Hall and the 1st and Alameda Stations.

So looking at the spacing of the stations, we think that makes more equal distance for walking to these stations. So we're recommending that the environmental impact analysis -- that you take a look at an additional station on 2nd Street.

Thank you very much.

MS. FILGIOUN: Thank you, Ms. Kumamoto.

(Proceedings concluded at 8:00 p.m.)

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Thursday, April 2, 2009

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:

BEFORE THE METRO

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM

Public Scoping Meeting in the Matter of:	)
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/DRAFT ENVIRONMENTAL IMPACT REPORT	)

TRANSCRIPT OF PROCEEDINGS, taken at the L.A. Central Library, 630 West Fifth Street, Los Angeles, California, commencing at 12:00 p.m., on Monday, April 2, 2009, heard before the METRO REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT TEAM, reported by MARCENA M. MUNGUIA, CSR No. 10420, a Certified Shorthand Reporter in and for the State of California.

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APPEARANCES:

Metro Presenter:	DOLORES ROYBAL SALTARELLI Transportation Planning Manager, Metro
Facilitator:	ANN KERMAN Community Relations Manager, Metro

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Los Angeles, California, Monday, April 2, 2009

12:00 p.m.

MS. KERMAN: Thank you, Dolores. We're going to get set up here with our second mike and what I'd like to invite all of you to do is if you wish to make comments today, to fill out a speaker card.

Can you hear me? Good.

Fill out a speaker card. I will be calling up three names at a time and what you will then do is you'll have the two minutes to speak. We will be capturing all of that by our court reporter and we will be here until 1:30 taking comments. So even if you're done speaking, we'll still be here, just in case you want to come up and make a comment.

As you come up, you'll be speaking from the microphone to your right. I ask that you state your name clearly for the public record.

And we again welcome all of your comments.

First up, Craig F. Thompson, followed by Kymberleigh Richards, followed by Arnold Sachs.

MR. THOMPSON: I'm Craig Thompson, founding member of the Citizens for Better Mobility. And we believe that

25 although the Downtown connector is a very good idea,

these two alternatives look quite expensive (indicating) when a cheaper alternative and one that functions just as well exists. It is quite possible to take this line straight down Alameda Street to Washington to make the west turn on Washington to hook up with the preexisting Blue Line.

Furthermore, there could be also a junction installed at Flower and Washington to make the connection to the Expo line.

Why do we have to spend so many millions of dollars on tunneling when it could be saved just by dropping in two stations, one at Seventh and Alameda and the other one at Olympic, and you've got your low-cost connector and it achieves all of the purposes of the connector without the high cost of tunneling.

Thank you.

MS. KERMAN: Thank you, Mr. Thompson.

Kymberleigh Richards, followed by Arnold Sachs, followed by Scott Sookman.

MS. RICHARDS: Thank you, Ann. I'm going to face the counter.

Kymberleigh Richards, Public and Legislative Affairs Director, Southern California Transit Advocates. We support the underground option. Given the traffic

issues in Downtown Los Angeles, we believe even having

part of it at grade would create operational problems and would actually worsen the mobility for those that continue to drive in the Downtown region.

In direct response to the previous commenter, knowing what I know about Alameda Street, I don't believe that's a viable option because these two options create station location within the heart of Downtown, which is where the people are that need the service. Alameda is at the eastern edge of the Downtown area and, quite honestly, there would be much more of an interconnectivity issue there. To operate along Alameda would require additional feeder bus service, which does not now exist, in order to get from those stations into the heart of Downtown.

For that reason, I am inclined to reject the previous commenter's suggestion. And, again, we are in support of the underground option which is contained within the presentation.

Thank you.

MS. KERMAN: Thank you, Kymberleigh.

Next up, Arnold Sachs, followed by Scott Sookman, followed by Nate Zablen.

MR. SACHS: Good afternoon. Arnold Sachs, a transit rider. Your example of three transfers for a trip from

Pasadena to Staples Center, maybe you can explain to the

public why the 1.6-mile gap exists. When the Blue Line was first considered in your original scoping meeting in October, they mentioned that the original -- that one of the possibilities was the original Blue Line plan, which meant that the original Blue Line would have gone from Pasadena to Union Station. Why the 1.6-mile gap exists, if they would have studied that -- the Blue Line opened up in 1990 -- they would have had planning to go from Seventh and Metro to Union Station.

The new part of this project is an at-grade crossing. Why somebody would consider putting the train in front of City Hall, beyond me. Have you tried to get into City Hall lately with the security measures? You're not going to have a train there.

Everything old is new again. This is just reselling old stuff. I'd like to point out that this (indicating) is a flyer you get from Metro. Down in the corner, here is an articulated bus that they discontinued in 1983 (indicating).

They spent a billion dollars fighting a Consent Decree to put more seats on buses. Then in the years -- in early 2000, they came out with new articulated buses. I can't imagine Metro's going to spend 10 million dollars on tunneling equipment to build tunnels from Seventh and

Metro to Union Station and not be able to use that

equipment again.

And just remember, by not building this part of the tunnel in the beginning, it changed the whole infrastructure for the Metro plan and for the Red Line also.

Thank you.

MS. KERMAN: Thank you, Mr. Sachs.

Next up, Scott Sookman, followed by Nate Zablen, followed by B.H. Allen.

MR. SOOKMAN: Hello. My name is Scott Sookman. I live Downtown.

As far as the last commenter goes, I think we probably would be here until the sun went down if we went into all the reasons why the Blue Line was not connected and constructed to Pasadena in 1990, but there probably were three reasons at the time, and those were politics, politics, and politics. I just have a couple of points.

Looking at this system and what it does, I think it's a very good value for the money. If you look at most Metro systems around the world, what a lot of them or most of them do is they have services sharing the same tracks, and that's what this would allow the Metro system to do; provide trains going to different destinations,

sharing the same tracks, and that adds a lot of utility to the system as a whole. It allows people different

choices in destinations and where they're going. And now, since we're going to have a line going to the east, we're going to have the Expo Line going out to the west, we've got almost every point of the compass covered once those open, so in order to connect all those points of the compass, this is a very good project.

It has to be underground. Quality doesn't cost. It pays, since we have the Measure R funds available, since we have hopefully some Stimulus Funds from the Federal government available also.

Let's invest in a grade-separated route, the Regional Connector underground, and let's add a lot of utility to the Metro Rail System and let's make it a world-class rail system.

Thank you.

MS. KERMAN: Thank you, Mr. Sookman.

Next up, Nate Zablen, followed by B. H. Allen, followed by Tracey Chavira.

MR. ZABLEN: I'm Nate Zablen, and I'd like to suggest the underground alternative to me would be the best. It would avoid a lot of the traffic and possible delays you get with the demonstrations and pedestrian traffic, so I think the underground alternative is preferable.

On the other hand, though, I do think there

should be a station closer to the Civic Center; in other

words, City Hall, the Federal Building, the Federal Courthouse. You have a lot of potential riders there and there's a lot of traffic.

I think the present station on Second Street is a little far from the center and I think to attract a lot of riders and make it work, we need people commuting. They should have it right near the City Hall area and the Federal building.

Also, I think it should be possible for a transit rider to take the train from Pasadena and go all the way to Santa Monica. I think there should be through trains not only from Pasadena to Long Beach, but from Pasadena to the Westside. I think that would encourage a lot of riders and make it easier; and, also, to University of Southern California, an important employer in this area, which a lot of people work for.

So I think these are alternatives to be considered and, also, it's important to get that station as close as possible to the Disney Hall and the Music Center so you can just get out of that station and just walk up to it.

This is a little bit further, but I think -- I favor the underground alternative, but I think there should be some moderations to encourage a greater

ridership and make it more convenient for people from

other parts of the region to get through and go take the train all the way to their destination, not having to transfer.

Thank you very much.

MS. KERMAN: Thank you, Mr. Zablen.

Next up, B. H. Allen, followed by Tracey Chavira, and I'd like to invite anyone else that would like to speak to fill out a card. You can raise your hand.

Mr. Allen?

MR. ALLEN: For the court reporter, my name is spelled B-r-y-a-n A double l-e-n.

Obviously, the helmet advertises that I am a nonmotorist bicyclist. I have painful experience through nearly 31 years, since I was a young adult in 1978, observing the institutional and bureaucratic failures in transit in L.A. and Orange Counties.

The LACTC first studied the Downtown connector in the Pasadena Line at UNO Initiative in 1986, not 1990, ma'am, and in the Long Beach Line from 1982 to 1985.

MTA failed to tell you, ladies and gentlemen, today's purpose is not to ask you your opinions on what should be built, but to seek --

MS. CASE: Mr. Allen, I've stopped the timer. I've

stopped the timer. You need to move your mouth away from

the speaker so the reporter and the public can hear your comments.

MR. ALLEN: -- but to seek your opinions on what should be included in this scope or range of information of the future environmental document. The State's CEQA and Federal NEPA prescribe what must be included. I have personally reviewed key parts of the regulations in Title 14, California Code of Regulations, and Title 40, California Code of Regulations. By a show of hands, raise your hands, how many of you also have read those regulations? I thought so.

CEQA prohibits even considering social impacts for most purposes; only the significant adverse effects upon the physical environment. Did you know that if you fail to address that, MTA will ignore you or respond with "comments noted," end quote? I bear personal eyewitness to that fact.

Courts have repeatedly held that environmental comments are evidence which the decision makers must consider in addition to other evidence in deciding what they want to do and the project characteristics. Here, the jury analog is the MTA Board and the Federal Transit Administrator. This phase is analogous to the litigant's pretrial haggling over what evidence the jury should read

and no more than that.

Those of you who say -- again, available alternative A and -- go ahead -- alternative B are like those who say link alternative A and free alternative B. It's premature. B is mature and ideal with the evidence required.

MS. KERMAN: Thank you, Mr. Allen.

Tracey Chavira. And, Tracey, before you start, do I have any more cards? You're all welcome to fill out a card. We're happy to take your comments.

MS. CHAVIRA: Good afternoon. Tracey Chavira, Central City Association. Let me begin by acknowledging Metro staff for keeping the process moving along so steadily. Metro staff and consultants have been extremely responsive to CCA's membership and generous with your time, so thank you so much for that.

After participating in the analysis process and analyzing all 33 or so built options, CCA supports the underground option, which for a relatively small difference in cost will generate great benefits.

While recognizing the need to study all four options, I would like to take this opportunity to explain why we favor the below-grade option.

First, it will be impervious to above-ground incidents, making it the most reliable option for

commuters. Second, it's expected to garner the most

transit riders. Third, it won't create street-level visual clutter, which might interfere with revitalization of parts of Downtown. Finally, the regional sector will be competing for Federal funding for its completion.

The underground alternative has the best transportation system user benefit score, making it the best prospect for obtaining medical funding.

We urge you to move this project forward quickly and not go beyond the 45-day public comment time period, since speedy approval will save the County money and get people moving sooner.

Thank you for the opportunity to make these comments.

MS. KERMAN: Thank you, Tracey.

Do I have anyone else wishing to speak? If so, if you could raise your hand, we'll get you a card.

It is now -- thank you. Xavier Grobet?

MR. GROBET: Please. Hi. Name is Xavier Grobet.

I'm a resident here in Downtown and I think the underground proposition is the most interesting. I think it's -- if something -- if an investment like this is going to be done, it should be something that is going to last for a long, long time, and that's what's going to give us the most benefit. But in the meantime, before

that happens, maybe a no-build possibility should be

addressed while this is all done. I mean, there could be a shuttle service or something that starts doing that service from now on until the other option is finished.

Thank you.

MS. KERMAN: Thank you very much.

Roger Christensen?

MR. CHRISTENSEN: My name is Roger Christensen. I am the chairman of Metro Citizen Advisory Council. We have not yet weighed in on the mode for Regional Connector. We are a great fan of the project and I would -- we're busy -- today we're excited about what's going to happen with Exposition, of course. That decision is today.

You know, all it takes is one fender bender, one vehicle making a wrong left turn in this project, and the entire light-rail system is shut down from Pasadena to Santa Monica, to the eastside, to, you know, whatever.

When you're dealing with two-minute or 2.5-minute headways, you really have to have grade separation, not only for the safety of the passengers, but just for the efficiency of the system, and this is the missing link. This is the four-level interchange that the light-rail system has always needed for Downtown. It's not a Downtown project. It's a great

benefit to the entire region.

Thank you.

MS. KERMAN: Thank you, Mr. Christensen.

Christian Allen.

MR. ALLEN: Yeah. Good afternoon, everybody. My name is Christian Allen and I just want to keep it kind of short, but I'm not actually -- I actually do kind of support the underground project because, honestly, it's a lot more efficient. And personally, as a Laker fan, trust me, say they win the championship. Do you really want to see Kobe Bryant on a parade bus getting hit by the 12:25 train to Long Beach? That's all I've got to say.

MS. KERMAN: Thank you very much.

It's now almost 1:00 o'clock. We are going to be here until 1:30 taking comments, so if you decide in the next half-hour you'd like to speak, we'd be delighted to hear you.

There are further ways that you can continue during the next period of days through May 11th to provide us with your comments. There is a comment form that I believe is at the registration desk -- you may have received it -- which you can either fill out today or you may e-mail, fax, or mail it to us. You may go on our website, www.metro.net/regionalconnector and visit the website and make comments that way. You may also

e-mail us at regionalconnector@metro.net.

We will be engaging the community throughout this environmental process and I encourage you to visit the website and stay posted that way. Please make sure that we have your most current information on file so that we can keep you posted by e-mail, by mail, what have you.

And with that, I thank you all for coming. You're welcome to be with us the next half-hour and, again, thank you for taking time during your busy schedule to find out what we're doing here today.

Thank you.

(Recess)

MS. KERMAN: Ladies and gentlemen, I understand we have one more comment. Maria de Lourdes Gonzales?

MS. GONZALES: Good afternoon, everybody.

About two or three days ago, I found the pamphlet. I use MTA on a regular basis and when I found out that there was going to be a presentation here today, I came here today because I was in the building and I came to express my concerns and my questions in regards to some of the frustrations that we have as users on the MTA, and I'm very happy that I have the opportunity to comment and speak on some of these points.

I've sent a letter through the Internet and they

sent me a really nice response, but the point is not to

get just a response, but that they do take into consideration all of the issues that we have as users.

When I sent my letter, I wrote down four points, but I'm only going to talk about three of them. One of them is that it's very difficult to understand why we have to wait so long for the bus, and sometimes one to up to four buses have passed in the same route. I wish I had a camera on me then so that I could take a picture and show what I mean. That's one of my points.

Another is that there be better coordination between the buses between one stop and another stop.

Another point is that when we have the rapid bus, to have better coordination on the stops that are not rapid buses. Some are on one side of the street and others are on the other side or opposite sides of the street.

During the daytime, it's easier -- during the daytime, it's easier to be able to see a bus from far away. And I don't have great eyesight so I have to be on the lookout; but in the evening, it's a lot more difficult when I have to look far away and I have to run after a bus. It's a lot more dangerous in the evening, or to just have to stand there and wait for the next bus to come, and service isn't as frequent in the evening.

25 My third point is that we have to have better

coordination. The Wilshire line, the 920 -- that when they implement a new line, then they remove an old line that goes to Santa Monica. To have a better coordination with the buses, the new bus lines that are being implemented and the old bus routes, so that there's better service for everybody who travels. I don't understand why there is not better coordination between the different bus lines and the different bus routes.

I'm in favor of the system, but that there's also just a better coordination between the buses and the lines.

Thank you for your time.

(Proceedings concluded at 1:35 p.m.)

	Comment Matrix				
Date	Agency	LName	City	State	Format
03/18/09	FEMA: Homeland Security	Blackburn	Oakland	CA	Letter
03/24/09		Liang			Web
03/24/09		Rozalsky	Los Angeles	CA	Email
03/27/09		Sterling	Pasadena	CA	Email
03/30/09		Aldava	Pasadena	CA	Comment Card
03/30/09		Alpern			Speaker
03/30/09	Dorsey High Alumni Association/Fix Exposition Coalition	Bagby, SR			Speaker
03/30/09		Frescar	Rosemead	CA	Comment Card
03/30/09	Los Angeles Sheriff Dept.	Grein			Web
03/30/09	Senior Building Sheppard Senior Manor	Jones	Los Angeles	CA	Speaker
03/30/09		Kassimir			Speaker
03/30/09		King			Comment Card
03/30/09		Lipson			Comment Card
03/30/09		Metcalfe			Comment Card
03/30/09		Metcalfe			Speaker
03/30/09	USC Viterbi School of Engineering	Msdhkati			Speaker
03/30/09		Newton			Speaker
03/30/09		Suvaroporn			Speaker
03/30/09		Thompson	Altadena	CA	Comment Card
03/30/09	Citizens for Better Mobility	Thomson	Altadena	CA	Speaker
03/30/09	CalPirg, USC Chapter	Walker			Speaker
03/31/09		Covarrubias			Speaker
03/31/09		Hsu	Pasadena	CA	Comment Card
03/31/09	TRAC/NAPR/PRS	Johnson	Chino	CA	Comment Card
03/31/09	Transit Coalition	Lam			Speaker
03/31/09		Laue			Speaker
03/31/09	Citizens for Better Mobility	Leacock	Pomona	CA	Comment Card
03/31/09	Citizens for Better Mobility	Leacock	Pomona	CA	Speaker
03/31/09	Los Angeles Trade Tech	Powers			Speaker
03/31/09		Ruben			Speaker
03/31/09		Shafer			Speaker
03/31/09		Squires	Glendale	CA	Email
03/31/09		Sweet	Altadena	CA	Comment Card
03/31/09		Taffoni	Alhambra	CA	Speaker
03/31/09		Taffoni-Burke			Speaker
03/31/09	Citizens for Better Mobility	Thomson	Altadena	CA	Comment Card
03/31/09	Citizens for Better Mobility	Thomson	Altadena	CA	Speaker
03/31/09	Transit Coalition	Wright			Speaker
03/31/09		Yen	Pasadena	CA	Comment Card
04/1/09		Adelman	Los Angeles	CA	Speaker
04/1/09		Agnew			Speaker
04/1/09		Allen			Comment Card
04/1/09		Allen			Speaker
04/1/09	LA Streetcar	Allen			Speaker

	Comment Matrix				
Date	Agency	LName	City	State	Format
04/1/09	HCBID	Brown			Speaker
04/1/09		Bytof	Los Angeles	CA	Comment Card
04/1/09	Higgins Building Homeowners Association	Engellenner			Comment Card
04/1/09	Riley Management Company	Glass			Speaker
04/1/09	Little Tokyo Senior Residents Association	Katayama	Los Angeles	CA	Comment Card
04/1/09	LT Senior Residents Association	Katayama			Speaker
04/1/09	Higgins Loft	Kim	Los Angeles	CA	Speaker
04/1/09	LTCAC	Kumamoto			Speaker
04/1/09		Mozzer	Los Angeles	CA	Comment Card
04/1/09	Friends of Little Tokyo Library	Nagano			Comment Card
04/1/09	Nisei Week Foundation/LTCC	Okazaki	Los Angeles	CA	Speaker
04/1/09	Japanese American National Museum	Oshima	Los Angeles	CA	Comment Card
04/1/09	Friends for Exposition Rail	Pass	Tarzana	Ca	Comment Card
04/1/09	Friends for Exposition Rail	Pass	Tarzana	CA	Speaker
04/01/09	Native American Heritage Commission	Singleton	Sacramento	CA	Letter
04/1/09	Higgins Building Homeowners Association	Springhetti			Speaker
04/1/09	NARP	Stern			Speaker
04/01/09		Stewart	Los Angeles	CA	Email
04/1/09	Little Tokyo Service Center and Community Council	Yoshimura	Los Angeles	CA	Comment Card
04/2/09		Allen			Speaker
04/2/09		Allen			Speaker
04/2/09	Central City Association	Chavira			Speaker
04/2/09	Metro Citizens Advisory Council	Christensen	Sherman Oaks	CA	Comment Card
04/2/09	Metro CAC	Christensen	Sherman Oaks	CA	Speaker
04/2/09		De Laudes Gonzalez			Speaker
04/2/09		Grobet			Speaker
04/2/09		Kay			Comment Card
04/2/09		Kortum	Los Angeles	CA	Comment Card
04/2/09		Laventure	Los Angeles	CA	Comment Card
04/2/09		Reily	Los Angeles	CA	Comment Card
04/2/09	Southern California Transit Advocates	Richards			Speaker
04/2/09		Sachs			Speaker
04/2/09		Sookman			Speaker
04/2/09	Citizens for Better Mobility	Thomson	Altadena	CA	Speaker
04/2/09	Breathe LA	Witzling	Los Angeles	CA	Comment Card
04/2/09		Zablen			Speaker

	Comment Matrix				
Date	Agency	LName	City	State	Format
04/04/09		Johnston	Chino	CA	Letter
4/04/09		Johnston	Chino	CA	Letter
04/04/09		Peña	Montebello	CA	Letter
04/05/09		Mozzer	Los Angeles	CA	Email
4/9/09		Barboza			Email
4/10/09	Japanese American National Museum	Goller			Email
4/10/09		Schumacher			Email
4/15/09		Alossi	Los Angeles	CA	Email
4/21/09		Kassimir			Email
04/25/09		Mozzer	Los Angeles	CA	Email
4/27/09		Costales Jr.			Email
04/28/09		Tsukada Germain	Los Angeles	CA	Email
4/29/09		Yeh	Los Angeles	CA	Email
4/30/09	City of Culver City	Malsin	Culver City	CA	Letter
04/30/09		Pena	Montebello	CA	Letter
05/01/09	Los Angeles County: Community and Senior Services	Nguyen	Los Angeles	CA	Email
5/1/09		Sergeant			Email
5/4/09	U.S District Court	Hernandez-Torres			Email
5/4/09		Walker	Los Angeles	CA	Email
5/5/09		Kumamoto			Email
05/05/09		Porter	Los Angeles	CA	Web
05/06/09		Crossfield	Los Angeles	CA	Email
05/06/09		Fong	Los Angeles	CA	Email
05/06/09		Ng			Email
05/07/09		Fujita			Email
05/07/09		Hand			Email
05/07/09		Tooley	Los Angeles	CA	Email
05/08/09		Gunter			Email
05/08/09		Santangelo			Email
05/08/09		Squires			Email
05/09/09		Hashimoto	Los Angeles	CA	Letter
05/09/09		Popov			Email
05/10/09		Berk	Los Angeles	CA	Letter
05/10/09		Farrington			Email
05/11/09	Little Tokyo Community Council	Aihara			Letter
05/11/09		Allah			Email
05/11/09		Damrath	Los Angeles	CA	Letter
05/11/09	City of Los Angeles: Community Redevelopment Agency	Estalano	Los Angeles	CA	Letter
05/11/09		Garibay	Los Angeles	CA	Email
05/11/09	City of Los Angeles:	Hu			Letter

Date	Comment Matrix Agency	LName	City	State	Format
	Department of Transportation				
05/11/09		Nishimura			Email
05/11/09		Nolan			Email
05/11/09		Okazaki			Email
05/11/09	McCourt Group LLC	Sunkin	Los Angeles	CA	Letter
05/11/09	Go For Broke	Tanaka			Email
05/11/09		Volk			Email
05/11/09	MOCA	Wiseman	Los Angeles	CA	Letter
05/13/09	Union Church	Endo	Los Angeles	CA	Email
05/13/09		Massicci			Email
05/14/09		Uyeda			Email

Letter Comments

9770 CULVER BOULEVARD CULVER CITY, CA 90232-0507 www.culvercity.org

March 30, 2009

Dolores Roybal Saltarelli
Los Angeles County
Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012
Dear Ms Roybal Saltarelli,

Please accept this as official notice by the City of Culver City and the Culver City Redevelopment Agency that we wish to become a participating agency in the Environmental Review Process for the Regional Connector Transit Corridor Project, as invited to do so by your letter of March 13, 2009.

Respectfully,

Scott D. Malsin
Mayor
City of Culver City

Cc: Jerry Fulwood, City Manager

SOL BLUMENFELD, ASSISTANT EXECUTIVE DIRECTOR
REDEVELOPMENT AGENCY TEL 310.253.5760 FAX 310.253.5779

Johnston
4185 Van Buren Street
Chino, CA 91710
USA

SANTA ANA CA 927

FIRST-CLASS

Ms Dolores Royal Saltavelli
AICP Project Manager
Los Angeles County Metro Transit Authority
1 Gateway Plaza
Los Angeles CA. 90012

5001242552

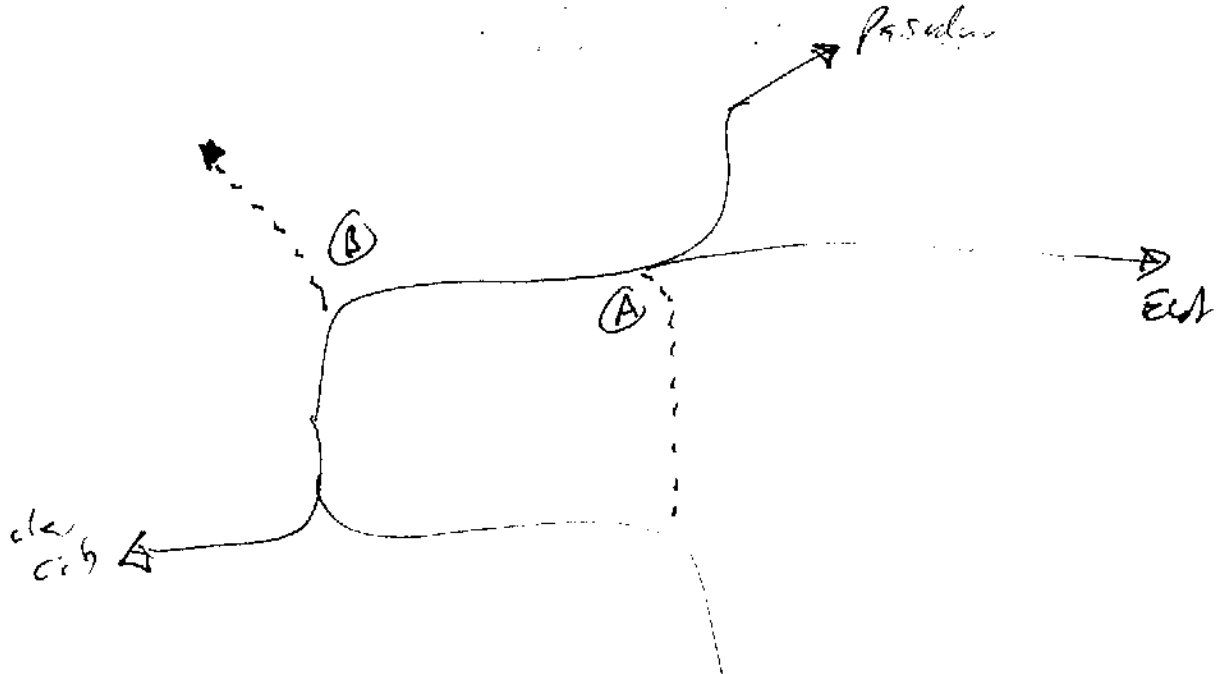
4/4/09

Please consider (2) knock out Panels

4) At the curve at 2nd / Central
Will create Easy Access Down Central Ave
to make for Shortcut down to Washington
(shortcut to South)

3) Another near 2nd / Grand — For future
Access to northwest Area — Echo Park -
Silver Lake — on the Glendale or Hollywood

These "wyes" on the 2 corners
Create a "Box" Around Downtown
Makes easier for future services



✓ Thank you for the important thought on this

✓ Tunnel all the way — no Above ground no Bus

✓ Just Build this quicker 7–10 yrs is Ridiculous !

Mark Johnson
4185 Van Buren St
Chino, CA. 91710

2015 W. Hellman Ave
Alhambra, Calif
91803 - 3821
6 May, 2009

Dear MS. D. ROYBAL SALTARELLI

This letter pertains to the Downtown Interconnector from Union Station to METRO Seventh and Figueroa. Having attended several of your meetings during the past year ~~I made~~ may add, they were very informative, indeed. — Thanks! so. My conclusion remains even more so. It must be a subway. The light rail line must go underground. It may be more expensive to build, but in the long run pay for itself, many times over.

Not only will it ellivate much of the mounting traffic in our Central City, but make it more liveable, interesting + fascinating. That is what we need.

I remember your Grandfather very well. If for any reason you need to reach me — my ~~cell~~ telephone number is 1-626-284-6958. Gracias por todos

Sincerely,
Albert Jaffori

THE MUSEUM OF CONTEMPORARY ART 250 South Grand Avenue Los Angeles, CA 90012
tel 213/621-2766 fax 213/620-8674 moca.org

May 11, 2009

Ms. Dolores Roybal Saltarelli
Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms. Saltarelli:

The Museum of Contemporary Art (MOCA) has been a member of the Little Tokyo community since the opening of the Temporary Contemporary (later renamed The Geffen Contemporary at MOCA) in 1983. The building, which was converted from a warehouse space to a gallery by renowned architect Frank O. Gehry, has received international acclaim and provides 45,000 square feet of gallery space for the museum. Located just inside the Little Tokyo redevelopment area in downtown Los Angeles and adjacent to the First Street Historic District in Little Tokyo, The Geffen Contemporary at MOCA has had a major influence on the community and surrounding businesses with visitors totaling, on average, 125,000 per year. The Museum is greatly concerned about the *Regional Connector Transit Corridor Final Alternatives Analysis Report* dated 2009.

While we understand the importance of an effective regional transit system we feel the alternatives indicated in the above referenced report will have a negative impact on the Little Tokyo community unless the following specific issues are studied, analyzed and resolved to the satisfaction of the area businesses and cultural institutions:

1. *Impact of Construction on the visitor experience:* With the construction scheduled to continue over a period of 4-5 years, we are concerned that the re-routed traffic will have a negative long-term impact on our visitors' ability to access both the Museum and the surface parking lots in the area. We are also concerned about the location and physical area required to stage materials and equipment related to this construction. Furthermore, we feel the noise pollution caused by continued construction in the immediate area will impact the visitor experience coming from and going to the Museum as well as during the actual Museum visit.

2. *Impact of Construction on the Museum Collection:* Vibrations caused by construction can have a negative impact on sensitive collections stored or on display at the Museum. Although precautions are always taken regarding seismic concerns, the continued vibrations caused by construction could potentially damage delicate works, resulting in expensive conservation repairs and hindering our ability to accept loaned art from donors or other institutions.

3. *Impact on Property Owners:* The potential loss or reduced property value of long-time stake holders within the Little Tokyo community must be considered and, if necessary, must be equitable.

4. *Impact on Local Businesses:* The effect of re-routed traffic, as a result of lengthy construction, will have a tremendously detrimental impact on local businesses.

Although we believe in the importance of the Connector Transit Corridor to the overall well being of the city at large, we feel these issues need to be addressed regardless of which alternative is chosen. We appreciate the efforts of the Metropolitan Transportation Authority to keep the community informed and look forward to working with you to resolve these issues prior to the commencement of any construction.

Sincerely,

Ari Wiseman
Deputy Director

McCourt

HOWARD SUNKIN

May 11, 2009

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Los Angeles, CA 90012

RE: Regional Connector Transit Corridor Scoping Process

Dear Ms. Roybal Saltarelli:

The Los Angeles Dodgers are pleased to be given this opportunity to comment on the scope for the Regional Connector Transit Corridor DEIS/DEIR. Based on the scoping presentation, it is our understanding that the project would allow direct connections (without the current multiple transfers) for rail riders traveling between Pasadena and Long Beach and between Culver City and the Eastside. The project would result in significant travel time savings for rail riders, make regional rail travel more convenient, and increase new transit trips by 8,000-10,000 boardings per day.

The Los Angeles Dodgers welcome the possibility of a fixed-guideway transit project that is intended to improve mobility within the downtown area by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. The Dodgers are extremely concerned about the effect of roadway congestion on regional mobility and accessibility and favor transit projects that address these critical issues.

Dodger Stadium is located approximately one mile north of downtown Los Angeles. Each year, the Los Angeles Dodgers play 81 regular season games at Dodger Stadium as well as exhibition and, if required, playoff games. In 2009, Dodger Stadium also played host to the World Baseball Classic Semifinal and Final. Numerous other events, such as concerts, are hosted at Dodger Stadium throughout the year. For each event, tens of thousands of individuals travel to and from Dodger Stadium. The private automobile is the primary mode of travel due to its location away off the traditional transit grid. Making public transit a viable transportation option to Dodger Stadium is a primary goal of the Dodgers. Attractive and useful public transit would make Dodger Stadium an extension of Downtown Los Angeles.

The Next 50 plan is a vision and investment for Dodger Stadium over the next half century. Under this plan, Dodger Stadium will become more accessible, attractive and inviting, not just during games, but before and after games, on non-game days and during the off-season. Public transit will need to be a primary mode of access under this vision.

McCOURT GROUP LLC • 1000 ELYSIAN PARK AVENUE • LOS ANGELES • CA • 90012
323.224.4240 (P) • 323.224.2618 (F) • HOWARD@MCCOURTGROUP.COM (E)

Upon careful consideration of the three project alternatives (in addition to a No Build Alternative), the Los Angeles Dodgers believe that the Underground Emphasis LRT Alternative would best achieve the project's stated goals and offer the best opportunity to eventually link Dodger Stadium and downtown via rail. The TSM Alternative does not satisfy the project's stated goals. The At-Grade Emphasis LRT Alternative would achieve the project's stated goals but would not offer the same level of benefit as the Underground Emphasis LRT Alternative. The at-grade portion of this alternative could result in increased traffic congestion in the downtown area, resulting in decreased mobility for motorists. The Underground Emphasis LRT Alternative would achieve the project's stated goals and would not result in secondary impacts.

We would like to encourage Metro to focus on the Underground Emphasis LRT Alternative. Under this alternative, a suitable connection from Bunker Hill to Dodger Stadium could be provided under short- and long-term scenarios, which would benefit fans and employees, and help to alleviate roadway congestion on regional mobility and accessibility. This alternative would be the best way forward in providing attractive and useful public transit to Dodger Stadium. The connection could initially consist of a shuttle bus and ultimately a fixed-guideway rail system (combination of subway & elevated). A rail connection between downtown and Dodger Stadium is a vision we hope to realize in the future.

The Los Angeles Dodgers are looking forward to working together with Metro on this important mobility project.

Sincerely,

Howard Sunkin
Senior Vice President, Public Affairs
McCourt Group LLC

三河屋

MIKAWAYA BAKERY-CONFECTIONERY

Main Office & Factory
800 E FOURTH STREET LOS ANGELES CALIFORNIA 90013 TEL (213) 628-6514
FAX (213) 625-0943 E-MAIL mochi1@ix.netcom.com

May 9, 2009

Ms Dolores Roybal Saltarelli
Project Manager
Los Angeles, County MTA
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms Roybal Saltarelli:

As a business that will be celebrating its 100th anniversary in 2010 and a member of various organizations in Little Tokyo, I am very concerned with the proposed Regional Connector. While I feel that improved and efficient public transportation will be vital to the future of Little Tokyo and favor the Underground emphases alternative via Second Street, I have strong concerns about the negative impacts that construction will have on the residents, businesses, tenants, property owners, customers, and visitors.

1. The disruption of businesses that will be directly impacted by construction. Closure of streets, stoppage of utilities, loss of customer parking spaces, noise and air pollution. There will need to be meetings with these business owners so they can plan and know in advance what to anticipate and where to call.

2. Little Tokyo has many residents, especially near Alameda, Second Street, and Central Avenue. These people will also be affected by street closures, stoppage of utilities, noise and air pollution as well as being able to cross Alameda and First Streets. With the anticipated trains crossing Alameda and 1st Street intersections "every 2 ½ minutes both ways", there will need to be a safe, efficient pedestrian crossing for Alameda and First Street, possible a escalator overpass. This should be a priority since the Gold Line will be opening this summer.

3. Loss of On-Street and Off-Street parking during construction should be mitigated, possibly by using open spaces or areas not yet in construction. After construction parking spaces should be replaced. City of Los Angeles Community Redevelopment Agency is conducting a parking study and identifying parking areas. The METRO should use that information.

4. I would support another station on the Underground emphasis alternative at Second Street, between Los Angeles and San Pedro Streets.

三河屋

In closing, I appreciate the opportunity to comment on the Regional Connector and appreciate the METRO Regional Connector team to work with the community on a on-going basis so that we can all have a public transportation system that will benefit Little Tokyo, the City of Los Angeles and all its inhabitants.

I look forward to future meetings and a continued working relationship,

Sincerely,

Frances K. Hashimoto

Frances K. Hashimoto
President
Mikawaya

Board of Directors

Chris Aihara
JACCC
Yoshitaka Ena
New Japan Travel
Ellen Endo
Asian American Journalists
Akira Fujimoto,
Olympic Shop
Frances Hashimoto,
Mikawaya
Kazuyuki Hoshino,
Anshindo America
Miyako Iwai
Manufacturers Bank
Bob Jannessa
Japanese Village Plaza
Shigeko Kajiya
Golden Globe Realty
Isohiro Kitahara
Pacific Commerce Bank
Michael Komai
Rafu Shimpo
David Kudo
All Japan News
Joanne Kumamoto
Kumamoto and Associates
Kats Kunitsugui
Keiro Residents
James Kurata, O.D.
Kurata Eye Care
Andrew Lee
Advanace Investments
Wilson Liu
Taira Services Corporation
Takeshi Matsumoto
Takeshi Matsumoto, M.D.
Archie Miyatake
Toyo Miyatake Studio
Eiji Morishita
LT Shopping Center
Masharu Motoyama
Motoyama Enterprise
Kazunori Nakajima
Kiyono Fashions
Andy Sato
Bank of the West
Patrick Seki
Mickey Seki & Son
Yuriko Shikai
Neufeld Law Group
Yukio Shiratori
Union Bank of California
Kenji Suzuki
Suehiro Café
Takashi Usui
California Bank and Trust
Hiroshi Yamauchi
Kouraku
Robert Yasui
Robert Yasui and Associates
Tad Koizumi
Miyako Hotel
Akira Yuhara
Kyoto Grand Hotel

Little Tokyo Business Association
244 S. San Pedro St., Suite 303
Los Angeles, CA 90012

May 1, 2009

Ms, Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Subject: Regional Connector Transit Corridor

Dear Ms. Saltarelli:

On behalf of the Little Tokyo Business Association (LTBA), we are responding to the Regional Connector Transit Corridor Environmental Impact Statement/Environmental Impact Report (EIS/EIR) public scoping process.

The Little Tokyo Business Association is in support of the construction of the "Underground Emphasis LRT Alternative, with a Station location at 2nd Street between Los Angeles and San Pedro Streets."

In light of the positive impacts this project may bring to the greater Los Angeles community, our organization is concern with negative implications and impacts to the current business owners, tenants, property owners and valued visitors and customers of the Little Tokyo community. The following is a list of our concerns, which mitigating measures needs to be implemented and documented in the EIS/EIR:

1. ***Eminent Domain:*** Business owners, tenants and property owners, whose business endeavors are taken away through eminent domain are to receive fair and just treatment. Fair and just relocation costs shall be made available to those businesses displace through eminent domain. Every effort shall be made to assist those displaced businesses and tenants who express their desires to stay in the Little Tokyo community. In addition to relocation cost, additional funding shall be made available to assist those displaced businesses with desires to stay in the Little Tokyo community.

2. ***Replacement On-Street and Off-Street Parking:*** All off-street parking spaces lost through eminent domain shall be replaced. All on-street and off-street parking spaces taken away during the course of construction shall be replaced.

3. ***Business Interruption:*** During the course of construction, every effort shall be made to minimize adverse impacts which businesses, tenants, property owners, and valued visitors/customers may encounter that prevents them from conducting reasonable business and personal activities within the Little Tokyo community. Additional funding shall be made available for those businesses, tenants or property owners whose business endeavors are adversely impacted during the course of construction. A special business interruption committee shall be established, whose membership shall include Little Tokyo businesses, tenants and property owners, along with those government agencies having jurisdiction to make policy to resolve issues arising from adverse business interruptions during the course of construction.

4. ***LRT Station:*** In the Underground Emphasis LRT Alternative there is a proposed a station location underground in an area at 2nd Street between Los Angeles and Main Streets. A commitment shall be made that a station will be constructed at 2nd Street between Los Angeles and San Pedro Streets, with pedestrian access at grade.

Respectfully yours;

Wilson Liu
President

Mr. Rogelio L. Pena
1513 Loma Rd.
Montebello, CA 90640

LONG BEACH CA 908

10 APR 2008 PM 4 T

DOLORES R. SALTARELLI
ADJUST MANAGER, METRO, MS 99-22
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012

90012+2952

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: ROGER PEÑA	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地: 1513 LOMA ROAD, MONTEBELLO, CA 90640	
Telephone/Teléfono/電話: 323-726-8151	Fax: 323-726-9334
Email/電子メール: RPEÑA@CHARTER.NET	

Comments/Comentarios/コメント:

I FULLY ENDORSE THE UNDERGROUND ART ALTERNATIVE FOR THE DOWNTOWN REGIONAL CONNECTOR.

DOING OTHERWISE, WILL MAKE TRAFFIC WORSE DOWNTOWN.

START CONSTRUCTION AND GET IT DONE ASAP

Roger Peña 4/1/09

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

Email Comments

Jasso, Yara

From: Massicci, Lou [mailto:Lou.Massicci@hmhpub.com]
Sent: Wednesday, May 13, 2009 10:08 AM
To: 'regionalconnector@metro.net'; Roybal, Dolores
Subject: Regional Connector Transit Corridor

To whom it may concern:

As I am unable to attend the numerous “public scoping” meetings to give input on the proposed Corridor, I’d like to provide my perspective.

As a businessman who frequently travels in Los Angeles County I oppose any surface transportation being added to the already congested streets.

The corridor is not only essential; it is most welcome, and long overdue!

However, let’s keep in mind that the already overstressed streets and freeways cannot support any added transportation and that includes the Connector.

The Connector must be built underground.

Let’s keep the noise, the congestion away from our already congested streets and freeways.

Thanks for your careful attention to my input.

Lou Massicci, District Manager, K-12
Houghton Mifflin Harcourt / Holt Mc Dougal
(559) 324-8101
Please note my email has changed to lou.massicci@hmhpub.com

Jasso, Yara

From: Regional Connector [RSC_RegionalConnector@metro.net]
Sent: Thursday, May 14, 2009 10:11 AM
To: Roybal, Dolores; Villalobos, Monica; 'Ginny-Marie Case'; Clarissa Filgioun
Subject: FW: COMMENT

fyi

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Union Church [mailto:unionenglish@covad.net]
Sent: Wednesday, May 13, 2009 4:51 PM
To: Regional Connector
Subject: COMMENT

METRO REGIONAL CONNECTOR
COMMENT FORM

FORWARD THIS EMAIL TO:

DOLORES ROYBAL SALTARELLI, Project Manager, Metro
MS 99-22-2, One Gateway Plaza, L.A., 90012

COMMENT FORM FROM GORO ENDO

NAME: **GORO ENDO**

ORGANIZATION: **Union Church of Los Angeles**

ADDRESS: **401 E. Third St.Los Angeles, CA 90013**

TELEPHONE: **(213) 629-3876, FAX: (213) 629-4091**

EMAIL: unionenglish@covad.net

COMMENT:

Will traffic from Temple s.b. on Alameda be restricted to R.T.O. at First St. and will this be applicable to both alternatives? What will be the anticipated level of services on the streets and the resulting circulation plan?
This alternative may not impact the core of Little Tokyo during construction and in the future as much as the underground alternative.

UNDERGROUND ALTERNATIVE
The loss of 200 parking spaces is critical to the area. There are seveeral non-profits in the area with surface parking areas adjacent to their premises. Will public funding be available to build additional parking on these sites with stipulations that would reserve a portion of the site for their use?

May 11, 2009

Ms. Dolores Roybal Saltarelli
Project Manager
METRO
1 Gateway Plaza
MS99/22/52
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

The Little Tokyo Community Council (LTCC) is a council of more than 100 stakeholder organizations dedicated to the future vitality of our historic and cultural neighborhood. On behalf of LTCC, I take this opportunity to express our concerns related to the proposed METRO Regional Connector. While we recognize the importance and need for efficient public transportation for the Los Angeles area, we believe that the proposed alignments can have irreparable negative impact on our community unless specific issues are responsibly addressed and analyzed.

The concerns of LTCC in respect to the proposed Regional Connector alternatives include:

- Impact of construction on local businesses
  Disruption of business due to construction, and resulting diversion of traffic for an extended period of time can have devastating effects on small businesses.

- Loss of public parking
  Loss of convenient and available parking will impact negatively on public institutions and businesses, discouraging visitors and customers.

- Impact to key Little Tokyo property owners
  Potential loss and/or construction on major properties in Little Tokyo eliminate potential for future development benefiting community. Every consideration should be given to longtime community stakeholders who face loss or devaluation of property.

- Noise Pollution
  On-going noise from construction negatively impacts, business, community programming, and daily activity.

- Transit Creating Physical Barrier through the Community
  Above grade train and/or transit hub will potentially create a physical barrier, cutting off portions of the community and inhibiting travel and access.

We also take this opportunity to convey our strong recommendation that any Connector Alignment option must incorporate a Little Tokyo Station-West in order to promote Little Tokyo as a destination, providing convenient access for our patrons and workers.

Construction of the Connector above or below grade should be an enhancement to the community, and we strongly urge that issues of urban design, creative utilization of surrounding areas, in terms of development, public art, etc are incorporated into the project.

We appreciate the efforts by METRO to keep the community informed as to the progress of this project, and look forward to a continued close working relationship.

Sincerely,

Chris Aihara
Chair
Little Tokyo Community Council

LTCC Board of Directors

Bill Watanabe, 1st Vice Chair, Little Tokyo Service Center
Alan Kumamoto, 2nd Vice Chair, Kumamoto Associates
Frances Hashimoto, Co-Secretary, Mikawaya Confectioners
Ken Kasamatsu, Co-Secretary, Pacific Commerce Bank
Eric Kurimura, Treasurer, Los Angeles Hompa Hongwanji Buddhist Temple
Tom Kamei, Immediate Past Chair, Japanese Chamber of Commerce of So. CA.
Noriaki Ito, Past Chair, Higashi Honganji Buddhist Temple
Howard Nishimura, Past Chair, Tokyo Villas Homeowners Association
Ellen Endo, Little Tokyo Business Association
Goro Endo, Union Church of Los Angeles
Brian Kito, Fugetsu-do and Little Tokyo Public Safety Association
Jeff Liu, Visual Communications
Kei Nagao, J-Town Voice
Tatsushi Nakamura, Japanese Prefectural Association
Mike Okamoto, Asian American Architects & Engineers Association
Wilbur Takashima, Little Tokyo Teramachi Owners Association
Satoru Uyeda, S. K. Uyeda Investments
Hiroshi Yamaguchi, Japanese Pioneer Community Center
Akemi Kikumura Yano, Japanese American National Museum
Evelyn Yoshimura, Little Tokyo Residents Association

cc: Irene Hirano, Past Chair, Japanese American National Museum

-----Original Message-----
From: PJ Costales [mailto:pjcostales@gmail.com]
Sent: Monday, April 27, 2009 12:25 PM
To: Regional Connector
Subject: letter from a new downtown resident

Hello,

I am a new resident of the Higgins that believes in the revitalization of downtown. I think its a great idea to make public transportation a top priority and I applaud the council for looking to all avenues possible to make LA less automobile reliant...

With that said, I do believe that in it's current state, Downtown LA is difficult to navigate with all the one way streets and 2nd street is one of the few 2 way streets in the city. Creating an at-grade connector would severely disrupt traffic flow, divide a neighborhood, and cause that part of the city, with the soon to be added, little tokyo/arts district stop, congested beyond today's standards. Isn't creating public transportation supposed to decrease congestion instead of add to it?

I will be pushing for an underground station; one that would keep the confusing rails, electric lines, and street cars off the streets, and provide a needed safety to drivers, pedestrians and rail commuters. To add, this would be more aesthetically pleasing and would cut down on noise pollution. While I understand that this means would be more expensive, in the long run I believe it would be economical creating something that the city can use for 20+ years in the future... if we're going to do it, lets do it right with the quality. Let's not just create something that would ease the problem now... lets get rid of the problem and let's keep it gone for the future...

I hope someone reads this and a light switch goes off. I hope someone thinks about what downtown could be and how we have the opportunity to do something write for the future and not just for today. Please consider all the above and put yourselves in the shoes of the residents and employees of downtown that see what a great community this can be and the golden future that can take place if things are done right and not just done in haste...

Thank you for your time,

Pamelo E. Costales Jr.

A proud downtown resident

May 11, 2009

Dolores Roybal Saltarelli,
Project Manager
LACMTA
One Gateway Plaza
Los Angeles, CA 90012-2952

Re: Comments on the Regional Connector Scoping for EIS/EIR

Thank you for giving me the opportunity to comment on the Scoping Information related to the EIS/EIR for the Regional Connector. I made some oral comments at the public meeting held at JANM on April 1st, but I wanted to follow-up with additional comments about scoping issues on the proposed Regional Connector Alternatives that need to be addressed, as follows:

At-Grade Alternative

The Scoping meetings and the materials did not clarify how the at-grade would be designed and operate along 2nd Street, nor on Main St. and Los Angeles St. There are also several driveways along this alignment that needs to be fully analyzed for safety; these driveways include access to the new LAPD headquarter building, the new LAPD jail, Caltrans building, City Hall, City Hall East, and the Kyoto-Grand Hotel.

The capacity of the intersections along the alignment also need to be carefully analyzed. There will be a significant reduction in street width on 2nd Street, since it's currently only 36 feet to 40 feet wide. The remaining single lane available on 2nd Street may be inadequate to offer the width needed for proper circulation for the area and additional street widening may be needed, or it may also have to operate as one-way, including inside the 2nd Street Tunnel.

Although the split station is offered at the Civic Center next to City Hall, the Little Tokyo community would rather have a station in Little Tokyo, because the City Hall site is too far away. The Civic Center site would only be used during the week days, but would not be used at nights, weekends and on Holidays. Therefore, Metro should consider another station site on 2nd Street that would better serve the residents of Little Tokyo and the customers who come to the Little Tokyo businesses.

At-grade alternative for the Downtown Connector is very problematic because of potential accidents and the lack of operational reliability. Metro should also be aware that LAPD often closes Civic Center area streets due to demonstrations, and Little Tokyo community closes streets for their Annual Nisei Week Grand Parade that affect surrounding streets as well. Since the Parade Route includes Los Angeles Street, where the LRT alignment runs, the Little Tokyo community does not support the at-grade alternative.

Construction impacts are a major concern for the Little Tokyo community. The traffic impacts, and impacts to businesses during construction, noise and dust are all concerns that need to be fully disclosed, analyzed, and fully mitigated.

Subway Alternative

The Scoping meetings also did not clarify the details of the subway alternative as it relates to how it would be designed and operated at the intersection of 1st and Alameda St. It is my understanding that Alameda St. will be grade separated below 1st Street, but that the rail connections will all be at-grade. I suggest that the grade separation project be the first phase of work to minimize the overall impact. Furthermore, it was said that there will be grade separated pedestrian crossing of the tracks, as well as frontage roads along Alameda St. Traffic modeling and simulation of the traffic and trains would be necessary to convince me and the community that the intersection could operate satisfactorily, even with the grade separation. Furthermore, it would be necessary to maintain and allow street level crossings in all directions for pedestrians at the intersection.

There are concerns about the impact of the tunneling work under 2nd Street, particularly if utility relocation work impacts the intersection of 2nd and Central Avenue. The businesses as well as the community have concerns with traffic and parking impact during construction the ability to conduct their businesses.

The owner of the property where Metro intends to stage construction and where the tunnel boring machine will be set is a friend of the Little Tokyo community, so the community is concerned about how Metro will treat the owner. Would it be possible to have the owner partner with Metro for any development project at the site?

Station construction on 2nd Street is another concern to the community, since it involves a cut and cover technique. The Nisei Week Parade is held in August, and that has a Route along 2nd Street, so the community is concerned about not being able to have the Nisei Week Grand Parade, unless construction is coordinated to avoid that disruption. Furthermore, the community would like to see the subway station closer to Little Tokyo, say an entrance at Weller Court, rather than where it's currently proposed behind the Caltrans building. That's because when taking the train from East LA, the station spacing would already be more than a mile at Alameda Street. I believes that there should be two stations on 2nd Street, one closer to Little Tokyo, and second one closer to Hill Street on the east side of Bunker Hill. The community believes that it's important to have the Little Tokyo Station close to 2nd and San Pedro St. for security reasons, and in order to properly serve the residents and the business patrons at nights and weekends.

Thank you for the opportunity to comment on the Scoping for the EIS/EIR for the Regional Connector.

Sincerely Yours,

James M. Okazaki

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Pasadena Scoping Comments on Metro Regional Connector**
Date: May 7, 2009 3:50:05 PM PDT
To: 'Clarissa Filgioun' <clarissa@therobertgroup.com>, 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, Arcelia Arce <arcelia@therobertgroup.com>
Cc: "Roybal, Dolores" <ROYBALD@metro.net>
▶ 1 Attachment, 636 KB

Regional Connector
Not In Address Book

Please post to eRoom.

From: Yamarone, Mark [mailto:MYamarone@cityofpasadena.net]
Sent: Thursday, May 07, 2009 1:33 PM
To: Regional Connector
Cc: Paige-Saeki, Jennifer; Fuentes, Theresa; Dock, Fred
Subject: Pasadena Scoping Comments on Metro Regional Connector

Dear Ms. Roybal-Saltarelli,

Thank you for the opportunity to provide comments related to the Notice of Preparation and public scoping for the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the Metro Regional Connector Project. Based on our review of the scoping documents, we are requesting the following potential project impacts be considered and analyzed in the DEIS/DEIR.

1. Ridership analysis for trips from Pasadena for the alignment that provides the most direct connections to employment centers in Downtown Los Angeles, eliminating the need for Gold Line passengers to transfer to the Red Line.
2. Ridership analysis for trips from Pasadena for the alignment that provides the fastest connection through downtown to promote through trips to/from Pasadena on the Blue and Expo Lines.
3. Comprehensive traffic impact analysis for intersections surrounding the existing Gold Line at-

grade crossings in Pasadena for any project alternative that would result in trains operating in Pasadena at frequencies greater than that "cleared" in the Pasadena Blue Line EIR.

The majority of the project's potential impacts are localized to downtown Los Angeles. However, due to the scale of the project and the potential regional considerations, Pasadena requests to receive future CEQA notices for the project.

The City of Pasadena appreciates the opportunity to comment on the project. Should you have any questions regarding this letter, please do not hesitate to contact me at (626) 744-7474.

Mark Yamarone
Transportation Administrator

Mark Yamarone
City of Pasadena
Dept. of Transportation
626 744-7474

DEPARTMENT OF TRANSPORTATION

May 7, 2009

Ms. Dolores Roybal Saltarelli, Project Manager
Metro
1 Gateway Plaza, MS 99/22/52
Los Angeles, CA 90012

Re: Comments Related to NOP for the Metro Regional Connector Project

Dear Ms. Roybal-Saltarelli,

Thank you for the opportunity to provide comments related to the Notice of Preparation and public scoping for the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the Metro Regional Connector Project. Based on our review of the scoping documents, we are requesting the following potential project impacts be considered and analyzed in the DEIS/DEIR.

1. Ridership analysis for trips from Pasadena for the alignment that provides the most direct connections to employment centers in Downtown Los Angeles,

eliminating the need for Gold Line passengers to transfer to the Red Line.
2. Ridership analysis for trips from Pasadena for the alignment that provides the fastest connection through downtown to promote through trips to/from Pasadena on the Blue and Expo Lines.
3. Comprehensive traffic impact analysis for intersections surrounding the existing Gold Line at-grade crossings in Pasadena for any project alternative that would result in trains operating in Pasadena at frequencies greater than that "cleared" in the Pasadena Blue Line EIR.

The majority of the project's potential impacts are localized to downtown Los Angeles. However, due to the scale of the project and the potential regional considerations, Pasadena requests to receive future CEQA notices for the project.

The City of Pasadena appreciates the opportunity to comment on the project. Should you have any questions regarding this letter, please do not hesitate to contact me at (626) 744-7474.

Respectfully submitted,

Mark Yamarone
Transportation Administrator

221 East Walnut Street, Room 210 · Pasadena, CA 91101
(626) 744-6470

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector comments.**
Date: May 7, 2009 3:48:33 PM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>, Arcelia Arce <arcelia@therobertgroup.com>

Regional Connector
Not In Address Book

Please post to eRoom.

-----Original Message-----
From: .mac account [mailto:erictooley1@mac.com]
Sent: Thursday, May 07, 2009 2:44 PM
To: Regional Connector
Subject: Regional Connector comments.

I think that the Regional Connector is very much needed in Los Angeles. Once the Gold Line Eastside extension is up and running, and the Expo line - the need for the connector will be even greater. In adddition I look forward to the additional connections with the possibled downtown stations. I believe that light rail should be used, entirely grade spearated and underground - following the Underground Emphasis LRT Alternative as presented. Double-tracking the system, if possible, in both directions would seem smart to accomidated the enormous frequency of trains through this vital connection.

I think that the regional connector is possible the most important rail project currently under study for Los Angeles.

Thank

Eric Tooley
1741 Maltman Ave.
Los Angeles, CA 90026

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Metro Connector Comment**
Date: May 11, 2009 9:43:25 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Please post.
Thanks!

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: robert@volk.me [mailto:robert@volk.me]
Sent: Monday, May 11, 2009 8:35 AM
To: Regional Connector
Subject: Metro Connector Comment

It was interesting to hear the MTA presentation to the Little Tokyo Community Council on April 28, 2009.

All of the benefits mentioned for connecting the Little Tokyo Gold Line station to the 7th Street station related to MTA riders. There was no mention of how the connector would offer any benefits to Little Tokyo.

The proposed Underground Connector Alternative would have a very negative impact on Little Tokyo. APPROXIMATELY 20 PERCENT OF THE EXISTING COMMERCIAL AREA IN THE LITTLE TOKYO CRA PROJECT AREA AND OVER 200 PARKING SPACES WOULD BE LOST. During construction,1st and 2nd St will be closed for an extended

time. Many of our small businesses would not be able to survive the disruption of their activities. Moreover,once the project is completed, the constant flow of trains at grade across the intersection of 1st and Alameda will disrupt the eastern portal of Little Tokyo. To have a subway under 2nd St will not bring any more visitors or shoppers to Little Tokyo.

Over the last 25 years, the community and the Los Angeles Community Redevelopment Agency have worked very hard to make Little Tokyo the vital community that it is today. It is not fair to ask that we sacrifice all that we have achieved just to solve a lack of adequate transportation planning by MTA 20 years ago.

I urge MTA to select the No Build Alternative or the At-Grade Alternative along Temple Street.

Robert D. Volk

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments from Go For Broke National Education Center**
Date: May 11, 2009 4:42:55 PM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>
▶ 2 Attachments, 491 KB

Regional Connector
Not In Address Book

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Diane Tanaka [mailto:diane@goforbroke.org]
Sent: Monday, May 11, 2009 4:41 PM
To: Regional Connector
Subject: Comments from Go For Broke National Education Center

Hello Regional Connector Team,

The Go For Broke National Education Center respectfully submits our concerns and opposition for the Upper Grand Route 1 Alternate (Temple/Alameda at-grade alternative) due to the following: The proposed route will negatively limit the vehicular ingress and egress of the proposed Go For Broke National Education Center project site as it will block the site's only street frontage on Temple Street between Alameda and Judge John Aiso Street. The limited width of Temple Street may also require the widening of the street on the side of our project site creating severe impact to the infrastructure of the building. The proposed

route will also create substantial vibration and acoustical disruptions to the operation of the exhibition facilities housed in the building.

Attached please find a copy of the Go For Broke National Education Center's site plan for your review and consideration of our concerns.

Best regards,
Diane Tanaka

Diane H. Tanaka
Project Manager
Go For Broke National Education Center
310-222-5709 direct
310-328-0907 main
310-962-2698 mobile

Visit Go For Broke National Education Center at www.GoForBroke.org. We must never forget!

GFB-Drawings.pdf (487 KB)

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regtional connector public comments**
Date: May 11, 2009 9:45:26 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Please post.
Thanks!

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net
P Please consider the environment before printing this e-mail

-----Original Message-----
From: Yuri Popov [mailto:yopopov@gmail.com]
Sent: Saturday, May 09, 2009 7:48 PM
To: Regional Connector
Subject: Regtional connector public comments

Below is my formal public comments on the regional connector for the record.

I would like to express my strongest support of the Underground Emphasis LRT alternative. This alternative will result in the best performance of the connector among the four alternatives considered. It features the highest ridership, the shortest travel time, the lowest operating costs, and the least traffic impact. These are the most important factors in building the public transit infrastructure in dense urban areas, and all of them are optimized by the Underground Emphasis LRT alternative. While this alternative is slightly more expensive in terms of the construction costs, we are building the future of this city, and we cannot afford to build this project cheaply and badly. Thus, the underground alignment must be chosen.

Sincerely yours,

Yuri Popov, Ph.D.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Comments re: regional connector**
Date: May 11, 2009 4:38:53 PM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Please post.
Thanks!

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net
P Please consider the environment before printing this e-mail

-----Original Message-----
From: dawna nolan [mailto:dawnanolan@yahoo.com]
Sent: Monday, May 11, 2009 4:14 PM
To: Regional Connector
Subject: Comments re: regional connector

Dear Metro-
As a long-time resident of downtown, I am pleased and excited about the possibility of the regional connector. However, I feel strongly in favor of the below-grade option, as I believe the at-grade option will contribute to congestion rather than relieve it, and impact area-business negatively during construction in a way that will be mitigated with the below-grade option. I am in support of public transportation, AND a pedestrian-friendly downtown…the below-grade option is far better on both counts.

Thanks for taking my comments.

Best Regards,

Dawna Nolan
dawnanolan@yahoo.com
310-650-8525

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional connector scoping comments**
Date: May 11, 2009 4:42:34 PM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Howard Nishimura [mailto:hinishimura@msn.com]
Sent: Monday, May 11, 2009 4:24 PM
To: Regional Connector
Cc: June Berk ltcc
Subject: Regional connector scoping comments

From Howard Nishimura, former chairman of the Little Tokyo Community Council and Board member.

The comments that I am presenting do not represent the overall view of the board but my personal opinion only.

The Little Tokyo Community has been reduced time and time again for the expansion and growth of City and federal government buildings and to the extent that this new project will continue to make our overall size much smaller as it is presently configured I would like to have the regional connector consider the following suggestion. The traffic is horrible as it exists today and the benefit of the the regional connector as it is presently

being considered is negligible at the cost of losing another block. My observations are as follows:

1. The route of the regional connector line should be redesigned to have the rail line continue south after crossing the freeway and a portal put on the MTA or RTD site and continue underground and create a station on the Mangrove site and split the Gold line to continue to the Eastside Gold line with the connector to the Blue Line.

2. One benefit of this routing is that the split level traffic on Alameda and First Street would not be necessary. This split level concept would be a disaster without the left turn lanes at that particular intersection. The regional connector could tunnel under the First Street and Alameda Street intersection instead of the cars being subject to this problem.

3. Another benefit would be that the property bordered by 1st Street on the North, Alameda Street on the East, 2nd Street on the South and Central Avenue could hopefully be maintained with the minimum amount of disruption to the tenants who presently are operating a business on the location at the present time.

4. With Little Tokyo only having the one station the Regional connector will have very little benefit to the customers, business owners and residents of the Area. A second station if located on 2nd and Main or Los Angeles would be a greater benefit to Little Tokyo.

As this may creat a disagreement with the developers of the Mangrove Site I would propose that the Little Tokyo station if the station does not need the land of the Little Tokyo station that it be given back to the developers for addional development.

This represents my comments and I know how you will probably will not entertain such a radical idea I leave you with my best wishes on a successful project and I hope that Little Tokyo survives whatever you decide on.

Howard Nishimura

From: "Roybal, Dolores" <ROYBALD@metro.net>
Subject: **FW: Environmental Review Process**
Date: May 4, 2009 11:27:38 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, "'Villalobos, Monica'" <VillalobosMA@cdm.com>, "Kerman, Ann" <KERMANA@metro.net>

Roybal, Dolores
In Address Book

From: Minh-Ha Nguyen [mailto:MNguyen@css.lacounty.gov]
Sent: Friday, May 01, 2009 9:54 AM
To: Leahy, Arthur
Cc: Roybal, Dolores
Subject: Environmental Review Process

Dear Sir and Madam,

Based on the April 13, 2009 presentation on the Westside Extension Project (WEP), CSS fully supports the MTA's efforts to increase public transportation in the County of Los Angeles. It is projected that the senior population in L.A. County will grow exponentially over the next 10 years. For this reason, we anticipate many seniors using the WEP rail service. It should be noted that senior safety should be given special consideration, especially during evening hours. In addition, we support the rail transit option that has the highest number of stops near resources and services for seniors.

Should you need additional information, please call me at (213) 738-2645.

Regards,

Minh-Ha Nguyen, Assistant Director
Aging & Adult Services Branch
Community & Senior Services
3333 Wilshire Boulevard, Suite 400

Los Angeles, CA 90010

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector - "underground" alt. concerns**
Date: May 7, 2009 3:51:18 PM PDT
To: 'Clarissa Filgioun' <clarissa@therobertgroup.com>, 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, Arcelia Arce <arcelia@therobertgroup.com>

Regional Connector
Not In Address Book

Please post to eRoom.

From: Bryant Ng [mailto:brywng@gmail.com]
Sent: Wednesday, May 06, 2009 3:14 PM
To: Regional Connector
Subject: Regional Connector - "underground" alt. concerns

To whom it may concern,

I'm writing to voice my concerns about the "underground" alternative to the Regional Connector. While I agree with the benefits of the Regional Connector and believe that it will fulfill an unmet need by connecting the blue and gold lines, my concern is with the "underground" alternative and its negative impact to the Little Tokyo community.

It is my understanding that with the "underground" alternative the properties in the square block bordered by 1st. street and 2nd street on the North and South, and Alameda and Central on the East and West will need to be purchased. I'm concerned that this can have a negative impact on the already tiny community of Little Tokyo. I am a Los Angeles native and currently live near Little Tokyo. My wife and I frequent Little Tokyo on a regular basis and I've been able to observe the dynamics of this community over the years. The square block in question currently houses 2 parking lots, approximately 9 eateries and an Office Depot. With already limited parking options, getting

rid of the 2 parking lots could possibly lead to greater congestion in the area, as well as a decline in overall foot traffic and visits to Little Tokyo due to a decrease in available parking. In addition, the 9 eateries serve as a main traffic generator to Little Tokyo. A simple observation during lunch or dinner can confirm the amount of traffic generated by the businesses and parking lots on that square block. I would argue that the square block alone brings in nearly 50% of the visitors to Little Tokyo, with its businesses and parking lots.

I urge you to strongly consider the "at-grade" alternative to the Regional Connector. I am sure there are pros and cons to both alternatives, but a major con to the "underground" alternative is its obvious negative impact to the Little Tokyo community. Thank you for spending your time reading this and I hope that my comments will be considered when choosing the appropriate scenario.

Thank you,
Bryant Ng
818-593-9082

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector CEQA Scoping comments**
Date: May 7, 2009 3:53:39 PM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>, Arcelia Arce <arcelia@therobertgroup.com>

Regional Connector
Not In Address Book

Please post to eRoom.

From: Gunnar Hand [mailto:gunnarhand@hotmail.com]
Sent: Tuesday, May 05, 2009 9:31 PM
To: Regional Connector
Subject: Regional Connector CEQA Scoping comments

Metro,

My name is Gunnar Hand, AICP and I am a member of the Downtown Los Angeles Neighborhood Council (DLANC). While my association with DLANC lends some weight to my comments, I want to be clear that this email does not represent the views of DLANC. I am, unfortunately, a lone dissenting voice for this project on my Board. I would like to focus my comments for the Draft Environmental Impact Report on the alignment and station locations for this project proposal. Primarily, this new transit line should connect directly to Union Station. Instead of creating a separate train that would require a transfer at the 7th and Metro Station, the Regional Connector should extend the Blue Line and the Expo Line into Union Station. It has always been the intent of Metro to make Union Station the primary hub for mass transit in the region, and this would help solidly this position. Additionally, if the original intent of the Regional Connector was to provide a link from the 7th and Metro Station to Union Station, I would respond by saying that this connection already exists (the Red/Purple Line), and the entire project is an unnecessary waste of taxpayer money. While your projected ridership numbers are astounding for this Regional Connector, how much of that traffic is new trips as opposed to shifting trips away from the Red and Purple Lines? In regards

to the alignment, this Regional Connector, or extension of the Blue and Expo Line should remain under ground at 7th and Metro and proceed to a new subterranean platform in Union Station. This could create an additional opportunity to create linkages and transfers between the Gold, Red, Purple, Blue, and Expo lines, as well as Metrolink and Amtrak. As the project seems to be heading towards an above ground alignment and a terminus at the Gold Line East extension station at Alameda and 1st Streets, my primary concern here is the required turn around and end of track infrastructure required at this already congested intersection. With proposed development to occur all around this station, where will this infrastructure go? I fear that through this approach of connecting transit lines, we may create a disconnect in the community and an impermeable barrier between Little Tokyo and the Arts District. While most of my comments are directed at the project itself, hopefully this will help guide the EIR in developing project alternatives that not only have less impact, but many more benefits. Thank you for your time,

GUNNAR HAND, AICP
DLANC Public Sector Workforce Director
816.916.6304

Windows Live™: Keep your life in sync. Check it out.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector Comment**
Date: May 8, 2009 11:31:09 AM PDT
To: 'Clarissa Filgioun' <clarissa@therobertgroup.com>, 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, Arcelia Arce <arcelia@therobertgroup.com>
Keywords: rc.comment

Regional Connector
Not In Address Book

Please post to e-Room

From: Matt Gunter [mailto:fighterjock1000@yahoo.com]
Sent: Friday, May 08, 2009 8:19 AM
To: Regional Connector
Subject: Regional Connector Comment

Hello, thank you for this opportunity to comment on this transit project. This is, apart from the "Subway to the Sea" Purple line extension, the most important rail project right now. I am for all rail projects that have been proposed under Measure R, and even more than that. Further, any other projects that Metro is undertaking that involves a decision between Rail or “Dedicated Bus lanes”, please think to the future, and realize that trains must connect to trains to create not only an organized looking system, but for efficiency’s sake. To stick to the point of the Regional Connector and the decision between At-grade or Below-grade, the issue is quite easy. It must be Below-grade. There are many reasons why. First, The Blue Line (and future Expo Line) already terminates at 7th.st./Metro Center which is underground, so it would therefore seem odd for it to emerge from under the ground after that point. Second, I implore you to think of the traffic mess it could create if it were made at street level. The already crowded streets of both cars and (more importantly) pedestrians will make the train run slower, cause traffic instead of solve it, and more dangerous. Third, from a purely cosmetic point of view, it would look completely out of place with wires, rails, crossing signals, and the train its self with its horn. A downtown area, one that is and will continue to grow, is no place for an At-grade train. I also have heard that the price difference between the two choices is within 20% of each other. Given the fact that we now have Measure R, and more importantly the Federal Stimulus Package delivering several hundred million dollars to Metro, the cost difference is negligible. My final point is this; look to the future, does an At-grade rail system make sense? If your goal is to reduce traffic, and increase the speed at which people

commute by rail, then the train must be underground to connect to our already underground stations.

Thank you for your time,
Matthew Gunter

From: "Roybal, Dolores" <ROYBALD@metro.net>
Subject: **FW: Regional Connector Transit Corridor**
Date: May 6, 2009 12:44:45 PM PDT
To: Ginny-Marie Case <Ginny@TheRobertGroup.com>, "Kerman, Ann" <KERMANA@metro.net>, "'Villalobos, Monica'" <VillalobosMA@cdm.com>

Roybal, Dolores
In Address Book

From: Bunkado [mailto:bunkado@sbcglobal.net]
Sent: Tuesday, April 28, 2009 2:46 PM
To: Roybal, Dolores
Subject: Regional Connector Transit Corridor

April 28, 2009

Ms. Dolores Roybal Saltarelli
LA County MTA
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

I heard a presentation by MTA staff at the Little Tokyo Community Council Meeting today. Although I applaud the County's work to improve mass transit, I am very concerned about the impact that the project will have on the Little Tokyo community. Given the present economy, I am afraid that the impact will have a severe, and possible permanent negative impact on the already fragile business and cultural community here. I own a retail business that has been in the same location on First Street for over 60 years. I have witnessed a dramatic reduction of family-owned businesses in Little Tokyo, and I feel very protective of this area. I am concerned over the following issues:

1. In the underground scenario, it was not fully clear during the presentation whether or not there would be traffic lanes taken away on 2nd Street. 2nd Street is already slow and congested at any time of day, and any fewer lanes would make its level of service unacceptable, unless it is made a one-way eastbound street.

2. I regret the impact the project will have on business on the block east of Central between First and Second. Perhaps the loss cannot be helped. However, there MUST BE NO REDUCTION in the number of public parking spaces. Parking is the single most critical problem this community has. If parking is lost on that block, they should be mitigated at a location within Little Tokyo.

3. I fear the worst regarding the impact on businesses 2nd Street during construction after the experience of the Hollywood line. Would you consider undergrounding at Temple or 3rd Street?

4. I understand there will be 25 trains an hour. How will traffic flow on First Street during rush hour traffic?

Thank you for addressing these issues that are very important to us.

Sincerely,

Irene Tsukada Germain
Bunkado, Inc.
340 E. First Street
Los Angeles, CA 90012
213-625-1122

Mon-Sat: 9:30 am - 6pm
Sun: 10am - 6pm
www.bunkadoonline.com

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Little Tokyo Connector**
Date: May 11, 2009 9:42:30 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Please post… thanks!

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Darryl Garibay [mailto:dagaribay@sbcglobal.net]
Sent: Monday, May 11, 2009 9:00 AM
To: Regional Connector
Subject: Little Tokyo Connector

Dolores Roybal Saltarelli,

Regarding the Metro Connector proposed to connect via through or near to the Little Tokyo community, I am not in favor of the below grade alternative. I believe that there are several factors that may/will have an adverse affect on the Little Tokyo community including but not limited to:

1. Potential negative effect on both JANM and MOCA museums, in terms of available parking for their visitors. The 1st and Alameda/Central parking lot is one of the primary parking areas for these museums.

2. Potential serious negative effect on all Little Tokyo businesses. I believe that not only the obvious businesses would be affected (1st and Central and Office Depot complex), but also adjacent businesses. A long period of construction was stated at the recent Q & A meeting @ the LTCC meeting on 4/28/09. I believe that the reality and the perception of the public could be that of a "hassle" to enter, shop, visit, eat, meet, etc.. in Little Tokyo. That kind of perception can kill businesses in the immediate area and have a negative effect on all businesses--as a customer may never make it to the center or the west side of Little Tokyo.
3. I do not agree with the concept that more visitors will result from the below grade. Actually I think it will be the opposite versus an at grade solution (i.e. Temple Street)
4. General traffic impact due to the probable train frequency and the negative impact that will have on one of the entrances into Little Tokyo.
5. Loss of significant number of surface parking spaces (approximately 200) for general public parking for the area, both on the 1st and Central site as well as the Office Depot site.

As an objective business person, I believe that it takes a long time to cultivate a business/following and a great community. With a severe disruption, failed businesses are probable and it will very likely take a long time to rebuild. To me the question, "is that risk necessary?" needs to be asked. My opinion is that it is not.

I urge the MTA to make a selection of the No Build or Temple Street At-Grade alternative. I believe that the Temple alternative may be able to achieve the best results for all parties--
a.) Providing the desired connector
b.) Doing so in a way that would not require significant sacrifices of the Little Tokyo community and its businesses.
c.) Actually increasing visitors to our community (or adjacent neighborhoods) via riders actually seeing some of the area and perhaps coming back into the Little Tokyo community at a later time.

Sincerely,

Darryl Garibay, President
Advanced **P**arking **S**ystems
544 Mateo Street, Third Floor
Los Angeles, CA 90013
P: 213-628-9500
F: 213-628-9600

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: comment: stations need many portals**
Date: May 8, 2009 11:32:53 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>, Arcelia Arce <arcelia@therobertgroup.com>
Keywords: rc.comment

Regional Connector
Not In Address Book

Please post to e-Room

-----Original Message-----
From: James Fujita [mailto:jim61773@yahoo.com]
Sent: Thursday, May 07, 2009 8:56 PM
To: Regional Connector
Subject: comment: stations need many portals

I'm glad to hear that Metro is moving forward with the Regional Connector project.

I don't know where the stations will be built, but wherever they are built, I hope that they are underground, and I hope that there will be plenty of portals.

The current Red Line stations don't have very many entrances and exits. The big portals are great, but they shouldn't be the only exits.

Other cities with subway systems have stations with lots of portals, entrances, exits and pedestrian tunnels that lead to the stations. This makes it much easier for people to find the stations and get inside.
For the downtown area, it would not be enough to have only one or two entrances.

For example, if there is a station near the Bonaventure Hotel, there ought to be a station entrance that leads directly into the Bonaventure Hotel. There ought to be station entrances that lead directly into downtown office towers. This sort of thing happens all the time in downtown Tokyo.

If it is too hard to have a station entrance lead directly to a building, then the stations ought to have multiple exits.

Thanks,

- James Fujita

From: "Roybal, Dolores" <ROYBALD@metro.net>
Subject: **FW: Regional Connector - scoping comments**
Date: May 6, 2009 3:47:36 PM PDT
To: "Kerman, Ann" <KERMANA@metro.net>, Ginny-Marie Case <Ginny@TheRobertGroup.com>, "'Villalobos, Monica'" <VillalobosMA@cdm.com>

Roybal, Dolores
In Address Book

From: Ron Fong [mailto:rfong@ltsc.org]
Sent: Wednesday, May 06, 2009 3:46 PM
To: Roybal, Dolores
Subject: Regional Connector - scoping comments

Hello Ms. Saltarelli,

With this email I'm submitting the following comments on the scope of the EIS/EIR to be prepared for the Regional Connector Transit Corridor project.

Regarding the underground alternative:

1. The MTA should consider locating an underground station as close as possible to Little Tokyo, preferably at 2nd and Los Angeles streets. Given the demolition of the "Office Depot block" and 2nd Street underground construction, Little Tokyo could suffer the largest negative impact during construction. In return, Little Tokyo should have a station that serves the community; otherwise neither the at-grade nor underground alternatives would serve Little Tokyo at all.

2. The MTA should consider providing direct assistance to businesses in LIttle Tokyo that will be negatively impacted by underground construction and its staging. This includes businesses on 2nd Street and those across from the "Office Depot block" on Central, 1st and Alameda streets.

3. The MTA needs to closely study the impact that trains will have on

vehicular and pedestrian traffic at the intersection of 1st and Alameda streets where the trains will cross at grade. 1st Street is heavily used by commuters during rush hour, and we are concerned that frequent delays at this intersection will drive neighborhood users away from the area as well as degrade air quality.

4. Little Tokyo will lose significant amounts of public parking if the "Office Depot block" is demolished and used for staging during the entire construction period of the Regional Connector. This is a significant negative impact on Little Tokyo. The MTA should consider providing replacement public parking nearby during the entire period that the agency occupies the block and to provide replacement public parking on-site after construction is finished.

Regarding both alternatives:

1. The MTA should consider topping or placing a cap on the Alameda underpass as it travels through Little Tokyo. This will provide new open space opportunities and help ease pedestrian access across Alameda to and from the new Gold Line station.

Thank you for your consideration. Please feel free to contact me if you have any questions about these comments.

Ron

Ronald M. Fong, Planning Director
Little Tokyo Service Center (http://www.ltsc.org/)
231 East Third Street, Suite G-106, Los Angeles, CA 90013
T: 213-473-3025 / F: 213-473-1681 / E: rfong@ltsc.org

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector Comments**
Date: May 11, 2009 9:44:06 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

Please post.
Thanks!

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Jeffrey Farrington [mailto:jeffrey.farrington@gmail.com]
Sent: Sunday, May 10, 2009 8:12 PM
To: Regional Connector
Subject: Regional Connector Comments

To Whom It May Concern:

I strongly urge you to adopt the underground LRT alignment. Traffic mitigation, pedestrian safety, and system efficiency make this a superior option. I spend considerable time in the downtown area and ride the metro rail system rather frequently and would appreciate the improvements that would be provided by the underground LRT alignment for the regional connector.

Thank you,
Jeff
Resident of Northridge

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Supporting underground regional connector**
Date: May 7, 2009 3:52:22 PM PDT
To: 'Clarissa Filgioun' <clarissa@therobertgroup.com>, 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, Arcelia Arce <arcelia@therobertgroup.com>

Regional Connector
Not In Address Book

Please post to eRoom.

-----Original Message-----
From: Ian J. Crossfield [mailto:ian.j.crossfield@gmail.com]
Sent: Wednesday, May 06, 2009 12:10 PM
To: Regional Connector
Subject: Supporting underground regional connector

Hello,

I am writing to note my support for the underground, fully grade-separated, alternative for the Regional Connector project currently under construction. This alternative has higher ridership projections, faster commute times, and results in less additional congestion in the Downtown environment.

I also urge the project to strongly consider building this underground project with THREE sets of tracks. Once completed, this will be a difficult project to retrofit -- an extra set of tracks will allow for additional capacity, speed, and redundancy as our Light Rail network continues to expand.

Ian J. Crossfield
ian.j.crossfield@gmail.com
3717 Bagley Ave., Apt 203
Los Angeles, CA 90034

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector Idea / Other Ideas**
Date: May 12, 2009 9:56:44 AM PDT
To: 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, 'Clarissa Filgioun' <clarissa@therobertgroup.com>
4 Attachments, 235 KB

Regional Connector
Not In Address Book

Made the deadline…..
Please post.
Thanks!

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Antonio Allah [mailto:Antonio.Allah@apollogrp.edu]
Sent: Monday, May 11, 2009 11:42 PM
To: Regional Connector
Cc: Harborsubdivision; Westside Extension; Starosky, Greg
Subject: Regional Connector Idea / Other Ideas

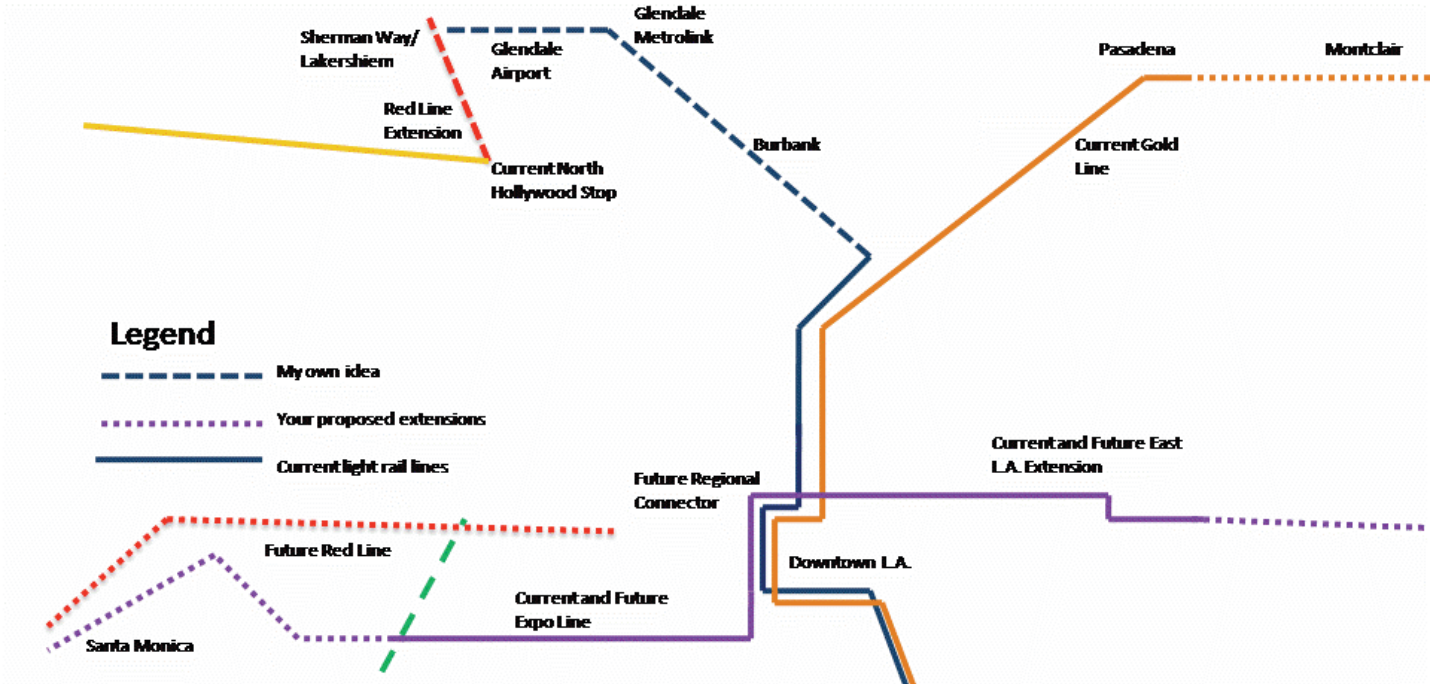
Hello,

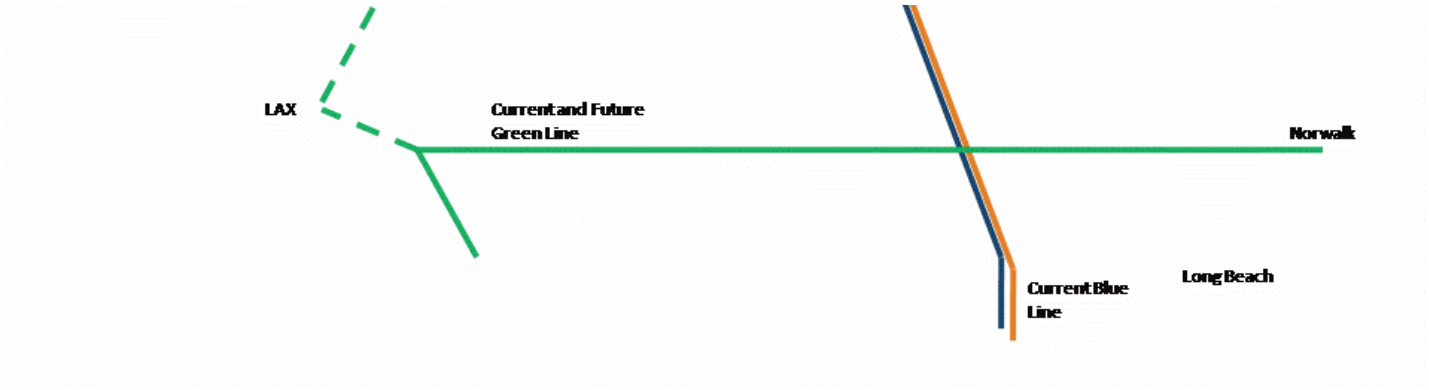
I am glad I got this on time. Since the Blue Line is one of your most successful lines, you may not want to take anything away from the Blue Line as far as frequency.

Here is what I propose.

Consider a line that goes from Union Station to Glendale. The stations can match the Metrolink stops along the way. The line will then head West to connect with the Glendale airport. That line will probably be no longer than five miles.

Blue Line – Glendale Airport to Long Beach
Gold Line – Pasadena (Montclair) to Long Beach
Purple Line – Whittier (East L.A.) to Santa Monica (Exposition)





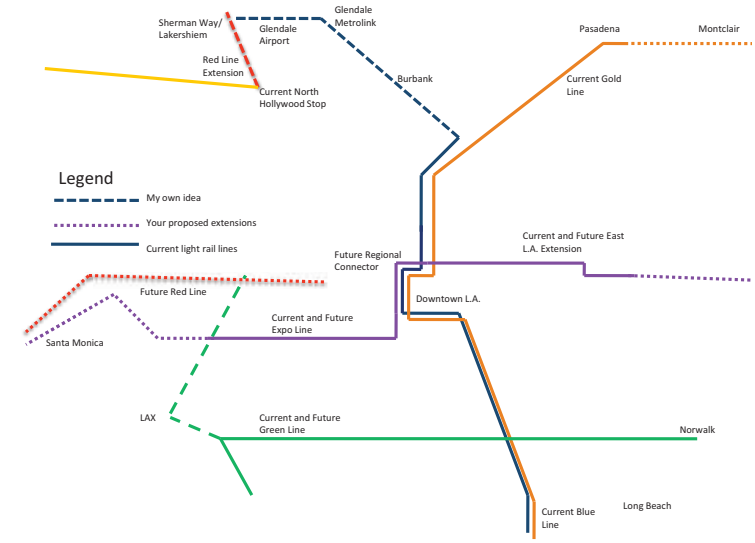
Regards,

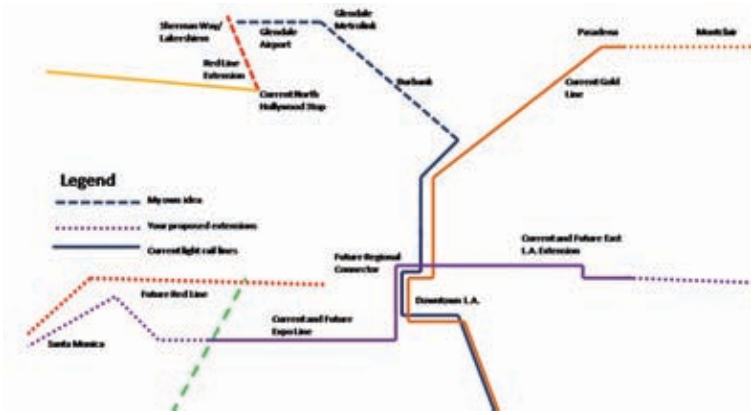
Thank you.

Antonio Allah, Information Center Analyst
Apollo Group | University of Phoenix
Technical Support | 3157 E Elwood St | CF-A101 | Phoenix, AZ 85034
phone: 602.387.3830 | fax: 602.383.5401 | email: antonio.allah@apollogrp.edu

Think Green! Please consider the environment before printing this email.

This message is private and confidential. If you have received it in error, please notify the sender and remove it from your system.





lines.pptx (62.4 KB)

Date: May 10, 2009

To: Ms. Dolores Roybal Saltarelli, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012
email: RegionalConnector@metro.net

Metro Board of Directors
cc: Ann Kerman
Also: cc: Councilwoman Jan Perry
cc: Mayor Antonio Villaraigosa

From: June Aochi Berk
Home Address: 11338 Sunshine Terrace
Studio City, California 91604
email: juneaochiberk@aol.com

Re: Proposed Metro Regional Connector Transit Corridor

Thank you for the presentation on the Proposed Regional Transit Connector Corridor by Metro at the recent Little Tokyo Community Council meeting which was held at the Japanese American National Museum. We appreciate your outreach to the community and your invitation to receive comments from the community.

I wish to hereby submit my personal comments and concerns regarding the proposed two and the third, "no build," alternatives. I hope that I may be pardoned for my passion for my personal perception of how this proposed project would impact the Little Tokyo community. My concerns are as follows:

1. The impact on the vehicle and pedestrian traffic on the intersection at 1st and Alameda, where the eastbound train will egress from the underground tunnel at the southwest corner and cross diagonally over the intersection to the northeast corner.

2. The safety factor at the 1st & Alameda intersection for both vehicular and pedestrian traffic

3. Impact on the traffic flow on 1st Street - eastbound and westbound - the main artery of Little TokyoThe impact this intersection has on the Little Tokyo community. It would split the community, as we know it now, in half.

4. The impact this project would have on the Little Tokyo community, both physically as well as environmentally and threaten the quality of life in Little Tokyo

5. According to the Metro Overview on the website, the following Benefits of the Regional Connector are listed:

" The Regional Connector benefits the entire Los Angeles County region - not just Downtown.*

** The Regional Connector will enhance Metro Rail service by providing one continuous trip between the Pasadena Gold Line and Blue Line, and between the Eastside Gold Line and Expo Line.*

** The Regional Connector will minimize the need for transfers, reducing one-way light rail trips across the County by 10 - 30 minutes or more.*

** The Regional Connector will reduce station crowding, especially at peak hours.*

** The Regional Connector will provide new access to Downtown attractions as well as regional destinations.*

** The Regional Connector will increase regional mobility.*

The Regional Connector will enable all Los Angeles County rail and bus transit as well as all intercity transit service to operate more efficiently and attract higher ridership, thus reducing roadway congestion, improving regional air quality and reducing the region's carbon footprint

Nowhere in this overview does it state what, if any, impact this project would have on the Little Tokyo community. I submit herewith the concerns I have with this proposed project:

As I understand it, the following train lines would connect at 1st and Alameda through Little Tokyo by providing continuous through service between the destinations served by the Gold, Blue and Purpole Light Rail Train lines:

Gold Line - Presently from Pasadena to East Los Angeles (Monterey Park) - opens 2009. Westbound trains from Monterey Park would turn right and stop at Little Tokyo/Arts District, on Alameda Street, northeast corner, travel northbound to Union Station for connecting trains, and travel on through Chinatown and then to Pasadena.

Propose that

- Gold Line Train 1 - Coming from ELA would turn right, then travel northbound to Union Station and Pasadena
- Gold Line Train 2 - Coming from ELA would travel directly through Alameda intersection at Street Level through Little Tokyo and travel westbound and southbound to Long Beach
- Gold Line Train 3 - from ELA would travel directly through 1st & Alameda in Little Tokyo on street level and travel westbound to Culver City

Blue Line - Propose that:

- Blue Line Train 1 - From Long Beach, now ending at 7th St. Metro, would continue to travel through to Little Tokyo, then egress to street level at 1st & Alameda, stop at Little Tokyo/Arts District Station - then travel northbound to Pasadena

- Blue Line Train 2 - From Culver City/ Westside LA to continue through Little Tokyo, egress to street level on 1st & Alameda and travel eastbound to East LA / Monterey Park

Purple Line - Propose that:

- Purple Line Expo Line (1) from Westside (Culver City) go through Little Tokyo, subway and egress at 1st & Alameda to street level, then travel eastbound at street level to East LA
- Purple Line Expo Line (2) from Westside (Culver City) go through Little Tokyo, egress to street level to 1st and Alameda and then stop at a platform for passengers, then travel eastbound to Pasadena

All of the above 7 train lines (14-both ways) with different destinations would cross over diagonally, both eastbound and westbound, at street level, at the intersection at 1st & Alameda. We were told that the trains would cross over the Alameda and 1st Street intersection approximately every 2- 1/2 minutes both ways, or 25 trains in one hour (2.25 minutes).

If the above is true, 1st & Alameda would then be known as a major street level "hub" for Metro Trains, and not known as an intersection of Little Tokyo. It would, in effect, be an area that people would avoid, whether driving or walking, because it will be considered dangerous and too busy with train traffic. The Historic Little Tokyo would be divided in half, and split from each other at this vital intersection.

1. Impact / Concerns / Questions - on the 1st & Alameda Intersection

The intersection at 1st and Alameda is the key intersections of Little Tokyo, and it is vital to the economic and, even to a great degree, to the spiritual life of Little Tokyo. All traffic entering Little Tokyo would be interrupted on 1st Street at Alameda Street if the Metro trains were to cut diagonally across this intersection every 2-1/2 minutes.

I am concerned that there would be no benefit to Little Tokyo Community, with the trains egressing to street level to cross diagonally of 1st And Alameda every 2-1/2 minutes, and also with the westbound trains crossing over to enter the tunnel. The environmental impact on the noise for this intersection would negatively affect the residents living on the southeast corner of the intersection, as well as disrupt pedestrian and vehicle traffic tremendously.

I would imagine, in my opinion, that if this were to be proposed at any downtown street intersection, i.e. 7th & Flower, the hue and cry of objections by the businesses affected would be loud and immediate to such a hub at a street-level intersection. I cannot imagine that such an intersection would be acceptable in Downtown Los Angeles.

At least at the 7th & Metro hub, as it operates now, the Red Line and Blue Line meet underground, on two (or three?) different levels, and transfers occur below street level for the connecting trains. Although I have seen how busy it gets with people transferring to connecting trains, the intersection above on 7th & Flower is not adversely affected by the hub below. This would not be the case at 1st & Alameda.

It is hard to imagine how a tri-level underground situation at 7th & Flower can be transferred to a street level (one level) to handle all of the trains coming through. It sounds impractical, and would also be confusing for the riders who want to transfer at 1st and Alameda at the Little Tokyo / Arts District Station, to get off and find the trains that they want to transfer to. And also to connecting buses and the DASH. The 7th and Metro underground platform is very crowded with hundreds of passengers transferring connections. How can this large amount of riders be accommodated on the small platforms designed for the Little Tokyo / Arts District Station?

- How would a person, for example, coming from Long Beach on the Blue Line, go to East LA? Will there be a platform for eastbound trains across 1st Street (will there be another platform built?) for riders to get off or on to the Blue Line ? Where will the platform be built for westbound riders on Blue Line and Purple Line? Will there be additional tracks built to service these lines at the intersection?

- If the trains egress from the Office Depot area, how much room will the trains need to make that turn and stop at the Little Tokyo / Arts District Station?

  -How slow or fast will the trains be traveling as they approach the Little Tokyo/Arts District station?

  - How many segments in one train? How long will it take the train to pass through the intersection?

  -Will more property need to be acquired to handle the "hub" of trains coming from all the different directions traveling to so many different destinations?

- With a train count of 2.25 headway on 4 lines going through the intersection, how was the headcount determined?

- Will the train run on 2 tracks across 1st and Alameda at street level for all of the projected trains coming through the intersection? Or will more tracks be added?

- The auto /bus traffic on surface street crossing East / West on 1st Street at Alameda would be extremely slow, if at all possible, with a very heavy back-up on 1st Street, a major thoroughfare and entrance into Little Tokyo.

- It would be extremely difficult, and a tremendous liability to allow pedestrians to cross over 1st Streets and Alameda Street, east/west and north/south.

- How much time will pedestrians have to cross in any direction?

- If you are bringing in more trains, you will need more switches and more room to accommodate those switches (at least 2 switches for each train you intend to run in each direction) which means it will take more room for the extra switches. Would this also mean more maintenance for the tracks?

- You will need more room for transfer of passengers at this intersection. Will you build more platforms? Where ?

- How does one get across the tracks to gain access to train on next track? Will trains heading to East LA, be able to leave passengers on platforms at 1st and Alameda? Where?

- With all of the connector trains, and with so many transferring passengers, would it not be detrimental to passengers changing trains, not knowing where to transfer or where to catch the next train of their choice; creating confusion on the platforms. I envision a very crowded, chaotic situation at this transfer / loading / unloading point.

- How high will the electric lines be above the trains coming out of the tunnel crossing over 1st & Alameda at street level ? How will Metro be able to build a pedestrian cross-over bridge if the electric lines are so high above the trains? Will this bridge be covered to protect pedestrians from rain? Will it be earthquake safe?

- The main concern here is how can pedestrians get from one side of 1st Street to the other side? Will one have to walk to 2nd Street - or Temple Street to cross over Alameda?

- How will a person cross parallel across Alameda - from the southeast corner to the northeast corner? Will they have to cross over the tracks? The same goes for pedestrians from the northeast corner to the northwest corner. How many tracks would pedestrians cross over?

- Will the train come at the same speed out the tunnel, or will the train first stop underground, in the tunnel, before climbing to the street level to egress out of the tunnel. Will the engineer be able to see the cross traffic ahead from a monitor ? Will the train stop before entering the intersection? Will it have traffic lights?

- What if a pedestrian - a child or elderly citizen - stumbles and falls on the tracks. With 2-1/2 minutes between trains, I would imagine a person becoming frozen and panicky. Will the engineer be able to stop in time and avoid a collision with the pedestrian?

- The pedestrian cannot see any train in the tunnel and coming out of the tunnel and how soon a train is arriving. What safeguards will there be to make sure that no one is in the crosswalk? What if someone tries to "beat the train" and doesn't see the oncoming train? Will the engineer be able to stop in time?

I would prefer to see a plot plan, or preferably a model to see what would happen at that intersection

2. Safety Factor

Even as I am concerned about the preservation of the quality of life of Little Tokyo, I am even more concerned for the safety factor for pedestrians at this intersection:

- Would the Board of Directors of the Los Angeles County Metropolitan Transit Authority be able to assure 100% safety of pedestrians at this busy intersection?

- What would happen if a child, distracted by noise or something shiny on the ground, or an elderly person who cannot see or hear too well, or an indigent person crossing against the light, suddenly looks up to see a train coming out of the tunnel, a few feet away, and coming towards them? Would the train engineer be able to stop in time?

I fear for these very vulnerable people - the children, the seniors who are often handicapped and elderly, the indigent person who crosses the street at 1st and Alameda at all hours of the day and night. They would not be able to see the trains approaching out of the tunnel. The train would suddenly appear as it comes out of the tunnel only a few feet away, and people would be unable to react and move of the way in time.

I believe that people will be hesitant to bring their children, older seniors on trains because of the danger of so much train traffic coming through the center of Little Tokyo's busiest intersection.

3. **Impact on the Traffic on 1st Street, and 2nd Street**

- **First Street is the main artery for Little Tokyo**. 2nd Street is also another busy artery, and on Third Street there are many residential complexes both for seniors and non-seniors. There is also a large medical complex on Third Street with the Pacific Commerce Bank at street level.

Little Tokyo on the eastside of Alameda houses the following:

- Los Angeles Betsuin (Nishi) Buddhist Temple
- Zenshuji Buddhist Temple
- Maryknoll Japanese Catholic Church
- Japanese restaurants and businesses
- Large residential complexes
- The Nikkei Center, a proposed 360-unit mixed-use development, is planned for the northeast corner of 1st and Alameda.

Little Tokyo on the westside of Alameda. north of 1st Street

- The Japanese American Natonal Museum
- The MOCA Geffen Contemporary Museum
- The East West Theatre and Union Arts Building
- Many restaurants, businesses, galleries, hotels and residential housing (mostly for seniors)

Little Tokyo on the westside of Alameda, south of 1st Street

- The Japanese American Cultural & Community Center & Plaza
- The Japan America Theatre
- A large medical building
- The Japanese Village Plaza
- Centenary Methodist Church
- Union Church of Los Angeles
- Zenshuji Buddhist Temple
- Little Tokyo Branch City Library
- Casa Heiwa, the Little Tokyo Towers, Miyako Gardens, Little Tokyo Villa, Teramachi Condominums and many other senior housing residences.
- Many restaurants, offices, businesses and government offices
- Soon to be built mixed use residential and business complex on "Block 8" (2nd/3rd/San Pedro/Los Angeles Street)
- Also in planning stages: Little Tokyo Recreation Center for youth, seniors and Little Tokyo community residents

As noted, the trains at the intersection of 1st and Alameda would split the Little Tokyo community in half. Little Tokyo is a walking community and many of Little Tokyo's residents are elderly and handicapped eyesight and hearing, and it would be difficult for pedestrians to cross over the 1st and Alameda intersection with trains crossing every 2.25 minutes.

- How would traffic flow on 1st Street, either / or / both eastbound and westbound? Will vehicular traffic be re-routed to 2nd Street or Temple Street to cross over 1st Street? Or, if it is allowed, will there be rail traffic gates going up and down? Would eastbound traffic on 1st Street be allowed to turn right?

- The bus traffic on 1st Street would also add to the tremendous back-up on 1st Street at this 1st & Alameda intersection. Overflow traffic on 2nd Street would also be heavy, and traffic would clog intersections and streets around Little Tokyo.

4. Lack of Available Parking Spaces Would Become Even More Critical

The 200-space parking lot on 1st and Alameda and Central Avenue is vital for the economic life of the Little Tokyo community. At the present time, there is already a parking space availability crisis in Little Tokyo. If this parking lot were to be taken away by Metro for the tunnel egress site, Little Tokyo would lose 200 more parking spaces.

This long-standing parking lot is important to sustain the economy that is once again beginning to improve in Little Tokyo with events at the Japan America Theater at the Japanese American Cultural and Community Center, on the south side of 2nd Street, and on the north side of 2nd Street, the East West Theater and the Japanese American National Museum, MOCA Geffen Contemporary are major attractions in Little Tokyo. These institutions and the many Buddhist Temples and Christian Churches in the area once again are thriving with people from all areas of the Greater Los Angeles County, and from Southern California coming to Little Tokyo. This is a place that welcomes visitors from all over the world who come to Little Tokyo for events/weddings and funerals, and celebratory yearly events such as Nisei Week, the Obon Festivals and Children's Day activities.

All of these events, institutions and businesses would suffer from a lack of available parking spaces.

5. Background / History / Effect on Future of Little Tokyo

Little Tokyo has been located in this same area since the first businesses opened in the late 1800s. It has grown physically and economically, and survived through a series of events that threatened the existence of Little Tokyo.

From the time my parents arrived in the United States in 1900 and settled in Los Angeles, and as a child growing up in Little Tokyo before WWII, Little Tokyo has served as a very special cultural and historical and educational place for many like myself, who grew up learning the traditions and culture of Japan.

Then, owing to the special provisions of the now infamous Executive Order 9066, Little Tokyo was disseminated and demolished during World War II as the Japanese and Japanese Americans were forcibly moved out in the mass evacuation in 1942. Businesses were closed down, and residents lost their civil rights, and against their will, sent to live in America's Concentration Camps. (In fact, the corner of 1st and Central, one block west of 1st and Alameda, was the gathering / departing point for hundreds and thousands of Japanese families (our family was among those families) being sent by bus to Santa Anita and Pomona Assembly Centers.

After the end of WWII, the Japanese / Japanese Americans were allowed back into California, and many resettled in what was once Little Tokyo, and again they invested their time and money and were determined to rebuild Little Tokyo. It took a lot of sweat and endless hours of back-breaking effort to bring the community back to a successful and thriving community.

Then, again, around 1947-50 the City of Los Angeles took away a large portion of Little Tokyo to build the City's Police Headquarters at Parker Center. Again, businesses and buildings were demolished or displaced, closed and or moved to other areas in Los Angeles, Gardena, East Los Angeles and San Fernando Valley. Much of Little Tokyo was lost to the City.

Little Tokyo survived, and is now coming back again to thrive once more as a vibrant7community. There are new businesses and restaurants along Central Avenue, 2nd Street, and 1st Street. This vibrant street of businesses and restaurants would be demolished with the proposed Underground Tunnel Exit on the block bounded by 1st & 2nd, Alameda and Central Avenue. Many small businesses and restaurants on 2nd Street would be unable to survive the many years of construction, traffic obstacles, noise and air pollution.

6. Future of Little Tokyo

In 2007, Little Tokyo was officially designated by the State of California as one of the three remaining Japantowns in California. (San Francisco and San Jose and Los Angeles). There have been capital improvements and many new residents moving in, and discussions were held in the Community for planning and design guidelines. The discussions continue today as the LTCC Planning and Cultural Preservation Committee meet with the City Planners for the design and planning guidelines for the future Little Tokyo and Downtown Los Angeles.

The week-long Nisei Week Japanese Festival, held in August each year, celebrates the businesses, people and culture of Japan. Nisei Week began in the mid-1930s and with the absence in the War years, it has continued to bring thousands of visitors to Little Tokyo, and this year will celebrate its 69th year. Thousands of visitors come to Little Tokyo each year to celebrate Nisei Week, as well as the Buddhist Temples' "Obon" Festivals and other special events all year around.

Many have continued to bring their children and grandchildren to shop, eat and play and work in Little Tokyo. In the near future, the Little Tokyo Recreation Center, which will be built soon, will become the center of Japanese American youth activities.

Now, once again, the quality of life in this quaint Historic Little Tokyo in Downtown Los Angeles is being threatened.

Because of the uncertainty of the conditions caused by construction, the proposed project would keep people from coming to Little Tokyo during and after construction, and the economy and the vibrancy of Little Tokyo would suffer greatly. Many of the Little Tokyo small businesses would be devastated, and unable to survive the long period of construction.

The Little Tokyo community is very small in area and very fragile. It is vulnerable to any sudden changes and long-term construction such as for the Transit Corridor Connector.

What a shame it would be for the City of Los Angeles to lose the vibrancy and the economic vitality and the cultural quaintness of Little Tokyo.

And what a tragedy it would be for a pedestrian to suffer the tragic consequences of an ill-designed, unsafe planned intersection.

Therefore, I would respectfully urge that the Metro Board vote "No" on Metro Transit Regional Corridor Connector Underground Alternative - and urge the Metro Board to not build an underground emphasis with trains coming out of a tunnel on the southwest corner of 1st and Alameda to cross diagonally for eastbound and westbound trains at street-level at this busy vehicular and pedestrian intersection in the middle of Little Tokyo.

I would urge that the Metro Board consider the either the "no build" alternative and have the trains meet at the hub in Union Station, and use shuttle buses or DASH to connect passengers for transfers.

Or, I would urge the Metro Board to vote for the At-Grade Alternative to travel along Temple Street which is the northern edge of Little Tokyo. The employees in the government offices, or visitors that have business at government offices on Temple Street and Civic Center area, could potentially leave their cars at home and travel through the Metro system and arrive at their destinations in the Civic Center area and Temple Street offices; thus, saving the environment from more cars traveling to daily destinations. This would leave more parking spaces available for customers of businesses in Little Tokyo and downtown area. This would also leave Little Tokyo area intact from being split in half.

As one travels through Civic Center and Little Tokyo, at street level, the life of the City can be seen on Temple Street; and in Little Tokyo, the East West Theatre, the Union Arts Center, the Go For Broke 442nd Memorial Monument and National Education Center, MOCA Geffen Contemporary and the Japanese American National Museum and the National Center for the Preservation of Democracy would be seen from Temple Street.. If the hoped for Art Park is built, the many travelers on the Metro trains at street level on Temple Street would pass by this park.

When I ride the subway (Red Line) from the Universal City Station to Union Station, I do not see any of the City above ground. I miss seeing the different neighborhoods. Subway is a good way to get around quickly, but you lose the connection to the various diverse neighborhoods in Los Angeles.

And Los Angeles is a beautiful City; a beautiful patchwork quilt of diverse neighborhoods. We should preserve and protect all of these neighborhoods.

Thank you again for inviting our comments and considering our concerns.

Respectfully submitted

s/June Berk
Email: juneaochiberk@aol.com
Secretary and Contact Person, Little Tokyo Community Council
(Member of the LTCC ad hoc committee working with Metro Planners of the Transit Corridor Connector Project)
Secretary, Leadership Education for Asian Pacifics, Board of Directors, Little Tokyo
Secretary, L.A. Artcore, Board of Trustees, Little Tokyo

Arcelia Arce

From: Kerman, Ann [KERMANA@metro.net]
Sent: Wednesday, May 06, 2009 9:08 AM
To: Clarissa Filgioun; Ginny-Marie Case; Arcelia Arce
Subject: Scoping Comment

Scoping Comment:
Please post to eRoom.
Thanks!

From: webmasters@metro.net [mailto:webmasters@metro.net]
Sent: Tuesday, May 05, 2009 6:49 PM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

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firstName: MARTHA
lastName: PORTER
organization: USC
emailAddress: mporter_6@yahoo.com
streetAddress: 3467 W 71st Street
city: LA
state: CA
zipCode: 90043
Date: Tuesday, May 05, 2009
Time: 06:49:16 PM

comments:

I like the details and strategic location of the Regional Connector-Downtown. Many passengers can ride it, because it connects to the Tokyo Arts District, the Red/ Purple, and Expo Lines. All in all, it can be named the "L" (aka. The LA Loop).
*Martha Porter

Arcelia Arce

From: Kerman, Ann [KERMANA@metro.net]
Sent: Tuesday, May 05, 2009 3:21 PM
To: Clarissa Filgioun; Ginny-Marie Case; Arcelia Arce
Subject: Scoping Comment

Please post to eRoom
Thanks!!

From: webmasters@metro.net [mailto:webmasters@metro.net]
Sent: Tuesday, May 05, 2009 1:36 PM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

---

firstName: Daniel
lastName: Walker
organization:
emailAddress: milowalker@ca.rr.com
streetAddress: 7416 West 82nd Street
city: Los Angeles
state: CA
zipCode: 90045
Date: Tuesday, May 05, 2009
Time: 01:36:16 PM

comments:

We support the Regional Connector project. We urge Metro to move forward with final environmental clearance and build this proposed Light Rail project mostly underground from 7th/Metro to Little Tokyo ASAP. The Regional Connector will have high initial traffic because it will link passengers from the Expo Santa Monica / Long Beach Blue Lines under downtown LA to the Pasadena Gold and East LA lines. We support the "Underground Emphasis LRT" option over the proposed surface alternatives. The underground option will be safer and quicker and impact downtown traffic less during construction. The Regional Connector should be a key project in the funded category of the upcoming MTA/SCAG Long Range Transportation Plan for LA county. Building a vehicular tunnel for Alemeda St. would improve safety for pedestrians, trains, trucks, and cars near 1st St / Little Tokyo Metro station. We believe this project is worth the estimated AA report cost (about $900M). Modern deep bore tunneling equipment/techniques should reduce actual total costs if construction can be initiated ASAP. Convenient links at each proposed new station should be provided for pedestrians, bikes, and bus transfers to LRT.
Thanks and good luck!

Arcelia Arce

From: Regional Connector [RSC_RegionalConnector@metro.net]
Sent: Tuesday, May 05, 2009 3:15 PM
To: Ginny-Marie Case; Clarissa Filgioun; Arcelia Arce
Subject: Scoping Comment

Please post to eRoom.
Thanks!

-----Original Message-----
From: akumamoto@aol.com [mailto:akumamoto@aol.com]
Sent: Tuesday, May 05, 2009 12:02 PM
To: Regional Connector
Subject: Little Tokyo

Please include a Little Tokyo stop if underground between Los Angeles and San Pedro on second (1st choice) and at least Temple and Judge Aiso if Temple surface is selected (the stops along this roue are not convenient to Little Tokyo)

A KUMAMOTO
323 223 6473 X18

From:	Kerman, Ann
To:	Clarissa Filgioun; Arcelia Arce;
Subject:	FW: Regional Connector
Date:	Monday, May 04, 2009 11:30:44 AM

Please post to eroom...
Thanks!!

-----Original Message-----
From: Roybal, Dolores
Sent: Monday, May 04, 2009 10:41 AM
To: 'Ginny-Marie Case'; 'Villalobos, Monica'; Kerman, Ann
Subject: FW: Regional Connector

-----Original Message-----
From: Garrett Sergeant [mailto:scythefalcon@mac.com]
Sent: Friday, May 01, 2009 12:57 PM
To: Roybal, Dolores
Subject: Regional Connector

Greetings-

I wanted to quickly add my two cents regarding the downtown connector project.

This project MUST be placed underground.

Downtown is already a vortex of traffic congestion and an on-grade train will only hinder that more.

We've also already seen what on-grade rail does to slow rail traffic flow with the gold line. This connector will be among the most heavily trafficked rail passages in the county if completed. This project is all about speed and fluidity, which will go out the window if implemented in such a way.

In addition, this project is about a much grander scheme in which Los Angeles is trying to build a world class rail system capable of meeting the demands that will be placed on the city in the coming decades. Anything running above ground through downtown will not stand to meet these demands. Do it right the first time and don't regret it later.

-Garrett Sergeant

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Regional Connector DEIS/EIR comment**
Date: April 17, 2009 2:41:17 PM PDT
To: 'Ginny-Marie Case' <ginny@therobertgroup.com>, 'Ginny-Marie Case' <gincase@gmail.com>
Cc: Clarissa Filgioun <Clarissa@TheRobertGroup.com>

Regional Connector
Not In Address Book

fyi

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net
P Please consider the environment before printing this e-mail

-----Original Message-----
From: richard schumacher [mailto:schumach@hp.com]
Sent: Friday, April 10, 2009 2:38 PM
To: Regional Connector
Subject: Regional Connector DEIS/EIR comment

The Underground Emphasis LRT alternative is vastly superior and well worth the additional cost:
- the wye connection at the Gold Line maximizes operational flexibility
- the lack of traffic and pedestrian conflicts allows minimal headways and travel times
Both of these features would greatly increase the utility of the existing Blue, Gold and Red lines, much more than would the No Build, TSM, or At-Grade Emphasis LRT alternatives.

regards,
Richard Schumacher

From: Satenique Squires [mailto:satenique@sbcglobal.net]
Sent: Tuesday, March 31, 2009 8:33 PM
To: Regional Connector
Subject: Regional Connector Transit Corridor

As I am unable to attend the numerous “public scoping” meetings to give input on the proposed Corridor, there is one very important point I’d like to make.

Please put me on record as a resident of Los Angeles County who opposes any surface transportation being added to our already congested streets.

The corridor is not only essential, it is most welcome, and long overdue!

However, let’s keep in mind that our already overstressed streets and freeways cannot support any added transportation and that includes the Connector.

The Connector must be built underground.

Let’s keep the noise, the congestion away from our already congested streets and freeways.

Thanks for your careful attention to my input.

Sincerely,

Satenique "Nikki" Squires, REALTOR
Prudential California Realty
1625 W. Glenoaks Boulevard
Glendale, CA 91201
(818) 414-7929 - Cell
(818) 476-3093 - Office
satenique@sbcglobal.net

From: webmasters@metro.net [mailto:webmasters@metro.net]
Sent: Tuesday, March 24, 2009 11:27 AM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

---

firstName: Marcie
lastName: Rozalsky
organization:
emailAddress: marcie@rozegraphics.com
streetAddress: 13173 Pacific Promenade #217
city: LA
state: CA
zipCode: 90094
Date: Tuesday, March 24, 2009
Time: 10:27:00 AM

comments:

My duaghter currently goes to school at Robertson/National in Culver City. I am wondering about the construction and completion of the project at that intersection. Where can I learn more about its impact, layout and completion date? Thank you.

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: Public Comment - Regional Connector Transit Corridor**
Date: April 7, 2009 9:37:50 AM PDT
To: 'Ginny-Marie Case' <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

Regional Connector
Not In Address Book

-----Original Message-----
From: John A. Mozzer [mailto:jamworks@earthlink.net]
Sent: Sunday, April 05, 2009 10:39 PM
To: Regional Connector
Cc: HCNCXC@ONEBOX.COM
Subject: Public Comment - Regional Connector Transit Corridor

To:
Los Angeles County Metropolitan Transportation Authority
Attn:
Ms. Dolores Roybal Saltarelli, Project Manager

From:
John A. Mozzer
4137 Perlita Avenue, Unit A
Los Angeles, CA 90039-1333
323-660-0335

Re:
Regional Connector Transit Corridor Project
Underground Emphasis LRT Alternative

I attended the community meeting at the Japanese American National Museum on Wednesday, April 1, 2009, and submitted a comment. This is an additional comment.

Please consider the feasibility of adding a station in the middle of 1st Street, between Alameda Street and the 1st Street Bridge, adjacent to the Little Tokyo/Arts District Station that will soon open. Thus, the East L.A./Culver City line would not bypass this Little Tokyo/Arts District intersection.

Possibly, the station would be similar to Blue Line stations along Washington Blvd., where passengers walk across half the street to access the platform. Transfers would be possible between the East L.A./Culver City line and the Pasadena/Long Beach line by walking across half of 1st Street.

From: David Barboza [mailto:dejaybe@gmail.com]
Sent: Sunday, March 29, 2009 8:53 AM
To: Customer Relations
Subject: Comments About Metro: Regional Connector

Hello,

I strongly support a grade-separated (underground) alignment of the regional connector project. At-grade rail in downtown Los Angeles was a factor in the original decline of the LA streetcar system. At-grade rail may be cheaper, but it is slower, more dangerous, causes delays for motorists, and causes trains to honk at intersections, creating unnecessary noise pollution.

While I am aware that Metro operates under budget constraints I often feel like you pursue maximum rail system miles at the expense of system quality. I would prefer to see an exclusively grade-separated rail system going forward, even if it is less extensive. Only by focusing on system quality can you hope to attract a broader base of riders.

The system already has a broad scope through busses, the issue is quality. Rail should be the freeway of transit.

--
David J. Barboza
Los Angeles

From: Rich Alossi [mailto:alossix@gmail.com]
Sent: Wednesday, April 15, 2009 4:09 PM
To: Regional Connector
Subject: Regional Connector

Metro:

My name is Rich Alossi, a resident and worker in Downtown LA, and I wanted to voice my support for the Project.

I also support the UNDERGROUND/BELOW GRADE alternative above all else, as this is the only way to ensure speedy, safe connectivity with the rest of the Metro Rail system and plan for long-term transit alternative planning.

Thank you for your consistent leadership in building up the future of LA!

Rich Alossi
213-235-7968

121 E 6th Street, #104
Los Angeles, CA 90014

From: Regional Connector <RSC_RegionalConnector@metro.net>
Subject: **FW: goldline connector comments**
Date: April 29, 2009 4:21:02 PM PDT
To: 'Clarissa Filgioun' <Clarissa@TheRobertGroup.com>, 'Ginny-Marie Case' <Ginny@TheRobertGroup.com>, Arcelia Arce <arcelia@therobertgroup.com>

Regional Connector
Not In Address Book

Please post to e-Room

From: Paul Yeh [mailto:paulyehster@gmail.com]
Sent: Tuesday, April 28, 2009 2:56 PM
To: Regional Connector
Subject: goldline connector comments

To the MTA:

I've been a resident of Little Tokyo at the Savoy on Alameda and 1st for the last 3 years. I'd like to express deep concerns with both of your rail connector proposals (at-grade and below-grade). The biggest concern is with the underground rail proposal which would surface across the street from my building. Construction would wipe out 7 businesses that I frequent (particularly Starbucks, Yogurtland, Office Depot, Weiland's Brewery, and Senior Fish). The block is a hub of activity right now even into the midnight hour on weekdays and removing those stores will be a detriment to the community. Replacing successful businesses with a staging ground/construction site for 3 years (at least) does not in the least appeal to me especially when there is no guarantee that when MTA is done that those stores and that hub of activity will return. I am aware that MTA Rail projects have improved sites with rail stations and development to better the community- but I would argue that this is not a run-down block that is easily made better. On the contrary, tearing this block out represents tremendous loss of business and local community and culture in Little Tokyo, both in the

short-term and long-term. Traffic is another huge concern. Alameda is a heavily trafficked corridor with stop and go traffic at rush hour. How does it make sense to have trains crossing the intersection at 1st and Alameda to add to that? To me, it represents a traffic nightmare not only during construction, but after it is finished as well when trains will be added into the mix.

The above-ground option is not much better although it is not as disruptive to the community in Little Tokyo. Adding rail on Temple St. will significantly impact commuter traffic (downtown workers trying to reach the freeway onramps on Alameda).

I really am pro-public transit and supportive of MTA's efforts. However, I cannot suppport these proposals in their current form and without promise of extensive mitigation. I feel like these solutions are compromising to the existing local community and need more thought or ideas in terms of design and planning.

Thanks,

Paul Yeh
Resident of Little Tokyo

--

_____

Paul Yeh Design Inc.
100 s alameda st unit 203
los angeles, ca 90012

714.458.9728

paul@pyehdesign.com
http://www.pyehdesign.com

Comment Cards

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: CRAIG F. THOMPSON	
Organization/ Organización/団体名: CITIZENS FOR BETTER MOBILITY	
Address/Dirección/住所・所在地: 3741 NORTH EL SERENO AVENUE ALTADENA CA 91001	
Telephone/Teléfono/電話: 909.973.0935 C / 626.398.0988 H	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

THE CONNECTOR IS BEING PLACED/PLANNED IN THE WRONG AREA!! MILLIONS OF DOLLARS WOULD BE SAVED IF THE LINE WERE TAKEN STRAIGHT DOWN ALAMEDA STREET TO WASHINGTON BLVD., HEADING WEST ON WASHINGTON WITH A WYE CONNECTION TO THE BLUE LINE TO LONG BEACH AND 7TH & METRO CENTER! ANOTHER WYE CONNECTION COULD CONNECT WITH THE EXPO LINE TO SANTA MONICA!! TWO STATIONS COULD BE PLACED @ 7TH STREET AND OLYMPIC BLVD. AND THERE WOULD BE NO EXPENSIVE TUNNELING INVOLVED!?!

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

Station locations for this alternative would all be underground and include the area north of 5th Street on Flower Street, adjacent to Bunker Hill just south of 2nd Street and 2nd Street between Los Angeles and Main Streets.

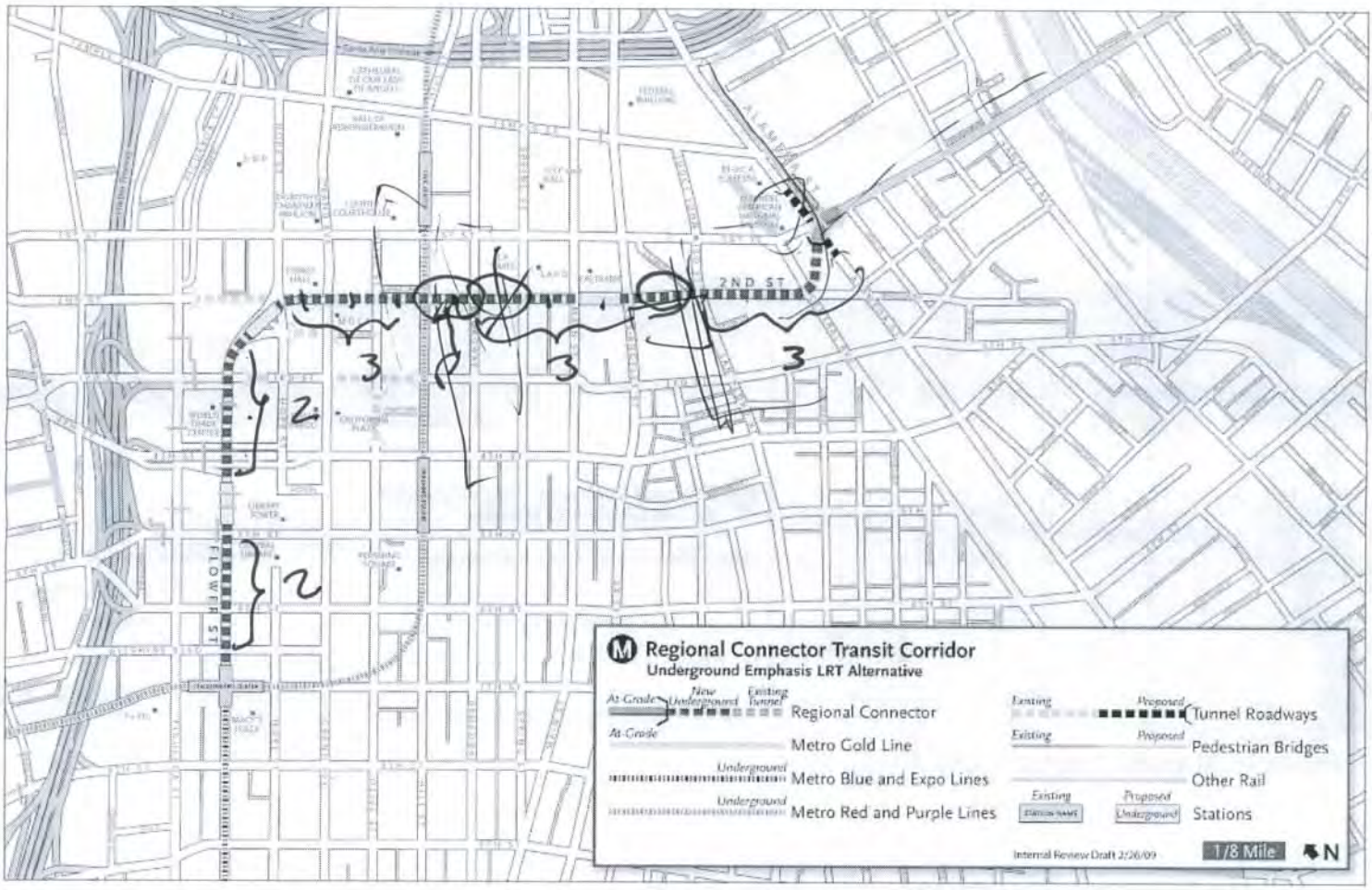

Figure 2: Underground Emphasis LRT Alternative

Preliminary Schedule

The preliminary schedule is provided below for discussion at the agency scoping meeting.

Written comments will be accepted until May 11, 2009. Comments may also be submitted at the scoping meetings, sent via email to regionalconnector@metro.net, or mailed to:

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Los Angeles, CA 90012

Project Information

Additional information may be found on the project website at:
http://www.metro.net/projects_studies/connector

ISSUES

- Favor Subway alignment
- Traffic analysis of intersections
  - L. Tokyo
  - 1st / ~~Vignes~~ Alameda
- Station @ bet. LA & San Pedro
- Concern with construction impact:
  - tunnel work
  - station

so — Mitigate it!

(1) Safety
(2) Schedule reliability/
(3) Performance less disruptive

Oppose at-grade

site of 2nd related project

— Want to keep 2nd St. open during construction. (summer - April & August)

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: MIKE METCALFE	
Organization/ Organización/団体名: METCALFE ASSOCIATES	
Address/Dirección/住所・所在地: 1421 PANDORA AVE.	
Telephone/Teléfono/電話: (310) 474-6418	Fax: SAME
Email/電子メール: m.metcalfe@verizon.net	

Comments/Comentarios/コメント:

THE UNDERGROUND ALTERNATIVE IS PREFERRED BECAUSE IT WILL MINIMIZE LONG-TERM IMPACTS ON DOWNTOWN LAND USE AND SURFACE STREET CIRCULATION and WILL GENERATE GREAT POTENTIAL FOR SEVERAL PUBLIC/PRIVATE JOINT DEVELOPMENT PROJECTS, INCLUDING BUNKER HILL/DISNEY HALL/GRAND AVE., THE SOUTH-WEST and NORTH-EAST CITY BLOCKS AT 1st & ALAMEDA'S LITTLE TOKYO/ ARTS DISTRICT WHICH WILL ALL GENERATE FISCAL REVENUES TO HELP PAY FOR CONSTRUCTION COSTS DEBT SERVICE OVER TIME.

THANK YOU! [signature]

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

http://www.dailynews.com/opinions/ci_11557722

Expo line approval: A license to kill?

By Najmedin Meshkati and Robert "BJ" Takushi

Updated: 01/26/2009 05:23:37 PM PST

The Metrolink crash in Chatsworth on Sept. 12, which killed 25 and injured more than 135 innocent people, highlighted the need for much more rigorous government scrutiny of rail safety in the country and especially in Southern California. It is against this sober backdrop that we -- the badly hit Southlanders -- are pleading and looking up to the north for a protector from future rail carnages.

This Thursday, Jan. 29. the five commissioners of the California Public Utilities Commission are expected to vote on and announce their final decision concerning the design of key street crossings in phase 1 of the Exposition Light Rail, or Expo Line, project planned from downtown Los Angeles to Culver City. It will cross major busy city streets such as Vermont, Western, Farmdale and Crenshaw.

There are rare occasions that a San Francisco-based state agency's decision can determine the risk to life and safety of millions school children in Los Angeles for the next 75 to 100 years. However, this CPUC's decision will be a precedent-setting case and there certainly will be future similar cases elsewhere in California, and as such, many more lives will be at risk.

In fact, the term "light rail" is a bit of a misnomer. Each of the three-coupled 225-ton train cars will operate at speeds of up to 55 miles per hour. Expo Line trains will run every 2 to 2.5 minutes, 22 hours a day, in opposite directions on parallel sets of dual tracks and will cross Farmdale Avenue at street level (at-grade), within 10 feet of Dorsey High School, which has 2,100 students, and will cross Western Avenue and Harvard Blvd., also at street level, within 50 feet of the Foshay Learning Center, which is a K-12 Multi-Track School with 3,400 students.

The L.A. Country Metropolitan Transportation Authority and its Exposition Light Rail Construction Authority with their army of lawyers, consultants, lobbyists and PR agencies, which are all paid from our tax money, are vigorously pushing and asking for CPUC approval of their at-grade crossings near the two schools. However, the local community organizations and the Los Angeles Unified School District are opposing such at-grade design of intersections. The public's distrust of MTA is rooted in its dismal safety record. Ninety people have died on the MTA's 22-mile L.A.-Long Beach Blue Line, which has had more than 821 recorded incidents since its inception in July 1990 to July 2008. These numbers, which are significantly higher than national average rates of accidents and fatalities along the MTA rail network, attest to the dire state of rail safety in LA, which is primarily caused by MTA's outdated and messy safety-related policies, procedures and practices.

If the CPUC has not learned its lessons about the human factors-related root-causes of past rail

accidents, and does not fully scrutinize MTA's proposed crossings' risk and hazard analyses, then CPUC's "easy" approval will be tantamount to granting MTA and its Expo Line Construction Authority a license to kill and maim school children and adults on the Expo Line for the next decades to come, as approximately 72 million Dorsey students who will use the Farmdale Avenue crossing during the expect life of operation of this line. The CPUC's approval would provide MTA with the alibi - the "design immunity" in legalese - for so doing.

The concept of "design immunity," which is based upon an otherwise obscure California Government Code § 830.6, would potentially entitle MTA to avoid liability for dangerous condition of its designs and grant MTA with complete immunity against any type of claim arising out of its design defect. It was precisely the CPUC's lax approval of the Blue Line's more than 100 crossings back in late 1980s that left us to live with the persistent dangerous condition which is a major root-cause of its many fatalities and accidents (the last two accidents happened just in one day, on Thursday, Nov. 20.)

Moreover, the automatic "design immunity" entitlement of MTA has also been responsible for the status quo, as well as stifling any motivation and imputes within this agency for any fundamental change and systematic safety improvement. Neither numerous deaths and the resulting protracted litigations, nor trail or appeal court's affirmative rulings against MTA in favor of the rail accident's victim (plaintiff), have been able to make a dent in the MTA's dismal safety practices.

This time around, the CPUC approval of MTA's requests for the Expo Line would do the same. It will not only continue to shield MTA's unsafe crossings and operation against any future lawsuits stemming from accidents and resultant injuries and deaths caused by design-induced errors of pedestrians and drivers on the Expo Line, but also will further hardened MTA's entrenched archaic safety culture.

It is truly perplexing that the Exposition Light Rail Construction Authority, even in this dismal state economy, is still continuing to squander millions of dollars of precious taxpayers' money by lavishly paying for thousands of pages of legal briefs, stubbornly fighting neighborhood community organizations, and recklessly disparaging scientific facts which justifiably question and refute its proposed designs. This is the money that should have been spent on making the Expo Line safer and our hope is that the CPUC puts an end to this vicious cycle.

The CPUC of today has much greater competent technical resources and it can (and should) learn from other agencies such as the National Transportation Safety Board and do much better job than what it did some 30 years ago and consequently we are stuck with the Blue Line's unsafe intersections. We can only hope that what the American philosopher William James said, "great emergencies and crises show us how much greater our vital resources are than we had supposed," also applies to California and its PUC.

Najmedin Meshkati is a professor at the Sonny Astani Department of Civil/Environmental and a professor at the Daniel J. Epstein Department of Industrial & Systems Engineering (ISE) at the Viterbi School of Engineering, University of Southern California. He teaches and conducts research on the safety of technological systems and created USC's Transportation Safety Program in 1992. Robert "BJ" Takushi, a recent graduate of the Epstein ISE Department, received a grant from the Rose Hill Foundation to study the Expo Light Rail safety.

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: HAROLD LEACOCK	
Organization/ Organización/団体名: Citizens for better Mobility	
Address/Dirección/住所・所在地: Box 1232 Pomona, Calif 91769	
Telephone/Teléfono/電話: 909-229-2130	Fax:
Email/電子メール: HAROLD_L450@hotMail.com	

Comments/Comentarios/コメント:

Would like to say, as I always hope to have is a better connections for the entire light Rail system, similar to San Diego. where you could travel all over the LA basin on one pass. OR ticket.

Connect the dots — Hello.

HAROLD

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: MARK R JOHNSTON	
Organization/ Organización/団体名: TRAC - NARP - PRS	
Address/Dirección/住所・所在地: 4185 Van Buren Street, Chino, CA. 91710	
Telephone/Teléfono/電話: 909- 591-6691	Fax:
Email/電子メール: Canammj@yahoo.com	

Comments/Comentarios/コメント:

✓ Entire Route Underground (Rest of system is too slow Don't make slower)

✓ Build Faster than 8-10 yrs! (Too Long)

✓ Consider Knock-out panels

(at 2nd & Central (Future Route Down Central To Washington Blvd) Create a "wye"

(at new Bunker Hill station, create another "wye" For Future Route up Temple to Silver Lake/Glendale

✓ The Los Angeles St. station needs to consider a Connection to Broadway Street Car (or more Broadway connection East (or 2 Blocks)

over

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: LAWRENCE ALCAVA	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地: 14 N. FAIR OAKS AVENUE # 3400 PASADENA, CA 91103	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: LAWRENCE.ALCAVA@GMAIL.COM	

Comments/Comentarios/コメント:

I FEEL THAT THE REGIONAL CONNECTOR IS ONE OF THE MOST IMPORTANT PROPOSED LINES. IT WOULD INCREASE RIDERSHIP DRAMATICALLY AND WOULD CREATE A CONNECTED REGIONAL SYSTEM. I THINK ITS IMPERATIVE THAT THIS LINE BE BUILT BELOW GROUND. GIVEN THE DENSE NATURE OF DOWNTOWN L.A, GRADE SEPARATION WILL HAVE LESS IMPACT ON THE REVITALIZING NEIGHBORHOODS IN THE AREA. I HOPE WE CAN BUILD THIS LINE SOONER RATHER THAN LATER.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: EDWARD KING	
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Telephone/Teléfono/電話: (323) 759-9652	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Greg Kay	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: gkay@usc.edu	

Comments/Comentarios/コメント:

I support this project. It would greatly improve mobility Downtown. The underground alternative is a must! Otherwise it would interrupt the street scape too much.

Metro should consider double tracking b/c the Blue Line is already at capacity. When the Expo Line opens, it would be a shame to have a low level of service b/c of bottlenecks downtown.

The Bunker Hill station should be moved to be centered at the Grand Ave/2nd St station. This will make it

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

closer to the Music Center, courthouse, & Grand Avenue Project & Grand Ave office buildings. The current location favors the Bunker Hill Towers - which are not strong source of riders.

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Mizue Katayama	
Organization/ Organización/団体名: Little Tokyo Senior Residents Assc. (LT Service Center)	
Address/Dirección/住所・所在地: 231 E. 3rd St. Suite G106 LA, CA 90013	
Telephone/Teléfono/電話: (213) 473-1649	Fax:
Email/電子メール: mkatayama@ltsc.org	

Comments/Comentarios/コメント: ※ I'm representing senior residents' opinions.

- I vote for shuttle bus (TSM) alternative ① because it's more accessible with more frequent stops.

② mdly senior housings are on/near 3rd st. (Casa Heiwa, Teramachi, LT Towers, Miyako Gardens, & Tokyo Villa) where shuttle bus runs.

③ after Metro bus #16 (run on 3rd st.) got cancelled, seniors have been complaining how inconvenient it is for them to go to St. Vincent Hospital. this shuttle bus may be a solution?

④ seniors aren't into ~~the bold~~ LRT alternatives. They think they won't be around by the time it's completed.

they can only attend daytime meetings.
None of seniors attended today's mtg because it was too late in the evening for them.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

Continue

⑤ In order to access to either of LRT alternatives, LT seniors would have to take buses to get to the stations anyway.

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Ron Frescas	
Organization/ Organización/団体名: student	
Address/Dirección/住所・所在地: 3436 Ivar Avenue, Rosemead, CA 91770	
Telephone/Teléfono/電話: (626)255-1490	Fax: (626)571-1404
Email/電子メール: rfrescas@alumni.usc.edu	

Comments/Comentarios/コメント:

I am extremely pleased that Metro has considered the public's opinion about future projects. Since January of this year, I have been using public transportation, and I have to say it has made me happier. It is because of the cost and the reduced stress of driving. I am in favor of any extention project. If the project may consist of an underground emphasis or an at-grade, You would probably have to consider people who live and/or work in downtown Los Angeles.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

I do have to say this, and I think it is because of my age and marital status, but I feel the light rail systems in Los Angeles County and downtown should run 24 hours a day. I am in college and I enjoy going out and staying out late. I noticed that the light rails run up to mid-night or 1 A.M. In some areas of the city, buses do not run late as well. So, I will not be able to get home until 5 A.M. or well or not enjoying my night out because I will be too concerned about missing the train. I am only speaking for myself, not all college students. I would like to thank you for your time and patience will all the speakers here today (3/31/09), and to all the representatives of Metro.

Respectfully,

Metro

THE HIGGINS BUILDING at 2nd and Main since 1910

April 1, 2009

From: Higgins Building Homeowners Association
Re: Comments on proposed Downtown Regional Connector

The Higgins Building Homeowners Association would like to join our many neighborhood residents, business leaders and stakeholders to reiterate, in the strongest of terms, our support to the responsible building of the Regional Connector as a below-grade project, and our categorical objection to building it as an at-grade project.

As you consider the proposal before you, we ask that you dutifully consider the many benefits of the below-grade project over the at-grade option:

– The below-grade option will allow for greater efficiency of the regional transit system. Trains will be allowed to travel at much higher speeds underground, significantly reducing route times and allowing for more frequent trips, maximizing the efficiency of the system, allowing the MTA to better service the community and the region as a whole. In addition, it will avoid disruption of existing MTA and Dash bus routes in the area, many of which use Broadway as a key artery.

– The below-grade option will be safer. It will avoid the congestion of at-grade trains that will endanger the lives of thousands of pedestrians and motorists who cross Second Street each day. This will save the MTA and the City millions of dollars in potential legal fees and settlements over injury cases by eliminating the risk altogether. It will also be safer for residents of the area, specifically the Higgins Building. An at-grade train system will significantly compromise access by emergency vehicles to the building.

– The below-grade option will be less disruptive. An above-grade train will avoid the total conversion of 2nd Street to railroad tracks, eliminating a key east-west thoroughfare through downtown, and causing potential gridlock on adjacent east-west thoroughfares (1st Street, 3rd Street & 4th Street). It will avoid traffic gridlock on north-south streets through the area, including the major thoroughfares of Hill, Broadway, Spring, Main and Los Angeles Streets. The City stands to save hundreds of thousands of dollars on studying the retiming of traffic for this area alone. In addition it will avoid potential disruption with security operations at the new LAPD headquarters, and will cause far less noise disruption to the hundreds of new residents of the area.

– The below-grade option will encourage a pedestrian-friendly downtown. Second Street is a key pedestrian connection link between the burgeoning residential neighborhoods of the Historic Bank District, Little Tokyo and the Civic Center. The below grade option will preserve that pedestrian connection. An above-grade option would destroy that connection, especially during peak morning and evening hours by running trains – and impeding pedestrian crossings – every 2-5 minutes.

-- The below-grade option will cost the City less in the long run. A below-grade option will allow current and planned businesses along 2nd Street to operate and thrive, generating hundreds of thousands of tax dollars annually for the City and County. An above-ground option will completely cut off vehicular access (for both customers and supplies) to many existing businesses in Little Tokyo and the Higgins Building, potentially starving the City of much-needed, existing tax revenue. In addition, it will completely eliminate film revenue from the historic 2nd Street tunnel, one of the most filmed locations in the County of Los Angeles. Altogether, building the at-grade option may very well end up costing the City and County more over 20 or so years than building at below-grade.

-- Finally the below-grade option will improve quality of life for existing and future residents. A below-grade option allows the hard work and considerable investment that has already been put into the neighborhood to continue to grow and contribute to the community. The Higgins Building – a Historic-Cultural Monument – will not become isolated by elimination of critical loading lanes and the laying of tracks mere yards from the building entrance and existing thriving businesses. It will allow continued development of properties along 2nd Street, including planned restaurants on the Vibiana's property and retail on Little Toyko's Block 8.

When considering the options, it is abundantly clear that the below-grade option is a far superior option for the downtown community and the Los Angeles region as a whole – operationally, financially, and pragmatically. Saving 13% up front to build the at-grade option would not only be incredibly short-sighted, but it may end up costing the City far more in the long-run than any savings achieved up front.

There continues to be overwhelming support for the below-grade option of the Regional Connector project, from the thousands of new residents, to business and community leaders. As residents and community leaders, we at the Higgins join in that support.

Second Street is a part of the functional, historic and lively fabric of downtown. Converting it into a rail corridor would be devastating. While building this project below-grade will also create significant disruptions, we believe many of those can be mitigated. If built responsibly, this project can be an asset for downtown residents, workers and businesses as well as for cross-county travelers.

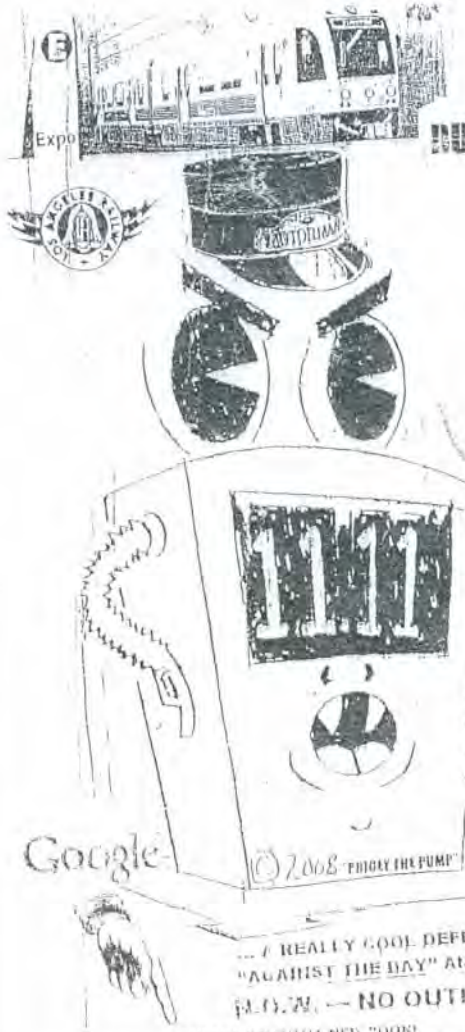
Thank you for your consideration.

Coleman Engellenner
HOA President

"PRICEY THE PUMP" SAYS.... "PUMP"!!!

BUILD THE DOWNTOWN LOS ANGELES STREETCAR QUICKLY – N.O.W.
WHILE WE STILL CAN!!!...

SUPPORT YOUR VERY OWN P.E.T.T. PROJECT !!!
RALLY AROUND YOUR
HISTORY-RICH PACIFIC ELECTRIC TOURISM TOOLS:
"THE BIG RED CARS" !!!



BUILD THE "WASHINGTON PLAN"...
FROM THE BLUE LINE TO THE GOLD LINE,
PICO – BROADWAY – FIRST
YOUR INITIAL REGIONAL CONNECTOR!!!

"PUMP TALK"

WELL, WHAT ARE YOU WAITING FOR?...

THE ELEVENTH DOLLAR ???!!!

FOR BETTER TRANSPORTATION AND MORE OF IT !!!

THE ELEVEN ELEVEN EMERGENCY RAIL TRANSPORTATION IMPLEMENTATION COMMITTEE

"STREETCAR" !!!
"STREETCAR" !!!
"STREETCAR" !!!

... A REALLY COOL DEFENDER OF YOUR MOBILITY
"AGAINST THE DAY" AN OIL EMBARGO IS IMPOSED!!!...
P.U.M.P. — NO OUTRAGEOUS WAITING !!!!!!

READ THE ESSENTIAL NEW BOOK!
THE DEVIL WE KNOW: DEALING WITH THE NEW IRANIAN SUPER POWER
BY FORMER CIA "CASE OFFICER" ROBERT BAER...
READ ABOUT THE VERY REAL THREAT OF
A GULF OIL EMBARGO -
- AND IT'S EFFECT ON THE PRICE OF GASOLINE!

PLEASE READ PAGE 25 OF THE BOOK !!!..

FIRST "STREETCAR" SERVICE
WILL BE FROM CHINATOWN TO USC/ EXPOSITION PARK
VIA GOLD LINE - INITIAL "REGIONAL CONNECTOR" - BLUE LINE - EXPO LINE
FUNDING FROM EXPO AND GOLD LINES !!!

SO C'MON N' HELP HER PUMP ALREADY- WHY DON'T CHA?!
THIS PROJECT HAS GOTTA GO THROUGH!!!

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Philip e laventure	
Organization/ Organización/団体名: C.E.R.T	
Address/Dirección/住所・所在地: 725 S. Witmer 203 LA CA 90017	
Telephone/Teléfono/電話: 2134133472	Fax: N/A
Email/電子メール: Philipelaventure@yahoo.com	

Comments/Comentarios/コメント:

SCREECHING ENGINES
HEALTH ISSUES DUE
TO DIESEL BUSES.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: ROGER CHRISTENSEN	
Organization/ Organización/団体名: Metro Citizens Advisory Council	
Address/Dirección/住所・所在地: 14335 Huston St #205 Sherman Oaks 91423	
Telephone/Teléfono/電話: 818 995-4859	Fax: —
Email/電子メール: rog4trail@aol.com	

Comments/Comentarios/コメント:

The Regional Connector has been rated as Metro's most cost effective future project. The underground ~~object~~ option is the far superior one. If one train is stalled with a surface fender project, the entire light rail system would be halted. Running at 2.5 minute headways, underground is safest, most efficient, and fastest.

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名:	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

BrianAbbott81@yahoo.com

(Please E-mail me Re: Powerpoint)

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: G REILLY	
Organization/ Organización/団体名: LOS ANGELES NATIVE	
Address/Dirección/住所・所在地: 447 S. GRAND VIEW ST.	
Telephone/Teléfono/電話: (213) 448-6882	Fax:
Email/電子メール: DEZINER213@GMAIL.COM	

Comments/Comentarios/コメント:

IN REGARDS TO EFFICIENCY AND TRAFFIC CONTROL; THE ABOVE GROUND ALTERNATIVE NOT ONLY CAN BE DISRUPTED BY ~~SURF~~ SURFACE TRAFFIC, BUT HAS A SPLIT STATION AT SECOND STREET. THIS SPLIT STATION CAN LEAVE ONE STRANDED IF SOMEONE WERE TO MISS THEIR TRAIN. THIS TYPE OF OPERATION WILL CONFUSED TOURISTS AND MANY UNFAMILIAR WITH DOWNTOWN LOS ANGELES.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

Thurs 4/23 8:00 a.m.

Westside Subway

TRACEY CHANICK

CCA – Presentation

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Dan Witzling

Organization/ Organización/団体名: Breathe LA

Address/Dirección/住所・所在地: 5858 Wilshire Blvd, Suite 300 Los Angeles CA 90036

Telephone/Teléfono/電話: 323 935 8050 x288

Fax: 323 935 1873

Email/電子メール: dwitzling@breathela.org

Comments/Comentarios/コメント:

Breathe LA supports Metro's efforts to improve our subway system in order to mitigate air quality concerns through reduced traffic congestion. We appreciate consideration in the EIR to indicate projected smog reductions from the Underground and other proposed alternatives. Mobile air sources have been a major influencer on asthma in the Los Angeles County region and this METRO project has great potential to help alleviate harmful emissions.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Frank Kortum	
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Address/Dirección/住所・所在地: 312 N. Spring St. #1400 Los Angeles 90012	
Telephone/Teléfono/電話: 213.894.5710	Fax: 213.894.7177
Email/電子メール: fkortum@gmail.com	

Comments/Comentarios/コメント:

I support the Underground Emphasis alternative because the At-Grade alternative seems like it would contribute to surface street congestion in the downtown area.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Scott Bytof	
Organization/ Organización/団体名: DLANC / RESIDENT	
Address/Dirección/住所・所在地: 330 W 11th St #309 Los Angeles, CA 90015	
Telephone/Teléfono/電話: 213-749-1365	Fax: → same
Email/電子メール: scottbytof@co.rr.com	

Comments/Comentarios/コメント: Prefer below grade option.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: MIYOKO OSHIMA	
Organization/ Organización/団体名: Japanese American National Museum (JANM)	
Address/Dirección/住所・所在地: 369 E. First St, Los Angeles, CA 90012	
Telephone/Teléfono/電話: 213-830-5655	Fax: 213-625-1770
Email/電子メール: moshima@janm.org	

Comments/Comentarios/コメント:

Alameda Street is a critical access route for JANM. The parking garage entrance is on Alameda, as is the loading dock for the Museum. (Large trucks use this for transporting exhibitions.) Therefore any construction on Alameda needs to ensure adequate open access for both JANM and MOCA. Otherwise operations would be impacted.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: GERALD J. PASS	
Organization/ Organización/団体名: FRIENDS4EXPO RAIL	
Address/Dirección/住所・所在地: P. O. BOX 572483, TARZANA, CAL. 91357	
Telephone/Teléfono/電話: (213) 884-3548	Fax:
Email/電子メール: proofgeog@yahoo.com	

Comments/Comentarios/コメント:

I DID HAVE A PREFERENCE FOR A 3RD ST. ALIGNMENT, NOW THAT IT ISN'T AN OPTION PRESENTLY, I WOULD LIKE TO EXPRESS MY PREFERENCE FOR THE 2ND ST. UNDERGROUND ROUTE.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: B H Allen	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: BHA_in_LA@Yahoo.com	

Comments/Comentarios/コメント

I ~~Aerate~~:

1. I ~~request that the~~ FTA and ~~the~~ LACMTA prepare earnest, ~~thoughtful~~, respectful, robust responses ~~to~~ all ~~the~~ substantive "non-environmental" comments received on ~~this~~ project during ~~the~~ scoping process, notwithstanding ~~that~~ CEQA and NEPA do not require this.

   This may be done as a chapter or as an appendix to ~~the~~ scoping report.

2. I ~~request that the~~ internal draft scoping report be subjected to a vigorous, internal, critical adversarial review, to ensure ~~the~~ utter robustness of all responses to all issues and ~~the~~ utter robustness of ~~the~~ E.D.'s scope. The E.D.'s scope must not satisfy ~~the~~ bureaucratic interests but ~~the~~ interests of all ~~the~~ affected people and excellent public policy, free from self-complacency and self-delusion.

Bryan H. Allen

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: JOHN A. MOZZER	
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Address/Dirección/住所・所在地: 4137 PERLITA AVENUE, UNIT A, LOS ANGELES, CA 90039-1333	
Telephone/Teléfono/電話: 323-660-0335	Fax:
Email/電子メール: jamworks@earthlink.net	

Comments/Comentarios/コメント:

IN SUPPORT OF UNDERGROUND EMPHASIS LRT ALTERNATIVE.

LOOK INTO ESCALATORS AT CITIGROUP CENTER PLAZA (5TH STREET AND FLOWER STREET) TO ACCESS STATION

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: THOMAS K NAGANO 1ST VP	
Organization/ Organización/団体名: FRIENDS OF LITTLE TOKYO LIBRARY	
Address/Dirección/住所・所在地: 2ND & LOS ANGELES	
Telephone/Teléfono/電話: (213) 621-7665	Fax:
Email/電子メール: MRDOWNTOWNCA @ YAHOO.COM	

Comments/Comentarios/コメント:

FRIENDS GROUP IS IN FAVOR OF AN UNDERGROUD STATION DIRECTLY ADJACENT TO LITTLE TOKYO LIBRARY LAPL — WITH A MAJOR PORTION OF LINK SERVICING LITTLE TOKYO.

ADDITIONAL SECURITY AROUND THE 2ND/LOS ANGELES STATION NEXT TO STATE VIBANA'S. IS A CONSIDERATION FOR SAFETY OF PATRONS AND THE LIBRARY'S BOOK COLLECTION.

FRIENDS GROUP WOULD LIKE INPUT IN THE SELECTION OF THE ARTWORK.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Evelyn Yoshimura	
Organization/ Organización/団体名: Little Tokyo Community Council, LT Service Center	
Address/Dirección/住所・所在地: 231 E. 3rd St., #G106, LA 90013	
Telephone/Teléfono/電話: 213-473-1690	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

Underground alternative seems best, but as a LT stakeholder, am concerned about impact on businesses along 2nd St. ~~in~~ between Los Angeles St. and Alameda during construction. These mainly mom-&-pop business can't absorb severe traffic congestion and construction. Every effort should be made to minimize this impact

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Paul Lipson	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

Sounds great.
Go with UNDERGROUND.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

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Organization/ Organización/団体名: —	
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Telephone/Teléfono/電話:	Fax:
Email/電子メール: bchsu@earthlink.net	

Comments/Comentarios/コメント:

① Of the two LRT alternatives, I would prefer the underground ~~alt~~ alignment.

② One concern I have is the need ~~to~~ to transfer while traveling from Pasadena to ELA. I would like Metro to consider keeping some trains travelling directly from Pasadena to ELA even after the Regional Connector is ~~for~~ built. (BTW, the need to go to a different station to transfer is one reason I dislike the at grade route)

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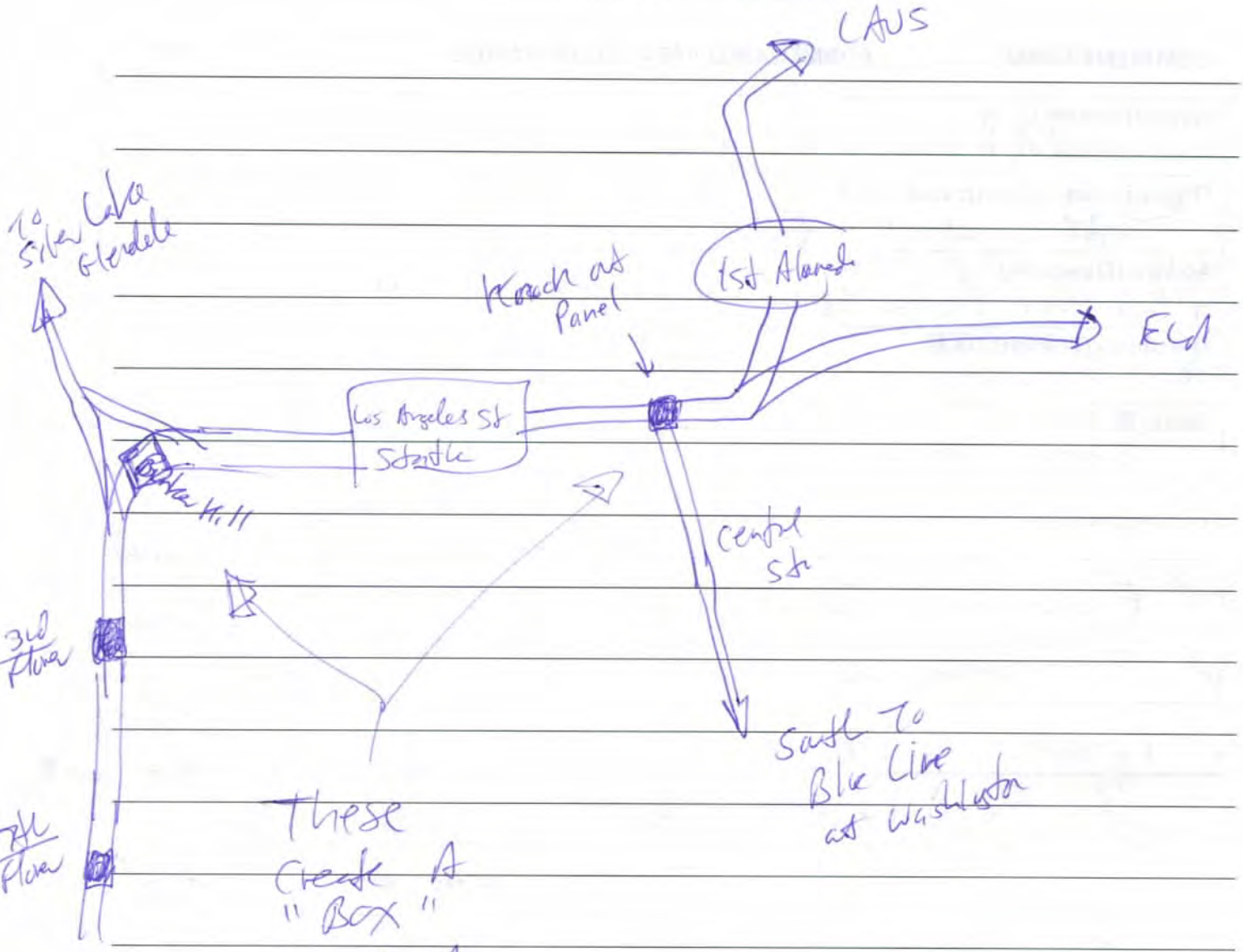
CAUS
To Silver Lake Glendale
Knock out Panel
1st Alarm
ECA
Los Angeles St Subway
Main H.H.
central Sta
3rd Floor
7th Floor
Sash To Blue Line at Washington
These Create A "Box" Around LA
multiple Direction

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: KATHLEEN SWEET	
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Telephone/Teléfono/電話: 626 798-5896	Fax: —
Email/電子メール: Kathleen.sweet@SBCGlobal.NET	

Comments/Comentarios/コメント:

Any alignment - please put it underground !

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Brigham Yen	
Organization/ Organización/団体名:	
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Telephone/Teléfono/電話: 6265909105	Fax:
Email/電子メール: da177atrix@netzero.net	

Comments/Comentarios/コメント: LA needs more strategically Smart rail lines built and the Regional Downtown Connector needs to be UNDERGROUND! Being underground means being faster and higher ridership numbers.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
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COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: CRAIG F. THOMPSON	
Organization/ Organización/団体名: CITIZENS FOR BETTER MOBILITY	
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Telephone/Teléfono/電話: 909·973·0936 C 626·398·0988	Fax:
Email/電子メール:	

Comments/Comentarios/コメント:

-THE FINAL PLANS ARE WAY OFF BASE!! A BETTER ROUTE WOULD HAVE BEEN: SOUTH ON ALAMEDA FROM FIRST STREET, WITH STATIONS @ 7TH STREET & OLYMPIC BLVD. CONTINUE SOUTH ON ALAMEDA TO WASHINGTON BLVD, WEST ON WASHINGTON TO PRE-EXISTING BLUE LINE WITH A DOUBLE-TRACK WYE @ WASHINGTON BLVD. & LONG BEACH AVENUE. ANOTHER DOUBLE-TRACK WYE WOULD BE INSTALLED @ WASHINGTON BLVD. & FLOWER STREET. THIS WOULD BE THE ULTIMATE CONNECTOR, BECAUSE TENS OF MILLIONS OF DOLLARS WOULD BE SAVED,

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Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

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(CONT'D. OVER)

WHICH COULD POSSIBLY BE USED FOR TOTAL GRADE SEPARATION OF THE TRACKAGE ON WASHINGTON BLVD. THROUGH THE CONSTRUCTION OF A CUT & COVER TUNNEL!?!

Metro

alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

Station locations for this alternative would all be underground and include the area north of 5th Street on Flower Street, adjacent to Bunker Hill just south of 2nd Street and 2nd Street between Los Angeles and Main Streets.

Figure 2: Underground Emphasis LRT Alternative

Preliminary Schedule

The preliminary schedule is provided below for discussion at the agency scoping meeting.

Web Based Comments

From: webmasters@metro.net [mailto:webmasters@metro.net]
Sent: Friday, March 27, 2009 3:04 PM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

---

firstName: Kenneth
lastName: Sterling
organization: retired coach operator
emailAddress: silverbox46@yahoo.com
streetAddress:
city: Pasadena
state: CA
zipCode: 91101
Date: Friday, March 27, 2009
Time: 02:03:34 PM

comments:

I think the underground option is a no-brainer. There is no way you could safely run 3 car light rail trains through downtown on the surface and NOT expect to hit or be hit by other vehicles. (What is the body count now for the Blue line?) That said, the only problem I see with pairing the legs of the Gold line with the Blue line and the Expo line is a logistical one. Folks wanting to stay ON the Gold line in either direction will have to go PAST the new Y connection to the next station before they can transfer to a train going in the direction they really want. But I'll bet you already know that. Can't wait to see what your solution is.

firstName: Genevieve
lastName: Liang
organization:
emailAddress: genevieve.liang@gmail.com
streetAddress:
city:
state:
zipCode: 90013
Date: Tuesday, March 24, 2009
Time: 07:58:56 PM

comments:

RE: Regional Connector Transit Corridor project
I'm a downtown resident, and unfortunately I cannot make it to the scoping meetings that you've scheduled, but I'd like to put forth some comment here. I think it's a great idea to make the subway system connect better through downtown. It will make not only the people who live and/or work here use public transit more to go across downtown or to parts farther away, but I strongly believe it will also make downtown a livelier, more accessible place for people from other LA neighborhoods that will be served by the new subway line extensions to come partake in our numerous entertainment and other cultural offerings.
I would opt for the underground emphasis alternative via 2nd and Flower Streets, because I think to have any at-grade lines would cause more gridlock on those streets around the Civic Center than what is already present there today. I would ask, though, that considerations for a station be made for somewhere like 2nd/Spring, so that those of us who live in the Old Bank District can access the line fairly easily. Ultimately, I'm sure the decision to build at-grade or underground will depend on the cost differences, but if going underground would speed up the transit, I think that's another benefit that all riders/commuters would all appreciate.

Thanks.

firstName: eden
lastName: stewart
organization:
emailAddress: estewart@yulagirls.com
streetAddress: 339 n. detroit st.
city: Los Angeles
state: ca
zipCode: 90036
Date: Wednesday, April 01, 2009
Time: 07:53:12 AM

comments:

the regional connector is a vital link in our system. it will increase ridership dramatically because of the ease in using 1 continous line or easy transfers. with tap technology, I suggest we reinstitute transfers and make a policy of free transfers between all rail lines! the connector must be in subway to facilitate speed. thank you

Appendix W
Summary of Agency Comments

CITY OF LOS ANGELES

CALIFORNIA

RITA ROBINSON
GENERAL MANAGER

ANTONIO VILLARAIGOSA
MAYOR

DEPARTMENT OF
TRANSPORTATION

100 S. Main Street, 10th Floor
LOS ANGELES, CA 90012
213-972-8470
FAX (213) 972-8410

http://www.lacity.org/ladot/

May 8, 2009

Dolores Roybal Saltarelli, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

RE: SCOPING COMMENTS FOR THE REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT EIR/EIS

Dear Ms. Saltarelli,

Thank you for this opportunity to comment on the scope of the Regional Connector Transit Corridor EIR/EIS. The Los Angeles Department of Transportation (LADOT) will be serving as the lead contact agency for the City of Los Angeles on this project, and any correspondence or documents from your agency should also be sent to the Los Angeles Bureau of Engineering (LABOE), attention Mr. Gary Moore.

The EIR/EIS should include an evaluation of the traffic and on-street parking impacts of the LRT At-grade Alternative. Appropriate mitigation measures will be necessary, especially for impacts on Temple Street and Second Street resulting from the at-grade LRT alignment. Additionally, projected travel speeds for the at-grade LRT trains along the entire route should be described in the EIR/EIS.

Traffic Impact Analysis

Prior to conducting the traffic impact analysis, the underlying modeling assumptions used to develop transit ridership forecasts, including mode split assumptions, trip length and vehicular trip reductions assumptions due to increased transit ridership, need to be submitted to LADOT for review. Modeling results should include an explanation, in the main text of the EIR/EIS, of the methodology, assumptions and levels or thresholds of significance. Growth forecasts should reflect the most currently-available forecasts from Metro or SCAG, with at least a 2030 time horizon.

The Highway Capacity Manual's delay methodology should be used for the traffic impact analysis of the LRT At-grade Alternative. Critical Movement Analysis methodology should be used for analyzing station area traffic impacts resulting from the LRT Underground Alternative. LADOT's threshold criteria for significant impact using volume/capacity ratios should be used in both analyses. These ratios can be adapted to delay measurements in consultation with LADOT.

Traffic count data should be collected between September and May. Typically, summer (June-August) traffic count volumes are low due to schools being out of session and workers on vacation.

LADOT will need to approve the list of intersections for the traffic impact analysis, and this list may need to be revised based on initial model runs. Based on our review of the proposed study area intersections, all signalized intersections along Arcadia St., Aliso St., and Fourth St. within Downtown should be added to the list since they could be impacted by the proposed project when both First Street and Third Street are heavily congested.

Grade Crossings

All proposed at-grade crossings should be initially analyzed using Metro's Grade Crossing Policy. Design of grade crossings (at-grade, aerial or underground) on City streets should be made in consultation with LADOT, and final disposition of grade crossing treatments will be subject to the City's approval. Safety devices for at-grade crossings should include quad-gates and other traffic control measures. In addition, automobile speed zone areas near the proposed at-grade alignment should be analyzed.

Also, please see our previous scoping comments for the project's Alternatives Analysis (attached.)

Please contact Susan Bok of my staff at 213-972-8623 with any questions.

Sincerely,

Kang Hu
Senior Transportation Engineer

Att: 1

c: Rita Robinson, LADOT
Haripal Vir, LADOT
Jay Kim, LADOT
Gary Lee Moore, BOE
Michael Brown, BOE
Cecilia V. Estolano, CRA
Gail Goldberg, City Planning Dept.

From: "Grein, George O." <GOGrein@lasd.org>
Subject: **Feedback re: Downtown Connector Scoping Phase**
Date: March 30, 2009 8:29:40 AM PDT
To: <ginny@therobertgroup.com>

Grein, George O.
Not In Address Book

Good Morning,

I appreciated the opportunity to hear the proposed plans for the downtown connector. It will be an excellent enhancement for dealing with downtown gridlock and making downtown access more readily available to rail passengers from throughout the metropolitan area.

Law enforcement does have concerns regarding the preliminary info provided. Perhaps you can respond as to the few concerns that I will express below, or ask that those responsible for fine tuning the planning to consider our perspective.

1. Similar to what will take place with the convergence of the Expo and Blue Lines at Pico Station, two separate lines (the Expo/Downtown Connector and the Gold/Blue will apparently be sharing one platform at Little Tokyo. Clearly, Pico Station was not designed for this (too narrow and cannot be lengthened). Was Little Tokyo designed to be a transfer point? Our concern is crowding and having a proper queuing design to allow for ingress/egress for all of the potential options for passengers. This becomes an additional staffing requirement, especially since the downtown area is subject to so many political protests and rallies. (One solution being studied for Pico Station was to turn it into a dual platform station, but that would require widening Flower Street). Making changes to an active revenue line are certainly challenging and potentially problematic.
2. Along the same line, the method of connecting the tracks between the new Expo and existing Blue lines at Washington and Flower has been the subject of great debate for Metro. Have the designers discussed this issue of the connection of the tracks with Metro Rail Operations (and in particular General Manager Mike Cannell)? This became an issue during construction of the Expo Line, and should have been addressed during the planning phase. Peak commute train traffic flow is the issue. For law enforcement, the concern is critical as to how traffic along two busy streets (1st Street and Alameda Street) will be affected.
3. From a security point of view, since Alameda Street is a heavy truck traffic route, our concern is about allowing vehicles to go under the track right-of-way in the immediate vicinity of a potentially crowded transfer point. A person carrying an explosive device is a challenge to us on a platform, which we can potentially alleviate by use of our canine detection teams. However, we cannot stop persons from driving a large vehicle through the underpass and detonating an even larger vehicle borne improvised explosive device (VBIED) so near to a public transit station (and a transfer point at that). While this may seem a bit dramatic, the issue of VBIED's is real enough to have the acronym due to a number of successful attacks worldwide. Has this been considered in your planning of the underpass for vehicle traffic?
4. For law enforcement, and for rail operations too, any option involving below grade (or above grade) routing of public transit, so that it does not have to cross streets with vehicles is a good option. While it is more costly in the short term, it will benefit Metro in the long run as it will eliminate cross traffic delays. Once a train comes in contact with a car or truck (or pedestrian), the system slows or stops. That not only affects those on that train, but all of those in the system. It takes time to set up a bus bridge, and in the interim, people are crowding platforms and getting frustrated with "rapid transit" – which stops being rapid. I certainly hope that the downtown connector will go underground.
5. Given the realities of the homeless/transient population in downtown, the design will at some point need to address issues of intrusion by pedestrians into any tunnel portals. That may be a little further down the line that what you are doing right now, but I did want to address this issue. On the Expo Line, that was not addressed in the design phase, and had to be added at additional Metro expense after construction started.

Those are the preliminary concerns that law enforcement has. I appreciate the opportunity to express them to you so early in the planning.

Thank you again,

George
Lt. George Grein (Ret.)
Law Enforcement Liaison
Los Angeles County Sheriff's Department

Transit Services Bureau HQ
(213) 922-3687 (Office)
(213) 219-6327 (Mobile)
(323) 415-3362 (Fax)
gogrein@lasd.org
greing@metro.net
Palman qui meruit ferat

Arcelia Arce

From: Regional Connector [RSC_RegionalConnector@metro.net]
Sent: Tuesday, May 05, 2009 10:50 AM
To: Roybal, Dolores; Ginny-Marie Case; Clarissa Filgioun; Arcelia Arce
Subject: FW: Comments from the U.S. District Court, Space and Facilities Department

Scoping Comments...
TRG: Please post to eRoom

-----Original Message-----
From: Anna_Hernandez-Torres@cacd.uscourts.gov [mailto:Anna_Hernandez-Torres@cacd.uscourts.gov]
Sent: Monday, May 04, 2009 9:56 AM
To: Regional Connector
Cc: Allen_Leslein@cacd.uscourts.gov
Subject: Comments from the U.S. District Court, Space and Facilities Department

Hello Dolores - on behalf of Allen Leslein, Chief District Architect, the following comments are submitted:

The New (Federal) District Courthouse is planned for the block bounded by Second, Hill, First and Broadway streets. The plans have been completed, the site has been cleared and Congress has appropriated nearly 400 million dollars for this project. Construction will begin as soon as a funding shortfall is addressed. This site is directly adjacent to the proposed Regional Connector Transit Corridor on Second Street.

The plans for the 1 million gross square foot courthouse call for all vehicular access to be from Second Street. This includes parking for the approximately 150 space subterranean garage, the building's loading dock and the prisoner vehicular sallyport. Significant turning radiuses are required to accommodate the large delivery trucks as well as the U.S. Marshals prisoner busses.

If the regional connector is located at grade, it will consume two lanes of Second Street, severely reducing the capacity of this street and increasing traffic congestion especially during peak rush hours when most vehicles will be entering or exiting our facility. The at grade connector may actually eliminate access to our site or require vehicles to cross two lanes of tracks resulting in significant safety concerns. Larger vehicles may be prohibited from accessing our site as the narrower public roadway
will be limiting the turning radius of these vehicles. Also it may result
in Second Street becoming a one-way street further limiting access and egress from the site, which raises security issues.

It should also be noted a street car line has been proposed for Broadway.
This would increase congestion at the intersections of Second and Broadway should the connector remain at grade. The at-grade connector will also impact vehicular traffic flow and pedestrian safety as it winds its way through the Civic Center on Los Angeles and Main Streets.

The underground alternative does not result in any of these issues and is therefore the strongly preferred option.

Anna Hernandez-Torres

Administrative Assistant to the
Chief District Architect
Space & Facilities
U.S. District Court
(213) 894-1830

Jasso, Yara

> _____
> From: Yamarone, Mark [mailto:MYamarone@cityofpasadena.net]
> Sent: Thursday, May 07, 2009 1:33 PM
> To: Regional Connector
> Cc: Paige-Saeki, Jennifer; Fuentes, Theresa; Dock, Fred
> Subject: Pasadena Scoping Comments on Metro Regional Connector
>
> Dear Ms. Roybal-Saltarelli,
>
> Thank you for the opportunity to provide comments related to the
> Notice of Preparation and public scoping for the Draft Environmental
> Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the
> Metro Regional Connector Project. Based on our review of the scoping
> documents, we are requesting the following potential project impacts
> be considered and analyzed in the DEIS/DEIR.
>
>
> 1. Ridership analysis for trips from Pasadena for the alignment that
> provides the most direct connections to employment centers in Downtown
> Los Angeles, eliminating the need for Gold Line passengers to transfer
> to the Red Line.
> 2. Ridership analysis for trips from Pasadena for the alignment that
> provides the fastest connection through downtown to promote through
> trips to/from Pasadena on the Blue and Expo Lines.
> 3. Comprehensive traffic impact analysis for intersections
> surrounding the existing Gold Line at-grade crossings in Pasadena for
> any project alternative that would result in trains operating in
> Pasadena at frequencies greater than that "cleared" in the Pasadena
> Blue Line EIR.
>
> The majority of the project's potential impacts are localized to
> downtown Los Angeles. However, due to the scale of the project and
> the potential regional considerations, Pasadena requests to receive
> future CEQA notices for the project.
>
> The City of Pasadena appreciates the opportunity to comment on the
> project. Should you have any questions regarding this letter, please
> do not hesitate to contact me at (626) 744-7474.
>
> Mark Yamarone
> Transportation Administrator
>
>
> Mark Yamarone
> City of Pasadena
> Dept. of Transportation
> 626 744-7474
>
> <Metro_Reg_Con_Scoping_Let.pdf>

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, OFFICE OF PUBLIC
TRANSPORTATION AND REGIONAL PLANNING
IGR/CEQA BRANCH
100 SOUTH MAIN STREET
LOS ANGELES, CA 90012
PHONE (213) 897-6696
FAX (213) 897-1337

Flex your power!
Be energy efficient!

April 21, 2009

IGR/CEQA NOP CS/090324
City of Los Angeles
Regional Connector Transit Corridor Project
Vic. LA-101/110, SCH# 2009031043

Ms. Delores Roybal Saltarelli
Los Angeles Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Dear Ms. Roybal Saltarelli:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Notice of Preparation (NOP) for an Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for the Regional Connector Transit Corridor Project. The light rail transit project would connect the future Metro Gold Line at Alameda Street and Temple Street to the Metro Blue Line and the future Metro Exposition Line at the 7th Street Metro Center Station. Based on the information received, we have the following comments:

The project will have a direct impact on the Caltrans District 7 Los Angeles downtown office building at 100 South Main Street. The alignment would involve one-way couplets on Main Street and Los Angeles Street and tracks on Second Street between Main Street and Los Angeles Street.

Metro Rail transit stations or tracks to be located along the east side of Main Street (between Second Street and First Street), on the west side of Los Angeles Street (between Second Street and First Street) and on the north side of Second Street (between Main Street and Los Angeles Street) would need to be reviewed and approved by Caltrans. LRT operating along the Caltrans building could impede building ingress/egress.

Additional considerations should address emergency evacuation of buildings around First Street, Main Street, Second Street and Los Angeles Street. An evaluation of impacts to major events such as City Hall celebrations, parades and marches, rallies and demonstrations, etc. The placement of pedestrian crossing barriers or signage should be considered for locations across the street from transit stations.

A traffic study will be needed to analyze impacts to the US-101 Freeway ramps at Alameda Street using HCM methodology. The project would involve at-grade tracks on Temple Street, with Alameda Street configured as a below grade roadway with a pedestrian overpass over the tracks.

A subway alternative along the Caltrans building will need to assess construction impacts including location of station portals.

Transport of over-size or over-weight vehicles on State highways will need a Caltrans Transportation Permit. We recommend that construction related truck trips on State highways be limited to off-peak commute periods. The contractor should agree to limit platooning of truck trips on mainline freeways, on freeway on/off-ramps and at freeway ramp intersections.

If you have any questions, you may reach me at (213) 897-6696 and please refer to our record number 090324/CS.

Sincerely,

ELMER ALVAREZ
IGR/CEQA Program Manager
Office of Regional Planning

cc: Scott Morgan, State Clearinghouse

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, Division of Environmental Planning
100 South Main Street, Suite 100
LOS ANGELES, CA 90012-3606
PHONE (213) 897-9016
FAX (213) 897-0685
TTY (213) 897-4937

Flex your power!
Be Energy efficient!

May 11, 2009

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

Re: Comments to Regional Connector Transit Corridor Project

Dear Ms. Roybal Saltarelli,

Thank you for the opportunity to comment on the Scoping Packet for the above referenced project. The California Department of Transportation (Department), Division of Environmental Planning has the following comments for your consideration in the preparing the Environmental Impact Report / Environmental Impact Statement (EIR / EIS) for this project:

1. Considering expanding scoping to discuss the social, economic and environmental impacts of the project. Examine what potential environmental impacts should be evaluated to determine what environmental process, to be followed, and what level of analysis for each impact.

2. Recommend the scoping process address allocated assignments of the project and how the studies will be collected.

3. The affected environment of the project should be studied and address the resource impacts of the study area.

4. Discuss an outline of the possible timing of the study activities.

5. Identify what studies and experts would be need for the project.

If you have any questions regarding these comments, please do not hesitate to contact me or Brian Manor at 213-897-0704.

Sincerely,

Garrett Damrath
Senior Environmental Planner
Division of Environmental Planning
Caltrans-District 7

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

April 1, 2009

Ms. Delores Roybal Saltarelli
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
One Gateway Plaza
Los Angeles, CA 90012

Re: SCH#2009031043; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR); for the Regional Connector Transit Corridor Project; Los Angeles County, California

Dear Ms. Roybal Saltarelli:

The Native American Heritage Commission (NAHC) is the state 'trustee agency' pursuant to Public Resources Code §21070 designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS) for possible 'recorded sites' in locations where the development will or might occur.. Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ http://www.ohp.parks.ca.gov. The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ The Native American Heritage Commission (NAHC) performed:

* A Sacred Lands File (SLF) search of the project 'area of potential effect (APE)': The results: No known Native American Cultural Resources were identified within one-half mile of the 'area of potential effect' (APE).: However the NAHC SLF is not exhaustive and local tribal contacts should be consulted from the attached list and the there are Native American cultural resources in close proximity..

- The NAHC advises the use of Native American Monitors, also, when professional archaeologists or the equivalent are employed by project proponents, in order to ensure proper identification and care given cultural resources that may be discovered. The NAHC, FURTHER, recommends that contact be made with Native American Contacts on the attached list to get their input on potential IMPACT of the project (APE) on cultural resources.. In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s) or Native American individuals or elders.
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- Again, a culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.

- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

- CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contact
Los Angeles County
March 30, 2009

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C Gabrielino
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
, Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Felicia Sheerman, Chairperson
501 Santa Monica Blvd, # 500 Gabrielino
Santa Monica , CA 90401
(310) 587-2203
(310) 428-7720 - cell
(310) 587-2281
fsheerman1@GabrielinoTribe.

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
(828) 286-1262 -FAX
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino-Tongva Tribe
Bernie Acuna
501 Santa Monica Blvd, # 500 Gabrielino
Santa Monica , CA 90401
(310) 587-2203
(310) 428-7720 - cell
(310) 587-2281

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2009031043; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Regional Connector Transit Corridor; Los Angeles County, California.

CRA/LA
Building communities

Community Redevelopment Agency
of the CITY OF LOS ANGELES

354 South Spring Street / Suite 800
Los Angeles / California 90013-1258

T 213 977 1600 / F 213 977 1665
www.crala.org

DATE / May 11, 2009

FILE CODE /

Ms. Dolores Roybal-Saltarelli
Project Manager, Regional Transit Connector Study
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

RE: Comments on the Scoping of the DEIS/DEIR for the Regional Transit Connector Project

Dear Ms. Roybal-Saltarelli:

We would like to express our appreciation to the Metro staff and consultant team for the extensive outreach efforts that have been made during the environmental scoping phase of this project. In general, we recognize the need and benefit of this transportation improvement project as an important link in the regional public transit system that will make transit use more convenient and faster for passengers, which will further the collective goal of increasing transit ridership across the Greater Los Angeles region, reducing auto dependence and traffic congestion and improving air quality.

Staff from several City of Los Angeles departments, notably City Planning (LADCP), Transportation (LADOT), and Public Works (LADPW), as well as the Community Redevelopment Agency of the City of Los Angeles (CRA/LA), have reviewed the proposed scope and attended the public scoping meetings. Based on their comments along with the vision and goals adopted by the City through various planning documents, including the Central City and Central City North Community Plans, this letter summarizes the primary concerns that we believe should be given particular attention and emphasis in the DEIS and DEIR.

1. **Impact on the Long-Range Plans and Needs of the Entire Regional Transit System**

   Establishing an accurate and appropriate definition for a project has to be an over-arching concern for any environmental documentation. As stated in the Federal Register Notice of Preparation, the purpose of the project is "...to improve the mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line, and the Metro Expo Line." We very strongly support this intent; however, we believe the Regional Connector is only one good step in developing a regional light rail system that provides for a variety of travel options and improves mobility to and through downtown. We express a desire to work with Metro to discuss the future light rail transit connections and operations to and through downtown Los Angeles to help develop the system that will support the City of Los Angeles.

2. **Impact on Accessibility, Pedestrian Safety, Livability and Economic Vitality in Downtown Los Angeles**

While the DEIS/DEIR should consider both the at-grade and underground alternatives, operating the Regional Connector in a surface configuration would create excessive and unreasonable impacts with respect to obstruction of street (vehicular and pedestrian) traffic, safety and security of both vehicles and pedestrians, noise and vibration on fronting businesses and residents, visual intrusion and blight, as well as significantly diminishing community livability and economic development potentials over what would occur with a below-grade facility design. Thus, we believe that the City of Los Angeles would be more likely to support the construction of a below-grade light rail connector through Downtown that minimizes negative impacts to the community and maximizes the benefits of improved transit access to and from Downtown's increasingly vibrant neighborhood districts. We would expect the DEIS/DEIR to be thorough and diligent in appropriately evaluating the potential effects that construction and operation may have on accessibility, circulation, safety, the built environment, future development and economic growth, community livability and neighborhood identity.

3. **Station Placement and Design Issues to Consider**

The context of the built environment should be carefully considered in the placement and design of each new rail station and portal, and the City's existing land use plans and policies offer insight into the unique character of the communities that will be served by the project. General concepts to consider are listed below.

- Station location, design, and access issues, including consideration of multiple portal locations for each station (especially transfer stations), and the provision of transit amenities such as bicycle storage lockers, showers for bicyclists, public restrooms, taxi stands, Wi-Fi Internet access, and proximity to bus stops.
- Pedestrian accessibility and circulation in the vicinity of station sites, with particular emphasis on the following:
    - Ensuring connectivity between each station and the surrounding neighborhood;
    - Providing wayfinding signage to facilitate access to key destinations;
    - Incorporating pedestrian amenities such as bus shelters, landscaping, awnings or overhangs, and adequate lighting; and
    - Creating an identity and sense of place at each station by incorporating urban design best practices.
- Linkages to the multimodal transit network, including improvements at key transfer points.
- Ecologically sustainable design elements, such as solar panels, energy-efficient lighting, stormwater retention, water recycling, and drought-tolerant landscaping.

CRA/LA
Building communities

- Approaches to system and station design that maximize potential reductions in vehicle miles traveled (VMT) and greenhouse gas emissions.
- Opportunity sites for joint development that would help to integrate this new transportation system into our existing neighborhoods, reinforce the unique character of our vibrant mixed-use districts, and promote active streets that encourage the viability of ground floor retail and services.
- Impacts to historic structures.

We are also interested in collaborating on the refinement of station locations and ensuring that transit-supportive land use policies and surface transportation connectivity work to enhance the overall viability of the project. Though various planning documents, including the Central City and Central City North Community Plans, the City of Los Angeles has developed a set of principles that we believe should guide development of the Regional Connector project, and we request that Metro consider these principles, which are attached as Exhibit A, when studying the potential environmental impacts of the alignment and station options. Specific issues regarding the project's potential below-grade station locations in Downtown Los Angeles are discussed in greater detail in the attached Exhibit B.

The Metro Regional Connector Transit Corridor Project is a major transit investment that has the potential to enhance the viability of the regional transportation system, if not reinforce Downtown Los Angeles as the center of the City and the greater metropolitan area. The project will also help us to achieve mobility and sustainability goals for the region, providing key linkages between regional centers of employment and housing, and facilitating reduced dependence on the automobile. The City Planning Department along with CRA/LA and LADOT is currently engaging the Downtown community in developing a new Central City Community Plan that will reexamine land use policies and development regulations throughout the entire Regional Connector project area. We look forward to collaborating with you on both of these important projects, to better link transportation and land use policies that will promote a livable and sustainable Downtown.

Thank you for the opportunity to share our comments. We look forward to continue working closely with Metro's project team in bringing forth the very best result possible from these efforts.

Sincerely yours,

Cecilia V. Estolano
Chief Executive Officer

S. Gail Goldberg
Director
Los Angeles Department of City Planning

Rita L. Robinson
General Manager
Los Angeles Department of Transportation

Gary Lee Moore
City Engineer
Los Angeles Department of Public Works

cc: Congresswoman Lucille Roybal-Allard
Deputy Mayor Jaime de la Vega
Deputy Mayor Bud Ovrom
Councilmember Wendy Greuel, Chair, Transportation Committee
Councilmember Ed Reyes, Council District 1
Councilmember Jan Perry, Council District 9
Councilmember Jose Huizar, Council District 14
County Supervisor Gloria Molina, District 1
Ray Tellis, Los Angeles Metropolitan Team Leader, Federal Transit Administration
Doug Failing, Director, District 7, Caltrans
David Solow, CEO, Southern California Regional Rail Authority
Haripal S. Vir, Principal Transportation Engineer, LADOT
J. Russell Brown, President, Downtown Los Angeles Neighborhood Council
Kim Benjamin, President, Historic Cultural Neighborhood Council

EXHIBIT A

Principles that Should Guide Development of the Regional Connector Project

- It should be easy to use and have clearly identified points of access (stations, portals, etc).

- It should create opportunities to enhance neighborhood identity by providing urban amenities and incorporating urban design elements that reinforce the public realm and a sense of place.

- It should maximize ridership and strike a balance between the function of moving passengers through Downtown and conveniently getting people to Downtown destinations (as many of the trips will still terminate Downtown).

- The stations should not drive the alignment; the best alignment should be chosen.

- Existing roadways should be maintained for all users: autos, buses, pedestrians, cyclists, etc. Downtown streets should be complete streets, emphasizing a pedestrian priority.

- Downtown neighborhoods should be enhanced and reinforced by this project. The project should improve the sustainability of the district and not negatively affect the livability or economic vitality of Downtown and its distinct neighborhoods.

- Station area priorities are Bunker Hill, Civic Center, Historic Core and Little Tokyo.

- Station stops should be appropriately integrated into the land use and development patterns and street grid of their Downtown neighborhoods. Their design and placements should encourage Transit Oriented Development. Stations should include elements that ensure the safety and comfort of pedestrians and users, including lighting and communications.

- Consideration should be given to how the Regional Connector is going to interact with the proposed Downtown Urban Streetcar (currently proposed to connect South Park to Bunker Hill via Broadway).

- The new Downtown Street Standards should be utilized for the analysis of the traffic impacts of the possible alignments.

- The proposed project alternatives should not interfere with any project entitlements approved by the City or CRA/LA as part of a Development Agreement unless agreed to by the City.

EXHIBIT B

Specific Issues Regarding Existing and Potential Below-Grade Station Locations

- 7th Street/Metro Center (Existing)
  This station is a major transfer point in the Metro Rail system and is situated in the heart of the City's Financial District. Although three station portals exist on the north side of 7th Street, this station should be assessed for potential pedestrian circulation impacts brought by significant new ridership. Consideration should be given to coordinating future development with improved pedestrian access from the south side of 7th Street into an expanded light rail-subway transfer station. Although dominated by commercial office, retail, and visitor-oriented uses, the area around this station has seen a number of new residential units open in recent years, including in the building directly above the station, which provides even greater ridership potential with the provision of additional transit service and better connectivity.

- 4th/5th/Flower (Potential)
  This station would also be located in the heart of the City's Financial Core near the Central Library, and would provide improved access to high-rise office, residential, and hotel uses in the southern portion of the adjacent Bunker Hill district. The high intensity of development in the area is conducive to additional rail transit service, and a number of redevelopment opportunity sites exist in the vicinity that could further enhance the viability of new rail service. Specific attention needs to be paid to potential multiple portal locations to facilitate access to downtown destinations and minimize pedestrian/vehicular conflicts at high volume intersections.

- 2nd/Grand/Hope (Potential)
  This station would be located in Bunker Hill, a major regional destination that would benefit tremendously from improved rail transit access. Ideally, this station should be convenient to serve employment hubs in the vicinity, while also providing direct access to the numerous cultural facilities located at the adjacent Music Center complex. The station and portal locations should also be coordinated with the Grand Avenue Project, a multi-phase mixed-use development with commercial, residential, hotel, and other uses encompassing several city blocks in this area, to maximize ridership potential and reduce the need for excessive automobile parking.

- 2nd/Main/Los Angeles (Potential)
  As currently proposed, this station would be located at the crossroads of the Historic Core, Little Tokyo and Civic Center districts. However, consideration should be given to ensuring connectivity with the Downtown Streetcar at Broadway, which could be achieved with an expanded portal or by locating the station closer to Broadway. Several regional civic and cultural destinations are within close proximity to this location, including City Hall, the new Los Angeles Police Department headquarters, Caltrans District 7 headquarters, the Little Tokyo Branch Library, and the Los Angeles Times. There are also key underdeveloped sites along 2nd Street and on Broadway, Spring, and Main Streets that have the potential for new commercial and residential uses that would promote and link with a new rail portal. Appropriate integration of this station and the existing Civic Center Station serving the Red and Purple Lines should also be explored.

- Little Tokyo/Arts District (Under Construction)
  The soon-to-open Little Tokyo/Arts District station at 1st and Alameda Streets is surrounded by a vibrant mixture of residential, commercial, and industrial uses that will benefit from increased regional transit access. Although somewhat smaller in scale than other Downtown districts, Little Tokyo and the Arts District contain significant regional destinations such as the Japanese American National Museum and the Geffen Contemporary at the Museum of Contemporary Art (MOCA). Recent and future mixed-use development will support the local culture and heritage of these dynamic neighborhoods and create demand for additional transit service in the surrounding area.

  The current alignment for the Underground Emphasis alternative indicates the Regional Connector would have an at-grade crossing at 1st and Alameda Streets, with a new underpass for auto and truck traffic along Alameda as well as a new overhead pedestrian bridge structure. This proposed alignment and the configuration of the intersection would have particular concerns that need to be addressed in the DEIS/DEIR, including the following:

  Realizing Alameda as a "Complete Street"
  Alameda Street today is an intensively-used but badly neglected corridor that is serving increasing and increasingly diverse needs. While it will continue to be a vital arterial for industrial truck traffic, Alameda Street also now needs to become more supportive of evolving commercial, mixed-use and residential development occurring in and near Little Tokyo and the adjacent Arts District. To that end, Alameda Street needs not only to be fully rehabilitated, but it also needs to be reconfigured to better relate to adjoining development, vehicular access and pedestrian circulation. A design for how Alameda Street is to evolve has not yet been devised; however, it is essential that the Regional Connector's facilities fully respect this need and preserve the street's options for development.

  While it is essential to grade-separate the Regional Connector from Alameda Street's local and through traffic demands, the proposed underpass and its approaches will create a lot of barriers and broken connections in this area of Little Tokyo and the Arts District. Also, concrete retaining walls and bridge structures are likely to magnify the noise impacts from truck traffic on nearby residential blocks. A specific program of design mitigations should be identified to address these impacts if an alternate design is not to be pursued.

  Maintaining 1st Street Pedestrian Safety, Community Livability and Attractive Connections to the Little Tokyo/Arts District Station
  Pedestrian overpass connections are difficult to design well. The DEIS/DEIR should include: design requirements that mitigate compromising aspects, including excessive shade, shadow and massing; excessive loss of sightlines and orientation to the Little Tokyo/Arts District Station; diminishment of the pedestrian orientation around the Japanese American National Museum; potential user difficulties or discomfort in climbing stairs or ramps; potential user discomfort from excessively exposed or vulnerable walkway segments.

Please consider in your analysis the environmental impacts of maintaining the underground alignment with the light rail tunnel emerging after crossing under 1st Street up to a second parallel platform at the Little Tokyo/Arts District Station, as well as creating a short underground alignment going east (parallel to existing tracks) with a tunnel emerging prior to reaching the 1st Street Bridge, possibly at Garey or Vignes Streets. This would eliminate all additional transportation conflicts at the intersection of 1st and Alameda. This intersection is increasingly important because it links the Downtown area with the Eastside and the 6th Street Viaduct project will impact other intersections affecting east-west thoroughfares from Downtown to the Eastside once construction is underway

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

May 11, 2009

Ms. Dolores Roybal Saltarelli
Los Angeles County
Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

Re: Notice of Preparation for a draft EIR fro proposed Regional Connector Transit Corridor

Dear Ms. Saltarelli:

Thank you for providing us with a copy of your Notice of Preparation (NOP) for the Regional Connector Transit Corridor Draft Environmental Report. The California Public utilities Commission (CPUC or Commission) appreciates the opportunity to provide the following comments.

One of the proposed design alternatives involves an at-grade emphasized LRT alignment that would extend from the underground 7th/Metro Center Station. The alignment would rise above ground twice; once just north of 5th St to cross 3rd St at-grade, and again between Olive St and Hill St, along 2nd St. into a couplet configuration on Main St. and Los Angeles Ave. to Temple Blvd. This surface street alignment will create several at-grade rail crossings and expose the public to potential pedestrian-train and automobile-train conflicts. The Commission has adopted the Federal Railroad Administrations policy on reducing the number of at-grade crossings, and accordingly does not approve the construction of new at-grade crossings unless the applicant can provide substantial evidence that a grade separation is not practicable.

Other design scenarios include an underground emphasized LRT alignment with one single at-grade crossing at the intersection of 1st and Alameda Streets. Commission staff has concerns over the proposed at-grade crossing of 1st St and recommends grade separating the entire intersection of 1st and Alameda St. due to the high number vehicles and trains that would traverse the proposed Regional Connector at-grade crossing.

RCES favors the underground alternative over the street surface alternative, and ask for LACMTA to arrange additional meetings with the Commission's Rail Crossings Engineering Section to discuss relevant safety issues and to conduct a diagnostic review at the proposed crossing location.

Commission approval is required for construction of new at-grade crossings. RCES staff also requests that LACMTA provide RCES with a copy of relevant traffic impact studies for the intersections that will be impacted by construction of the Regional Connector.

We understand that this is a highly complex and challenging project with funding, design and environmental approval for the downtown Los Angeles area. It is imperative that the CPUC be involved with the details of this project from its inception in order to be informed and to be of greater assistance in the future.

The CPUC will need to provide applicable regulatory oversight for all phases of the project. This will require early consultation with not only LACMTA staff but contracted consultants as well in order to provide early consultation on all proposed design and engineering of the proposed project improvements on the corridor.

This will assist with the review of the environmental documents and final CEQA approval of the project by the CPUC, since we are a responsible agency under CEQA section 15381 with regard to this project and in complying with any and all General Order requirements as they apply to the Regional Connector project.

Thank you very much for the opportunity to review and comment on your NOP. Commission staff is available to meet with you and discuss our concerns.

If you have any questions, please contact me at (213) 576-7085 or sal@cpuc.ca.gov

Sincerely,

Sergio Licon
Utilities Engineer
Rail Crossings Engineering Section
Rail Transit and Crossings Branch

CC:

Jose D. Hernandez, LADOT

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

March 18, 2009

Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Dear Ms. Saltarelli:

This is in response to your request for comments on the Invitation to Participate in the Environmental Review Process for the Regional Connector Transit Corridor Project in the City and County of Los Angeles, California.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the City (Community Number 060137) and County (Community Number 065043) of Los Angeles, Maps revised September 26, 2008. Please note that the City and County of Los Angeles, California are participants in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The City of Los Angeles floodplain manager can be reached by calling Mark Pestrella, Assistant Deputy Director, Department of Public Works, at (626) 458-5100. The Los Angeles County floodplain manager can be reached by calling George De La O, Senior Civil Engineer, at (626) 458-7155.

If you have any questions or concerns, please do not hesitate to call Cynthia McKenzie of the Mitigation staff at (510) 627-7190.

Sincerely,

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:
Mark Pestrella, Assistant Deputy Director, Department of Public Works, City of Los Angeles
George De La O, Floodplain Manager, Senior Civil Engineer, Los Angeles County Department of Public Works
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources, Southern District
Cynthia McKenzie, Senior Floodplanner, CFM, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 10, 2009

Raymond Tellis
Federal Transit Administration
888 South Figueroa Street, Suite 1850
Los Angeles, CA 90017

Subject: Scoping Comments for the Regional Connector Transit Corridor Project, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, California

Dear Mr.Tellis:

The U.S. Environmental Protection Agency (EPA) has reviewed the Notice of Intent published in the Federal Register March 24, 2009, by the Federal Transit Administration (FTA) to prepare a Draft Environmental Impact Statement (DEIS) for the Regional Connector Transit Corridor, a proposal to provide a direct transit connection between the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) and Section 309 of the Clean Air Act.

EPA appreciates the opportunity to provide comments for the preparation of the DEIS for the Regional Connector Transit Corridor Project. We are supportive of this project as it has the potential to increase transit mode share and reduce air quality impacts from auto emissions in Los Angeles County, as well as provide time savings for existing transit riders. Our concerns, as described below, focus on how the DEIS will address impacts to (1) air quality, (2) integration with existing facilities, and (3) environmental justice communities and public involvement.

Air Quality

The proposed Regional Connector Transit Corridor Project is located in the South Coast Air Basin, which is classified as non-attainment for ozone and particulate matter (PM_{10} and $PM_{2.5}$), and should therefore be included in a current conforming transportation plan and transportation improvement program. In addition, while the project has the potential to reduce air quality impacts by providing additional transit service that could reduce automobile use, implementation of the project may result in impacts to air quality resulting from changes to traffic operations, parking, and local

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circulation. The DEIS should include a through analysis of these potential air quality impacts and identify opportunities to reduce emissions. The TSM alternative (rail station connectivity achieved via shuttle buses) should identify opportunities to reduce unnecessary idling, improved emission control device installation, and replacement of older buses, or purchase of new vehicles with low-emission diesel technology or alternative fuels.

The DEIS should also address potential air quality impacts during the construction period. EPA recommends that the following mitigation measures be included in the DEIS to reduce construction emissions:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification, where applicable, levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, use equipment meeting Tier 3 or greater engine standards and commit to the best available emissions control technology. Tier 3 engine standards are currently available; for some equipment Tier 4 is available for the 2009-model year and should be used for project construction equipment to the maximum extent feasible. Lacking availability of non-road construction equipment that meets Tier 3 or greater engine standards, commit to using the best available emissions control technologies on all equipment.

- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of particulate matter and other pollutants at the construction site.

Administrative controls:

- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Meet EPA diesel fuel requirements for off-road and on-highway, and where appropriate use alternative fuels such as natural gas and electric.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

Integration with Existing Facilities

The DEIS should explore the extent to which proposed alternatives will integrate with existing transportation facilities. The document should discuss how the project will impact existing vehicle lanes, bicycle lanes and pedestrian paths due to project construction or operation. While the *At-Grade Emphasis LRT Alternative* and *Underground Emphasis LRT Alternative* are intended to provide a seamless connection between LACMTA light rail lines, all potential alternatives should identify the opportunities available to better connect all modes of transportation, including heavy rail, light rail, bus rapid transit, standard bus service, and pedestrian facilities. Measures to minimize or mitigate impacts to vehicle lanes, bicycle lanes, and pedestrian paths should be addressed in the DEIS.

Environmental Justice and Community Involvement

The DEIS should identify how the proposed alternatives may affect the mobility of low income or minority populations in the surrounding areas and provide appropriate mitigation measures for any anticipated adverse impacts. Executive Order 12898

addresses Environmental Justice in minority and low-income populations, and the Council on Environmental Quality has developed guidance concerning how to address Environmental Justice in the environmental review process (http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf). Future environmental justice analyses for this project and the DEIS should include a description of the area of potential impact used for the analysis and provide the source of the demographic information. The DEIS should identify whether the proposed alternatives may disproportionately and adversely affect low-income or minority populations in the surrounding area and should provide appropriate mitigation measures for any adverse impacts.

Community involvement activities for the Regional Connector Transit Corridor project should include opportunities for incorporating public input to promote context sensitive design, especially in Environmental Justice communities.

We appreciate the opportunity to provide comments on the preparation of the DEIS, and look forward to continued participation in this process as more information becomes available. When the DEIS is released for public review, please send two copies to the address above (mail code CED-2). If you have any questions, please contact me at 415-947-3554 or mulvihill.carolyn@epa.gov.

Sincerely,

Carolyn Mulvihill

Carolyn Mulvihill
Environmental Review Office

cc: Dolores Roybal Saltarelli, LACMTA
Ray Sukys, Federal Transit Administration (Region 9)

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX GG

CUMULATIVE IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Cumulative Impacts
Technical Memorandum

March 25, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

This technical memorandum was prepared by:

CDM
523 West Sixth Street
Suite 400
Los Angeles, CA 90014

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ACRONYMS

APE	Area of Potential Effects
BTU	British thermal units
Caltrans	California Department of Transportation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIP	Capitol Improvement Plans
CO	Carbon monoxide
CRA	Community Redevelopment Agency
DCBID	Los Angeles Downtown Center Business Improvement District
EIR	Environmental Impact Report
GHG	Greenhouse Gases
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NEPA	National Environmental Policy Act
NOx	Oxides of nitrogen
PM2.5	Particulate matter less than 2.5 microns in aerodynamic diameter
RCPG	Regional Comprehensive Plan and Guide

RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
TSM	Transportation System Management
VMT	Vehicle Miles Traveled
VOC	Volatile organic compounds

1.0 SUMMARY

This technical memorandum summarizes the potential cumulative impacts that could result from the Regional Connector Transit Corridor project in combination with the identified past, present, and reasonably foreseeable projects considered. Cumulative impacts are analyzed in more detail in each of the technical memoranda prepared for each resource area. For more information about potential cumulative impacts please see the resource specific technical memoranda. The alternatives analyzed include the No Build Alternative, the Transportation System Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative –Little Tokyo Variation 1, and the Fully Underground LRT Alternative –Little Tokyo Variation 2.

The No Build Alternative would not involve any construction and, therefore, would not result in any cumulative impacts, with the exception of transit systems and environmental justice impacts. Cumulative transit impacts associated with the No Build Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not provide the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would disproportionately affect transit-dependent users who also tend to be environmental justice populations based on income and other factors. For these transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient resulting in a cumulative adverse environmental justice impact from the No Build Alternative. There would be a negative transit impact upon those that rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in an adverse cumulative transit impact. The No Build Alternative would result in cumulative disproportionate adverse impacts related to transit service equity.

With implementation of mitigation, the TSM Alternative would not contribute to any cumulative impacts, with the exception of transit systems and environmental justice. Cumulative transit impacts associated with the TSM Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not provide the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would disproportionately affect transit-dependent users who tend to be environmental justice populations based on income and other factors. For these transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient resulting in a cumulative adverse environmental justice impact from the TSM Alternative. There would be a negative transit impact upon those that rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in an adverse cumulative transit impact. The TSM Alternative would result in cumulative disproportionate adverse impacts related to transit service equity.

Even with implementation of possible mitigation measures, construction of the At-Grade Emphasis LRT Alternative could result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Construction and operation of the At-Grade Emphasis LRT Alternative would result in a considerable contribution to adverse cumulative impacts at 11 intersections during the AM peak hour and 15 intersections during the PM peak hour. With regards to permanent displacements, operation of the At-Grade Emphasis LRT Alternative would partially offset potential impacts due to loss of parking.

Although regional construction emissions under the At-Grade Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional vehicle miles traveled (VMT), which would result in a beneficial impact to air quality and outweigh the temporary construction impacts. Cumulative impacts to all other environmental resources would be less than significant.

With incorporation of possible mitigation measures, construction of the Underground Emphasis LRT Alternative could still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Implementation of the Underground Emphasis LRT Alternative would result in a considerable contribution to significant cumulative impacts at two intersections (Alameda Street/2nd Street and Flower Street/4th Street) during the AM peak hour and three intersections (Judge John Aiso Street/1st Street; Alameda Street/2nd Street; and Judge John Aiso Street/Temple Street) during the PM peak hour. With regard to permanent displacements, operation of the Underground Emphasis LRT Alternative would partially offset potential impacts due to loss of parking.

Although regional construction emissions under the Underground Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary construction impacts. Cumulative impacts to all other environmental resources would be less than significant.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in similar cumulative impacts. With incorporation of possible mitigation measures, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 could still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Implementation of either of these alternatives would result in a cumulatively considerable impact at one intersection (Flower Street/ 4th Street) during the AM peak hour.

Although regional construction emissions under the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be significant and unavoidable, operation of the either alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary significant construction impacts. The Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not contribute to cumulative impacts with respect to all other environmental resources.

2.0 INTRODUCTION

This technical memorandum summarizes potential cumulative impacts that could result from the Regional Connector Transit Corridor project in combination with identified past, present, and reasonably foreseeable projects. Please see the resource specific technical memoranda for a more detailed analysis of cumulative impacts for each resource.

The National Environmental Policy Act (NEPA) provides for consideration of three types or categories of effect: direct, indirect, and cumulative (40 C.F.R. §1508.25). Direct effects are those caused directly by the project activities. Indirect effects are caused by project activities that occur later in time, at some distance from the project, and are in the chain of cause-and-effect relationships.

According to Section 15130 of the California Environmental Quality Act (CEQA) Guidelines, an environmental impact report (EIR) shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. If a project's incremental effect is not cumulatively considerable, the effect is not considered significant.

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative effects include both direct and indirect effects in combination with the past and reasonably foreseeable future actions of other projects and entities. The cumulative impact is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable projects. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time, regardless of the agency or person undertaking the project.

If there are no direct or indirect effects on a particular resource, then there cannot be any cumulative effects on that resource from the project and that discipline will not be discussed further. Where an alternative results in a considerable contribution to a cumulative impact, mitigation measures have been identified to reduce the project's contribution to the cumulative impact.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 NEPA Guidance

An analysis of cumulative impacts is required by NEPA, as defined in 40 Code of Federal Regulations (CFR) 1508.7. The NEPA analysis of cumulative impacts follows the guidance of the Council of Environmental Quality's (CEQ) 1997 document, *Considering Cumulative Effects Under the National Environmental Policy Act.* In accordance with this guidance, the significance of impacts is evaluated based on context and intensity. Considerations of context and intensity also include a discussion of the severity of the impacts and the likelihood of their occurrence.

The standards of significance for cumulative impacts depend on "the type of resource being analyzed, the condition of the resource, and the importance of the resource as an issue (as identified through scoping)" (CEQ 1997, p.45). Therefore, the standards of significance used for cumulative impacts are discipline-specific and may follow the same standards of significance established for the direct and indirect impacts of the project on each resource area. For some resources, limited details about other projects may prevent analysis from reaching the level of precision implied in the standards of significance for the direct and indirect impacts.

3.2 CEQA Guidance

In accordance with CEQA, a significant adverse cumulative impact would occur if an alternative would have environmental effects that are individually limited, but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects or expected growth.

The standards for "significant" or "cumulatively considerable" are based on the established significance thresholds for each resource area. However, as noted with regard to NEPA, the analysis level achievable for the cumulative impact evaluation may not provide sufficient detail for comparison to the exact standards of significance used for the project alone. The *Los Angeles CEQA Thresholds Guide* provides some guidance for the cumulative analysis for some resource areas, but does not contain specific standards of significance for each resource area with regard to cumulative impacts.

Determining whether a cumulative impact is "considerable" should also consider the effect of mitigation measures in reducing the effect on a resource. Compliance with previously approved plans or mitigation programs may also be a guide to determining that an effect is not significant. Depending on the discipline area, demonstrating that the project is included in a regional plan or projection may be a measure of whether the project is contributing

cumulative effects. Regional plans developed by the Southern California Association of Governments (SCAG) such as the Regional Transportation Plan (RTP), the Regional Comprehensive Plan and Guide (RCPG), or the Regional Transportation Improvement Program (RTIP)may provide appropriate thresholds or mitigation measures for particular project-related effects.

3.3 Area of Potential Impact

The cumulative context includes the geographic area, timeframe, and/or type of projects that would contribute to the potential cumulative effect. This context differs for each discipline. Each discipline identifies a relevant geographic area for evaluation for direct, indirect, and cumulative impacts. The geographic range considered for the cumulative analysis can vary based on the resource area.

For example, the geographic range over which air quality impacts would occur would not necessarily be the same as the geographic range considered for traffic impacts. In addition, for some disciplines the scope of analysis for cumulative impacts is based on a list of reasonably foreseeable related projects while for others it is be based on general trends in demographics or other regional forecasts. The methodology section in the technical memorandum for each resource area describes the basis for analysis of direct, indirect and cumulative impacts.

3.4 Methodology

The cumulative impacts analysis considered long-term effects of the project; those impacts which may not be apparent in the near-term, but which may evolve into beneficial or adverse impacts in the long-term. Specifically, the cumulative analysis for each resource area considered impacts related to general growth projected for the area. The regional plans for transportation and land use were consulted for the planned future conditions.

According to CEQA Guidelines, the discussion of cumulative impacts should reflect the severity of the impacts, as well as the likelihood of their occurrence. However, the evaluation need not be as detailed as the discussion of environmental impacts attributable to the proposed project alone. Additionally, the discussion should be guided by the standards of practicality and reasonableness.

Beneficial impacts are also considered in this analysis of cumulative impacts. Beneficial impacts could be associated with increased ridership and expanded transit service resulting from implementation of the proposed project in the context of reasonably foreseeable projects and conditions.

There are several steps involved in analyzing cumulative impacts. The initial steps involve analyzing direct and indirect effects, followed by the application of those results to cumulative

effects. These steps, which were followed in the technical memorandum for each resource, are generally outlined below:

- Establish the geographic scope for the analysis. The geographic scope is unique to each discipline and used to analyze project-level and cumulative impacts (documented in the technical memorandum for each resource as part of the methodology for analyzing impacts).
- Establish the time frame for the analysis; important project time frames are defined in Section 3.4.1.
- Characterize the thresholds of significance that are relevant to the resources, ecosystems, and communities of concern. The significance thresholds used to analyze project-level and cumulative impacts are documented in the technical memorandum for each resource as part of the methodology for analyzing impacts for each discipline.
- Identify the effects associated with the proposed action (done as part of the analysis of direct and indirect impacts in the technical memorandum for each resource). If there are no direct or indirect effects of the project on a resource or discipline area then there cannot be any cumulative impacts.
- Identify other actions affecting the resources, ecosystems, and communities of concern. Past, present, and future reasonably foreseeable related projects assumed for the Regional Connector Transit Corridor project cumulative impacts analysis are identified in Section 4.0.
- Define the baseline existing conditions for the resources, ecosystems, and communities. This step is documented in the technical memorandum for each resource as part of the affected environment section and in the description of the No Build Alternative baseline year, 2035 condition.
- Identify the important cause and effect relationships between human activities and resources, ecosystems, and communities. This step is documented in the technical memorandum for each resource as part of the potential effects of each alternative.
- Determine the magnitude and significance of cumulative effects. Significance determinations are related back to the background laid in the methodology section and the thresholds of significance that are relevant to each resource.
- Identify potential mitigation measures for potential effects on each environmental resource. Potential mitigation measures could include measures that would avoid, minimize, or mitigate cumulative impacts as well as direct and indirect impacts.

3.4.1 Project Time Frames

Construction Period: 2014 -2019

The construction period is assumed to extend from 2014 to 2019. A worst-case (i.e. maximum potential impact) scenario is assumed for each discipline. For example, it is assumed that all other related projects for which there is no current construction schedule will be under construction during the project construction period.

Year of Opening: 2019

During 2019, any potential effects from operation of the system would begin to be seen. The planning horizon for the project is 2035.

Project Baseline Year: 2035

The future year 2035 is the baseline year for assumptions regarding the No Build alternative.

4.0 AFFECTED ENVIRONMENT

4.1 Current and Reasonably Foreseeable Related Actions

There are two ways to address the question of what is reasonably foreseeable within the project area. The first is to evaluate the project effects in combination with expected trends in population, employment, land use, and transportation. The second method is to generally review a list of projected projects within the project area that are expected to be under construction or in operation during the same time frames as the proposed project. The most appropriate method may vary by discipline.

Forecasts for elements such as population, employment, land use, air quality, and transportation from regional plans were used in the analysis. Regional plans prepared by SCAG and general plans prepared by the City and County of Los Angeles and other nearby cities provided information on trends and forecasts relevant to the impact analysis for specific disciplines.

The following tables identify projects within the general project area that are either anticipated to be completed prior to start of construction in 2014 or which may be under construction during this project's proposed construction period of 2014 to 2019. There are several subcategories identified, including major renovations, new construction, transportation, and utility projects. The locations of the new construction projects are also indentified in Figures 4-1 through 4-3.

The project lists were developed from information available from the Los Angeles Downtown Center Business Improvement District (DCBID) fourth quarter 2008 project database and the utility district capital improvement plans (CIP). The Community Redevelopment Agency of Los Angeles (CRA) also maintains lists of potential projects. However, it would appear that the projects listed in the DCBID database better meet the definition of "reasonably foreseeable". Many of these potential projects are only in the conceptual planning stages and the timing of construction or operations are unknown. Projects with no reported completion date have been compiled in the tables of projects assumed to be under construction or completed between 2014 and 2019 as a worst-case scenario.

4.1.1 Projects Anticipated to be Completed Prior to 2014

Many of the projects identified in Tables 4-1 and 4-2 are currently under construction and have identified completion dates prior to 2014. These lists may also include some projects which have recently been completed. The locations of related projects are illustrated in Figure 4-1.

Table 4-1. Major Renovation Projects Anticipated to be Completed Prior to 2014[a]					
Number	Project Name	Address[a]	Land Use	Units	Completion
CR1	Rowan Building Lofts	460 S. Spring Street	Residential	206	2009 Q4
CR2	Great Republic Lofts	756 S. Spring Street	Residential	72	2009 Q1
CR3	Metropolitan Lofts	315 W. 5th Street	Residential	84	2009 Q1
CR4	SB Spring	650 S. Spring Street/111 W. 7th Street	Residential	195	2009 Q1
CR5	El Dorado	416 S. Spring Street	Residential	65	2009 Q4
CR6	SB Tower	600 S. Spring Street	Residential	250	2009 Q2
CR7	Rosslyn Lofts	116 W. 5th Street	Residential	297	2009 Q4
CR8	308 E. Ninth St.	308 E. 9th Street	Residential	38	2009 Q1
CR9	Broadway Exchange Building	219 W. 7th Street/660 Broadway	Residential	68	2009 Q1
CR10	Factory Place Arts Complex	1330 Factory Place	Residential	63	2009 Q1
CR11	655 Hope	655 S. Hope Street	Residential	80	2009 Q3
CR12	Barn Lofts	940 E. 2nd Street	Residential	39	2009 Q3

[a] *All projects are located within the City of Los Angeles.*

Transportation

The following transportation capital improvements within the project area are currently identified as funded under Metro's 2009 Long Range Transportation Plan and SCAG's 2008 RTIP. The projects listed in this section are anticipated to be completed prior to 2014 and are shown in Figure 4-2.

- Metro Gold Line to East Los Angeles: This 6-mile light rail extension of the Metro Gold Line from its current southern terminus at Union Station eastward to East Los Angeles opened in 2009. From Union Station, the tracks cross over the Santa Ana Freeway (US 101) and veer west toward Alameda Street. The tracks then follow along the east side of Alameda Street and come down to grade at the intersection of Temple and Alameda Streets. After crossing Temple Street at-grade, the tracks reach the Little Tokyo/Arts District Station on the northeast corner of 1st and Alameda Streets. The tracks then turn eastward on 1st Street and continue to East Los Angeles. With this extension, the Metro Gold Line will provide service from East Los Angeles to Pasadena.

- Eastside Four Quadrant Gate Project: This project, sponsored by Metro, would install rail crossing gates at at-grade intersections located along the portion of the Metro Gold Line to East Los Angeles. This project would include some intersections located along Alameda and 1st Streets in Little Tokyo.

- Metro Expo Line: This 9-mile light rail line will extend from the 7th Street/Metro Center Station to Culver City and is expected to be open in 2010. It will share the boarding platforms at the 7th Street/Metro Center and Pico Stations and the tracks between 7th Street/Metro Center Station and the intersection of Flower Street and Washington Boulevard with the Metro Blue Line.

In addition to the projects listed above, the Metro Gold Line from Pasadena to Azusa and the Metro Expo Line from Culver City to Santa Monica are expected to be completed prior to 2014. These projects are outside of the project area and may only present potential cumulative impacts for operational considerations in a few disciplines. Some cumulative impacts may be beneficial depending upon the alternative.

Utility Projects

The City of Los Angeles maintains an extensive project list of public works projects. One utility project has been identified for construction prior to year 2014. This related project involves the development of District Cooling System proposed by the City of Los Angeles, Department of Water and Power. The District Cooling System would provide air conditioning to office buildings in downtown. The project involves a cooling plant, which would be constructed near 1st Street and Beaudry Avenue with distribution lines located in 1st Street from the cooling plant to San Pedro Street. The projected buildout year for this related project is 2014. Given that the project involves operation of a district cooling system with trunk lines in 1st Street, it is unlikely that it would change the existing baseline conditions. No other projects are planned before 2014 within the project area that would change the existing baseline conditions. Most of the planned projects within the City are related to ongoing maintenance or replacement in-kind of existing infrastructure.

Table 4-2. New Construction Projects Anticipated to be Complete Prior to 2014					
Number	Project Name	Address[a]	Land Use	Units	Completion
CC1	717 Ninth	845 S. Flower Street	Residential	214	2009 Q3
CC2	The Medallion	334 S. Main Street	Mixed Use	200	2009 Q4
CC3	Concerto	900 Figueroa Street	Mixed Use	629	2009 Q3
CC4	Sakura Crossing	235 S. San Pedro Street	Mixed Use	230	2009 Q2
CC5	Hewitt-First Lofts	120-130 S. Hewitt Street	Residential	33	2009 Q3
CC6	LA Live	777 W. Chick Hearn Court	Mixed Use	224	2010 Q1
CC7	The Orsini (Phase III)	867 W. Cesar E Chavez Avenue	Residential	210	2010 Q3
CC8	Alameda and Fourth Condos	4th & Alameda Street	Residential	52	2011 Q1
CC9	Hanjin Group	7th and Figueroa	Mixed Use	unknown	2014

4.1.2 Projects Potentially Under Construction 2014 to 2019

Tables 4-3, 4-4, and 4-5 show projects which are currently in some stage of conceptual planning, but which do not have a defined schedule. Given the uncertainties of project development compounded by the current economic conditions, the probability that these projects will occur is unknown. It may be reasonable to assume that this compilation of projects represents a worst case condition for the construction period. The locations of these related projects are shown in Figure 4-3.

Table 4-3. Institutional and Public Facility Projects Expected to be Completed by 2014[a]			
Number	**Project Name**	**Address[a]**	**Land Use**
CC10	Police Headquarters Building	1st Street between Main and Spring	Institution
CC11	Police Headquarters Vehicle Maintenance Facility	Main Street between 2nd and 3rd Streets	Institution
CC12	Metropolitan Detention Center	Temple & Los Angeles Street	Institution

[a] *All projects are located within the City of Los Angeles.*

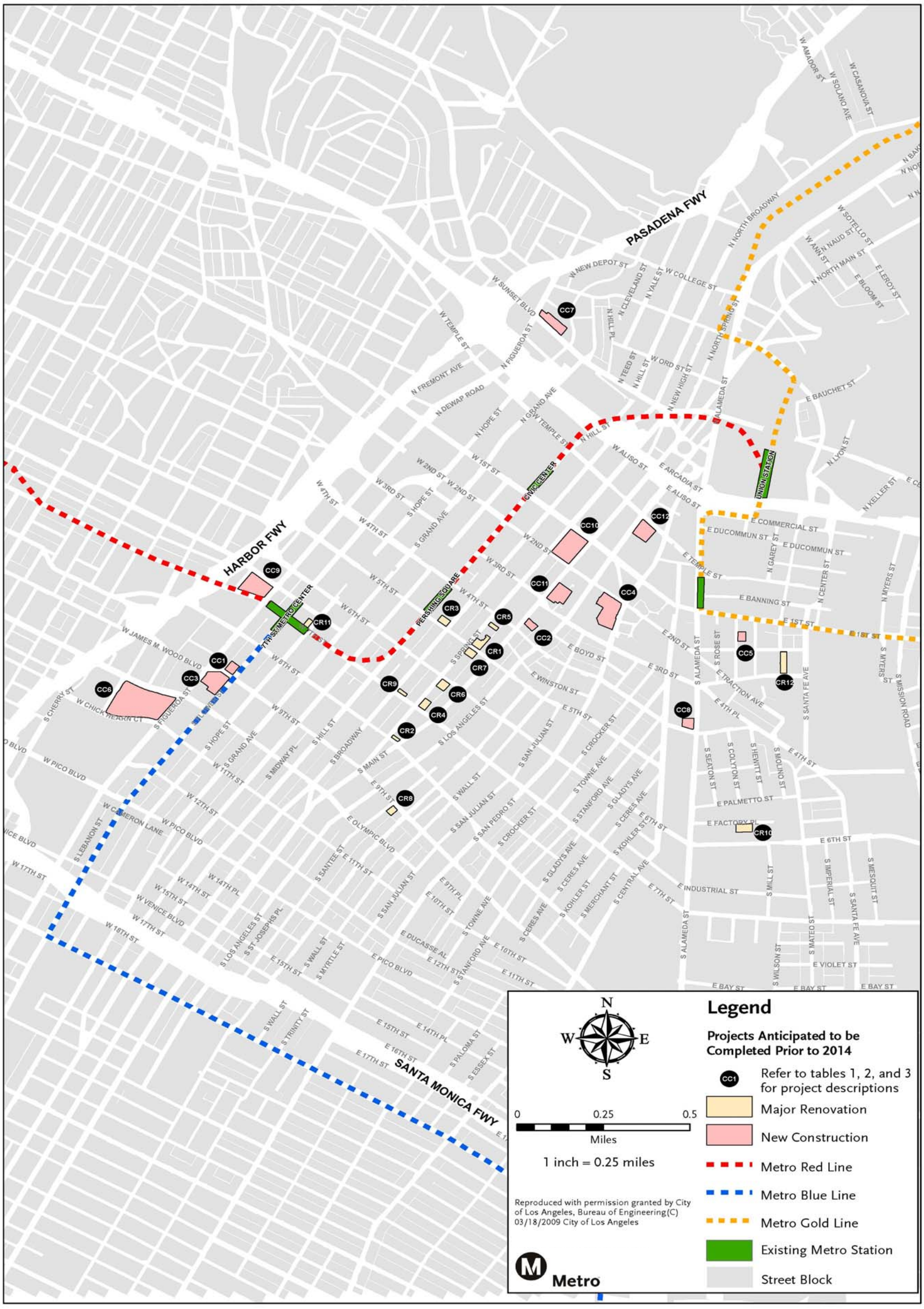

Figure 4-1. Projects Anticipated to be Completed Prior to 2014

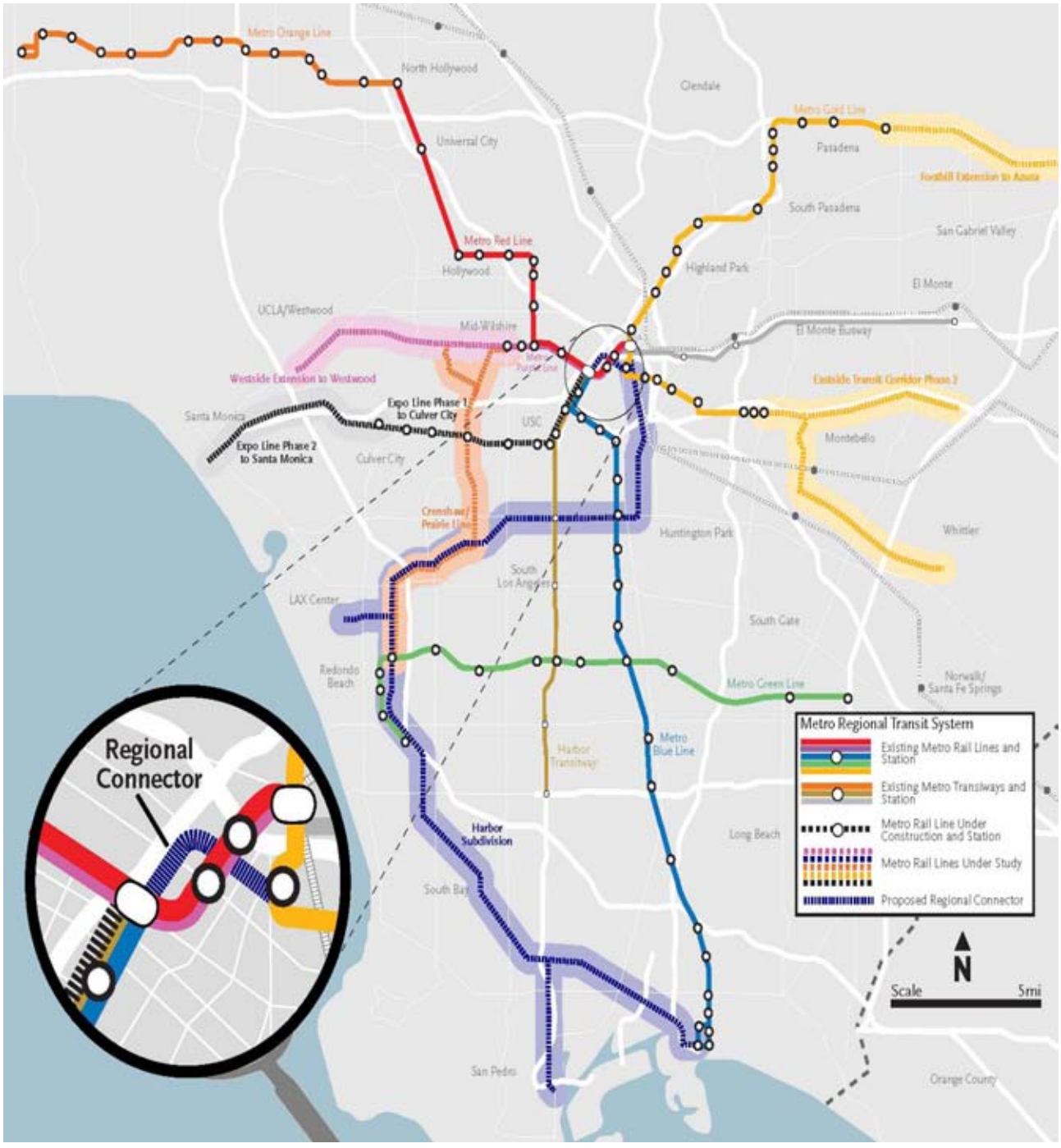

Figure 4-2. Year 2035 Rail Transit and Bus Rapid Transit Projects

Major Renovations

Projects located within the project area that propose to convert offices to residential housing and/or which involve a major renovation of an existing structure include:

Table 4-4: Major Renovation Projects Potentially Under Construction 2014-2019[a]

Number	Project Name	Street Address[a]	Land Use	Units
R1	Chester Williams Building	5th Street & Broadway	Residential	82
R2	Cosavings Building	315 W. 9th Street	Residential	98
R3	Former Beacon Storage Building	350 S. Alameda Street	Residential	59
R4	Giannini Place	649 S. Olive Street	Residential	100
R5	Gill Lofts	752-756 S. Los Angeles	Residential	9
R6	Herald Examiner	1111 S. Broadway	Mixed Use	587
R7	Mercantile Arcade Building	541 S. Broadway	Residential	140
R8	Chinatown Lofts	Not Mapped	Mixed Use	318

[a] *All projects are located within the City of Los Angeles.*

New Construction

Figure 4-3 provides a map of the location of new potential construction projects in the project area. New construction encompasses building new structures on vacant lots, as well as any demolition of older structures needed to clear the lots for construction.

Table 4-5: New Residential and Mixed Use Construction Projected For 2014-2019[a]

Number	Project Name	Street Address[a]	Land Use	Units
C1	611 Place	611 W. 6th Street	Mixed Use	402
C2	751 S. Spring Street	751 S. Spring Street	Residential	257
C3	808 N Spring Street	808 N Spring Street	Residential	123
C4	808 S. Olive Street	808 S. Olive Street	Residential	

Table 4-5: New Residential and Mixed Use Construction Projected For 2014-2019[a]				
Number	**Project Name**	**Street Address[a]**	**Land Use**	**Units**
C5	1027 Wilshire	1027 Wilshire Blvd.	Residential	402
C6	1133 S. Hope Street	1133 S. Hope Street	Residential	159
C7	1150 Grand	1150 Grand Avenue	Residential	374
C8	1340 S. Figueroa Street	1340 S. Figueroa Street	Mixed Use	
C9	1500 Figueroa	1500 S. Figueroa Street	Mixed Use	195
C10	AMP Lofts	695 S. Santa Fe Street	Mixed Use	180
C11	BC Plaza Lofts	711 N. Broadway	Residential	53
C12	Block 8	200 S. Los Angeles Street		510
C13	Blossom Plaza	900 N. Broadway	Mixed Use	262
C14	Capitol Milling Building	1231 N. Spring Street	Mixed Use	40
C15	Chinatown Gateway Plaza	617 N. Broadway	Mixed Use	280
C16	City Front Place	530 E. Washington Blvd.	Residential	136
C17	Glass Tower	1050 S. Grand Avenue	Residential	128
C18	Hai Wei	871 Figueroa Terrace	Residential	102
C19	Holland Partners Project	Not Mapped	Residential	360
C20	Industrial Lofts	1800 E Industrial Street	Residential	36
C21	L.A. Central	11th & Figueroa Street	Mixed Use	860
C22	L.A. Lofts	1024 S. Hope Street	Residential	250
C23	Lucia Tower	Grand Ave & Cesar Chavez	Residential	200
C24	Matsu	2nd & Los Angeles Street	Residential	

Table 4-5: New Residential and Mixed Use Construction Projected For 2014-2019[a]				
Number	**Project Name**	**Street Address[a]**	**Land Use**	**Units**
C25	McGregor Company Tower	Not Mapped	Mixed Use	123
C26	Metropolis Phase I	831 Francisco Street	Mixed Use	351
C27	Metropolis Phase II	831 Francisco Street	Mixed Use	388
C28	Metropolis Phase III	831 Francisco Street	Mixed Use	88
C29	Nikkei Center	1st & Alameda Street	Mixed Use	390
C30	Olive Street Lofts	1103 S. Olive Street	Residential	105
C31	Olympic	Olympic & Grand	Residential	150
C32	One Santa Fe	230 S. Santa Fe Avenue	Mixed Use	440
C33	Opus	718 S. Grand Avenue	Residential	875
C34	Pacific Exchange	233 Beaudry Avenue	Residential	850
C35	Park Fifth	5th between Hill & Olive	Mixed Use	790
C36	Piero II	1052 W 6th Street	Mixed Use	340
C37	Renato Apartments	527-531 S. San Julian Street	Residential	123
C38	Residences @ Bixel	1110 Ingraham Street	Mixed Use	334
C39	Seven West	1401 W. 7th Street	Residential	62
C40	Shy Barry Tower II	Main & 6th Street	Residential	700
C41	South Village	8th & Hope Street	Residential	225
C42	South Village- Park Tower	9th & Hope Street	Residential	300
C43	The Grand Phase I (Parcel Q)	121 S. Olive Street	Mixed Use	500

Table 4-5: New Residential and Mixed Use Construction Projected For 2014-2019[a]				
Number	**Project Name**	**Street Address[a]**	**Land Use**	**Units**
C44	The Grand Phase II (Parcel L)	220 S. Hope Street	Mixed Use	720
C45	The Grand Phase II (Parcel M2)	236 S. Hope Street	Mixed Use	720
C46	The Grand Phase III (Parcel W2)	440 W 1st Street	Mixed Use	720
C47	The Yards	875 E. Traction Avenue	Residential	400
C48	Ullman Tower I	Broadway between 8th & 9th Streets	Residential	320
C49	Ullman Tower II	Broadway between 9th Street & Olympic Blvd.	Residential	195
C50	Vibiana Phase II	114 E. 2nd Street	Mixed Use	300
C51	Zen	250 S. Hill Street	Residential	302

[a] *All projects are located within the City of Los Angeles.*

Table 4-6: New Institutional and Public Facility Construction Projected For 2014-2019[a]			
Number	**Project Name**	**Street Address[a]**	**Land Use**
C52	Children's Museum and Art Park	Temple & Judge Aiso Street	Public
C53	Federal Courthouse	1st Street & Broadway	Institution
C54	Proposed Civic Park	Main Street to Grand Avenue	Public

[a] *All projects are located within the City of Los Angeles.*

Transportation

The following transportation capital improvements within the project area are currently identified as funded under Metro's 2009 Long Range Transportation Plan and the Southern California Association of Governments' (SCAG) 2008 Regional Transportation Improvement Program. In addition to the projects listed below, the Metro Crenshaw Line and the Metro Purple Line from Wilshire/Western to Westwood will be under construction, although they are located well outside of the project area and are not likely to present construction-related cumulative impacts.

- Congestion Reduction Demonstration Program: This program will convert existing high-occupancy vehicle (HOV or carpool) lanes to high-occupancy toll (HOT) lanes, where solo drivers could pay a toll to use the lanes. Several stretches of Los Angeles County freeway HOV lanes have been identified for this pilot program, including the El Monte Busway, which runs parallel to the Santa Ana (US 101) and San Bernardino (I-10) Freeways from Alameda Street to El Monte.

- SR 110 Auxiliary Lanes: This project would reconfigure ramp structures and construct northbound and southbound auxiliary lanes on the Harbor Freeway (SR 110) between 8th Street and the Santa Monica Freeway (I-10).

- Angels Flight Railway Rehabilitation: This project would involve an easement between Hill and Olive Streets and 3rd and 4th Streets for the construction of a new propulsion system. The rehabilitation will allow for service along the currently inactive rail line to be restored. The Angels Flight is a short funicular railway that travels the length of one city block up the side of Bunker Hill.

- Eastside Light Rail Pedestrian Linkages: This project, sponsored by the City of Los Angeles, would improve pedestrian access to the Metro Gold Line to East Los Angeles stations, including the Little Tokyo/Arts District Station at 1st and Alameda Streets.

- Fashion District Streetscape Phase II: This project would provide streetscape and sidewalk enhancements to facilitate increased pedestrian activity between the Fashion District and the 7th Street transit corridor. The Fashion District is roughly bounded by 7th Street, Main Street, San Pedro Street, and the Santa Monica Freeway (I-10).

- Downtown Los Angeles Alternative Green Transit Modes Trial Program: This program would offer shared-ride bicycles and neighborhood electric vehicles as an alternative to existing DASH shuttle services for the purpose of accessing City Hall. City Hall is located within the block bounded by 1st, Spring, Temple, and Main Streets.

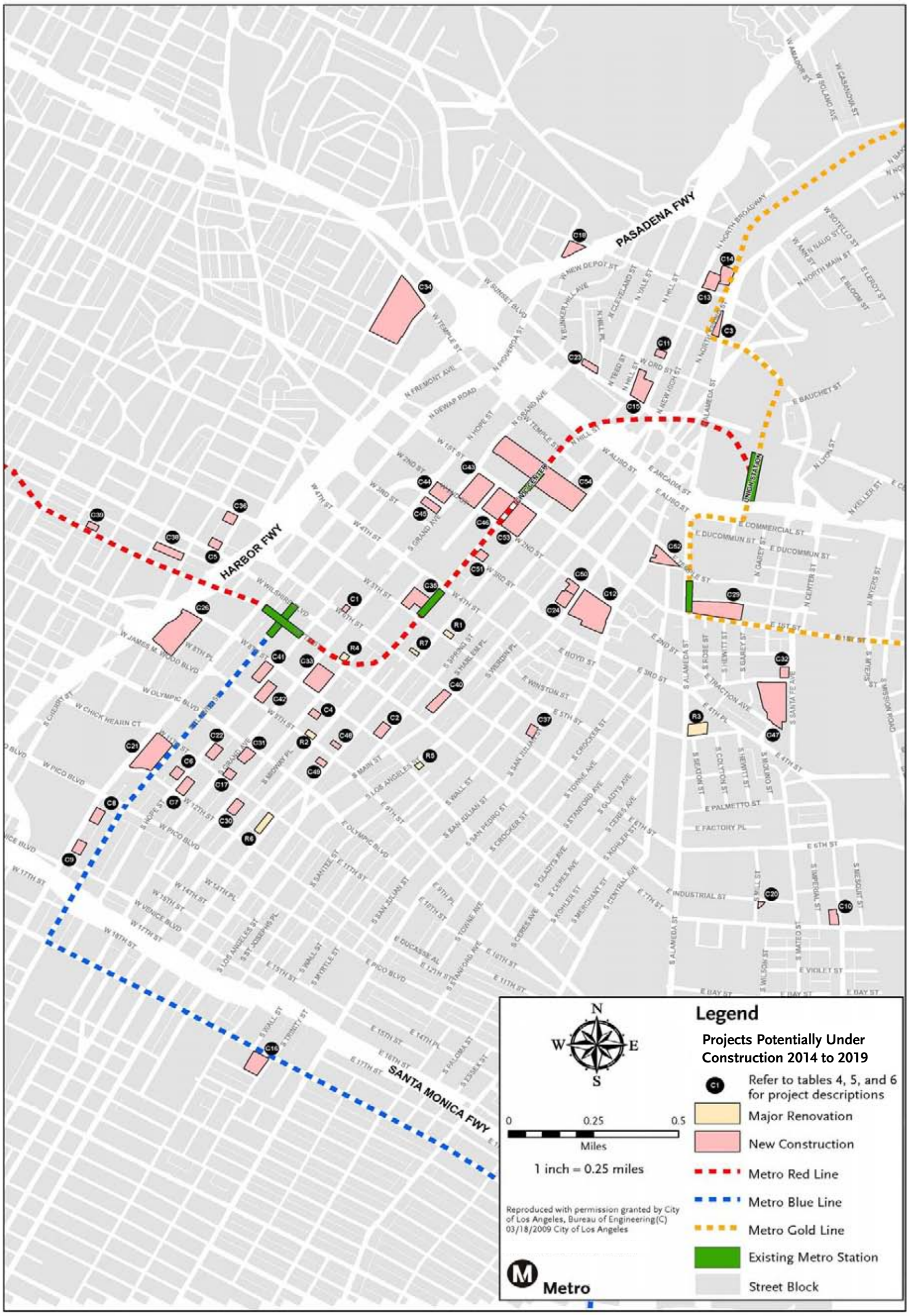

Figure 4-3. Projects Potentially Under Construction 2014 to 2019

- Little Tokyo Pedestrian Linkages: This City of Los Angeles project would create sidewalk and crosswalk enhancements to encourage pedestrian activity within the Little Tokyo area. The project also calls for new landscaping and street furniture.

- East Downtown Truck Access Improvements: This City of Los Angeles project calls for roadway improvements, widening, and restriping to facilitate truck access to the industrial area in the southeastern portion of the project area.

- Route 101 Southbound Improvements: This State of California Department of Transportation (Caltrans) project calls for replacement of the southbound Vignes Street and Hewitt Street ramps with new ramps at Garey Street on the northeast corner of the project area.

- Route 101 Pedestrian Bridge Enhancement: This City of Los Angeles project calls for the enhancement of pedestrian bridges across the Santa Ana Freeway (US 101) along the northern edge of the project area.

The following two projects are not currently included in the regional transportation plans listed above, however, these projects are in some stage of planning and could potentially occur during the construction period for the Regional Connector project.

- Resurrection of the Red Car Trolley Services in the Downtown Los Angeles Area: This project seeks to implement a historic streetcar service connecting the South Park, Financial District, South Broadway, and Little Tokyo areas of downtown Los Angeles. The service would be primarily, if not entirely, at grade and the tracks could potentially be constructed in existing mixed-flow lanes. Though streetcar technology is similar to light rail, the Red Car service would be more local in scope, with stops spaced every two blocks or so.

- Broadway Transit Mall: This project would close part of South Broadway to auto traffic, tentatively from 2nd Street to 9th Street, in order to create a pedestrian and transit mall. Under this plan, only transit buses and delivery trucks would be permitted to drive through the transit mall. Broadway currently experiences among the highest volumes in pedestrian traffic in Los Angeles, and this project would help alleviate crowding on the sidewalks.

The California High-Speed Rail project proposes to construct a 700-mile long electric-power, steel-wheel-on-steel-rail, high-speed train system from Sacramento to San Diego. The Los Angeles portion of the project would provide a connection between Palmdale and Orange County utilizing existing Metrolink right-of-way to connect to Union Station. The high speed rail system would likely be built as an elevated guideway connecting to the upper level of Union Station and transitioning to an at-grade system in or near the Burlington Northern

Sante Fe/Metrolink rail corridor (LOSSAN rail corridor). The high speed rail system would either share tracks with existing non-electric trains or operate using dedicated tracks within the LOSSAN rail corridor. Project buildout is anticipated for year 2030. The California High-Speed Rail project is designed to interface with existing passenger rail service and to provide additional capacity to meet increases in intercity travel demand in California. The Regional Connector Project would be constructed and operated in coordination with the California High-Speed Rail project. Metro would also coordinate and interface with the County of Los Angeles portion of the California High-Speed Rail project.

Utility Projects

No major utility projects have been identified within the project area during the construction period of 2014 to 2019. The City of Los Angeles maintains an extensive project list of public works projects. However, there do not appear to be many projects planned after 2014 within the City and there do not appear to be any planned within the project area. Most of the planned projects within the City are related to ongoing maintenance or replacement in kind of existing infrastructure.

4.1.3 Projects Potentially Under Construction post-2019

The existing databases and long-range plans do not include any reasonably foreseeable projects beyond 2019. For potential cumulative impacts beyond the year of opening, trend information on land use, and population and employment growth from adopted regional plans have been used. The cumulative impacts analysis includes positive impacts as well as adverse effects, particularly with respect to the enhancements in regional mobility that may be represented by the build alternatives when compared to the No Build Alternative.

5.0 IMPACTS

5.1 No Build Alternative

The No Build Alternative would not involve construction of a new light rail transit project in downtown. The No Build Alternative would not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP). The transit network within the project area would be largely the same as it is now.

The No Build Alternative is expected to generate less than significant direct and indirect impacts related to the following environmental issues: traffic circulation, and parking; land use; displacement and relocation; community and neighborhoods; visual and aesthetic resources; noise and vibration; ecosystems and biological resources; geotechnical, subsurface, seismic hazards, and hazardous materials; water resources; energy resources; greenhouse gas (GHG) emissions; historic resources; archaeological resources; paleontological resources; parklands and other community facilities; Section 4(f) protected resources; economic and fiscal resources; safety and security; growth; and air quality. Therefore, this alternative would not contribute to cumulative impacts with respect to these environmental resources.

5.1.1 Transit, Traffic, Circulation, and Parking

It is anticipated that the current bus service would predominantly remain the same through the year 2035 No Build Alternative with increased headways for some of the most heavily travelled lines. In addition, increases would occur along the lines that would help feed more passengers into the downtown area along the rail corridors that would be joined by the Regional Connector. Transit patrons would continue to transfer twice to the Metro Red and Purple Lines through downtown in order to make a complete east-west or north-south trip. It is expected that transit service performance through the downtown area would likely decrease due to increased traffic congestion. This may make travel via transit a less attractive option for patrons traveling across downtown between Santa Monica and the I-605 or from Azusa to Long Beach.

Cumulative transit impacts associated with the No Build Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. For transit patrons that have no other travel options, bus travel times would increase and transit usage would be less convenient due to worsening congestion. There would be a negative transit impact upon those that rely on the public transit system, for east-west and north south travel through the downtown area. This would result in an adverse, though less than siginificant, cumulative transit impact.

5.1.2 Environmental Justice

Cumulative transit impacts associated with the No Build Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would result in disproportionate impacts associated with transit service equity to minority, low-income communities, but no feasible mitigation (other than construction of one of the build alternatives) exists to minimize this impact. Therefore, the No Build Alternative would result in direct, indirect, and cumulative disproportionate adverse impacts related to transit service equity.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative includes two new express shuttle bus lines linking 7th Street/Metro Center Station and Union Station above and beyond the No Build Alternative elements. These buses would run frequently, especially during peak hours. The buses may have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes.

Implementation of the TSM alternative would result in less than significant direct and indirect impacts related to the following environmental issues: land use; displacement and relocation; community and neighborhoods; visual and aesthetic resources; noise and vibration; ecosystems and biological resources; geotechnical, subsurface, seismic hazards, and hazardous materials; water resources; energy resources; GHG emissions; parklands and other community facilities; Section 4(f) protected resources; economic and fiscal resources; safety and security; growth; and air quality. As a result, this alternative would not contribute to cumulative impacts with respect to these environmental resources.

Operation of the two added bus routes under the TSM Alternative would result in less-than-significant impacts to energy use and energy resources. Additionally, the TSM Alternative would result in a reduction in automobile VMT and energy consumption measured in British thermal units (BTUs) when compared to the horizon year No Build Alternative. This would result in a beneficial energy impact.

5.2.1 Transit, Traffic, Circulation, and Parking

Construction of the TSM Alternative would not result in any significant impacts, and, therefore, would not contribute to cumulative construction impacts.

Operation of the TSM Alternative would have a less than significant impact on other modes of transportation (bicycle and pedestrian facilities) and, therefore, the TSM Alternative would not contribute to a cumulative impact to these transportation systems.

For the TSM Alternative, the total daily, system-wide, linked trips for the entire bus and rail system is projected to be about 1,722,400, which is a 5,300-trip increase from the No Build Alternative. The proposed alternative would improve the east-west and north-south connections between stations; however, transit patrons would have to continue to transfer through downtown in order to make a complete trip. This may make travel via transit a less attractive option for patrons traveling across downtown between Santa Monica and the I-605 or from Azusa to Long Beach.

Cumulative transit impacts associated with the TSM Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. For transit patrons that have no other travel options, bus travel times would increase and transit usage would be less convenient due to worsening congestion. There would be a negative impact upon those that rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in a less-than-significant adverse cumulative transit impact.

Projections show similar urban rail boardings compared to the No Build Alternative; however, the proposed TSM shuttle bus service is projected to carry 42,700 daily boardings. Although this alternative does not result in a negative transit impact, it is considered a marginal improvement over the No Build Alternative.

With implementation of potential mitigation measures identified in the Transportation Technical Memorandum, operation of the TSM Alternative would not result in a considerable contribution to cumulative impacts associated with traffic circulation or parking.

5.2.2 Cultural Resources – Archaeology

Construction of the TSM Alternative has the potential to affect archaeological resources within the APE, including previously unidentified archaeological resources and the Los Angeles zanja system. Implementation of potential mitigation measures identified in the Cultural Resources – Archaeology Technical Memorandum would reduce project-level impacts to previously unidentified archaeological resources to a less than significant level. Therefore, the TSM Alternative would not contribute to a cumulative impact on these resources.

5.2.3 Cultural Resources – Paleontology

Construction of the TSM Alternative has the potential to directly affect paleontological resources within the project area should excavations related to the construction of new bus stations occur in paleontologically sensitive geologic units. Implementation of potential mitigation measures identified in the Cultural Resources – Paleontology Technical Memorandum would reduce adverse impacts to a less than significant level. Therefore, the TSM Alternative would not contribute to a cumulative impact on these resources.

5.2.4 Environmental Justice

The environmental justice analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region.

Cumulative transit impacts associated with the TSM Alternative would be adverse as this alternative would not close the gap in the rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would result in disproportionate impacts associated with transit service equity and safety and security to minority and low-income communities.

Implementation of potential mitigation measures identified in the Environmental Justice Technical Memorandum would reduce potential disproportionate adverse impacts associated with safety and security to less than significant. Therefore, the TSM Alternative would not contribute to disproportionate cumulative impacts associated with safety and security. However, no feasible mitigation exists (other than construction of either of the two build alternatives) that would minimize the transit service equity impacts. Therefore, the TSM Alternative would result in disproportionate cumulative adverse impacts related to transit service equity.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces to at-grade north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The new underground portions of the alignment would be constructed using the cut and cover method, which is described in detail in the Description of Construction. After entering the 2nd Street tunnel, the alignment continues along 2nd Street and it splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). Then it heads east on Temple Street, realigns into a dual track configuration just east of Los Angeles Street, and connects to the Metro Gold Line to East Los Angeles in a 3-way junction north of the Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of heavy regional auto and truck traffic that travels along Alameda Street, an automobile underpass and a potential pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to reduce pedestrian-train and automobile-train conflicts.

Implementation of the At-Grade Emphasis LRT Alternative is not anticipated to contribute to an adverse cumulative effect related to the following environmental issues: land use; visual or

aesthetic resources; water resources; energy resources; GHG emissions; parklands or other community facilities; or cause growth inducement.

The alignment passes near several potential development sites, and plans for these sites include high density employment and residential facilities. The At-Grade Emphasis LRT Alternative combined with other projects could also support increases in residential development within the project area which would be a beneficial land use effect.

Implementation of the At-Grade Emphasis LRT Alternative would result in a decrease in highway VMT, which would subsequently result in a net decrease in energy consumption measured in both BTU's and barrels of oil. This net decrease in BTUs and barrels of oil would result in a beneficial impact to energy resources.

Potential beneficial economic impacts associated with the At-Grade Emphasis LRT Alternative include improved accessibility and mobility for the region, which would potentially encourage greater economic activity; and beneficial impacts for businesses and employees traveling to and from work.

5.3.1 Transit, Traffic, Circulation, and Parking

During construction of the At-Grade Emphasis LRT Alternative, temporary lane closures and/or street closures, relocation of bus stops, temporary removal of several parking and loading stalls, and temporary sidewalk closures may occur. However, light rail service would be maintained during construction of the alternative. Even with implementation of possible mitigation, construction of the alternative would result in significant and unavoidable impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Therefore, the At-Grade Emphasis LRT Alternative could result in a considerable contribution to cumulative construction impacts.

Operation of the At-Grade Emphasis LRT Alternative would have a less than significant impact on transit systems and would not result in a cumulative impact to transit systems. This alternative proposes a light rail alignment to provide a link between the 7th Street/Metro Center Station and Metro Gold Line at Temple and Alameda Streets. This connection would provide a direct east-west route between the I-605 and the City of Santa Monica and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. Additionally, the At-Grade Emphasis LRT Alternative would result in a significant beneficial impact to transit systems compared to the No Build and TSM Alternatives.

Development of the At-Grade Emphasis LRT Alternative would result in the permanent removal of 80 on-street parking and loading spaces. In addition, the reduction in travel lanes associated with operation of the alternative would impact bikeways and pedestrian crosswalks and sidewalks. With implementation of possible mitigation identified in the Transportation

Technical Memorandum, the At-Grade Emphasis LRT Alternative would not result in a considerable contribution to cumulative impacts associated with parking or other modes of transportation (bicycle and pedestrian facilities).

Under the year 2035 traffic forecasts for the At-Grade Emphasis LRT Alternative, a total of 18 intersections during the AM peak hour and 26 intersections during the PM peak hour would be impacted. During the AM peak hour, seven intersections could be mitigated to a level of insignificance. During the PM peak hour, 11 intersections could be mitigated to a level of insignificance. Therefore, the At-Grade Emphasis LRT Alternative would not contribute to cumulative impacts at these intersections. After implementation of the proposed mitigation measures, significant impacts would remain at the 11 of the 26 impacted intersections during the AM peak hour and 15 intersections during the PM peak hour. Operation of the At-Grade Emphasis LRT Alternative would result in a considerable contribution to significant cumulative impacts at 11 intersections during the AM peak hour and 15 intersections during the PM peak hour. Please refer to the Transportation Technical Memorandum for more information regarding impacted intersections.

It should be noted, a number of intersections would improve with operation of the At-Grade Emphasis LRT Alternative over the No Build Alternative by virtue of a reduction in delay. During the AM peak hour seven intersections show delay improvements and eight intersections show delay improvements in the PM peak hour.

5.3.2 Displacement and Relocation

By the year 2019, planned future developments would displace several existing parking lots. These new developments, mostly residential, would provide the required parking for their residents, but the stock of publicly accessible parking would be greatly reduced. The At-Grade Emphasis LRT Alternative would result in permanent displacement of 170 parking spaces (including 47 on-street parking spaces), 23 spaces in Little Tokyo, where the community has expressed concern over the potential loss of parking. Surface parking lots in downtown Los Angeles are an important community resource because many of the older, historical and civic buildings do not provide the amount of on-site, off-street parking required under current planning code, resulting in an overall parking deficit. The loss of publicly accessible surface parking in Little Tokyo and in other downtown Los Angeles areas due to the At-Grade Emphasis LRT Alternative in conjunction with other planned developments would not represent a cumulative loss with respect to parking. Other potential effects are discussed under environmental justice (Section 5.3.12).

Typically, transit projects themselves serve as mitigation for the loss of parking because they would remove vehicles on the road, thereby reducing the demand for parking. The Regional Connector will provide new non-auto access to downtown, including Little Tokyo. Therefore,

the proposed At-Grade Emphasis LRT Alternative would partially offset potential adverse impacts due to loss of parking.

5.3.3 Community and Neighborhood

The At-Grade Emphasis LRT Alternative would result in a beneficial cumulative impact to community mobility, population, housing and employment, and is not anticipated to contribute to any adverse cumulative effects with respect to viability of existing businesses or emergency services. With implementation of potential mitigation measures identified in the Community and Neighborhood Impacts Technical Memorandum, the At-Grade Emphasis LRT Alternative would not adversely contribute to cumulative impacts with regards to public health, safety, crime, community resources, or events.

5.3.4 Noise and Vibration

Project-level noise and vibration impacts from operation of the At-Grade Emphasis LRT Alternative would be less than significant and would not contribute to cumulative noise or vibration impacts.

Compliance with Section 41.40(a) of the Los Angeles Municipal Code and any variance to the Code would ensure that noise and vibration levels associated with construction of the At-Grade Emphasis LRT Alternative would not result in an adverse impact. However, sensitive and/or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Implementation of potential mitigation measures would reduce potentially significant project-level impacts to sensitive or historic buildings, within 21 feet of construction, to a less than significant level. With implementation of potential mitigation measures identified in the Noise and Vibration Technical Memorandum, construction of the At-Grade Emphasis LRT Alternative would not contribute to potentially adverse cumulative noise or vibration impacts.

5.3.5 Ecosystems and Biological Resources

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement potential mitigation measures to address any potential impacts to migratory birds under either the Migratory Bird Treaty Act or the California Fish and Game Code. There would be no cumulative impacts from the At-Grade Emphasis LRT Alternative with respect to biological resources.

5.3.6 Geotechnical/Subsurface/Seismic/Hazardous Materials

There is the potential for cumulative impacts associated with hazards and hazardous materials from the At-Grade Emphasis LRT Alternative. A number of related construction

projects have been identified and some of those projects could involve ground-disturbing construction where there is potential to encounter hazardous materials in soil and/or groundwater. In addition, other construction activities in the project area may entail building demolition, with the potential for release of asbestos fibers from asbestos containing materials and lead particles from lead-based paint. The additive effect of on-going and future activities could result in cumulative impacts to human health or the environment through release of hazardous materials. While these construction activities would require compliance with applicable hazardous waste laws and regulations, potential mitigation measures would also ensure cumulative impacts would be less than significant.

5.3.7 Cultural Resources – Built Environment

Construction of the At-Grade Emphasis LRT Alternative would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. All of these potential impacts could result in a substantial adverse change to a historical resource. Implementation of mitigation measures identified in Cultural Resources – Built Environment Technical Memorandum would reduce these potential impacts to a less than significant level. Project operation is not expected to cause direct or indirect impacts. Therefore, this alternative would not contribute to cumulative impacts on historic resources.

5.3.8 Cultural Resources – Archaeology

Construction of the At-Grade Emphasis LRT Alternative has the potential to affect archaeological resources within the APE, including previously unidentified archaeological resources and previously undiscovered portions of site RC-1. However, implementation of potential mitigation measures identified in that technical memorandum would reduce this potential impact to a less than significant level and this alternative would not contribute to cumulative impacts on these resources.

5.3.9 Cultural Resources – Paleontology

The At-Grade Emphasis LRT Alternative has the potential to adversely impact paleontological resources within the project area as a result of ground disturbance related to constructing new underground tunnel segments on Flower Street between 7th and Hope Streets and new stations. However, implementation of potential mitigation measures identified in Cultural Resources – Paleontology Technical Memorandum would reduce potential adverse impacts to a less than significant level. Therefore, the At-Grade Emphasis LRT Alternative would not contribute to a cumulative impact on these paleontological resources.

5.3.10 Economic and Fiscal

Implementation of mitigation measures identified in the Economic and Fiscal Impacts Technological Memorandum, such as compensation to property owners and business owners, would lessen potential construction impacts. Dependent upon the successful

implementation of mitigation where required during construction, some residual impacts could still occur during construction. Given the related projects that could be under construction during the same time as the proposed alternative, construction of the alternative could result in a considerable contribution to cumulative impacts on activity levels and revenue of businesses along the alignment. All other economic impacts on property tax, economic output, and employment associated with construction and operation of the alternative would be less than significant. Therefore, At-Grade Emphasis LRT Alternative would not contribute to a cumulative economic impact.

Potential beneficial economic impacts associated with the At-Grade Emphasis LRT Alternative include indirect and direct employment growth, with the potential to add 13,800 employees to the area economy; improved accessibility and mobility for the region, which would potentially encourage greater economic activity; and benefits for businesses and employees traveling to and from work.

5.3.11 Safety and Security

Potential cumulative impacts of the At-Grade Emphasis LRT Alternative were qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative, there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed use developments under consideration. However, each of these projects would address safety and security of pedestrians and motorists accessing the developments. From a cumulative perspective, potential impacts associated with the At-Grade Emphasis LRT Alternative would be mitigated to a less-than-significant level and not have a cumulative effect on the safety and security environment in the project area. Please refer to the Safety and Security Technical Memorandum for potential mitigation measures related to the At-Grade Emphasis LRT Alternative.

5.3.12 Environmental Justice

The environmental justice analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region.

The At-Grade Emphasis LRT Alternative would result in the following disproportionate potential cumulative impacts: loss of parking in Little Tokyo and impacts to community cohesion/viability of Little Tokyo due to parking losses. Implementation of possible mitigation measures included in the Environmental Justice Technical Memorandum would reduce the project's contribution to disproportionate cumulative impacts associated with these environmental topics to a less than significant level.

5.3.13 Air Quality Impacts and Health Risk Assessment

Operational emissions for the At-Grade Emphasis LRT Alternative would be less than significant under both CEQA and NEPA thresholds. Regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would result in significant air quality impacts under CEQA. Even with required up-to-date (2014 to 2017) equipment during construction as mitigation, regional construction emissions would remain significant and unavoidable.

Although regional construction emissions under the At-Grade Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary adverse construction impacts.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would connect directly to the tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and then northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north into a new portal on the private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The tracks would then enter the intersection of 1st and Alameda Streets in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative, with a potential pedestrian overpass and a vehicular underpass for through traffic on Alameda Street.

Implementation of the Underground Emphasis LRT Alternative is not anticipated to contribute to an adverse cumulative effects related to the following environmental issues: land use; visual or aesthetic resources; water resources; energy resources; GHG emissions; parklands and other community facilities; Section 4(f) protected resources; or growth inducement.

The alignment passes near several potential development sites, and plans for these sites include high density employment and residential facilities. The Underground Emphasis LRT Alternative combined with other projects could also support increases in residential development within the project area which would be a beneficial land use effect.

Implementation of the Underground Emphasis LRT Alternative would result in a decrease in highway VMT, which would subsequently result in a net decrease in energy consumption measured in both BTU's and barrels of oil. This net decrease in BTUs and barrels of oil would result in a beneficial impact to energy resources.

Potential beneficial economic impacts associated with the Underground Emphasis LRT Alternative include improved accessibility and mobility for the region, which would potentially

encourage greater economic activity; and beneficial impacts for businesses and employees traveling to and from work.

5.4.1 Transit, Traffic, Circulation, and Parking

During construction of the Underground Emphasis LRT Alternative, temporary lane closures and/or street closures, relocation of bus stops, temporary removal of several parking and loading stalls, and temporary sidewalk closures may occur. However, light rail service would be maintained during construction of the alternative. Even with implementation of possible mitigation, construction of the Underground Emphasis LRT Alternative would result in significant and unavoidable construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Therefore, the Underground Emphasis LRT Alternative could result in a considerable contribution to cumulative construction impacts.

Operation of the Underground Emphasis LRT Alternative would have a less than significant impact on transit systems and would not result in a cumulative impact to transit systems. This alternative proposes a light rail alignment to provide a link between the 7th Street/Metro Center Station and Metro Gold Line at the Little Tokyo/Arts District Station. This connection would provide a direct east-west route between the I-605 and the City of Santa Monica and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. Additionally, the Underground Emphasis LRT Alternative would result in a significant beneficial impact to the regional transit system compared to the No Build and TSM Alternatives.

Development of the Underground Emphasis LRT Alternative would result in the permanent removal of 20 on-street parking and loading spaces. With implementation of possible mitigation identified in the Transportation Technical Memorandum, the Underground Emphasis LRT Alternative would not result in a considerable contribution to cumulative impacts associated with parking or other modes of transportation (bicycle and pedestrian facilities).

Under the year 2035 traffic forecasts for the Underground Emphasis LRT Alternative, a total of three intersections would be impacted during the AM peak hour and seven intersections would be impacted during the PM peak hour. During the AM peak hour, one intersection would be mitigated to a less than significant level. During the PM peak hour, four intersections would be mitigated to a less than significant level. Therefore, the Underground Emphasis LRT Alternative would not contribute to cumulative impacts at these intersections. After implementation of the proposed mitigation measures, significant impacts would remain at two intersections (Alameda St./2nd St. and Flower St./4th St.) during the AM peak hour and three intersections (Judge John Aiso St./1st St., Alameda St./2nd St., and Judge John Aiso

St./Temple St.) during the PM peak hour. In summary, operation of the Underground Emphasis LRT Alternative would result in a considerable contribution to significant cumulative impacts at two intersections during the AM peak hour and three intersections during the PM peak hour. Please refer to the transportation Technical Memorandum for more information regarding cumulatively impacted intersections.

It should be noted, a number of intersections would improve under the Underground Emphasis LRT Alternative from the No Build Alternative by virtue of a reduction in delays. During the AM peak hour five intersections show delay improvements and eight intersections show delay improvements in the PM peak hour. It should also be noted that the inclusion of the Regional Connector would increase the person-carrying capacity through the downtown transportation environment without adversely impacting overall traffic operations.

5.4.2 Displacement and Relocation

By the year 2019, related projects would displace several current parking lots. These new developments, mostly residential, would provide the required parking for their tenants, but the stock of publicly accessible parking would be reduced.

The Underground Emphasis LRT Alternative could permanently displace between 148 and 281 parking spaces. Of these displaced parking spaces, 139 of them would be in Little Tokyo, where the community has expressed concern over the potential loss of parking. The displaced parking spaces would be replaced in an existing lot.

Surface parking lots in downtown Los Angeles are an important community resource. The loss of publicly accessible surface parking in Little Tokyo due to the proposed project would represent a cumulative loss with respect to parking. Other potential effects are discussed under environmental justice (Section 5.4.12). Transit projects themselves typically serve as mitigation for the loss of parking because they reduce dependence on vehicles on the road, thereby reducing the demand for parking. The Regional Connector would provide new non-auto access to downtown, including Little Tokyo. Therefore, the Underground Emphasis LRT Alternative would partially offset potential adverse impacts due to loss of parking.

5.4.3 Community Neighborhood

The Underground Emphasis LRT Alternative would result in a beneficial cumulative impact to community mobility, population, housing and employment, and is not anticipated to contribute to any adverse cumulative effects with respect to viability of existing businesses or emergency services. With implementation of the potential mitigation measures identified in the Community and Neighborhood Impacts Technical Memorandum, the Underground Emphasis LRT Alternative would not adversely contribute to cumulative impacts with regards to public health, safety, crime, community resources, or events.

5.4.4 Noise and Vibration

Project-level noise and vibration impacts from operation of the Underground Emphasis LRT Alternative would be less than significant. Operation of the Underground Emphasis LRT Alternative would not contribute to cumulative noise or vibration impacts.

Compliance with Section 41.40(a) of the Los Angeles Municipal Code and any variance to the Code would ensure that noise and vibration levels associated with construction of the Underground Emphasis LRT Alternative would not result in an adverse impact. However, sensitive and/or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Implementation of potential mitigation measures would reduce potentially significant project-level impacts to sensitive or historic buildings, within 21 feet of construction, to a less than significant level. With implementation of potential mitigation measures identified in the Noise and Vibration Technical Memorandum, construction of the Underground Emphasis LRT Alternative would not contribute to potentially adverse cumulative noise or vibration impacts.

5.4.5 Ecosystems and Biological Resources

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the Migratory Bird Treaty Act or the California Fish and Game Code. There would be no cumulative impacts from the Underground Emphasis LRT Alternative with respect to biological resources.

5.4.6 Geotechnical/Subsurface/Seismic/Hazardous Materials

There is the potential for cumulative impacts associated with hazards and hazardous materials from the Underground Emphasis LRT Alternative. Construction associated with on-going and future projects in the project area could result in cumulative impacts to human health or the environment through release of hazardous materials encountered in soil and/or groundwater, or released during building demolition. Compliance with applicable hazardous waste laws and regulations, along with potential mitigation measures identified in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, would ensure these potential cumulative impacts would be less than significant.

5.4.7 Cultural Resources – Built Environment

Implementation of potential mitigation measures identified in Cultural Resources – Built Environment Technical Memorandum would reduce potential impacts to historic resources to a less than significant level. This alternative would not contribute to cumulative impacts on historic resources. See the Cultural Resources – Built Environment Technical Memorandum for more information on specific historic resources.

5.4.8 Cultural Resources – Archaeology

Construction of the Underground Emphasis LRT Alternative has the potential to affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and site CA-LAN-3588. However, implementation of potential mitigation measures identified in Cultural Resources – Archaeology Technical Memorandum would reduce this potential impact to a less than significant level. Therefore, this alternative would not contribute to cumulative impacts on these resources.

5.4.9 Cultural Resources – Paleontology

The Underground Emphasis LRT Alternative involves ground disturbance, and therefore has potential to adversely affect paleontological resources within the project area. This disturbance would result from excavations to construct a new underground tunnel along the alternative's entire route, underground stations, and a proposed pedestrian bridge at the intersection of Alameda and 1st Streets. However, implementation of potential mitigation measures identified in Cultural Resources – Paleontology Technical Memorandum would reduce impacts to paleontological resources to below level of significance. Therefore, the Underground Emphasis LRT Alternative would not contribute to a cumulative impact on paleontological resources.

5.4.10 Economic and Fiscal

Implementation of mitigation measures identified in the Economic and Fiscal Impacts Technological Memorandum, such as compensation to property owners and business owners, would lessen potential construction impacts. Dependent upon the successful implementation of mitigation where required during construction, some residual impacts could still occur during construction. Given the related projects that could be under construction during the same time as the proposed alternative, construction of the alternative could result in a considerable contribution to cumulative impacts on activity levels and revenue of businesses along the alignment. All other potential economic impacts on property tax, economic output, and employment associated with construction and operation of the alternative would be less than significant and the Underground Emphasis LRT Alternative would not contribute to a cumulative economic impact.

Beneficial economic impacts associated with the Underground Emphasis LRT Alternative include indirect and direct employment growth, with the potential to add 20,800 employees to the area economy; improved accessibility and mobility for the region, which would potentially encourage greater economic activity; and benefits for businesses and employees traveling to and from work.

5.4.11 Safety and Security

Potential cumulative impacts of the Underground Emphasis LRT Alternative are qualitatively assessed in parallel to other known projects out to the baseline year (year 2035). Within the area of influence of this proposed alternative, there are a variety of major renovations to existing buildings, new facility construction, transportation projects, and mixed-use developments under consideration. Each of these projects would address the safety and security of pedestrians and motorists accessing the developments. From a cumulative perspective, potential impacts associated with the Underground Emphasis LRT Alternative would be mitigated to a less than significant level and they would not have a cumulative effect on the safety and security environment in the project area. Please refer to the Safety and Security Technical Memorandum for a description of potential mitigation measures.

5.4.12 Environmental Justice

The environmental justice analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region.

The Underground Emphasis LRT Alternative would result in the following disproportionate cumulative impacts: loss of parking in Little Tokyo and impacts to community cohesion/viability of Little Tokyo due to parking losses. Implementation of possible mitigation measures included in the Environmental Justice Technical Memorandum would reduce the project's contribution to potential disproportionate cumulative impacts to a less than significant level.

5.4.13 Air Quality Impacts and Health Risk Assessment

Operational emissions for the Underground Emphasis LRT Alternative would be less than significant under both CEQA and NEPA thresholds. Regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would result in significant air quality impacts under CEQA. Even with required up-to-date (2014 to 2017) equipment during construction as mitigation, regional construction emissions would remain significant and unavoidable.

Although regional construction emissions under the Underground Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh temporary adverse construction impacts.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would connect directly to the tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets, and Central Avenue. Next, the tracks would enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two directions. One set of tracks bound for Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for the San Gabriel Valley, would proceed east from the junction and rise through a new portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line to East Los Angeles tracks.

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 is not anticipated to contribute to an adverse cumulative effect related to the following environmental issues: land use; visual or aesthetic resources; water resources; energy resources; GHG emissions; parklands and other community facilities; Section 4(f) protected parks, recreation areas, or refuges; or growth inducement.

The alignment passes near several potential development sites, and plans for these sites include high density employment and residential facilities. The Fully Underground LRT Alternative – Little Tokyo Variation 1 combined with other projects could also support increases in residential development within the project area which would also be a beneficial land use effect.

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a decrease in highway VMT, which would subsequently result in a net decrease in energy consumption as measured in both BTU's and barrels of oil. This net decrease in BTUs and barrels of oil would result in a beneficial impact to energy resources.

Potential beneficial economic impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 include improved accessibility and mobility for the region, which would potentially encourage greater economic activity; and beneficial impacts for businesses and employees traveling to and from work.

5.5.1 Transit, Traffic, Circulation, and Parking

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, temporary lane closures and/or street closures, relocation of bus stops, temporary removal of

several parking and loading stalls, and temporary sidewalk closures may occur. However, light rail service would be maintained during construction of the alternative. Even with implementation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in significant and unavoidable construction impacts to bus transit, traffic circulation, and pedestrian and bicycle movements. Therefore, the Fully Underground LRT Alternative – Little Tokyo Variation 1 could result in a considerable contribution to cumulative construction impacts.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would have a less than significant impact on transit systems and parking and, therefore, would not result in a cumulative impact to these resources. This alternative proposes a light rail alignment to provide a link between the 7th Street/Metro Center Station and Metro Gold Line at 1st and Alameda Streets. This connection would provide a direct east-west route between the I-605 and the City of Santa Monica and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. Additionally, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a significant beneficial impact to transit systems compared to the No Build and TSM Alternatives.

With implementation of possible mitigation identified in the Transportation Technical Memorandum, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to cumulative impacts associated with other modes of transportation (bicycle and pedestrian facilities).

Under the year 2035 traffic forecasts for the Fully Underground LRT Alternative – Little Tokyo Variation 1, one intersection would be impacted during the AM peak hour and three intersections would be impacted during the PM peak hour. During the PM peak hour, all three intersections would be mitigated to a less than significant level. Therefore, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to cumulative impacts at these intersections during the PM peak hour. After implementation of the proposed mitigation measures, significant impacts would remain at one intersection during the AM peak hour. In summary, operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a considerable contribution to significant cumulative impacts at one intersection (Flower Street/ 4th Street) during the AM peak hour. Please refer to the Transportation Technical Memorandum for more information regarding cumulatively impacted intersections.

It should be noted, a number of intersections would improve under the Fully Underground LRT Alternative – Little Tokyo Variation 1 compared to the No Build Alternative by virtue of a reduction in delays. During the AM peak hour, four intersections show delay improvements and seven intersections show delay improvements in the PM peak hour. It should also be noted that the inclusion of the Regional Connector would increase the person-carrying

capacity through the downtown transportation environment without adversely impacting overall traffic operations.

5.5.2 Displacement and Relocation

Cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those under the Underground Emphasis LRT Alternative and potential mitigation measures would also be similar. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset some of the potential loss of parking in the downtown area. Therefore, this alternative would partly self-mitigate potential cumulative impacts associated with displacement and relocation.

5.5.3 Community and Neighborhoods

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a beneficial cumulative impact to community mobility, population, housing and employment, and would not contribute to any adverse cumulative effects with respect to viability of existing businesses or emergency services. With implementation of potential mitigation measures identified in the Community and Neighborhood Impacts Technical Memorandum, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not adversely contribute to cumulative impacts with regards to public health, safety, crime, community resources, or events.

5.5.4 Noise and Vibration

Project-level noise and vibration impacts from operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less than significant. As a result, operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to cumulative noise or vibration impacts.

Compliance with Section 41.40(a) of the Los Angeles Municipal Code and any variance to the Code would ensure that noise and vibration levels associated with construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in an adverse impact. However, sensitive and/or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Implementation of potential mitigation measures would reduce potentially significant project-level impacts to sensitive or historic buildings within 21 feet of construction to a less than significant level. With implementation of potential mitigation measures identified in the Noise and Vibration Technical Memorandum, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to potentially adverse cumulative noise or vibration impacts.

5.5.5 Ecosystems and Biological Resources

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the Migratory Bird Treaty Act or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 with respect to biological resources.

5.5.6 Geotechnical/Subsurface/Seismic/Hazardous Materials

Cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 could occur if there were a release of hazardous materials during on-going and future projects in the project area that resulted in cumulative impacts to human health or the environment. Compliance with applicable hazardous waste laws and regulations, along with potential mitigation measures identified in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, would ensure these potential cumulative impacts would be less than significant.

5.5.7 Cultural Resources – Built Environment

Implementation of potential mitigation measures identified in Cultural Resources – Built Environment Technical Memorandum would reduce impacts to historic resources to a less than significant level. Therefore, this alternative would not contribute to cumulative impacts on historic resources. Please refer to the Cultural Resources – Built Environment Technical Memorandum for more information about specific historic resources.

5.5.8 Cultural Resources – Archaeology

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 has the potential to affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338, and P-19-003339. However, implementation of potential mitigation measures identified in Cultural Resources – Archaeology Technical Memorandum would reduce this potential impact to a less than significant level. Therefore, this alternative would not contribute to cumulative impacts on these resources.

5.5.9 Cultural Resources – Paleontology

Fully Underground LRT Alternative - Little Tokyo Variation 1 involves ground disturbance and, therefore, has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations to construct an entirely underground tunnel located east from the 7th Street/Metro Center Station to the intersection of 1st and Alameda Streets and four underground stations. However, implementation of potential

mitigation measures identified in Cultural Resources – Paleontological Technical Memorandum would reduce adverse impacts to paleontological resources to below the level of significance. Therefore, the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not contribute to a cumulative impact on paleontological resources.

5.5.10 Economic and Fiscal

Implementation of mitigation measures identified in the Economic and Fiscal Impacts Technological Memorandum, such as compensation to property owners and business owners, would lessen potential construction impacts. Dependent upon the successful implementation of mitigation where required during construction, some residual impacts could still occur during construction. Given the related projects that could be under construction during the same time as the proposed alternative, construction of the alternative could result in a considerable contribution to cumulative impacts on activity levels and revenue of businesses along the alignment. All other potential economic impacts on property tax, economic output, and employment associated with construction and operation of the alternative would be less than significant and the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to a cumulative economic impact.

Beneficial economic impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 include indirect and direct employment growth, with the potential to add 23,500 employees to the area economy; improved accessibility and mobility for the region, which would potentially encourage greater economic activity and benefits for businesses; and employees traveling to and from work.

5.5.11 Safety and Security

Potential cumulative impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to the Underground Emphasis LRT Alternative. From a cumulative perspective, potential impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be mitigated to a less than significant level and would not have a cumulative effect on the safety and security environment in the project area. Please refer to the Safety and Security Technical Memorandum for the Fully Underground LRT Alternative – Little Tokyo Variation 1 potential mitigation measures.

5.5.12 Environmental Justice

The environmental justice analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in the following disproportionate cumulative impacts: loss of parking in Little Tokyo and impacts to community cohesion/viability of Little Tokyo due to parking losses. Implementation of possible mitigation as described in the Environmental Justice Technical Memorandum would reduce the project's contribution to potential disproportionate cumulative impacts to a less than significant level.

5.5.13 Air Quality Impacts and Health Risk Assessment

Operational emissions for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less than significant under both CEQA and NEPA thresholds. Regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would result in significant air quality impacts under CEQA. Even with required up-to-date (2014 to 2017) equipment during construction as mitigation, regional construction emissions would remain significant and unavoidable.

Although regional construction emissions under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary adverse construction impacts.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would connect directly to the tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and then northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets and Central Avenue. The tracks would then enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two sets. One set of tracks bound for Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for the San Gabriel Valley, would proceed east from the junction and each rising in a separate portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line.

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 is not anticipated to contribute to an adverse cumulative effect related to the following environmental issues: land use; visual or aesthetic resources; water resources; energy resources; GHG emissions; parklands and other community facilities; or growth inducement.

The alignment passes near several potential development sites, and plans for these sites include high density employment and residential facilities. The Fully Underground LRT Alternative – Little Tokyo Variation 2 combined with other projects could also support increases in residential development within the project area which would also be a beneficial land use effect.

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a decrease in highway VMT, which would subsequently result in a net decrease in energy consumption as measured in both BTU's and barrels of oil. This net decrease in BTUs and barrels of oil would result in a beneficial impact to energy resources.

Potential beneficial economic impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 include improved accessibility and mobility for the region, which would potentially encourage greater economic activity; and beneficial impacts for businesses and employees traveling to and from work.

5.6.1 Transit, Traffic, Circulation, and Parking

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2, temporary lane closures and/or street closures, relocation of bus stops, temporary removal of several parking and loading stalls, and temporary sidewalk closures may occur. However, light rail service would be maintained during construction of the alternative. Even with implementation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in significant and unavoidable construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements. Therefore, the alternative could result in a considerable contribution to cumulative construction impacts.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would have a less than significant impact on transit systems and parking and, therefore, would not result in a cumulative impact to these resources. This alternative proposes a light rail alignment to provide a link between the 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets. This connection would provide a direct east-west route from the vicinity of I-605 and the City of Santa Monica and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. Additionally, the alternative would result in a significant beneficial impact to regional transit systems compared to the No Build and TSM Alternatives.

With implementation of possible mitigation identified in the Transportation Technical Memorandum, the alternative would not contribute to cumulative impacts associated with other modes of transportation (bicycle and pedestrian facilities).

Under the year 2035 traffic forecasts for the Fully Underground LRT Alternative – Little Tokyo Variation 2, one intersection would be impacted during the AM peak hour and three intersections would be impacted during the PM peak hour. During the PM peak hour, all three intersections would be mitigated to a less than significant level. Therefore, the alternative would not contribute to cumulative impacts at these intersections during the PM peak hour. After implementation of the proposed mitigation measures, significant impacts would remain at one intersection during the AM peak hour. In summary, operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a considerable contribution to significant cumulative impacts at one intersection (Flower Street/ 4th Street) during the AM peak hour. Please refer to the Transportation Technical Memorandum for more information regarding cumulatively impacted intersections.

It should be noted, a number of intersections would improve under the Fully Underground LRT Alternative – Little Tokyo Variation 1 compared to the No Build Alternative by virtue of a reduction in delays. During the AM peak hour four intersections show delay improvements and seven intersections show delay improvements in the PM peak hour. It should also be noted that the inclusion of the Regional Connector would increase the person-carrying capacity through the downtown transportation environment without adversely impacting overall traffic operations.

5.6.2 Displacement and Relocation

Cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those under the Underground Emphasis LRT Alternative. The Fully Underground LRT Alternative – Little Tokyo Variation 2 would greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset some of the loss of parking in the downtown area. Therefore, this alternative would partly self-mitigate cumulative impacts associated with displacement and relocation.

5.6.3 Community and Neighborhoods

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a beneficial cumulative impact to community mobility, population, housing and employment, and would not contribute to any adverse cumulative effects with respect to viability of existing businesses or emergency services. With implementation of potential mitigation measures identified in the Community and Neighborhood Impacts Technical Memorandum, the alternative would not adversely contribute to cumulative impacts with regards to public health, safety, crime, community resources, or events.

5.6.4 Noise and Vibration

Project-level noise and vibration impacts from operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less than significant. As a result, operation of the alternative would not contribute to cumulative noise or vibration impacts.

Compliance with Section 41.40(a) of the Los Angeles Municipal Code and any variance to the Code would ensure that noise and vibration levels associated with construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in an adverse impact. However, sensitive and/or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Implementation of potential mitigation measures would reduce potentially significant project-level impacts to sensitive or historic buildings within 21 feet of construction to a less than significant level. With implementation of potential mitigation measures identified in the Noise and Vibration Technical Memorandum, construction of the alternative would not contribute to potentially adverse cumulative noise or vibration impacts.

5.6.5 Ecosystems and Biological Resources

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the Migratory Bird Treaty Act or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2 with respect to biological resources.

5.6.6 Geotechnical/Subsurface/Seismic/Hazardous Materials

Cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2 could occur if there were a release of hazardous materials during on-going and future projects in the project area that resulted in cumulative impacts to human health or the environment. Compliance with applicable hazardous waste laws and regulations, along with potential mitigation measures identified in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, would ensure these potential cumulative impacts would be less than significant.

5.6.7 Cultural Resources – Built Environment

Implementation of potential mitigation measures identified in Cultural Resources – Built Environment Technical Memorandum would reduce impacts to historic resources to a less than significant level. Therefore, this alternative would not contribute to cumulative impacts on historic resources. Please refer to the Cultural Resources – Built Environment Technical Memorandum for more detail on specific historic resources.

5.6.8 Cultural Resources – Archaeology

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 has the potential to affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338,

and P-19-003339. However, implementation of potential mitigation measures identified in Cultural Resources – Archaeology Technical Memorandum would reduce this potential impact to a less than significant level. Therefore, this alternative would not contribute to cumulative impacts on these resources.

5.6.9 Cultural Resources – Paleontology

Fully Underground LRT Alternative - Little Tokyo Variation 2 involves ground disturbance and, therefore, has the potential to adversely impact paleontological resources within the project area. However, implementation of potential mitigation measures identified in Cultural Resources – Paleontology Technical Memorandum would reduce potential adverse impacts to paleontological resources to below the level of significance. Therefore, Fully Underground LRT Alternative - Little Tokyo Variation 2 would not contribute to a cumulative impact on paleontological resources.

5.6.10 Economic and Fiscal

Implementation of mitigation measures identified in the Economic and Fiscal Impacts Technological Memorandum, such as compensation to property owners and business owners, would lessen potential construction impacts. Dependent upon the successful implementation of mitigation where required during construction, some residual impacts could still occur during construction. Given the related projects that could be under construction during the same time as the proposed alternative, construction of the alternative could result in a considerable contribution to cumulative impacts on activity levels and revenue of businesses along the alignment.

All other economic impacts on property tax, economic output, and employment associated with construction and operation of the alternative would be less than significant and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not contribute to a cumulative economic impact.

Beneficial economic impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 include indirect and direct employment growth, with the potential to add 25,400 employees to the area economy; improved accessibility and mobility for the region, which would potentially encourage greater economic activity and benefits for businesses; and employees traveling to and from work.

5.6.11 Safety and Security

Potential cumulative impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to the Underground Emphasis LRT Alternative. From a cumulative perspective, potential impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be mitigated to a less than significant level and would not have a cumulative effect on the safety and security environment in the project area.

Please refer to the Safety and Security Technical Memorandum for a description of potential mitigation measures.

5.6.12 Environmental Justice

The environmental justice analysis treated potential environmental justice impacts to Little Tokyo with special attention given its historical and cultural importance. Although it has shrunk significantly in size, and most of the Japanese-American population has migrated to the suburbs, Little Tokyo remains the historical focal point for Japanese-Americans in the Los Angeles region.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in the following potential disproportionate cumulative impacts: loss of parking in Little Tokyo and impacts to community cohesion/viability of Little Tokyo due to parking losses. Implementation of possible mitigation included in the Environmental Justice Technical Memorandum would reduce the project's contribution to disproportionate cumulative impacts to a less than significant level.

5.6.13 Air Quality Impacts and Health Risk Assessment

Operational emissions for the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less than significant under both CEQA and NEPA thresholds. Regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would result in significant air quality impacts under CEQA. Even with required up-to-date (2014 to 2017) equipment during construction as mitigation, regional construction emissions would remain significant and unavoidable.

Although regional construction emissions under the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary adverse construction impacts.

6.0 POTENTIAL MITIGATION MEASURES

Possible mitigation measures that could be implemented to avoid, minimize, or mitigate potentially significant impacts are contained within the specific technical memoranda for each environmental resource.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

The No Build Alternative would not result in adverse direct or indirect impacts related to the following environmental issues: traffic circulation, and parking; land use; displacement and relocation; community and neighborhoods; visual and aesthetic resources; noise and vibration; ecosystems and biological resources; geotechnical, subsurface, seismic hazards, and hazardous materials; water resources; energy resources; greenhouse gas (GHG) emissions; historic resources; archaeological resources; paleontological resources; parklands and other community facilities; Section 4(f) protected resources; economic and fiscal resources; safety and security; growth inducement; or air quality. Therefore, this alternative would not contribute to any adverse cumulative impacts with respect to these environmental resources.

Cumulative transit impacts associated with the No Build Alternative would be adverse as this alternative would not close the gap in the regional rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would disproportionately affect transit-dependent users who tend to be environmental justice populations based on income and other factors. For transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient. There would be a negative transit impact upon those that rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in an adverse cumulative transit impact.

The No Build Alternative would result in disproportionate impacts associated with transit service equity to minority, low-income communities, but no feasible mitigation (other than construction of one of the build alternatives) exists to minimize this impact. Therefore, the No Build Alternative would result in less-than-significant cumulative disproportionate adverse impacts related to transit service equity.

7.1.2 CEQA Determinations

The No Build Alternative would result in less than significant direct and indirect impacts to all the environmental resources listed above. Therefore, this alternative would not contribute to any significant cumulative impacts with respect to these environmental issues, with the exception of transit systems.

If no significant improvements in transit service are provided in the No Build Alternative, an adverse transit impact would occur to those who rely on the public transit system, for east-

west and north-south travel through the downtown area. This would result in a less-than-significant cumulative transit impact.

7.2 Transportation System Management (TSM) Alternative

7.2.1 NEPA Findings

Implementation of the TSM alternative would not result in adverse direct or indirect impacts related to the following environmental issues: land use; displacement and relocation; community and neighborhoods; visual and aesthetic resources; noise and vibration; ecosystems and biological resources; geotechnical, subsurface, seismic hazards, and hazardous materials; water resources; energy resources; GHG emissions; parklands and other community facilities; Section 4(f) protected resources; economic and fiscal resources; safety and security; and growth inducement. As a result, this alternative would not contribute to adverse cumulative impacts with respect to these environmental resources.

With implementation of mitigation, the TSM Alternative would not result in adverse impacts related to the following environmental issues: transit, traffic, circulation, and parking; historic resources, cultural resources – archaeology; cultural resources – paleontology; environmental justice associated with safety and security. Therefore, this alternative would not contribute to adverse cumulative impacts with respect to these environmental resources.

Cumulative transit impacts associated with the TSM Alternative would be adverse as this alternative would not close the gap in the regional rail transit system and would not have the travel time and convenience benefits for transit users associated with the build alternatives. This adverse transit impact would disproportionately affect transit-dependent users who tend to be environmental justice populations based on income and other factors. For transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient. There would be a negative transit impact upon those that rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in an adverse cumulative transit impact.

The TSM Alternative would result in disproportionate impacts associated with transit service equity to minority, low-income communities, but no feasible mitigation exists (other than construction of either of the two build alternatives) that would minimize the transit service equity impacts. Therefore, the TSM Alternative would result in less-than-significant cumulative disproportionate adverse impacts related to transit service equity.

7.2.2 CEQA Determinations

Implementation of the TSM alternative would not result in significant direct or indirect impacts related to the following environmental issues: land use; displacement and relocation; community and neighborhoods; visual and aesthetic resources; noise and vibration; ecosystems and biological resources; geotechnical, subsurface, seismic hazards, and

hazardous materials; water resources; energy resources; GHG emissions; parklands and other community facilities; Section 4(f) protected resources; economic and fiscal resources; safety and security; and growth inducement. As a result, this alternative would not contribute to cumulative impacts with respect to these environmental issues.

With implementation of mitigation, the TSM Alternative would not result in significant impacts related to the following environmental issues: transit, traffic, circulation, and parking; cultural resources – archaeology; or cultural resources – paleontology. Therefore, this alternative would not contribute to cumulative impacts with respect to these environmental issues.

If no substantial improvements in transit service are provided in the TSM Alternative, an adverse transit impact would occur to those who rely on the public transit system, for east-west and north-south travel through the downtown area. This would result in a less-than-significant cumulative transit impact.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

There would be no adverse cumulative impacts from the At-Grade Emphasis LRT Alternative with respect to transit systems, land use; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; air quality under NEPA; GHG emissions; parklands or other community facilities; Section 4(f) protected parks, recreation areas, or refuges; or growth inducement.

With implementation of project-level mitigation measures, the At-Grade Emphasis LRT Alternative is not anticipated to contribute to any adverse cumulative impacts with respect to the following issues: parking or other modes of transportation; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; cultural resources – archaeology; cultural resources – paleontology; economic or fiscal resources; safety or security; or environmental justice issues.

With incorporation of possible mitigation, construction of the At-Grade Emphasis LRT Alternative would still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the At-Grade Emphasis LRT Alternative would result in a considerable contribution to adverse cumulative impacts at 11 intersections during the AM peak hour and 15 intersections during the PM peak hour.

With regards to permanent displacements, operation of the At-Grade Emphasis LRT Alternative would partially offset potential adverse impacts due to loss of parking.

7.3.2 CEQA Determinations

The At-Grade Emphasis LRT Alternative would have no cumulative impact on transit systems, land use; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; GHG emissions; parklands or other community facilities; Section 4(f) protected parks, recreation areas, or refuges; or growth inducement.

With implementation of project-level mitigation measures, the At-Grade Emphasis LRT Alternative is not anticipated to contribute to any significant cumulative impacts with respect to the following issues: parking or other modes of transportation during operation; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; cultural resources – archaeology; cultural resources – paleontology; economic or fiscal resources; or safety or security.

With incorporation of possible mitigation, construction of the At-Grade Emphasis LRT Alternative would still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the At-Grade Emphasis LRT Alternative would result in a considerable contribution to significant cumulative impacts at 11 intersections during the AM peak hour and 15 intersections during the PM peak hour.

With regards to permanent displacements, operation of the At-Grade Emphasis LRT Alternative would partially offset potentially significant impacts due to loss of parking.

Operational emissions for the At-Grade Emphasis LRT Alternative would be less than significant under CEQA thresholds and, therefore, would not result in a cumulative impact. Although regional construction emissions under the At-Grade Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh temporary significant construction impacts.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

There would be no adverse cumulative impacts from the Underground Emphasis LRT Alternative with respect to transit systems, land use; visual or aesthetic resources; noise or

vibration associated with project operation; noise during construction; water resources; energy resources; air quality under NEPA; GHG emissions; parklands or other community facilities; Section 4(f) protected resources; or growth inducement.

With implementation of project-level mitigation measures, the Underground Emphasis LRT Alternative is not anticipated to contribute to any adverse cumulative impacts with respect to the following issues: parking or other modes of transportation; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; archaeological resources; paleontological resources; economic or fiscal resources; safety or security; or environmental justice issues.

With incorporation of possible mitigation, construction of the Underground Emphasis LRT Alternative would still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Underground Emphasis LRT Alternative would result in a considerable contribution to adverse cumulative impacts at two intersections (Alameda Street/2nd Street and Flower Street/4th Street) during the AM peak hour and three intersections (Judge John Aiso Street/1st Street; Alameda Street/2nd Street; and Judge John Aiso Street/Temple Street) during the PM peak hour.

With regards to permanent displacements, operation of the Underground Emphasis LRT Alternative would partially offset potential adverse impacts due to loss of parking.

7.4.2 CEQA Determinations

The Underground Emphasis LRT Alternative would have no cumulative impact on transit systems, land use; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; GHG emissions; parklands or other community facilities; Section 4(f) protected resources; or growth inducing effects.

With implementation of project-level mitigation measures, the Underground Emphasis LRT Alternative is not anticipated to contribute to any significant cumulative impacts with respect to the following issues: parking or other modes of transportation; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; cultural resources – archaeology; cultural resources – paleontology; economic or fiscal resources; or safety or security.

With incorporation of possible mitigation, construction of the Underground Emphasis LRT Alternative would still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Underground Emphasis LRT Alternative would result in a considerable contribution to significant cumulative impacts at two intersections (Alameda Street/2nd Street and Flower Street/4th Street) during the AM peak hour and three intersections (Judge John Aiso Street/1st Street; Alameda Street/2nd Street; and Judge John Aiso Street/Temple Street) during the PM peak hour.

With regards to permanent displacements, operation of the Underground Emphasis LRT Alternative would partially offset potential significant impacts due to loss of parking.

Operational emissions for the Underground Emphasis LRT Alternative would be less than significant under CEQA thresholds and, therefore, not result in a cumulative impact. Although regional construction emissions under the Underground Emphasis LRT Alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh temporary significant construction impacts.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

There would be no adverse cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 with respect to transit systems or parking during operation; land use; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; air quality under NEPA; GHG emissions; parklands or other community facilities; Section 4(f) protected resources; or growth inducement.

With implementation of project-level mitigation measures, the Fully Underground LRT Alternative – Little Tokyo Variation 1 is not anticipated to contribute to any adverse cumulative impacts with respect to the following issues: other modes of transportation during operation; displacements; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; archaeological resources; paleontological resources; economic or fiscal resources; safety or security; or environmental justice issues.

With incorporation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would still result in a considerable contribution to

cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a considerable contribution to an adverse cumulative impact at one intersection (Flower Street/ 4th Street) during the AM peak hour.

7.5.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have no cumulative impact on transit systems or parking during operation; land uses; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; GHG emissions; parklands or other community facilities; Section 4(f) protected resources; or growth inducement.

With implementation of project-level mitigation measures, the Fully Underground LRT Alternative – Little Tokyo Variation 1 is not anticipated to contribute to any significant cumulative impacts with respect to the following issues: other modes of transportation; displacements; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; cultural resources – archaeology; cultural resources – paleontology; economic or fiscal resources; or safety or security.

With incorporation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would still result in a considerable construction contribution to cumulative impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a considerable contribution to a significant cumulative impact at one intersection (Flower Street/ 4th Street) during the AM peak hour.

Operational emissions for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less than significant under CEQA thresholds and, therefore, not result in a cumulative impact. Although regional construction emissions under the alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary significant construction impacts.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

There would be no adverse cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2 with respect to transit systems or parking during operation; land uses; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; air quality under NEPA; GHG emissions; parklands or other community facilities; Section 4(f) protected resources; or growth inducement.

With implementation of project-level mitigation measures, the Fully Underground LRT Alternative – Little Tokyo Variation 2 is not anticipated to contribute to any adverse cumulative impacts with respect to the following issues: other modes of transportation during operation; displacements; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; archaeological resources; paleontological resources; economic or fiscal resources; safety or security; or environmental justice issues.

With incorporation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would still result in a considerable construction contribution to cumulative impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a considerable contribution to an adverse cumulative impact at one intersection (Flower Street/ 4th Street) during the AM peak hour.

7.6.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have no cumulative impact on transit systems or parking; land use; visual or aesthetic resources; noise or vibration associated with project operation; noise during construction; water resources; energy resources; GHG emissions; parklands or other community facilities; Section 4(f) protected historic resources; or growth inducement.

With implementation of project-level mitigation measures, the Fully Underground LRT Alternative – Little Tokyo Variation 2 is not anticipated to contribute to any significant cumulative impacts with respect to the following issues: other modes of transportation; displacements; public health, safety, crime, community resources, or events; vibration during construction; ecosystems or biological resources; geotechnical, subsurface, seismic, hazards, or hazardous materials; historic resources; cultural resources – archaeology; cultural resources – paleontology; economic or fiscal resources; or safety or security.

With incorporation of possible mitigation, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would still result in a considerable contribution to cumulative construction impacts associated with bus transit, traffic circulation, and pedestrian and bicycle movements.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a considerable contribution to a significant cumulative impact at one intersection (Flower Street/ 4th Street) during the AM peak hour.

Operational emissions for the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less than significant under CEQA thresholds and, therefore, not result in a cumulative impact. Although regional construction emissions under the alternative would be significant and unavoidable, operation of the alternative would reduce regional VMT, which would result in a beneficial impact to air quality and outweigh the temporary significant construction impacts.

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APPENDIX H

FINAL ALTERNATIVES ANALYSIS REPORT

State Clearinghouse Number: 2009031043

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ES.1 Introduction

The Regional Connector Transit Corridor project (Regional Connector) is a vital, core piece of public transit infrastructure that enhances investments already made in the existing Metro Light Rail system. It will link four distinct travel corridors covering over 50 miles across the County through the center of downtown Los Angeles. The Los Angeles County Metropolitan Transportation Authority (Metro) has envisioned this connection for nearly two decades beginning in the late 1980's/early 1990's. At the time of the Metro Rail system's inception, the Long Beach and Pasadena light rail branches were envisioned to meet in downtown Los Angeles and operate as a single line[1]. However, the downtown segment was never built, and passengers now must transfer to the Metro Red Line to move between the two branches as well as reach many major central business district destinations. This solution has functioned acceptably during the Metro Rail system's infancy. However, with the Metro Expo Line to Culver City and Metro Gold Line Eastside Extension opening over the next two years, increasing ridership, increasing traffic congestion, and new major regional developments occurring in downtown Los Angeles, a direct high-capacity link to tie the unconnected regional branches of Metro's light rail system together through downtown is needed.

The proposed Regional Connector would directly link 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line (2010) terminus) located at 7th and Figueroa Streets, to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) at 1st and Alameda Streets. The project would include several new stations downtown and would allow train operations between Long Beach and Pasadena without the need to transfer. Simultaneously, it would allow train operations between East Los Angeles and Culver City also without the need to transfer. It would also provide passengers with direct trains into the heart of the business and civic districts, whereas the line currently passes along the periphery and then north to Union Station. Metrolink, Amtrak, and Metro Red Line passengers would also have the option to transfer to the Long Beach-Pasadena and East Los Angeles-Culver City trains and reach portions of the downtown area not presently served by Metro Rail. The Regional Connector is a project which provides regional benefits to residents across the County, and can be accomplished with just 1.8 miles of a new set of dual tracks.

Since conclusion of early studies conducted in the early 1990's and even as late as 2004, much has changed in the downtown Los Angeles area, including the availability of right-of-way due to new civic and private developments and the residential explosion created by new development and re-use of historic underutilized buildings. Alternatives previously studied, while mindful of the tight physical and environmental constraints concerning the construction of new infrastructure in a dense urban area like downtown Los Angeles, are no longer applicable. Particularly challenging is the lack of vacant rail rights-of-way for transit vehicles to use, the high traffic pedestrian volumes on streets throughout the project study area (PSA), and the high volume of trains that will funnel into the Regional Connector. New solutions that negotiate these difficulties while maximizing benefits to the regional transit system, provide opportunities for land use improvements, and minimize impingement on the existing street

[1] Pasadena to Los Angeles Project EIR 1988-1993

network have been challenging to develop. Some proposed solutions include splitting the tracks into a couplet to avoid taking two lanes on the same street for rail use, building underpasses to eliminate conflicts between trains and automobiles, and building the tracks underground. The following map (Figure ES-1) shows the PSA and illustrates the present gap in the light rail network.

Figure ES-1 Project Study Area

By linking the 7th St./Metro Center and Little Tokyo/Arts District Stations, Metro will have the ability to provide continuous service across the region in two different directions: east/west and north/south without the need for transfer. The Regional Connector would thus provide a faster, more attractive transit option with greater access to the downtown area and mobility region-wide. The project would make possible the operation plan shown in Figure ES-2. Without it, each of the light rail branches shown would reach only the edge of downtown Los Angeles.

Recognizing the potential benefits to Southern California residents, the Metro Board authorized an Alternatives Analysis (AA) study in July 2007 to explore various technologies and route alignments for the Regional Connector. This report contains the results of that AA study.

Figure ES-2 Anticipated Service Plan

ES.2 Purpose of this Study

The AA is the first phase in the fixed guideway transit project development process defined by Metro and the Federal Transit Administration (FTA) under the New Starts program's Project Planning and Development process. The AA defines a specific transportation need in a corridor, identifies all reasonable alternatives and narrows down the alternatives based on a screening process using evaluation criteria developed during early scoping. The AA provides the reasoning for decisions regarding the identification and narrowing of alternatives. The study is based on evaluation criteria and measures consistent with FTA New Starts guidelines, including costs, benefits, environmental and community impacts and financial feasibility, as well as input from local stakeholders, community members, and public agencies.

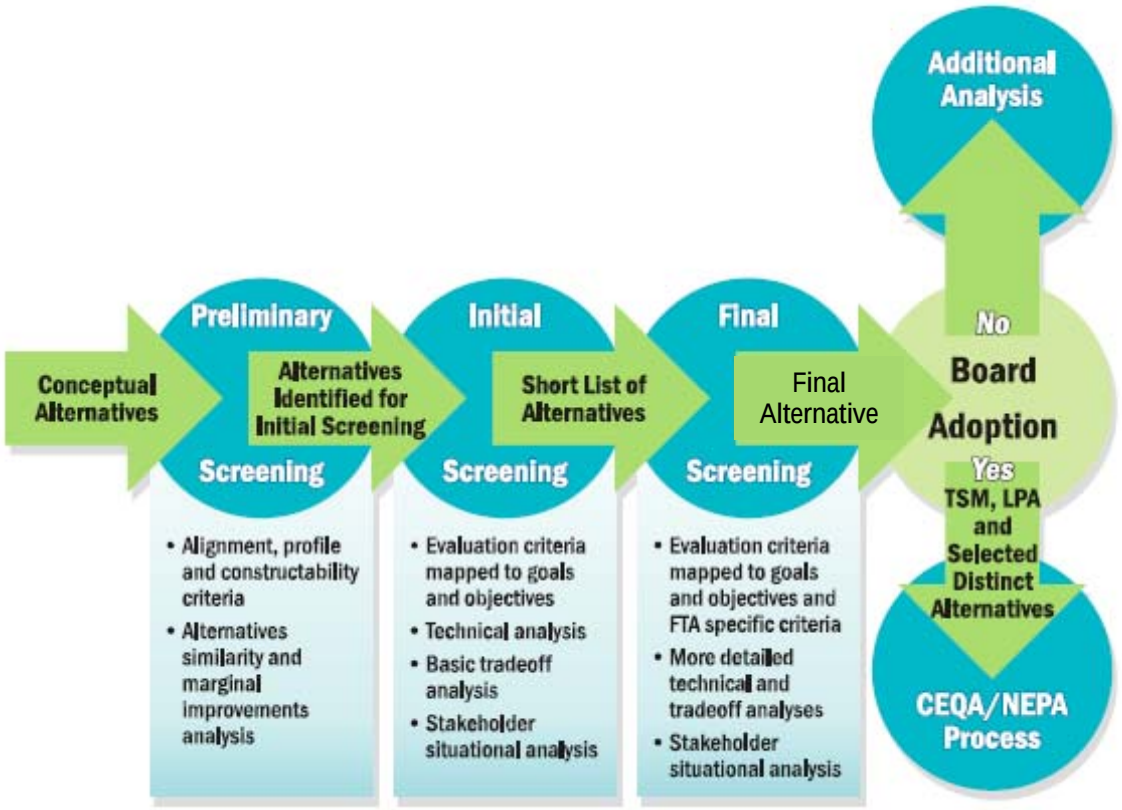


Figure ES-3 Alternatives Analysis Process

Relying on sound assumptions, public input, and initial conceptual engineering, this AA report includes a recommendation to carry a short list of alternatives into the next phase, which includes environmental documentation and clearance per the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), advanced conceptual engineering, and the selection of a Locally Preferred Alternative (LPA). Upon selection of the LPA and approval from FTA, final environmental documentation and preliminary engineering will be initiated. The process will ultimately lead to a certification of the environmental document, a Record of Decision by FTA, and potential negotiation of a Full Funding Grant Agreement between FTA and Metro. The following diagram (Figure ES-4) shows the AA phase with respect to the entire FTA New Starts process.

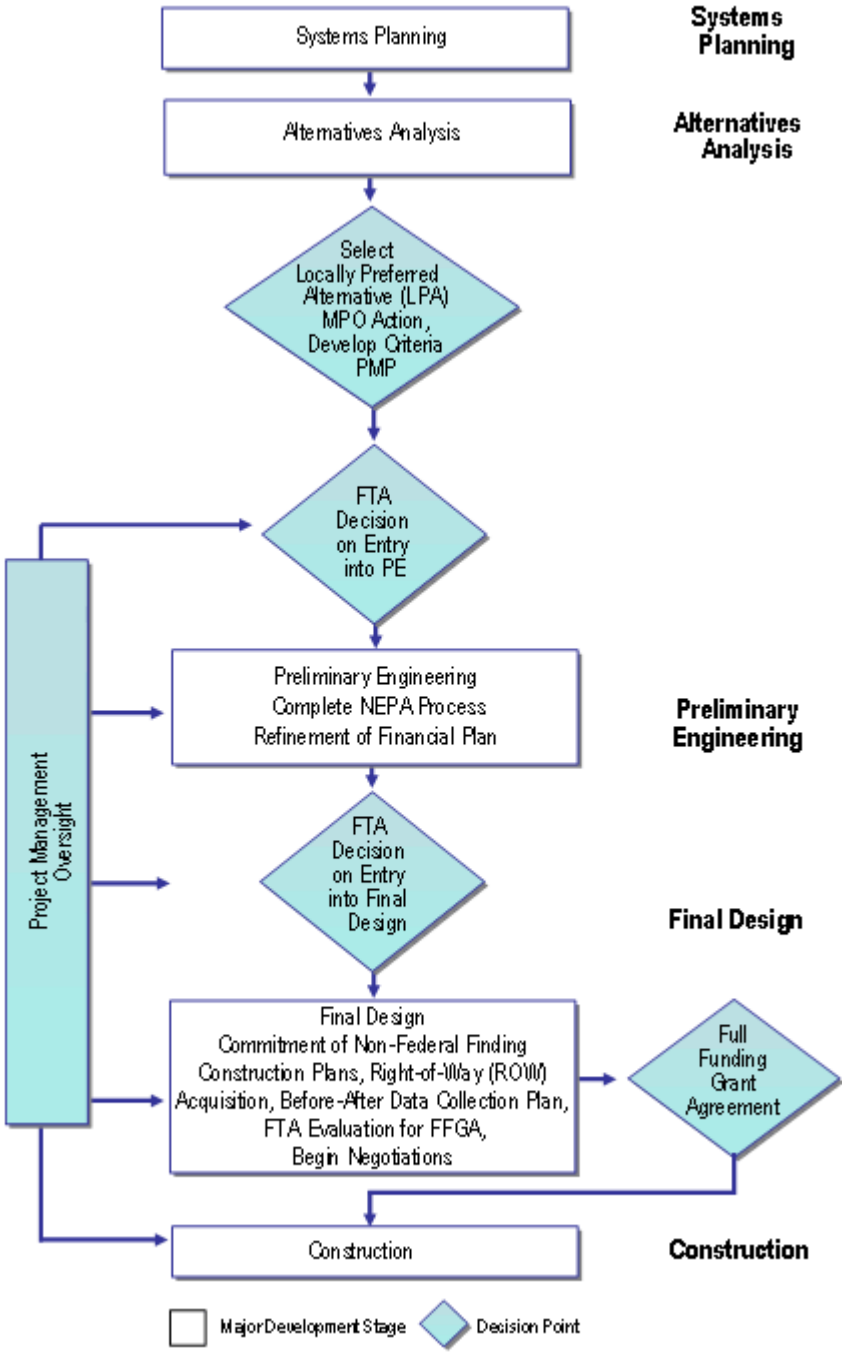

Systems Planning
Alternatives Analysis
Select Locally Preferred Alternative (LPA) MPO Action, Develop Criteria PMP
FTA Decision on Entry into PE
Preliminary Engineering Complete NEPA Process Refinement of Financial Plan
FTA Decision on Entry into Final Design
Final Design Commitment of Non-Federal Finding Construction Plans, Right-of-Way (ROW) Acquisition, Before-After Data Collection Plan, FTA Evaluation for FFGA, Begin Negotiations
Full Funding Grant Agreement
Construction
Project Management Oversight
Systems Planning
Alternatives Analysis
Preliminary Engineering
Final Design
Construction
Major Development Stage
Decision Point

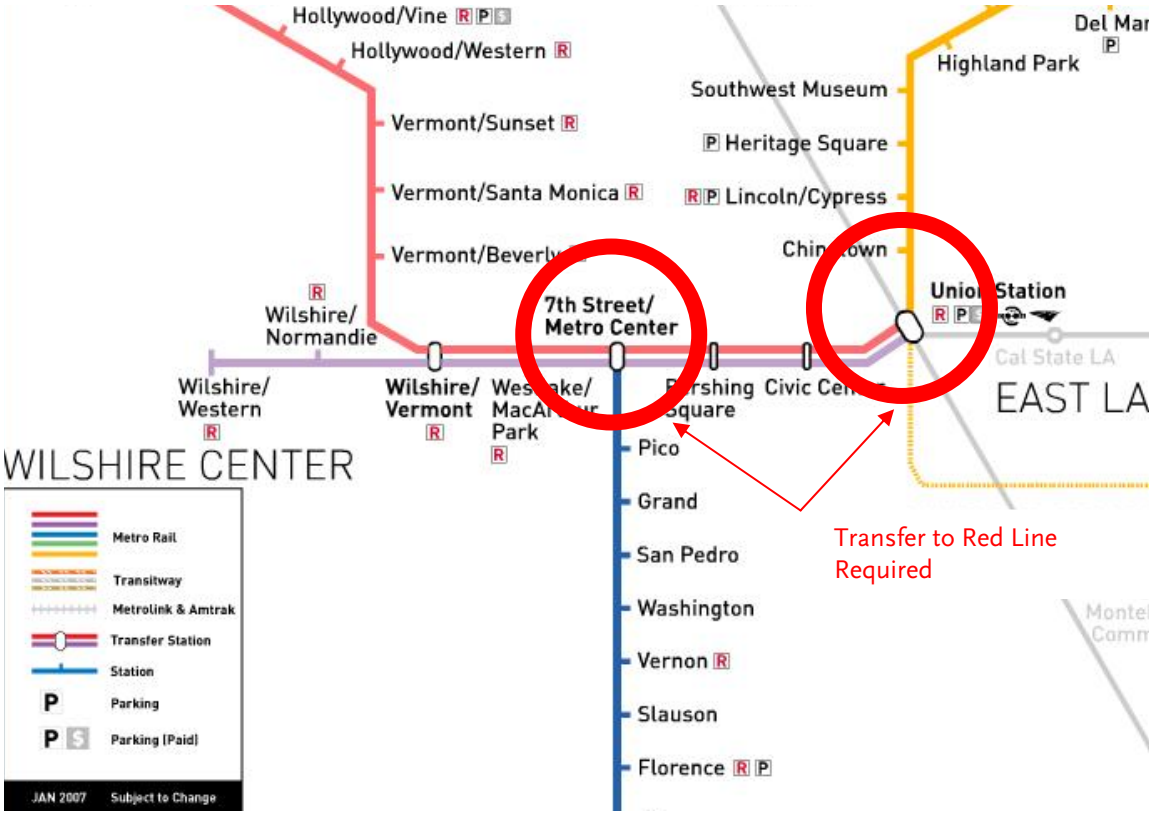
Figure ES-4 FTA New Starts Process
Graphic by Federal Transit Administration

ES.3 Background

The PSA is bounded by the Harbor Freeway (SR-110) on the west, the Santa Ana Freeway (US-101) on the north, Alameda St. on the east, and 7th and 9th Streets on the south. The area presently experiences heavy traffic congestion on weekdays, particularly on the surrounding freeways and the arterial streets leading to freeway on-ramps. Streets in the dense western portion of the PSA (Bunker Hill and the Financial District) routinely experience the highest traffic volumes, with 20,000-30,000 trips per day on some segments of Figueroa and Flower Streets. Though the volumes on these streets are high, the roadways are configured for one-way operation, and are six lanes wide in most places. As such, they accommodate traffic better than some of the narrower streets with lower traffic volumes elsewhere in the PSA. The worst-performing intersection in the PSA, 1st and Alameda Streets, operates at level of service (LOS, a measure of vehicular traffic) F during the morning rush hour, indicating severe congestion. In light of the rapid resurgence of development in the downtown area, traffic conditions are likely to worsen in the absence of improved transit connections to and within the PSA.

Wide roadway on Flower Street near 5th Street, with six automobile traffic lanes and one curb lane of parking. This segment of Flower Street carries about 20,000 cars on a typical weekday.

In the early 1990's, prior to the selection of a finalized rail transit route from downtown Los Angeles to Pasadena, the Los Angeles County Transportation Commission (LACTC, one of Metro's predecessors) studied the continuation of the Metro Blue Line from the existing 7th St./Metro Center Station north to Pasadena. However, LACTC decided to initiate the new light rail service to Pasadena from Union Station, concluding that in the interim riders would be required to transfer to the existing Metro Red Line, which connects Union Station to 7th St./Metro Center Station, until additional funding for a direct connection became available.



Interim solution for connections between the Metro Gold Line and Metro Blue Line selected by LACTC in 1990. Trips involving both the Metro Gold Line and the Metro Blue Line require two transfers.

In 2004, after the Metro Gold Line to Pasadena had opened and construction of the Metro Gold Line Eastside Extension had commenced, Metro initiated studies to revisit the connection between the Metro Gold and Blue Lines. Originally planned as an extension of the heavy rail Metro Red Line that would serve the strong east-west travel demand in the region, the Metro Gold Line Eastside Extension is currently being built as a light rail line to Union Station from East Los Angeles. In addition, the first phase of a new light rail line, the Metro Expo Line, is also being constructed between Culver City and 7th St./Metro Center Station. This first phase is scheduled for completion in 2010. The benefits of having three light rail lines serving four distinct transit corridors connecting through downtown Los Angeles allowing for cross-County trips on a single train prompted Metro to initiate an AA study that would guide the development and funding of the Regional Connector Transit Corridor project.

In June 2008, Metro included the Regional Connector Transit Corridor project in its Draft Long Range Transportation Plan (LRTP) as a rail project in the Tier 1 Unfunded Strategic Plan. At the moment, $160 million has been identified in the recent passage of the half-cent sales tax, Measure R, and additional funding will need to be secured to build and operate the line. This is consistent with Regional Transportation Plan (RTP) which was approved by the Southern California Association of Governments (SCAG) in May 2008.

ES.4 Purpose and Need for Transit Investment

As population, congestion and energy costs increase, there is a need to create mobility options for Los Angeles County. A transportation investment in the PSA will improve mobility, the environment, the economy and the livability for all of Los Angeles County. As the densest business district in the region, the downtown area includes major civic uses, high rise office buildings, the historic core, and multi-billion dollar entertainment venues, all surrounded by four major interstates and state highways operating at poor levels of service. Expansion of the roadway and highway network within the Regional Connector PSA is greatly limited due to the built-out nature of this central business core. The Metro Rail system provides an efficient alternative to driving for people travelling to the downtown area. However, Los Angeles County has several other dense business and activity districts not within downtown Los Angeles. While several of these activity centers are also served by the rail system, many passengers must pass through downtown to reach them.

At present, passengers wishing to travel through downtown Los Angeles on the light rail system must make two transfers, and many Metro Gold and Blue Line passengers need to transfer to the Metro Red Line to reach destinations within the downtown area. Future Metro Gold Line Eastside Extension and Metro Expo Line passengers will face the same delays (up to 20 minutes for transfers in some cases) and contribute to crowding on the Metro Red Line. According to the 2004 Metro Rail Onboard Survey, approximately half of all Gold Line riders used more than one train to complete their trips, suggesting that about 10,000 people are transferring between the Red and Gold Lines each day to travel in the direction of downtown Los Angeles. Ridership on the Metro Gold Line has grown by nearly one-third since 2004, so the number of passengers transferring to the Metro Red and Purple Lines today is likely even higher.

Surveys have not been completed for potential Metro riders of the Metro Gold Line Eastside Extension, the Metro Expo Line and the current riders of the Metro Blue Line. Updated surveys will be completed to determine size of stations and frequency of trains needed for the Regional Connector. A direct connection linking Metro's light rail lines together will allow for more transfer-free trips to be made through downtown Los Angeles from dense residential areas to other employment-rich districts. The following table shows the current and projected year 2030 Metro Rail boardings under No Build conditions.

Table ES-1 Current and Projected Year 2030 No Build Rail Boardings		
Line	Average Weekday Boardings – 2005-06	Projected Average Weekday Boardings - 2030
Metro Light Rail Lines	130,300	189,200
Metro Heavy Rail Lines	125,000	176,500
Total	255,300	365,700

Demographics

According to year 2005 data provided by SCAG, the PSA contains nearly 18,000 people at a density of 11,700 per square mile. However, there are over 168,000 jobs in the same area, at a density of 111,000 per square mile. This formidable imbalance between jobs and housing within the PSA results in heavy inbound commute traffic in the morning and similarly large outbound flows in the afternoon. Accordingly, the PSA records the highest levels of transit ridership in the region, and the existing transit system lifts a significant burden off of the freeways and arterial streets radiating from downtown Los Angeles. Improving the efficiency and speed of the transit system has historically been shown, particularly with the introduction of the Metro Rapid bus system and the existing Metro Rail system, to generate sizeable increases in ridership, especially in areas where the demand for transit service is already high. Additional transportation infrastructure will prove invaluable as the PSA grows. SCAG predicts that the PSA's population will increase by 16.5% and the number of employees will increase by 12% by 2030 (Figure ES-5). This is partly due to dozens of new and adaptive reuse housing developments currently under construction in the area.

Because the Regional Connector is intended to close a gap in the county-wide rail system, it is important to note that Los Angeles County's population is expected to grow to 12.2 million people (22 percent) by 2030, and no freeway expansion projects are planned near the downtown area. Increasing transit capacity and making operations more efficient will be key in allowing the transportation system to accommodate the projected regional growth. Table ES-2 shows the projected growth in both the PSA and Los Angeles County as a whole.

The following maps (Figures S-6 to S-9) show the population and employment distribution within the PSA. The downtown area has a high concentration of both jobs and residences. As the maps show, areas that contain relatively few jobs contain high numbers of residents, and vice versa. As such, nearly all areas of the PSA contain transit supportive land uses. Most of the jobs and residences are within walking distance of either the proposed Regional Connector routes, or the existing Metro Red and Purple lines. As such, the proposed rail network would provide good coverage of most jobs and housing units in downtown Los Angeles, both now and in 2030.

Table ES-2 Population, Household, and Employment Growth			
	2005	2030	Forecast Increase Between 2005-2030
Population			
Study Area	17,795	20,738	16.5%
LA County	10,010,315	12,193,030	21.8%
Study Area % of LA County	0.18%	0.17%	---
Households			
Study Area	9,673	12,287	27.0%
LA County	3,298,210	4,116,567	24.8%
Study Area % of LA County	0.29%	0.39%	---
Employment			
Study Area	168,328	188,591	12.0%
LA County	4,644,010	5,651,043	21.7%
Study Area % of LA County	3.62%	3.34%	---

Source: SCAG, 2005 data and 2030 projections

Of the 18,000 people that currently live in the PSA, most live in the northern portion of Bunker Hill and the area south of Little Tokyo, both of which would have new rail stations in more proximate locations than the existing ones upon implementation of the Regional Connector. There is evidence of concentrated levels of transit dependency in the PSA, since 8,600 of the 9,700 households in the area do not have cars, and 7,200 are classified as low income (average annual salary below $12,755 for a two-person household). Furthermore, children and the elderly are among those most likely to use public transportation because they often lack drivers' licenses and access to private automobiles, and they account for over one-quarter of the PSA's population. As such, a large portion of PSA residents stand to benefit from the new businesses, developments, and amenities in the downtown area, and will augment ridership volumes on the Regional Connector. Like the overall population, low income households are concentrated in the northern portion of Bunker Hill and the southeastern section of the PSA.

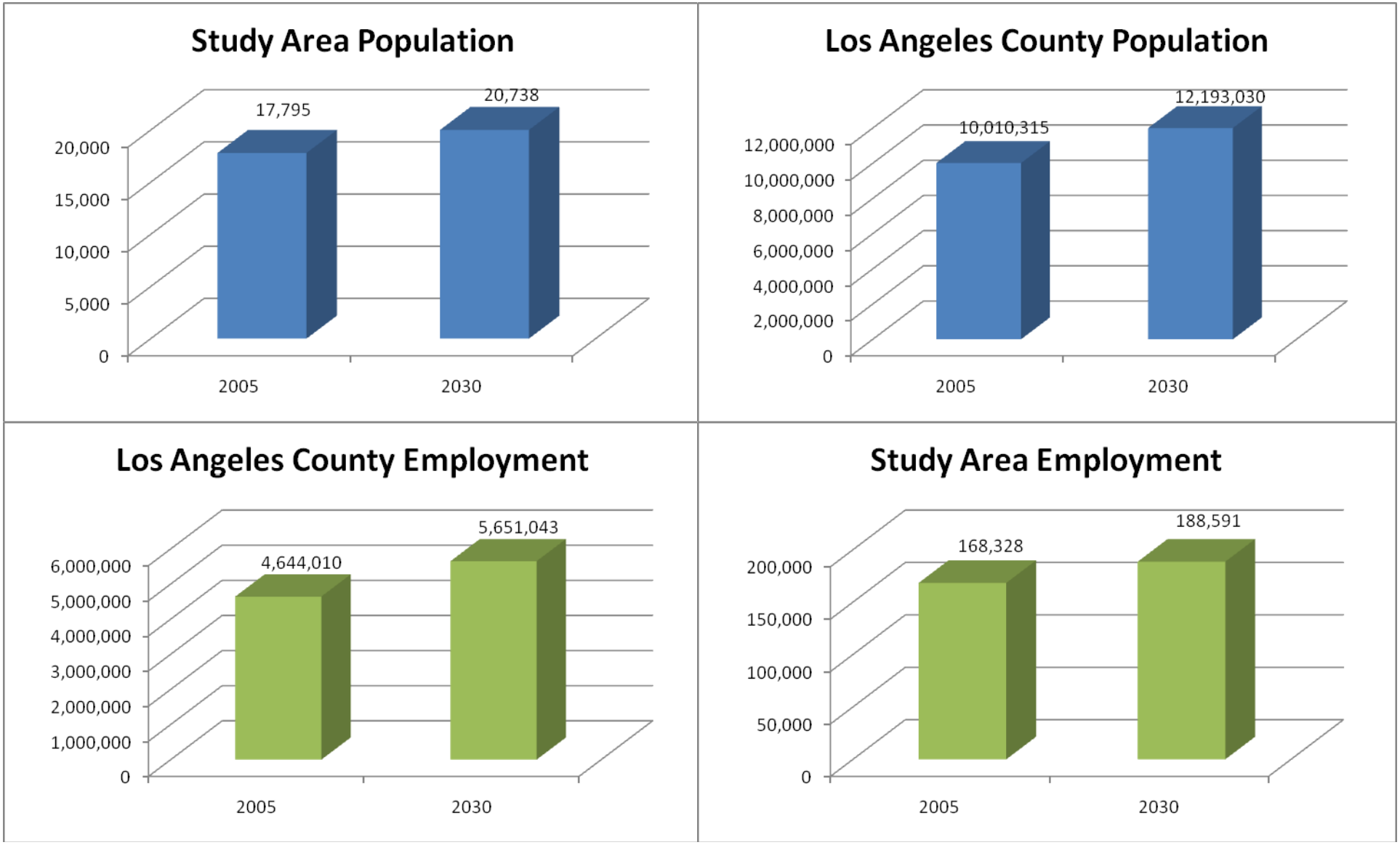
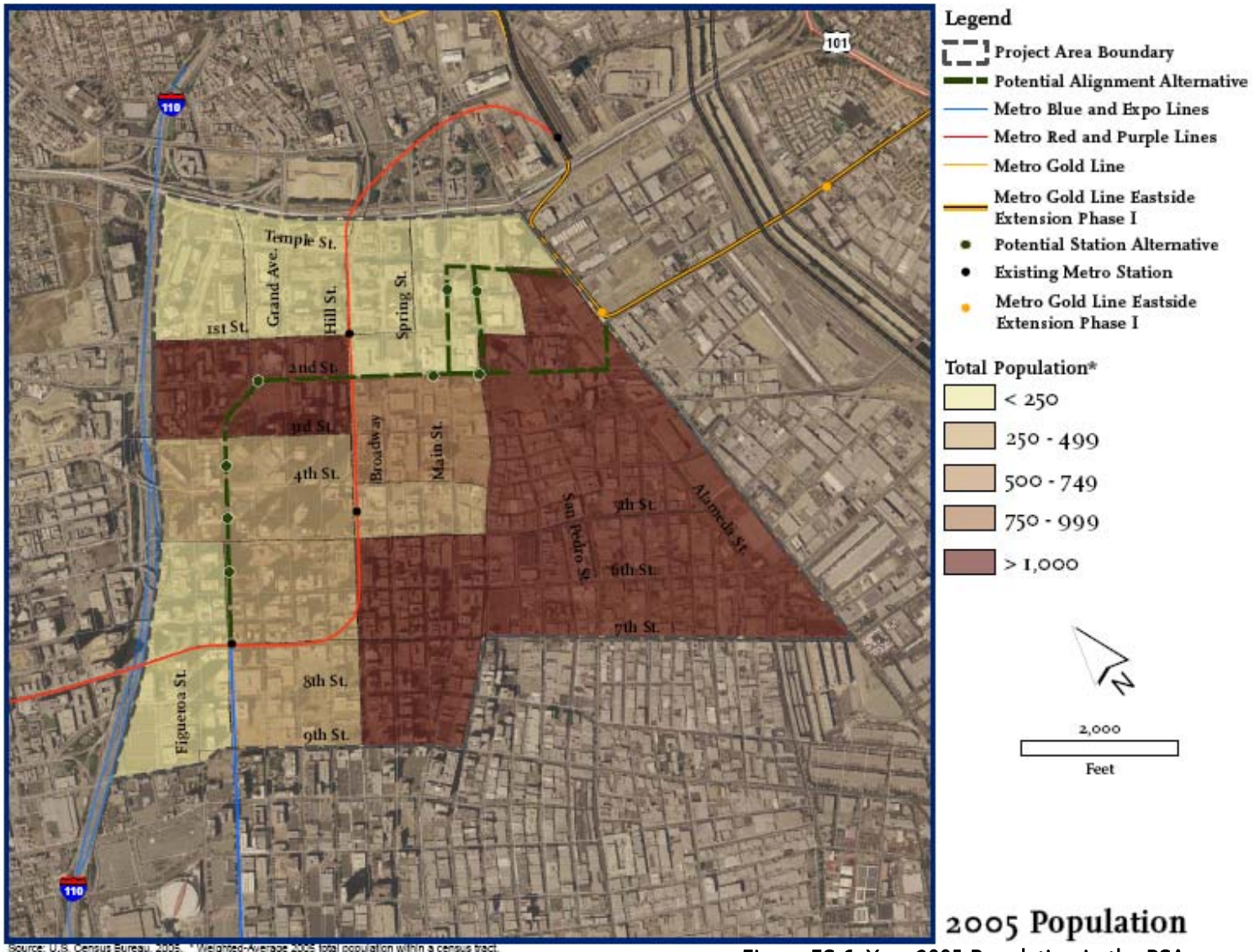
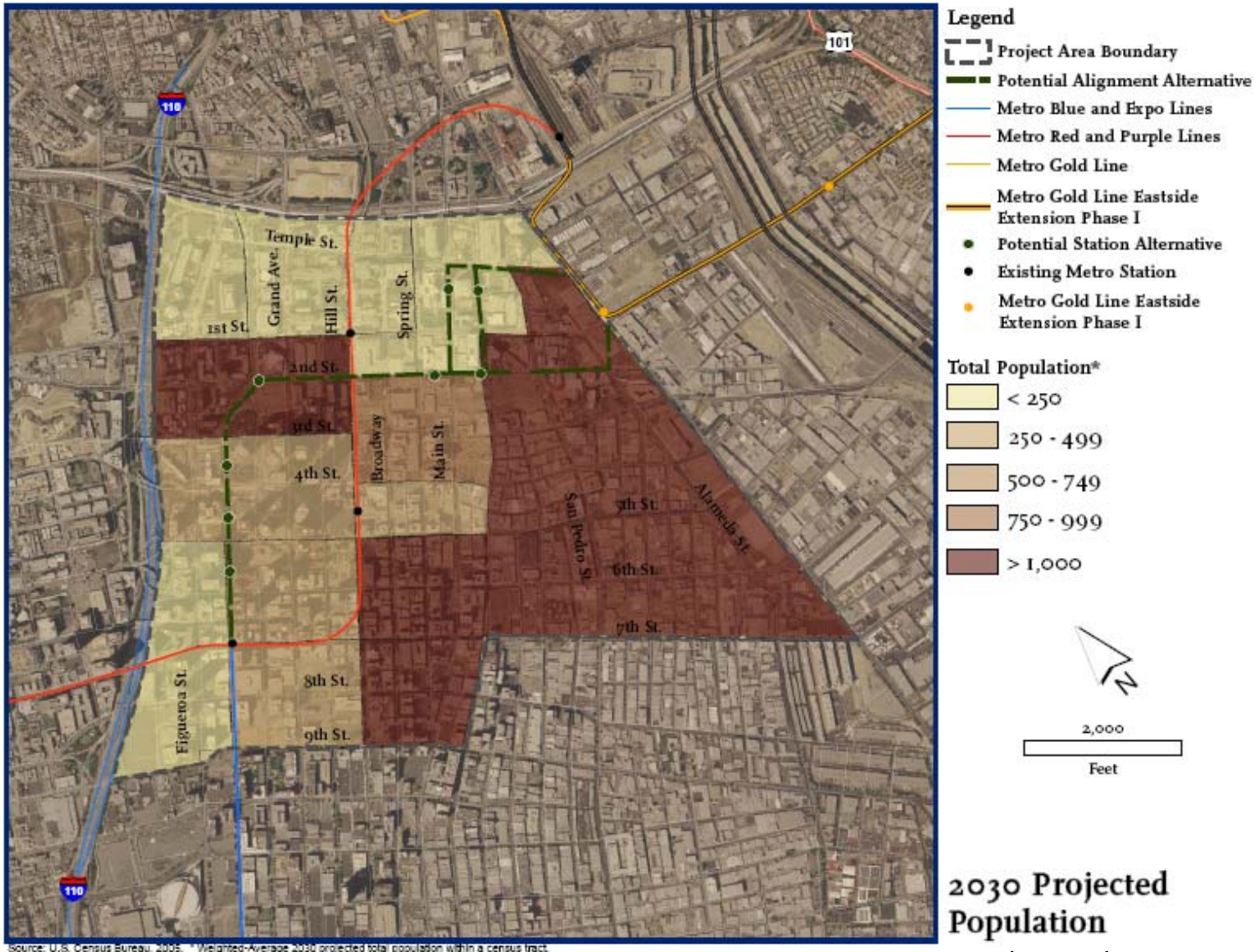


Figure ES-5 Projected Population and Employment Growth



Source: U.S. Census Bureau, 2005. * Weighted-Average 2005 total population within a census tract.

Figure ES-6: Year 2005 Population in the PSA



Source: U.S. Census Bureau, 2005. * Weighted-Average 2030 projected total population within a census tract.

Figure ES-7: Year 2030 Population in the PSA

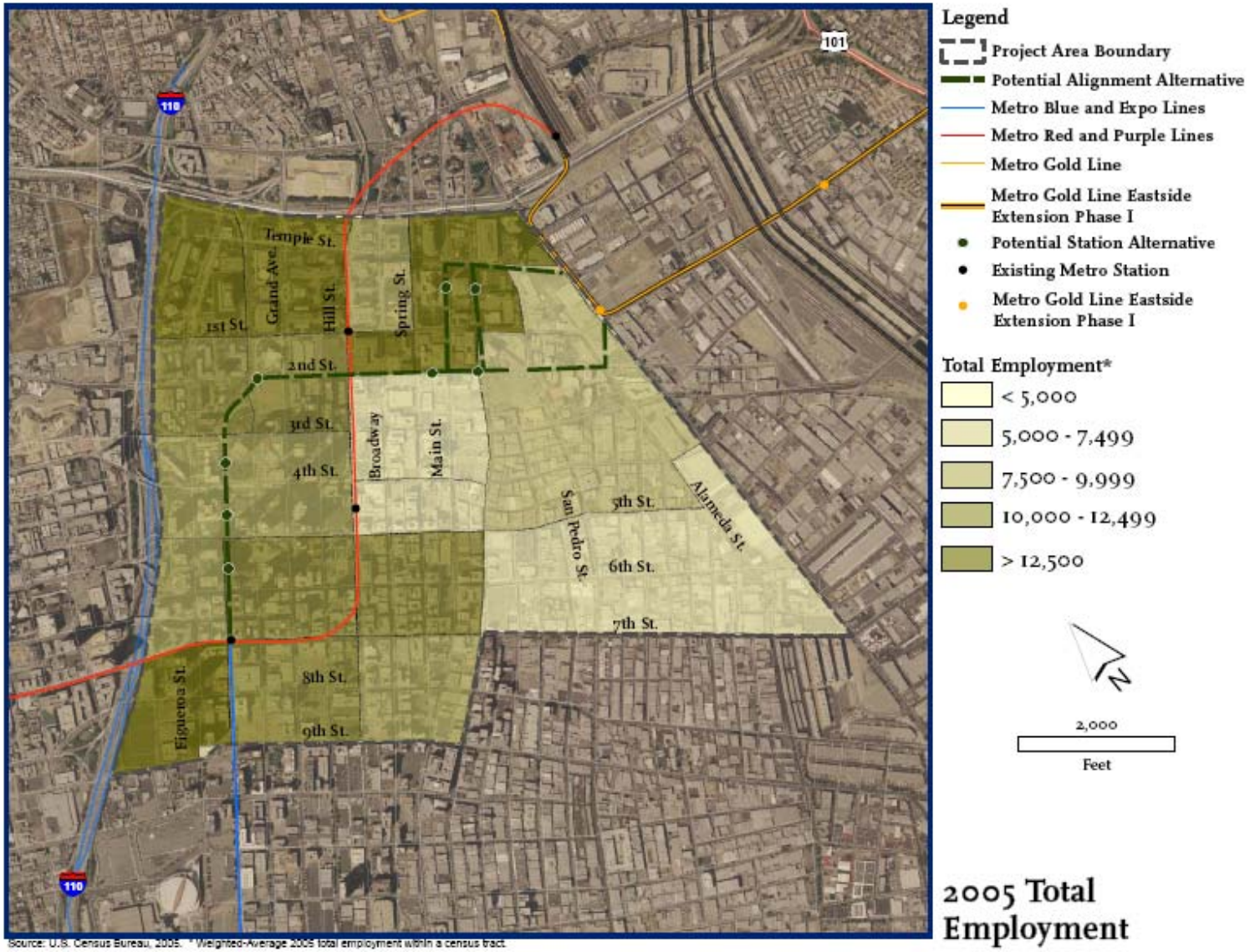
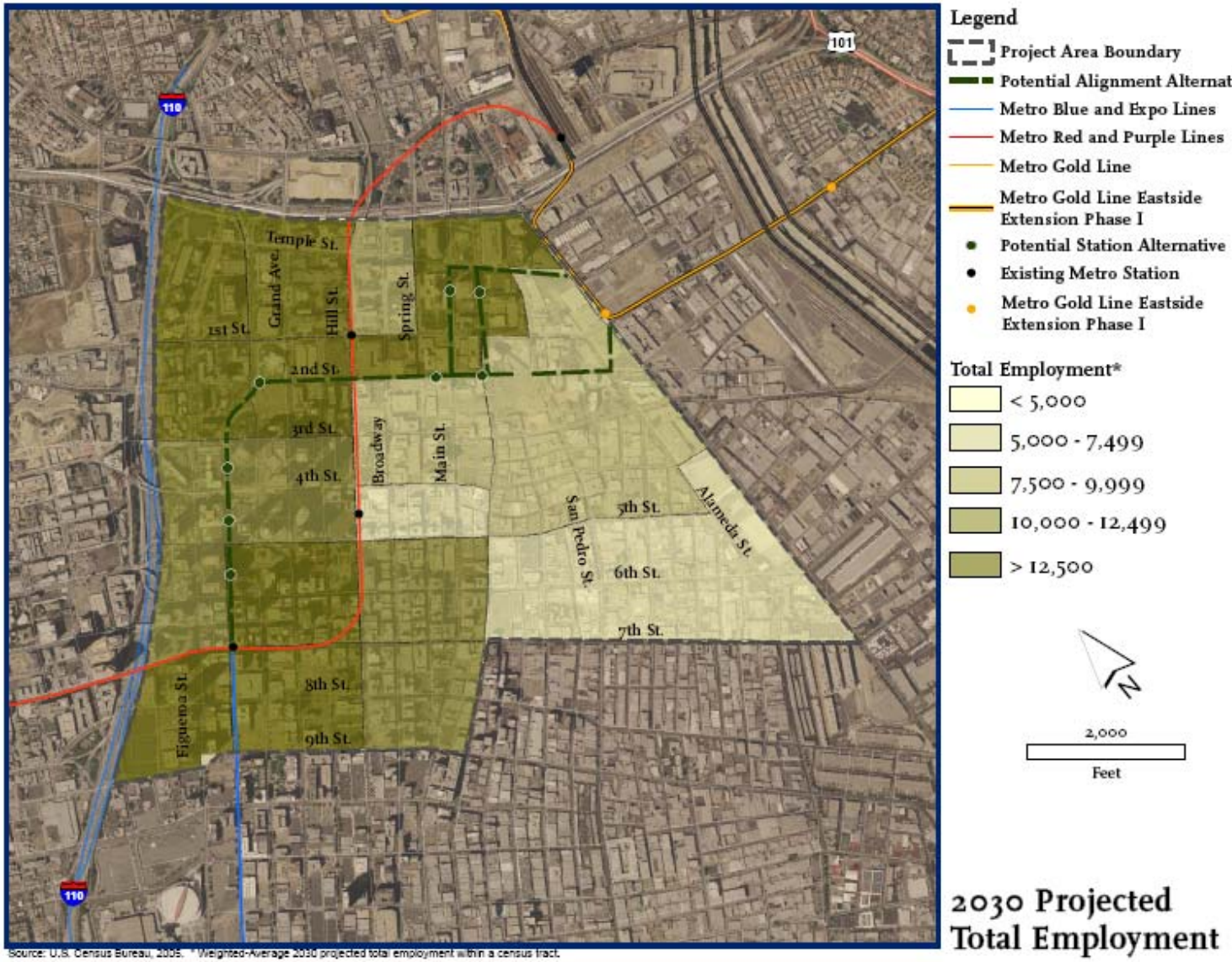


Figure ES-8: Year 2005 Employment in the PSA



Source: U.S. Census Bureau, 2005. * Weighted-Average 2030 projected total employment within a census tract.

Figure ES-9: Year 2030 Employment in the PSA

Table ES-3 Transit Dependent Demographic Information			
	Study Area	LA County	Study Area % of LA County
Population	17,795	10,010,315	0.18%
Under 18 years	976	2,798,604	0.03%
Over 65 years	3,497	926,670	0.38%
Households	9,673	3,298,210	0.29%
No vehicle households	8,586	671,214	1.28%
Use public transportation	1,025	254,091	0.40%
Low income households	7,244	1,481,896	0.49%
Total employment	168,328	4,644,010	3.62%

Source: U.S. Census Bureau, 2005

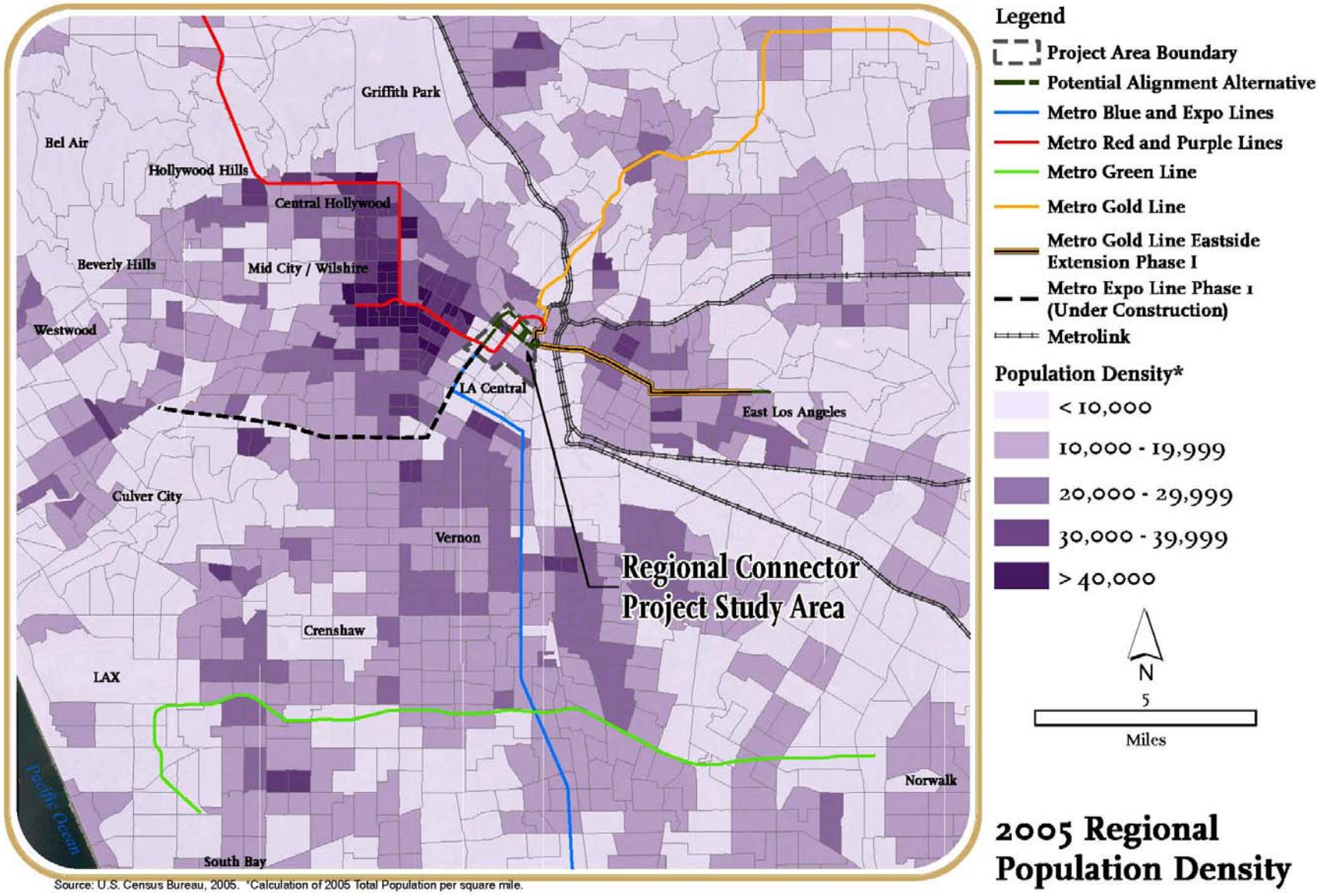
Like the PSA, Los Angeles County as a whole is expected to undergo a similar growth spurt over the next two decades. Figures ES-10 through ES-13 illustrate these growth patterns. As shown by the maps, the Metro Rail system passes through many areas with dense employment and residential land uses, including downtown Los Angeles. With large numbers of people within walking distance of the rail lines, the system-wide efficiency gains and better connections between lines generated by the Regional Connector would likely result in substantially increased transit use.

Transportation System

Downtown Los Angeles has the highest concentration of transit service in Los Angeles County. Historic growth patterns have established downtown as the crossroads of the region's transportation system. Ten transit operators provide service to 125 stops in the area along 112 bus routes and three rail lines (four when the Metro Expo Line opens in 2010). Bus service runs in a grid pattern through the downtown area, with the heaviest service on 1st St., the 4th St./5th St. couplet, Hill St., Broadway, the Main St./Spring St. couplet, and the Grand Ave./Olive St. couplet. There is also heavy pedestrian activity throughout the PSA. On the Metro Bus system alone, there are over 90,000 daily boardings within the PSA. Headways, the time between buses or trains on the same line, are as little as two minutes during peak hours on some lines, and there are dozens of express "freeway flyer" style lines that provide added service during peak periods.

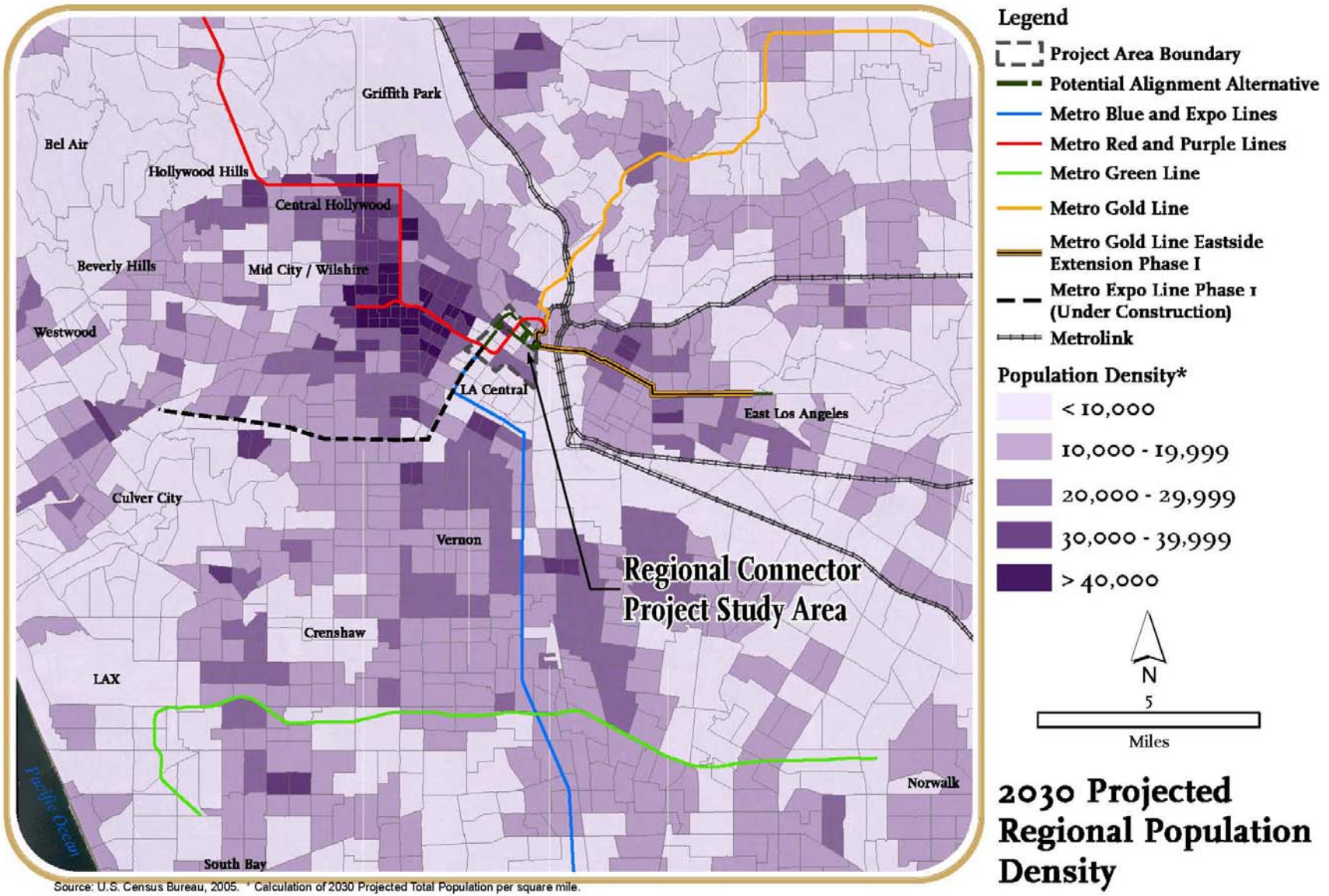
The Metro Rail system extends outward from downtown Los Angeles with 73 track miles and 62 stations. Altogether, it logs about 255,000 daily boardings system-wide. Overall, the countywide Metro Bus and Metro Rail systems average 1.6 million boardings each weekday. The busiest routes travel to the areas east and west of downtown, both of which will have expanded light rail service within the next two years. With downtown Los Angeles firmly established as the center of the regional transit network, improved connections and service efficiency in the PSA will reap benefits for transit users throughout Los Angeles County.

The relatively low population compared to the number of jobs in the PSA results in over 70,000 inbound commuters every day, and many more passing through. With such high travel demand in and out of the PSA, all of the freeways entering downtown Los Angeles operate at LOS F during peak hours, indicating severe congestion and delays. Like the PSA, most areas of Los Angeles County are affected by freeway congestion, though traffic volumes in the PSA are among the worst, as evidenced by Figure ES-14.



Source: U.S. Census Bureau, 2005. *Calculation of 2005 Total Population per square mile.

Figure ES 10 2005 Regional Population Density



Source: U.S. Census Bureau, 2005. * Calculation of 2030 Projected Total Population per square mile.

Figure ES-11 2030 Project Regional Population Density

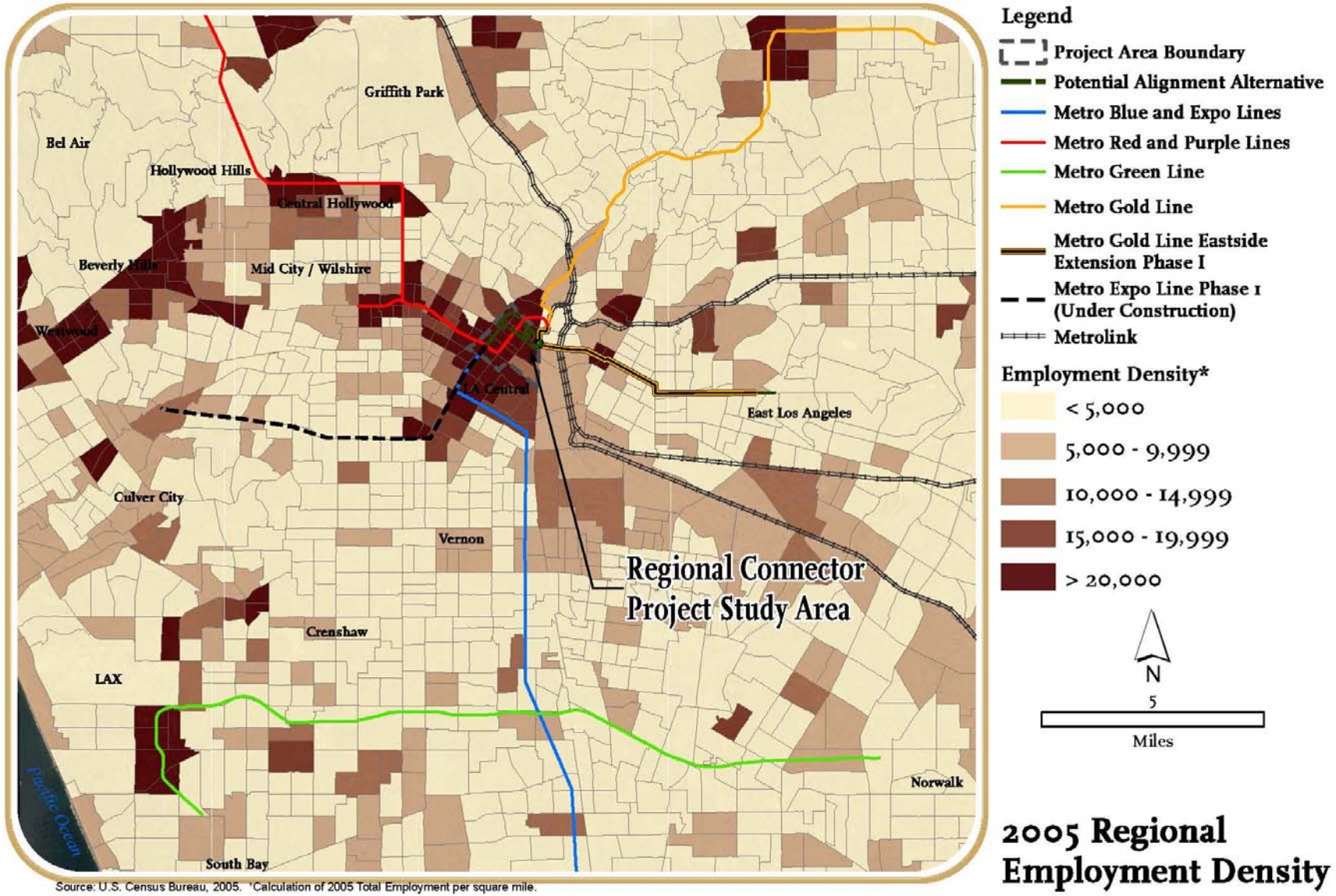
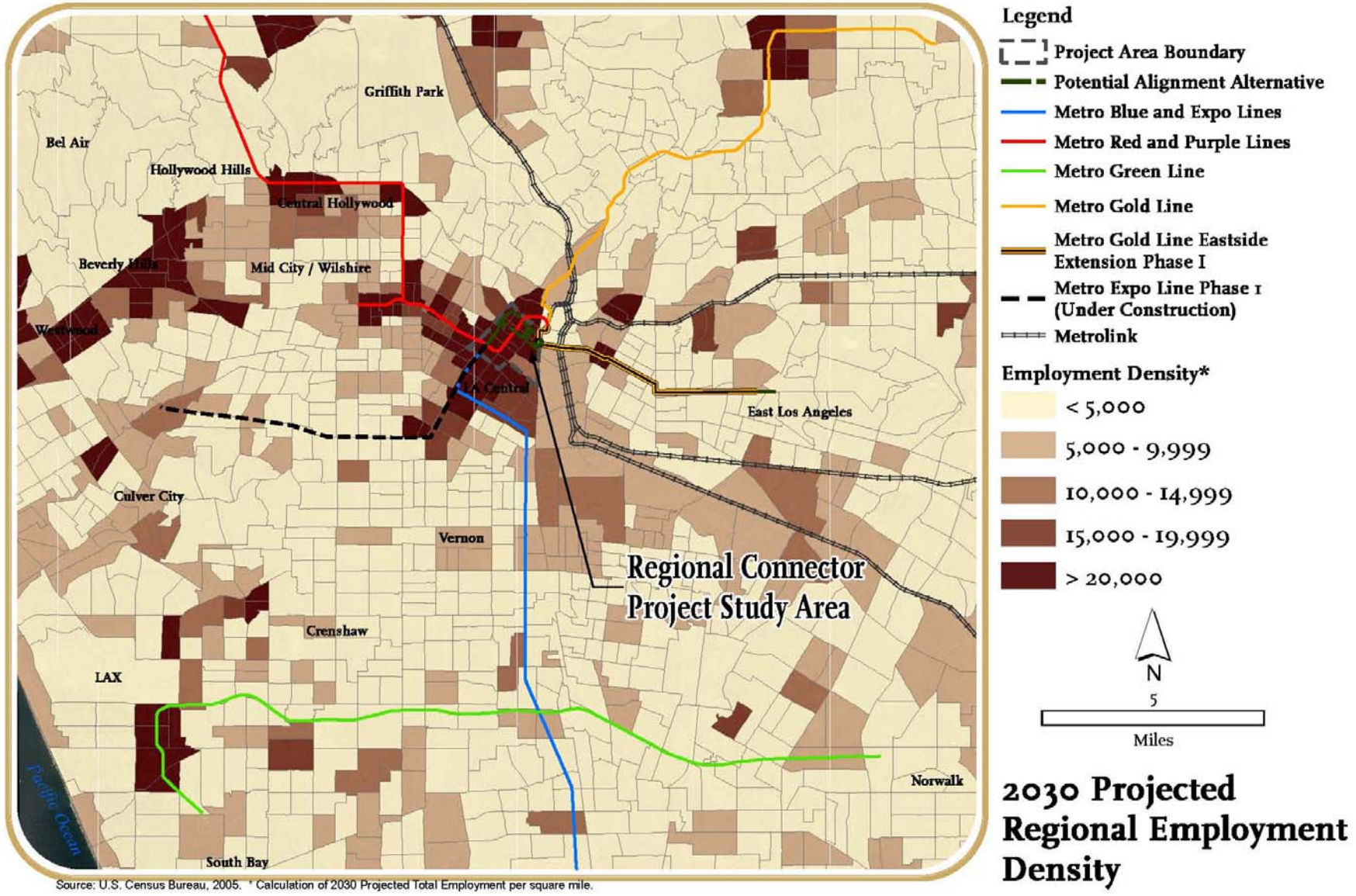


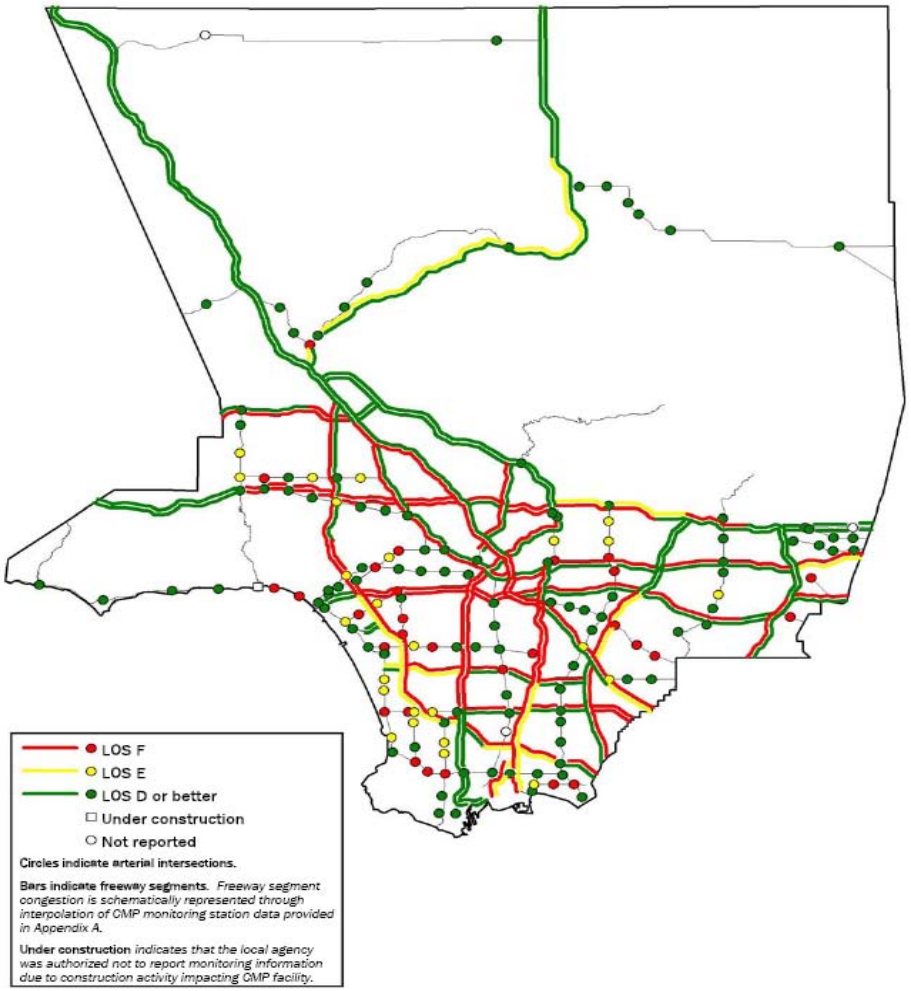
Figure ES 12 2005 Regional Employment Density



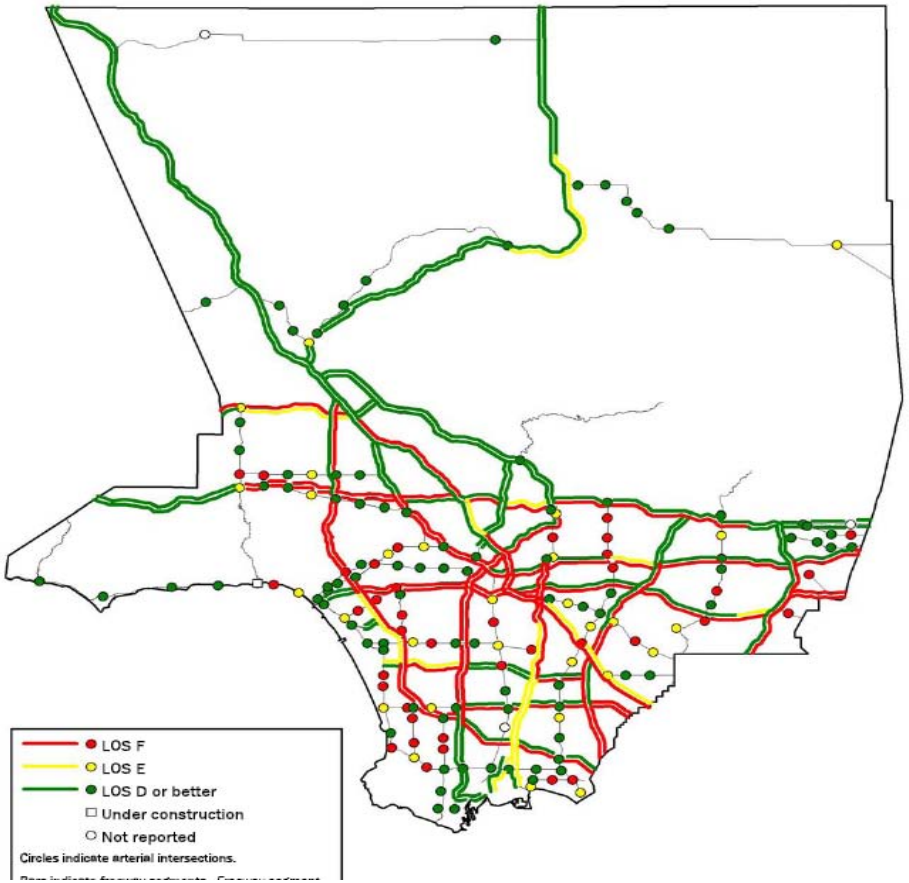
Source: U.S. Census Bureau, 2005. * Calculation of 2030 Projected Total Employment per square mile.

Figure ES-13 2030 Projected Regional Employment Density

2003 CMP HIGHWAY AND ROADWAY SYSTEM AM PEAK HOUR LEVELS OF SERVICE


LOS F
LOS E
LOS D or better
Under construction
Not reported
Circles indicate arterial intersections.
Bars indicate freeway segments. Freeway segment congestion is schematically represented through interpolation of CMP monitoring station data provided in Appendix A.
Under construction indicates that the local agency was authorized not to report monitoring information due to construction activity impacting CMP facility.

2003 CMP HIGHWAY AND ROADWAY SYSTEM PM PEAK HOUR LEVELS OF SERVICE



2004 Congestion Management Program for Los Angeles County

Figure ES-14 Freeway Levels of Service

Level of Service definitions are provided in Table ES-4. On surface streets, many intersections in the PSA carry upwards of 4,000 vehicles during their busiest hour, with many of these located on Figueroa and Flower Streets. Some of worst LOS ratings occur at some of the narrow intersections along 2nd St., but the only intersection with a rating of LOS F is at 1st and Alameda Streets. By 2030, two additional intersections are expected to deteriorate to LOS F in the absence of one of the Regional Connector build alternatives. The following tables (Tables S-5 and S-6) summarize the levels of service recently observed (2007) in the PSA.

Table ES-4 Level of Service Definitions

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	FREE FLOW. No vehicle waits longer than one red light and no green light phase is fully used.
B	0.601 - 0.700	REASONABLY FREE FLOW. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	STABLE FLOW. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	APPROACHING UNSTABLE FLOW (acceptable for urban conditions). Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	UNSTABLE FLOW (practical capacity). Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FORCED OR BREAKDOWN FLOW. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. There are tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, *Highway Capacity Manual*, 2000

The high intersection traffic volumes are largely attributable to the PSA's position as a major regional employment hub. Travel demand from all directions is high, especially from the areas east and west of the PSA. Of the relatively few home-based work trips originating in the PSA, most are bound for the Central East, Central West, and West Los Angeles areas. This is further illustrated in the spider diagrams in Figure ES-15 and Figure ES-16:

Table ES-5 Existing (2007) Intersection Level of Service				
	AM Peak Hour		PM Peak Hour	
Intersection	V/C Ratio	LOS	V/C Ratio	LOS
Hill St. / 1st St.	0.62	B	0.73	C
Broadway / 1st St.	0.63	B	0.56	A
Spring St. / 1st St.	0.54	A	0.45	A
Main St. / 1st St.	0.44	A	0.55	A
Los Angeles St. / 1st St.	0.53	A	0.58	A
Judge John Aiso St. / 1st St.	0.60	A	0.69	B
Alameda St. / 1st St.	1.03	F	0.88	D
Broadway / 2nd St.	0.84	D	0.46	A
Spring St. / 2nd St.	0.48	A	0.40	A
Main St. / 2nd St.	0.30	A	0.62	B
Los Angeles St. / 2nd St.	0.46	A	0.59	B
San Pedro St. / 2nd St.	0.40	A	0.52	A
Central Ave. / 2nd St.	0.39	A	0.54	A
Alameda St. /2nd St.	0.67	B	0.67	B
Broadway / 3rd St.	0.72	C	0.60	A
Spring St. / 3rd St.	0.59	A	0.55	A
Main St. / 3rd St.	0.53	A	0.73	C
Los Angeles St. / 3rd St.	0.66	B	0.57	A
San Pedro St. / 3rd St.	0.63	B	0.44	A
Central Ave. / 3rd St.	0.58	A	0.41	A
Alameda St. / 3rd St.	0.78	C	0.57	A
Figueroa St. / 3rd St.	0.65	B	0.84	D
Hope St. / Temple St.	0.75	C	0.82	D
Grand Ave. / Temple St.	0.65	B	0.68	B
Broadway / Temple St.	N/A	N/A	0.76	C
Spring St. / Temple St.	0.58	A	0.42	A
Main St. / Temple St.	0.39	A	0.69	B
Los Angeles St. / Temple St.	0.55	A	0.63	B
Judge John Aiso St. / Temple St.	0.36	A	0.50	A
Alameda St. / Temple St.	0.64	B	0.65	B

Table ES-6 Existing (2007) Roadway Segment Average Daily Traffic (ADT) Analysis							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	4	28,000	11,177	0.399	A
	5th St.	Secondary	6	45,000	19,920	0.443	A
	6th St.	Secondary	4	30,000	17,386	0.580	A
	Wilshire Blvd.	Secondary	4	30,000	19,434	0.648	B
	7th St.	Secondary	4	30,000	18,908	0.630	B
2nd St.	Alameda St.	Secondary	3	21,000	8,176	0.389	A
	Central Ave.	Secondary	2	14,000	10,452	0.747	C
	Los Angeles St.	Secondary	3	21,000	16,244	0.774	C
	Main St.	Secondary	3	21,000	19,630	0.935	E
	San Pedro St.	Secondary	2	14,000	13,371	0.955	E
	Spring St.	Secondary	4	28,000	14,394	0.514	A
Los Angeles St.	1st St.	Secondary	4	28,000	18,559	0.663	B
	2nd St.	Secondary	4	28,000	17,156	0.613	B
	Temple St.	Secondary	5	35,000	22,036	0.630	B
Main St.	1st St. 1-Way	Major Class II	3	25,500	12,079	0.474	A
	2nd St. 1-Way	Major Class II	3	25,500	13,711	0.538	A
	Temple St.	Major Class II	4	34,000	25,626	0.754	C
Temple St.	Judge John Aiso St.	Major Class II	4	32,000	17,114	0.535	A
	Los Angeles St.	Major Class II	4	32,000	16,809	0.525	A
	Main St.	Major Class II	4	32,000	17,032	0.532	A
1st St.	Alameda St.	Secondary	4	28,000	21,538	0.769	C
	Central Ave.	Secondary	4	28,000	23,081	0.824	D
	Los Angeles St.	Secondary	6	42,000	22,099	0.526	A
	Main St.	Secondary	6	42,000	23,908	0.569	A
	Spring St.	Secondary	6	42,000	20,205	0.481	A
3rd St.	Flower St.	Secondary	4	30,000	19,133	0.638	B
	Spring St.	Secondary	3	22,500	17,564	0.781	C
	Los Angeles St.	Secondary	3	22,500	17,965	0.798	C
	Main St.	Secondary	3	22,500	16,151	0.718	C
Alameda St.	1st St.	Major Class II	4	32,000	30,514	0.954	E
	2nd St.	Major Class II	4	32,000	27,881	0.871	D

Year 2006 Home Based Work Transit Trips
From Outside Districts to the Regional Connector Study Area

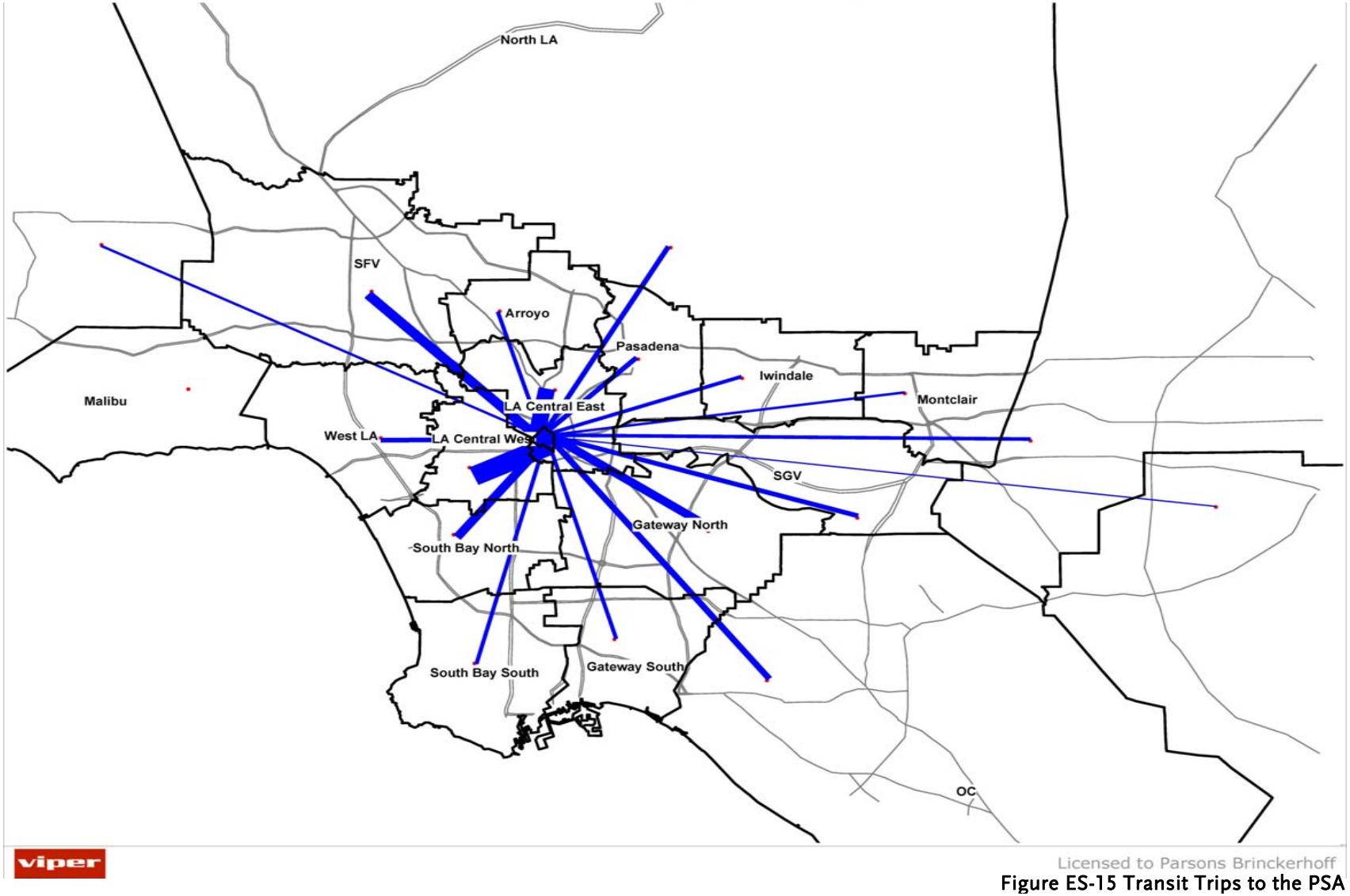
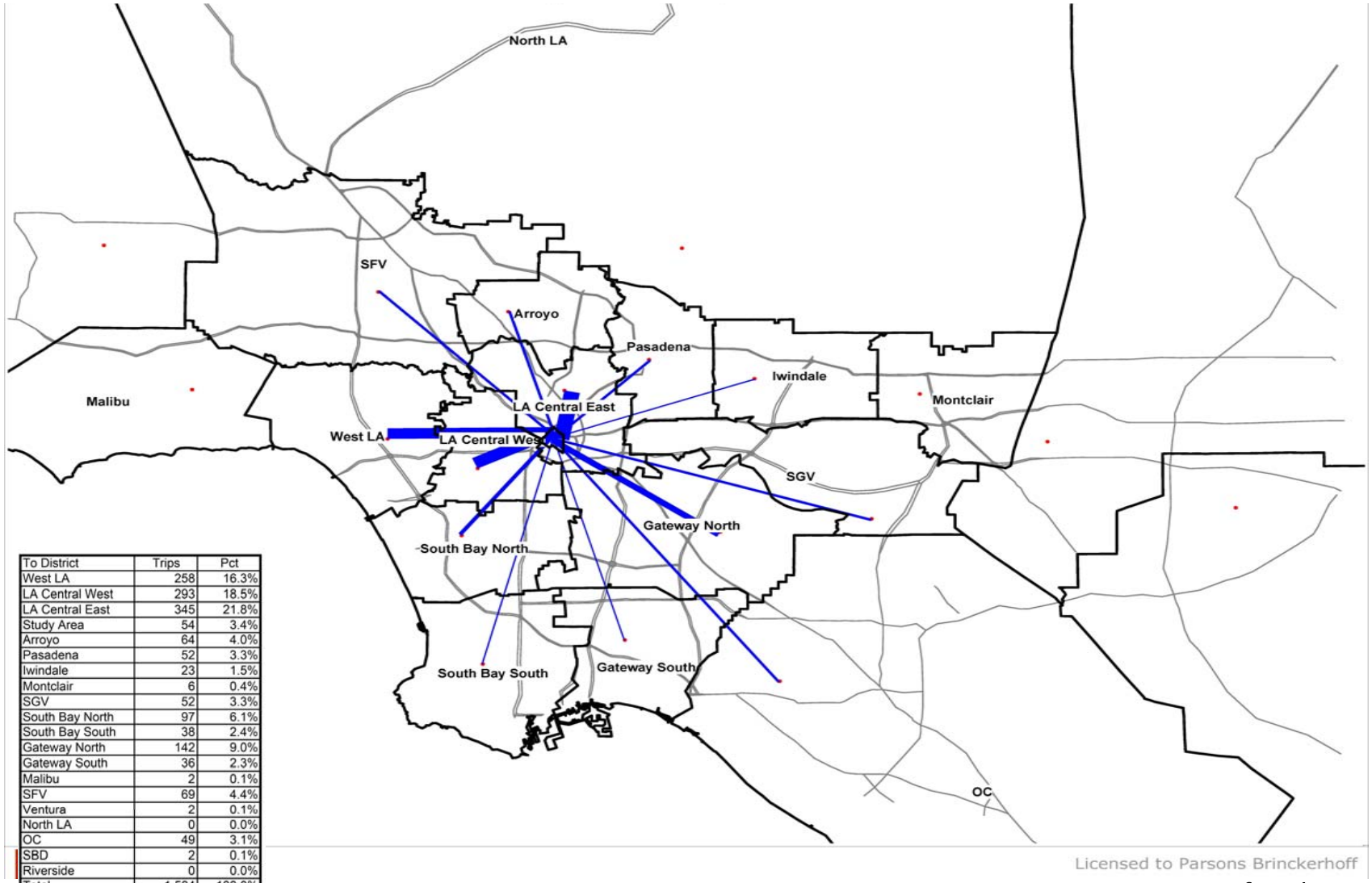


Figure ES-15 Transit Trips to the PSA



To District	Trips	Pct
West LA	258	16.3%
LA Central West	293	18.5%
LA Central East	345	21.8%
Study Area	54	3.4%
Arroyo	64	4.0%
Pasadena	52	3.3%
Iwindale	23	1.5%
Montclair	6	0.4%
SGV	52	3.3%
South Bay North	97	6.1%
South Bay South	38	2.4%
Gateway North	142	9.0%
Gateway South	36	2.3%
Malibu	2	0.1%
SFV	69	4.4%
Ventura	2	0.1%
North LA	0	0.0%
OC	49	3.1%
SBD	2	0.1%
Riverside	0	0.0%
Total	1,584	100.0%

Figure ES-16 Transit Trips from the PSA

Transit-Supportive Land Uses and Activity Centers

In light of the special constraints on roadway expansion and high traffic volumes in the downtown area, several planning entities have included transit-supportive language and projects in their published guidelines and planning documents. The County of Los Angeles, for example, seeks to encourage a range of transportation services for transit dependent populations, support the linking of regional transportation systems, and expand transportation options throughout the county. The Community Redevelopment Agency of the City of Los Angeles (CRA) publishes a set of Downtown Design Guidelines, which call for accessible transportation with an emphasis on walking, biking, and transit, rather than automobiles.

The potential transit markets for the Regional Connector are two-fold: passengers bound for downtown Los Angeles and passengers traveling through downtown Los Angeles on the way to other destinations. As mentioned in previous sections, the project will provide a continuous, transfer-free connection between over 50 miles of light rail lines spanning much of Los Angeles County. In addition, there are many activity centers and major destinations within the PSA that will be more easily accessible from the new Regional Connector stations. Downtown Los Angeles is a primary destination for employment, services, entertainment, and increasingly, housing. The Downtown Center Business Improvement District, which comprises a larger area of the downtown than the PSA, expects 10,000 new residents to move downtown between 2006 and 2009. The continued growth and revitalization of downtown Los Angeles will generate new transit trips both to and within the PSA, heightening the need for increased transit capacity and more efficient operations. Figure ES-17 shows the locations of ongoing development projects in the PSA, all of which will contribute to the activity levels in downtown Los Angeles and heighten the need for additional transit capacity. The figure also provides a photographic representation of the densest areas of downtown Los Angeles.

Major development is expected in the Bunker Hill area, where the proposed Grand Avenue Project will add 3.6 million square feet of new construction, including 449,000 sq. ft. of retail and 2,600 new housing units, nearly doubling the existing total. Similarly, the number of planned and recently completed housing units exceeds 2,000 in Little Tokyo, and planning for new housing is underway at the proposed terminus of the Regional Connector near the Little Tokyo/Arts District Station. The Financial Core is also expected to generate a large number of new trips within the next several years as two projects, Metropolis and Park Fifth, add over 1,000 new residential units and 200 hotel rooms to the PSA. Just south of the PSA, near the Pico Station, the four million square foot entertainment, office, and residential complex, LA Live, will serve as a major attraction that could generate many through-trips on the Regional Connector.

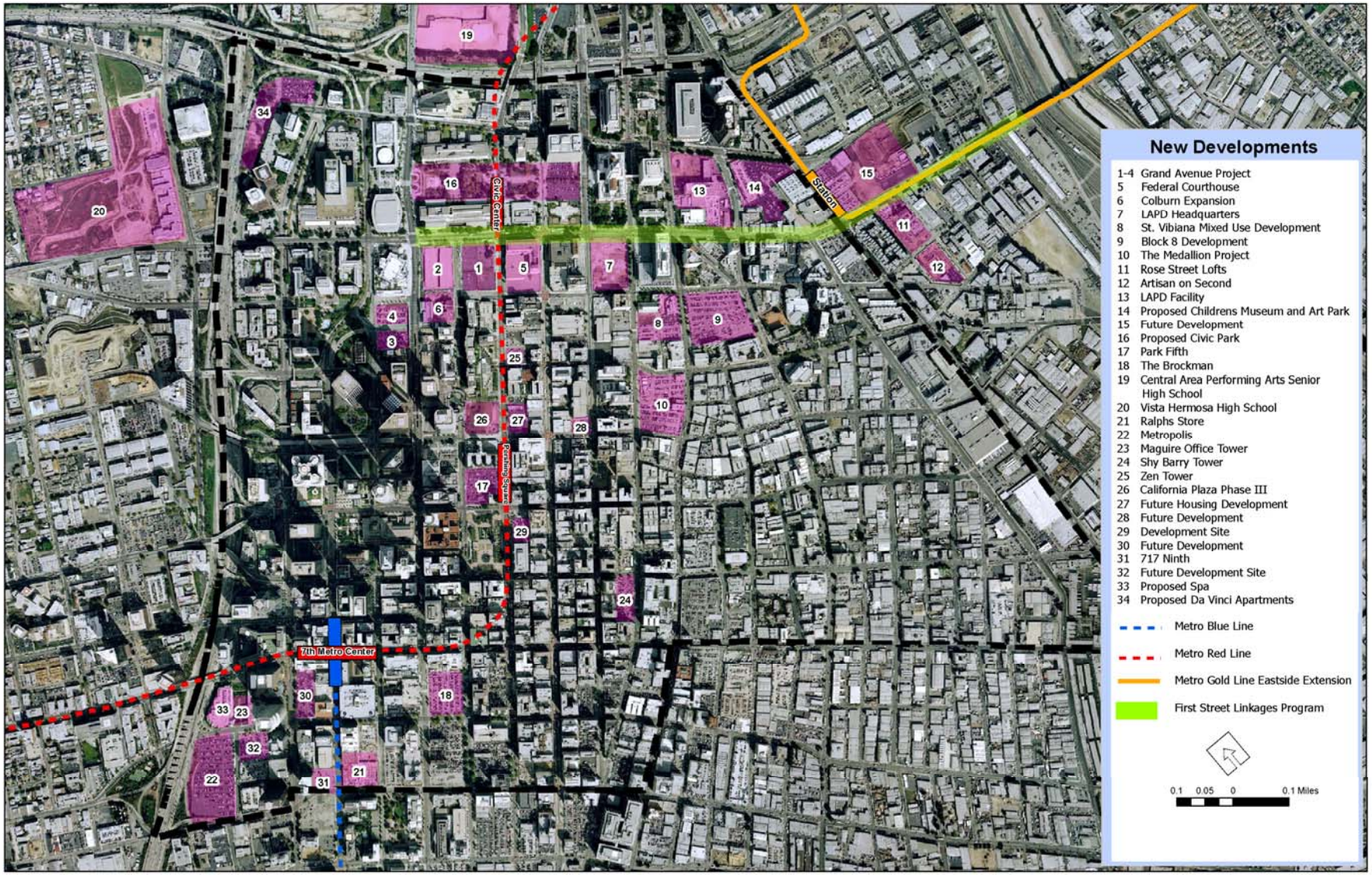


Figure ES-17 New Developments in the PSA

Conclusion

Seamlessly linking all of Metro's light rail lines together will allow for shorter trip times, fewer transfers, better schedule adherence, and more reliable service. All of these benefits are key factors that will improve the transit system's ability to attract high ridership. Los Angeles County has invested over $10 billion in its regional rail system over the past two decades, and the Regional Connector would significantly enhance that investment by improving the operations of the existing system, enabling the system to better accommodate future extensions, and making rail transit more convenient and attractive to potential users. By improving the operation of the entire rail system, the Regional Connector will lure solo drivers from their cars, reduce burdensome passenger loads on the bus network, and improve access to Los Angeles' growing downtown area. In turn, lighter traffic loads on the region's roadways would improve air quality, reduce greenhouse gas emissions, reduce fuel consumption, and represent a step toward a more sustainable transportation system.

ES.5 Community Input Process

In order to ensure that the public was kept informed about the AA study on an ongoing basis and provided with opportunities to comment at key milestones, a detailed Community Outreach and Public Involvement Plan was developed. The Plan included detailed stakeholder identification, communications protocols, public input tracking, a proposed schedule for interfacing with the public and recommendations for how meetings should be conducted at various stages of the study. Additional recommendations for key stakeholder interviews or briefings, inter-agency coordination, topic-specific and other meetings were also included in the Plan. It is important to note that while plans are important, outreach activities, especially on complex projects, were developed to be flexible enough to accommodate changing circumstances and enhanced approaches. Details of this and other outreach efforts can be found in the Community Participation Summary and Report prepared in November 2008.

A series of three public meetings were held respectively in November 2007, February 2008, and October 2008 as part of the ongoing community outreach and public involvement process. The overwhelming majority of comments received supported the need for a Regional Connector to enhance the efficiency of the current and future rail system by providing through service between the Metro Blue Line, Gold Line, Gold Line Eastside Extension and Expo Line, and service to link these rail corridors directly to Union Station. Most comments supported almost equally a Grand Avenue and 1st St. alignment, below-grade (i.e., subway), and utilizing Light Rail Transit (LRT) technology. Several potential stations received wide popularity, including, in order of their level of support, Little Tokyo, 7th St./Metro Center, Bunker Hill, Union Station, Main/1st St. and Civic Center (i.e., in the northern portion of the PSA). No comments were received opposing the Regional Connector, though a few remarks noted that other transit projects may need to receive a higher priority. Many comments specifically pointed out the need to develop a transit system that connects multiple lines, expand the 7th St./Metro Center Station to accommodate enhanced service, and upgrade various operational systems. Of those providing feedback about the evaluation criteria, most thought that access was paramount.

After the initial scoping meetings, a set of two community update meetings was held to present stakeholders with the results of the early scoping process. The majority of those who submitted comments supported a below-grade alignment. There was very little support for an at-grade alignment, particularly in the financial district. There were no concerns expressed about noise and vibration regarding tunneling through downtown Los Angeles. The community expressed interest in identifying ways to minimize transfers between the transit lines, and improved connections to the Metro Red Line.

ES.6 Alternatives Identification and Evaluation Methodology

At the outset of the AA process, Metro considered a wide range of possible modes and alignments to close the gap in the light rail system through downtown Los Angeles. The evaluation and screening process used to compare alternatives is shown in Table ES-8 and described briefly in this section.

At the start of this AA, an initial set of conceptual alternatives to be considered for the Regional Connector was developed by researching previous studies and related reports. Alternatives no longer viable due to changes in the environment were removed from further consideration. Changes in the environment included, but were not limited to, new developments of property previously vacant during the development of an earlier report, changes in land use, and placement of new infrastructure. The initial set of conceptual alternatives was then studied with respect to the following attributes:

- Modes
- Alignments
- Configurations
- Station Locations

Table ES-7 provides a graphic representation of some of the widely-used transit modes and configurations that were considered for the Regional Connector.

During the AA study phase, the project has undergone extensive research and analysis in developing alternatives. This process included:

- Consideration of alternatives previously studied during the 1990's as part of the Los Angeles County Metropolitan Transportation Commission's and Metro's Pasadena Blue Line Project
- Comments received from community involvement activities, including meetings with stakeholders, public agencies, local jurisdiction, and the public during the Initial Scoping phase

- Analysis of the engineering and geographic constraints of building new infrastructure in a dense central business district

- Surveys of land use and travel patterns to determine the most ideal routes and station locations

- Analysis of each alternative's ability to enhance connectivity and reduce transfers within the existing rail system

Based on these attributes, 32 initial conceptual alternatives were identified that would link the 7th St./Metro Center Station and the Metro Gold Line at 1st and Alameda St. (Figure ES-18).

An early scoping process was completed where both the general public and public agencies were engaged and provided input. During this process, goals, objectives and evaluation criteria were developed and documented in the Alternatives Analysis Methodology Report (May 2008). From the early scoping process the following seven goals were established:

Goal 1 Improve Mobility and Accessibility both Locally and Regionally
Develop an efficient and sustainable level of mobility within Los Angeles County to accommodate planned growth and a livable environment.

Goal 2 Provide a Cost Effective Transportation System
Develop a project that provides sufficient regional benefits to justify the investment.

Goal 3 Provide a Safe and Secure Alternative Transportation System
Develop a project that is safe for riders, pedestrians and drivers while meeting the region's need for security.

Goal 4 Achieve a Financially Feasible Project
Develop a project that maximizes opportunity for funding and financing that is financially sustainable.

Goal 5 – Support Public Involvement and Community Preservation
Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Tokyo, the Arts District, Bunker Hill, Civic Center and the Historic District.

Goal 6 Support Efforts to Improve Environmental Quality
Develop a project that minimizes environmental impacts.

Goal 7 – Support Community Planning Efforts
Support the progression of the regional center area as an integrated destination and a dynamic and livable area accommodating projected growth in a sustainable manner.

Table ES-7 Modes Considered	
Bus Traditional bus service operates in mixed flow traffic on freeways and arterial streets. Bus service is flexible, easily changed, and has the ability to detour around road obstacles. Service reliability depends heavily on traffic conditions.	
Bus Rapid Transit (BRT) BRT uses buses in exclusive right-of-way or bus-only lanes with traffic signal priority. Exclusive right-of-way could be configured at-grade, underground, or on aerial structures. Buses have the flexibility to leave their right-of-way and detour around road obstacles. Because of the limited use of mixed flow lanes, BRT service quality is less affected by traffic conditions than traditional bus service.	 A BRT bus (Metro Orange Line) operating on dedicated right-of-way in an at-grade configuration
Light Rail Transit (LRT) LRT uses electric trains on conventional rails, powered by overhead wires. Because the power delivery system is overhead, tracks can be installed in mixed flow lanes, exclusive right-of-way with grade crossings, or roadway medians. Automobiles can drive across or along the tracks at grade crossings and on street-running segments. Right-of-way can be at-grade, aerial, or underground. Trains do not have the flexibility to detour around obstacles, and such incidents typically require single tracking and service interruptions. Because of the limited use of mixed flow lanes, LRT service is typically affected little by traffic conditions.	 LRT train (Metro Gold Line) operating in an at-grade configuration

Heavy Rail Transit (HRT)
HRT uses electric trains on conventional rails, powered by a third rail. Because the power delivery system is located at track level, tracks can only run in exclusive right-of-way without grade crossings. Automobiles cannot cross the tracks at all. Right-of-way can be at-grade, aerial, or underground, but at-grade alignments require cross-traffic to use overpasses and underpasses. Trains do not have the flexibility to detour around obstacles, and such incidents typically require single tracking and service interruptions. HRT does not use mixed flow lanes, and service is unaffected by roadway traffic conditions.

HRT train (Purple Line above) operating in an underground configuration

Figure ES-18 Universe of Alternatives Considered

A detailed summary of each of the sub criteria for each of the seven goals is provided in Table ES-8.

The initial set of alternatives was further refined according to the criteria in Table ES-8, and a set of alternatives identified for additional screening was developed. Some of the initial alternatives were developed in 2004 or earlier, and they assumed the use of several then-vacant parcels which now contain new construction or planned developments. These alternatives, along with others where engineering feasibility would have been problematic, were subsequently reconfigured or dropped from consideration. Altogether, a total of eight alternatives were identified with some alternatives having minor variations, as shown in Figure ES-19.

Using the evaluation criteria developed to measure how well each alternative met the goals and objectives for the Regional Connector, the eight alternatives were compared to one another and a final two alternatives, including one alternative having a variation in one station location, were identified. The evaluation took into account level of urban fit, amount of the population served, community acceptability, jobs within a one-quarter mile radius, opportunities for transit-oriented design, number of connections to key activity centers, and other factors pertaining to potential transit benefits. The Initial Screening Report details the routes and configurations of the eight alternatives from which the final two were selected.

ES.7 Alternative Recommendations

Two build alternatives (one with two options) are studied in this AA Report, along with a No Build Alternative and a Transportation System Management (TSM) Alternative, both of which are required by the Federal Transit Administration as part of the New Starts application.

No Build

The No Build Alternative would maintain existing transit service through the year 2030. No new infrastructure would be built, aside from projects currently under construction or identified in Metro's 2008 Long Range Transportation Plan. The rail infrastructure serving the PSA under this alternative is:

- The existing Metro Gold Line from Union Station to Pasadena, a 13.6-mile light rail transit line along the northeastern edge of the PSA.
- The Metro Gold Line Eastside Extension Phase 1 from Union Station to East Los Angeles, a six-mile LRT line scheduled for completion in late 2009.
- The existing Metro Blue Line from 7th St./Metro Center Station to Long Beach, a 22-mile LRT line travelling south from the PSA.
- The Metro Expo Line Phase 1, an 8.5-mile LRT line scheduled to open in 2010, running from 7th St./Metro Center Station to Washington and National Blvds. in Culver City.

Table ES-8 Regional Connector Goals, Objectives, Evaluation Criteria and Performance Measures				
	Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
1	Support Community Planning Efforts *Support the progression of the regional center area as an integrated destination and a dynamic and livable area accommodating projected growth in a sustainable manner*	• *Support* land use policies and Community Plans	• *Population, Population Density, Households, Household Density for year 2030 ¼ mile of alignment*	• *Number of planned development projects in the area over the next 10 years, including residential/office space/commercial units within a 1/4 mile of stations*
		• Support and coordinate with development and redevelopment efforts	• *Transit Oriented Design supportive plans and policies in place (Score 1 - worst to 5 -best)*	• *Number of connections with sidewalks that support the City's Downtown Street Standards*
		• Support the City's effort to improve urban *design* and the pedestrian environment by contributing to a healthy environment	• *Number of jobs, employment density for year 2030 within a ¼ mile of alignment*	
		• Support efforts to improve safety and *security* for downtown residents, employees and visitors	• *Number of direct connections to key activity centers within ¼ mile of alignment (Score 1 -worst to 5 -best)*	
		• *Support* transit dependent communities	• *Number of opportunities for redevelopment within ¼ mile of alignment (underdeveloped or underutilized properties along alternative alignment)*	
2	Support Public Involvement and Community Preservation	• *Balance* the benefits and impacts to low income and minority communities	• *Evaluation of potential disproportionate effects: Environmental justice effects will be evaluated per CEQA/NEPA requirements (Score 1 to 5)*	• *Number of potential acquisitions*

Table ES-8 Regional Connector Goals, Objectives, Evaluation Criteria and Performance Measures				
	Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
	Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Tokyo/Arts District, Bunker Hill, Civic	• Enable *workers* and visitors to gain access to the regional center to increase its economic vitality and benefit from its economic opportunity	• *Initial areas identified for potential acquisitions for stations and alignment (does not include actually in construction) within ¼ mile of alignment* • *Evaluation of potential disproportionate effects: Number of low income HH within¼ mile of proposed alignment* • *Number of residents by ethnicity within ¼ mile of alignment (US Census)* • *Urban fit potential for alignment and for stations, including physical scale, visual fit, and cultural preservation (Score 1 to 5)* • *Percentage of service grade separated* • *Community Acceptance (High, Medium, Low)*	• *Percentage of service grade separated* • *Evaluation of potential disproportionate effects and risk to environmental justice populations related to construction activities (Score 1 to 5)* • *Urban fit potential, including pedestrian accessibility and urban design enhancement opportunities (Score 1 to 5)*
3	Improve Mobility and Accessibility both Locally and Regionally	• Improve the connectivity of the regional *transit* service and provide a more attractive travel alternative for residents, workers and visitors in the region	• *Increase in daily transit boardings (amount of transit users increased compared to No Build)*	• *Hours of transportation user benefits*
	Develop an efficient and sustainable level of mobility within LA County to accommodate planned growth and a livable environment	• Facilitate sustainable regional *development*	• *New daily transit trips compared to No Build and Transportation System Management (TSM) alternatives*	• *Congestion relief (Reduction in highway travel demand in the corridor)*

Table ES-8 Regional Connector Goals, Objectives, Evaluation Criteria and Performance Measures				
	Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
		• Increase ridership of the Metro transit system and reduce single occupancy *trips*	• *Traffic impacts (Number of intersections with E or F Level of Service)*	• *Comparison of highway, bus, and fixed guideway peak period travel times between major travel pairs (Run times, head ways, average speed, station spacing)*
		• Maintain or enhance transit services to the transit dependent	• *Reduction in number of transfers system-wide by operational plan of alignment (daily reductions at US & 7th/Metro)*	• *Peak period travel time (door to door)*
		• Improve travel time for transit users system-wide	• *Total number of lanes reduced (cumulative for all streets)*	• *Travel time savings (Union Station to 7th/Flower)*
		• Improve person throughput	• *Number of potentially impacted intersections*	• *Reduction in Vehicle Miles Traveled (VMT) (VMT compared to No Build)*
		• Reduce *growth* of congestion in corridor	• *Peak period travel time through Regional Connector Alignment (including 5 min for each transfer)*	• *Assessment of expandability (Score 1 to 5)*
			• *Number of left turn pockets affected*	
			• *Number of parking spaces potentially affected*	
			• *Number of driveways affected*	
			• *Daily hours of transportation user benefits (Compared to No Build)*	
4	Support Efforts to Improve Environmental Quality *Minimize adverse environmental impacts*	• Minimize *adverse* environmental impacts	• *Noise (Number of curves for LRT alignment)*	• *Expected level of impacts after mitigation to biological, social, and physical resources will be evaluated per CEQA/NEPA requirements (Score 1 to 5)*
		• Implement mitigation measures to reduce *environmental* effects to acceptable levels	• *Potential visual impacts to notable architectural resources within ¼ mile of alignment (Score 1 to 5)*	• *Reductions in PM10, NOx, and SOx emissions*
		• Reduce *emissions* and improve air quality	• *Number of Potential Sensitive Receptors within ¼ mile of alignment (Score 1 to 5)*	• *Reduction in carbon footprint for average user*

Table ES-8 Regional Connector Goals, Objectives, Evaluation Criteria and Performance Measures				
	Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
			• *Potential impacts to historically significant locations within ¼ mile alignment (Score 1 to 5)* • *Geologic and geotechnical issues along alignment (Score 1 to 5)*	
5	Provide a Cost Effective Alternative Transportation System *Develop a system that serves as an alternative to travel economically*	• *Increase* ridership on the Metro system • Minimize cost per passenger • Maximize travel time savings	• *Rough order of magnitude annual O&M (2008$) costs per alignment (millions)* • *User cost - Cost effectiveness compared to No Build ($/hour of transit user benefit)* • *Annual O&M costs*	• *Annualized cost per hour of transit system user benefit compared to No Build and Transportation System Management (TSM) alternatives*
6	Achieve a Financially Feasible Project *Develop a project that maximizes opportunities for funding and financing and that is financially sustainable*	• *Opportunities* for private/public funding • *Opportunities* for Federal and outside funding	• *ROM Capital costs — total and per mile per alignment (2008$) (millions)* • *Evaluation of availability and eligibility of capital funds at federal/state/local levels to construct, operate and maintain (Score 1 to 5)*	• *Capital cost estimate disaggregated by right of way (ROW), guideway, stations, yards, and vehicles on a cost per mile basis*
7	Provide a Safe and Secure Alternative Transportation System	• Secure entire alignment, stations, track and other facilities	• *Safety – determined to be able to provide measures typical of requirements per ADA, per typical CPUC requirements, fire life safety guidelines, and per Metro Design Guidelines for access to and from stations (amount grade separated) (Score 1 to 5)*	• *Number of crossing with high pedestrian activities on a daily basis*

Table ES-8 Regional Connector Goals, Objectives, Evaluation Criteria and Performance Measures			
Goal	**Objectives**	**Initial Screening Criteria (Performance Measures)**	**Final Screening Criteria (Performance Measures)**
Develop a project that is safe for riders, pedestrians, and drivers while meeting the regions needs for security	• Develop direct and indirect safety measures that exceed safety precautions typical of the Metro system • Develop a system that balances the need for accessibility and mobility with security • Develop a system that uses accessibility and mobility as measures for safety and security	• *Number of emergency facilities located within ¼ mile of the alignment, i.e., fire stations, police stations, hospitals.* • *Number of public events within ¼ mile of alignment*	• *Number of events along the alignment* • *Number of potential issues related to accessibility and line of sight for pedestrians and vehicle drivers (Score 1 to 5)*

Figure ES-19 Screened Alternatives

- The existing Metro Red Line from Union Station to North Hollywood and the Metro Purple Line from Union Station to Wilshire/Western Station. Together, these routes comprise a 17.4-mile underground HRT system that presently serves as the sole rail connection between Union Station and 7th St./Metro Center Station. LRT trains are not able to operate on HRT tracks, so the Metro Red and Purple Lines are not suitable for carrying Metro Blue, Gold, or Expo Line trains.

- The 20-mile Metro Green Line runs from Norwalk in southeast Los Angeles County to Redondo Beach, primarily in the center median of the I-105 freeway.

TSM

The TSM Alternative would include the provisions of the No Build Alternative and add two shuttle bus routes to simulate the proposed LRT link between 7th St./Metro Center and Union Station, one along Grand Ave. and 1st St., and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. The following map, Figure ES-20, shows the two routes. Stops would be located every few blocks so as to provide access to all major destinations along the routes.

Based on analysis of the proposed alternatives and the Regional Connector PSA demographic data during the initial screening process, the list of 32 conceptual build alternatives was narrowed to two preferred build alternatives linking the Metro Gold Line on Alameda between 1st and Commercial Streets to the Metro Blue and Expo Lines' terminus at 7th St./Metro Center Station (Flower and 7th Streets). These build alternatives are described below.

At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would bridge the gap between the Metro Gold Line and the Metro Blue and Expo Lines using an a combination of at-grade and underground tracks along Temple, Main, Los Angeles, 2nd, and Flower Streets. The route is shown in Figure ES-21.

The new tracks would branch off of the Metro Gold Line Eastside Extension at Temple and Alameda Streets in a wye junction. At this location, a new vehicular underpass for through traffic on Alameda St. would be constructed to remove conflicts between trains and the high volumes of truck and automobile traffic frequently observed at this intersection. A new pedestrian bridge structure over the intersection would also reduce the conflicts between pedestrian and trains, and reduce delays for trains passing through the intersection.

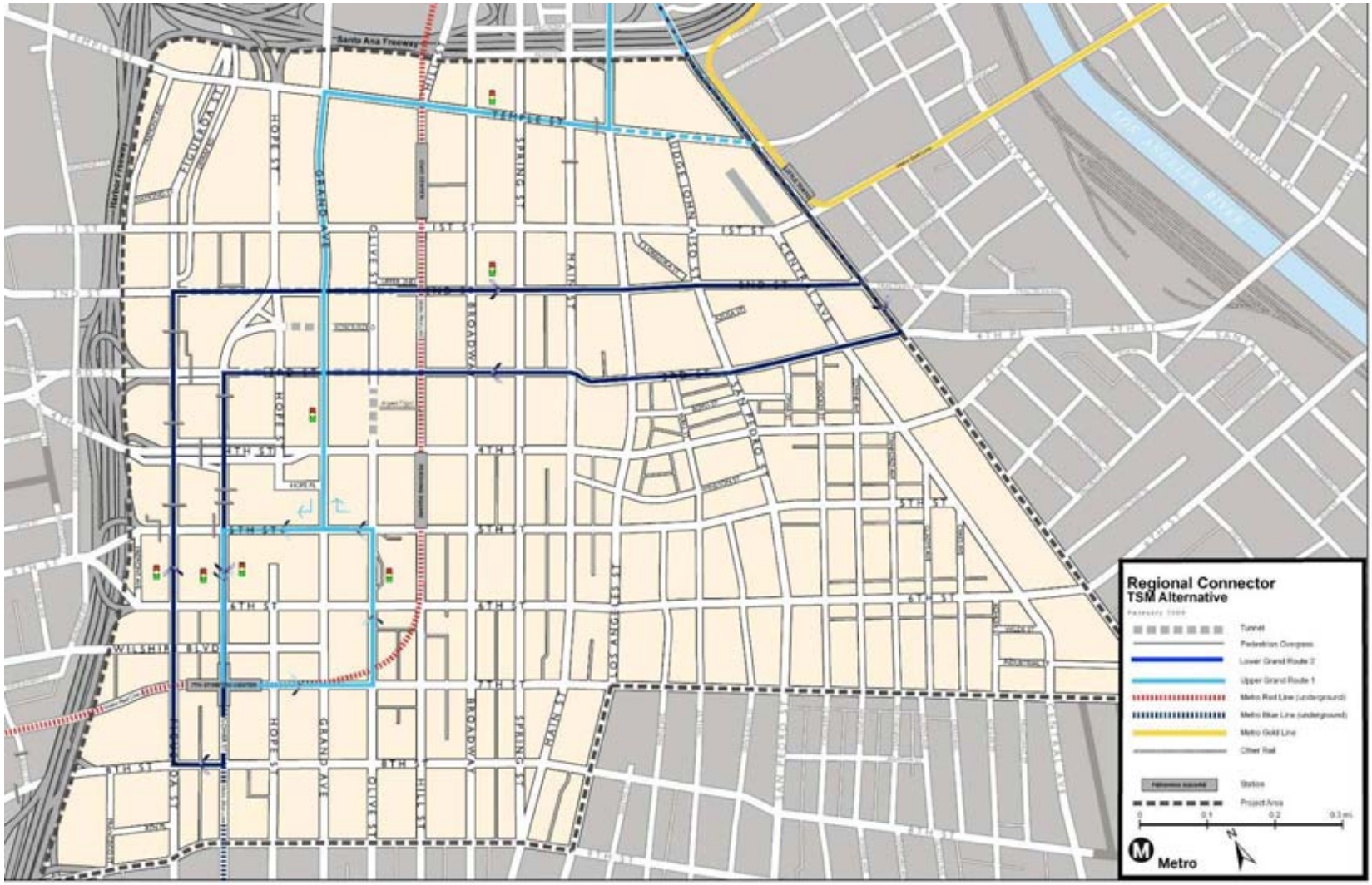


Figure ES-20 Transportation System Management Alternative

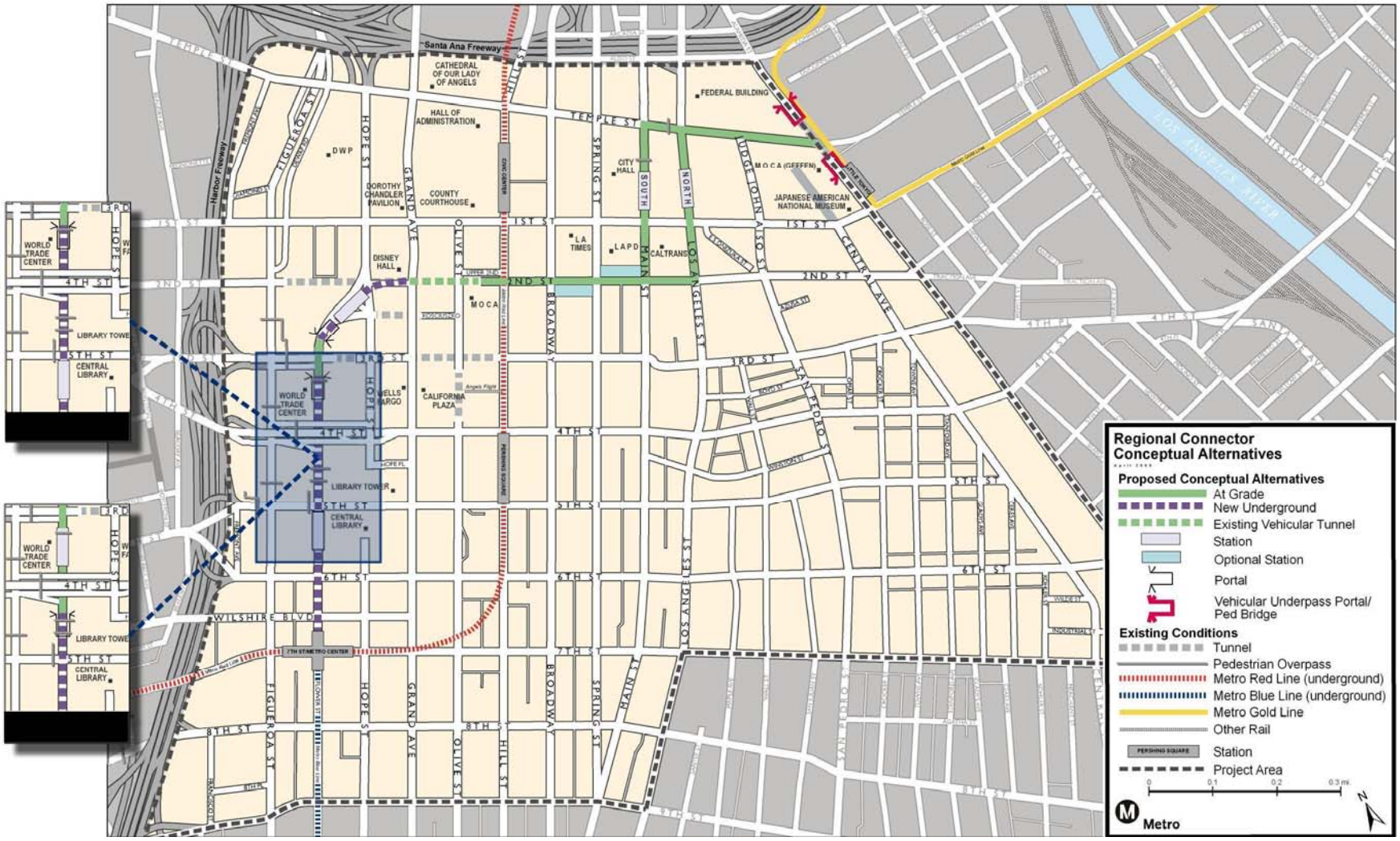


Figure ES-21 At-Grade Emphasis LRT Alternative

Looking Southeast at Temple and Alameda – Before

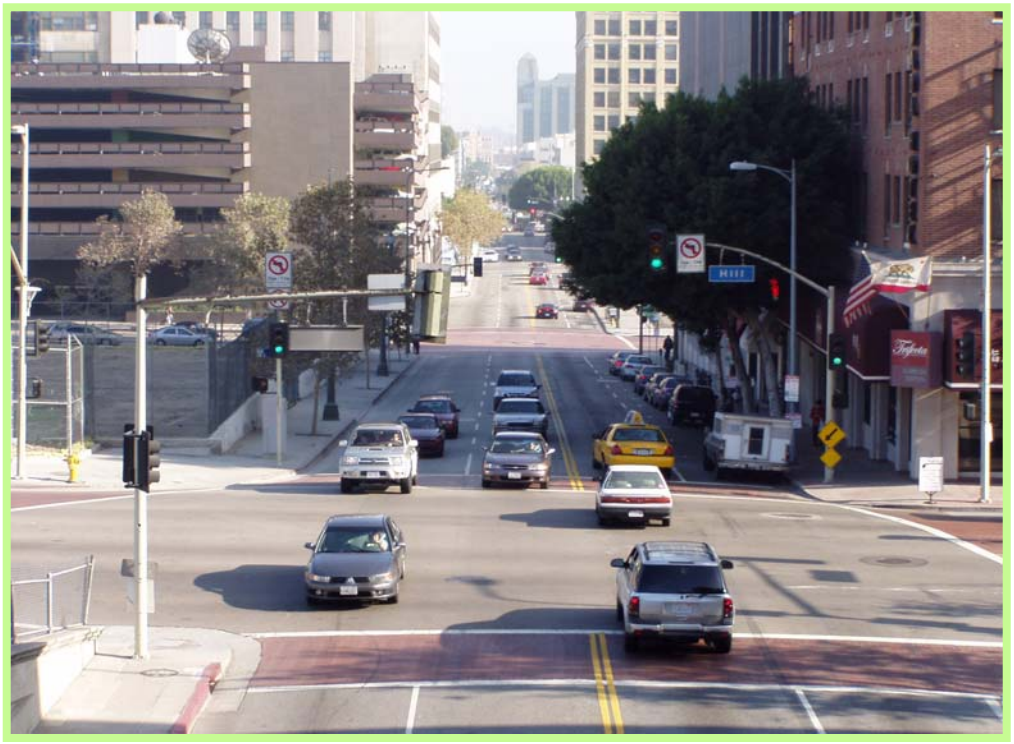
Looking Southeast at Temple and Alameda – After

The tracks would then continue west on Temple St. to Los Angeles St. Here, the tracks would split into a couplet on Main and Los Angeles Streets in order to travel south to 2nd St. Southbound trains would continue west on Temple St. to Main St., then turn south on Main St. to reach 2nd St. Northbound trains from 2nd and Main Streets would go east on 2nd St. and north on Los Angeles St. to rejoin the southbound tracks at Temple and Los Angeles Streets. Both the northbound and southbound tracks would have a new station along the couplet just north of 1st St.

Main St. at Temple, Looking South – Before

Main St. at Temple, Looking South - After

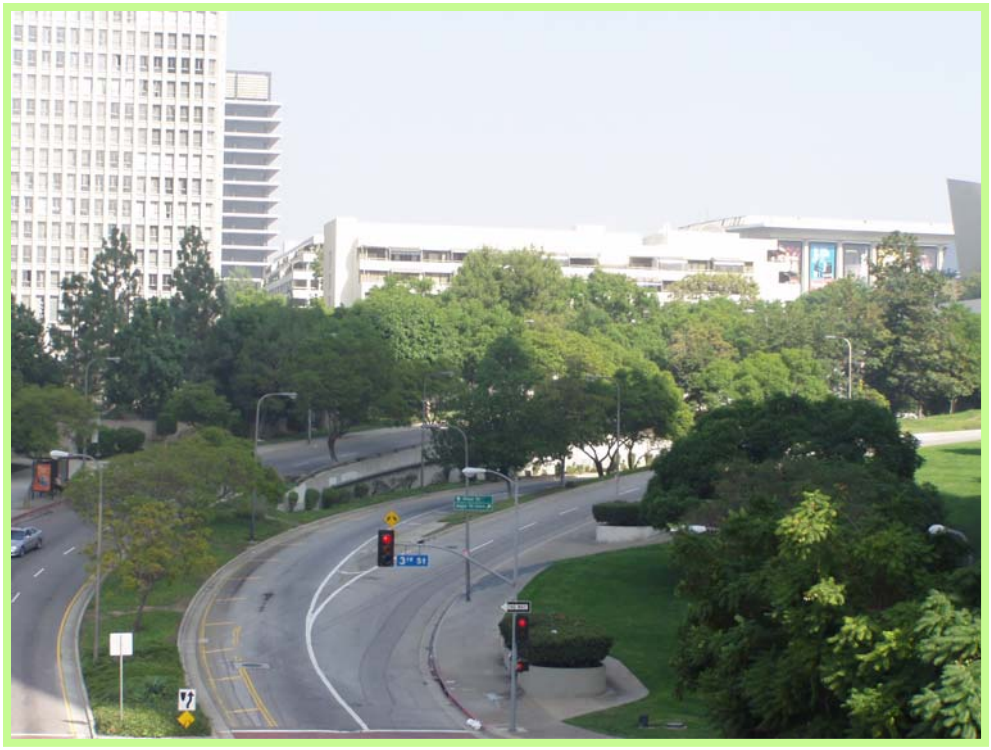
Continuing west along 2nd St. from Main St., there is an option to have a split-platform station in the vicinity of Broadway or Spring St. After crossing Hill St., the trains will enter the existing 2nd St. tunnel and then veer southward into a new tunnel beneath Bunker Hill linking the 2nd St. tunnel with Flower St.



2nd and Hill, Looking East - Before

2nd and Broadway – Looking East - After

There would be an underground station in this tunnel to allow connections with Bunker Hill. Trains would then surface through the hillside on the northeast corner of 3rd and Flower Streets and cross the intersection at-grade to travel southbound in the median of Flower St.



Looking North on Flower Street at 3rd Street – Before

Looking North on Flower Street at 3rd Street – After

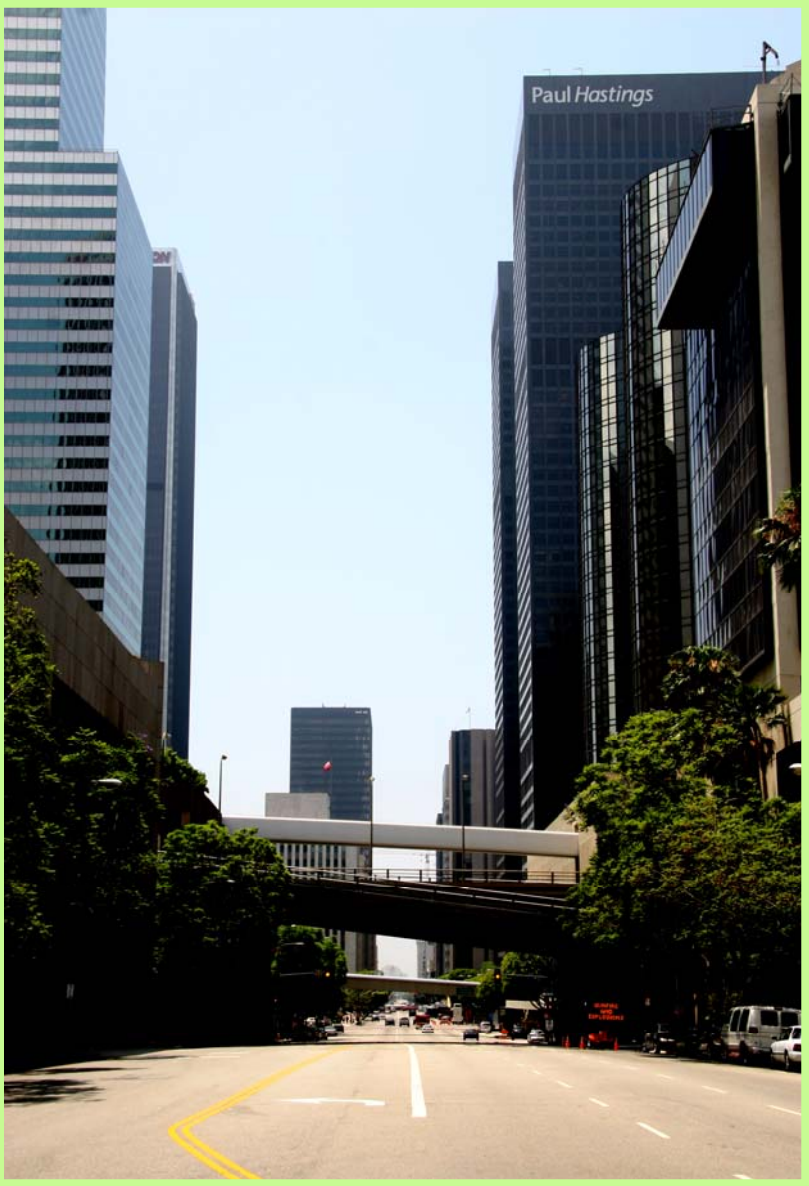
At this point, there are two options for the configuration on Flower St., as described below.

Option A:

After crossing 3rd St., trains would transition to underground tracks and continue south on Flower St. to a new underground station just south of 5th St. From there, trains would proceed underground to 7th St./Metro Center Station and arrive at the existing Metro Blue Line platform.

Option B:

After crossing 3rd St., trains would arrive at an at-grade station in the median of Flower St., just south of 3rd St. From there, trains would continue southward and transition to an underground alignment near 4th St. Trains would then proceed south under Flower St. to 7th St./Metro Center Station and arrive at the existing Metro Blue Line platform.



3rd and Flower, Looking South - Before

3rd and Flower, Looking South - After

Underground Emphasis LRT

The Underground Emphasis LRT Alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground, as shown on the following map (Figure ES-22).

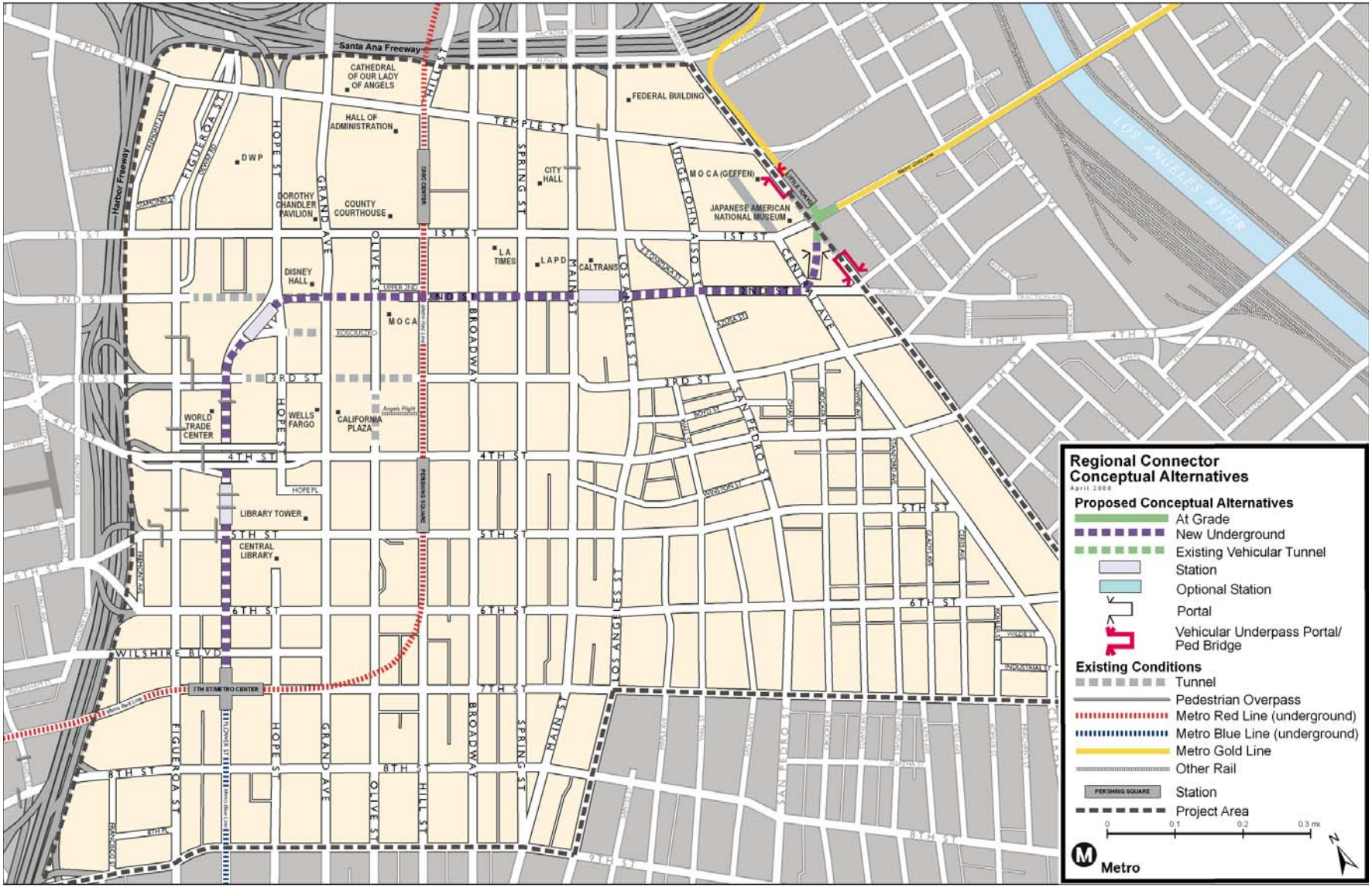


Figure ES-22 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would branch off from the Metro Gold Line Eastside Extension tracks in a wye junction in the intersection of 1st and Alameda Streets, immediately south of the Little Tokyo/Arts District Station. Trains from East Los Angeles would approach the junction from the east along 1st St, and trains from Pasadena would approach from the north along Alameda St., stopping first at the Little Tokyo/Arts District Station. Both lines would then cross the intersection to reach the southwest corner, where a new tunnel portal would bring the trains underground. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda St. below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains.

Looking Southwest at 1st and Alameda - After

Once in the tunnel, trains would turn west under 2nd St. to reach a new underground station to be located between Los Angeles St. and Broadway.

2nd and Los Angeles, Looking West - Before

2nd and Los Angeles, Looking West - After

Trains would then proceed west on 2nd St. and turn southward beneath the 2nd St. tunnel. A new station along this stretch of tunnel would provide access to Bunker Hill. After leaving the station, the tunnel would run south underneath Flower St. to reach the next station, just north of 5th St. Trains would then continue south to 7th St./Metro Center Station and arrive on the existing Metro Blue Line platform.

5th and Flower, Looking North - After

ES.8 Transportation Impacts & Benefits

The PSA is currently served by three rail lines and 112 bus lines operated by 10 transit agencies. Service on many of these lines operates very frequently, with vehicles arriving as few as two minutes apart during peak hours. Region-wide commuter rail service (Metrolink) and nationwide passenger rail service (Amtrak) both serve Union Station, just two blocks northeast of the PSA. Two additional LRT extensions, the Metro Gold Line Eastside Extension to East Los Angeles and the Metro Expo Line to Culver City are presently under construction, and are expected to be operational by 2010. The area is also served by several radial freeways branching out toward other major regional destinations, and many of them carry express bus service during peak hours.

Despite the area's dense transportation infrastructure, rapid growth in downtown Los Angeles is overwhelming many of the facilities, including transit transfer stations. Reducing the number of transfers needed to traverse the LRT system would alleviate some of the crowding, particularly at 7th St./Metro Center and Union Station, where two separate portions of the LRT system terminate and many riders must transfer to the HRT Metro Red and Purple Lines to complete their trips. The Regional Connector would improve the link between these two stations and enable transfer-

free service throughout much of the LRT network, most notably from Long Beach to Pasadena along the Metro Blue and Gold Lines, and from East Los Angeles to Culver City along the Metro Gold and Expo Lines.

Alternatives Studied

Because the purpose of the Regional Connector is to bridge a gap in the existing LRT system, LRT is the mode that survived the screening process and is under consideration for the build alternatives. Other modes such as HRT, monorail, commuter rail, people mover, etc. were eliminated due to their high cost and inability to allow single-vehicle service throughout the LRT network. The forecasted effects of the build alternatives (At-Grade Emphasis LRT and Underground Emphasis LRT) were compared with those of the No Build and TSM Alternatives to determine the amount of benefits the new LRT link would provide.

Travel Time Savings

The Regional Connector build alternatives would reduce travel times for many trips on the Metro Rail system whose current headways are shown in Table ES-10. Downtown-bound passengers on the Metro Gold Line would no longer have to transfer to reach their destinations, and Metro Blue and Expo Line passengers could also reach the northern and eastern areas of the central business district without changing trains. Riders passing through downtown from East Los Angeles to Long Beach and Pasadena to Culver City would need to make one less transfer, and riders travelling from East Los Angeles to Culver City and Pasadena to Long Beach would have both of their presently required transfers eliminated.

Under the current Pasadena-Long Beach and East Los Angeles-Culver City operating plan, passengers wishing to travel along the Gold Line from Pasadena to East Los Angeles would need to make one transfer at a new Regional Connector station in order to complete their trips. In the case of the Underground Emphasis LRT Alternative, this would be a cross-platform transfer at the new station on 2nd St. For the At-Grade Emphasis LRT Alternative, the transfer would occur at City Hall, and passengers would need to walk one block from the southbound platform on Main St. to the northbound platform on Los Angeles St.

Tables S-10 and S-11 show the potential time savings for passengers travelling along both of the proposed Regional Connector routes (East Los Angeles to Culver City and Pasadena to Long Beach). These estimates include current travel times along existing lines as well as predicted travel times along the lines that are presently under construction. The No Build estimates reflect a transfer from the Metro Gold Line to the Metro Red and Purple Lines at Union Station, which could take from five to 12 minutes at most times of day. This includes the five-minute ride from Union Station to 7th St./Metro Center Station on the Metro Red and Purple Lines and the transfer from the Metro Red and Purple Lines to the Metro Blue Line at 7th St./Metro Center Station, which could take anywhere from two to twelve minutes. The best case scenario for the No Build Alternative is the same as the predicted travel time along some of the build alternatives. However, it should be noted that the rush hour headways are different on every Metro Rail line serving downtown, as shown in Table ES-9, and the best case scenario under the No Build alternative happens only by chance. Most trips take longer.

Table ES-9 Current Peak Hour Headways on Downtown Metro Rail Lines

Metro Rail Line	Headway
Metro Gold Line	8 minutes
Metro Red and Purple Lines	10 minutes each, 5 minutes combined
Metro Blue Line	5 ½ minutes

Table ES-10 East Los Angeles to Culver City (in minutes)

	No Build	At-Grade Option A	At-Grade Option B	Underground
Pomona/Atlantic to Pico/Aliso	14	14	14	14
Pico/Aliso to 7th St./Metro Center	18 to 32*	13	12	8
7th St./Metro Center to Washington/National	26	26	26	26
Total	58 to 72	53	52	48

*via Metro Red and Purple Lines

Table ES-11 Pasadena to Long Beach (in minutes)

	No Build	At-Grade Option A	At-Grade Option B	Underground
Sierra Madre Villa to Union Station	29	29	29	29
Union Station to 7th St./Metro Center	12 to 29*	12	12	10
7th St./Metro Center to Transit Mall	55	55	55	55
Total	96 to 113	96	96	94

*via Metro Red and Purple Lines

Ridership

Model runs predicted the highest overall transit ridership, an increase of 0.7 percent over current levels (about 10,000 new transit trips), for the Underground Emphasis LRT Alternative. This is probably because it bridges the missing link in the LRT system, minimizes transfers, and provides a shorter trip time than the other build alternative. These improvements will increase the attractiveness of the system to people who do not currently ride transit. The rise in the number of rail linked trips is partially offset, however, by a small drop in the number of bus passengers. This indicates that many of the riders attracted to the rail system by the new link will be existing transit riders lured away from buses. However, the increase in rail riders is more than double than the decrease in bus riders, so the majority of the new rail passengers will be new transit users.

Underground-running tracks will eliminate conflicts with surface traffic and allow for faster train speeds.

The At-Grade Emphasis LRT alternative would achieve the same results, but to a slightly lesser extent. Trains would traverse the Regional Connector more slowly because they will need to safely navigate street-running alignments and potentially stop for red lights at intersections. The increase in overall transit ridership would be 0.5 percent, or about 8,000 linked trips.

Trains running at-grade will have to traverse some parts of the At-Grade Emphasis LRT Alternative alignment slowly to navigate 90-degree turns and avoid conflicts with automobiles and pedestrians.

The TSM Alternative would cause overall transit ridership to increase by about 1,000 trips, and cause an additional 1,000 riders to switch from rail to buses. This is likely because the new shuttle buses would provide a convenient new alternative to the Metro Red and Purple Lines for trips entirely within the downtown area, though they would not reduce the number of transfers needed to complete trips into or through downtown.

The No Build Alternative would provide the smallest increase in transit ridership over current levels, since it includes the fewest service improvements. Rail ridership is actually slightly higher under the No Build Alternative than under the TSM Alternative, because there is no competition for riders from the TSM shuttle bus service. Table ES-12 outlines the potential ridership benefits for each alternative in terms of total linked trips system-wide in the year 2030.

Table ES-12 Linked Transit Trip Estimates by Mode

	No Build	TSM	At-Grade Option A	At-Grade Option B	Underground
Bus Linked Trips	1,191,300	1,193,000	1,187,100	1,186,600	1,185,800
Metro Rail Linked Trips	248,200	247,400	260,400	261,700	264,200
Metrolink Linked Trips	76,300	76,400	75,900	75,900	76,000
Total	1,515,800	1,516,800	1,523,400	1,524,200	1,526,000
Increment Over No Build	0	1,000	7,600	8,400	10,200

Roadway Analysis

The traffic impacts of each alternative were compared using volume-to-capacity (V/C) ratio forecasts to identify the predicted amount of congestion. Level of service (LOS) was used to assign degrees of driver comfort to ranges of V/C ratios, with LOS A indicating free-flowing traffic, and LOS F indicating severe congestion. As of 2007, the entire PSA road network was operating at LOS D (acceptable for urban conditions) or better, except the intersection of 1st and Alameda Streets (LOS F) and three roadway segments along 2nd and Alameda Streets (LOS E). Under predicted year 2030 No Build conditions, five additional LOS E and LOS F intersections and nine additional LOS E/F roadway segments were identified. The traffic impacts of the No Build, TSM, and Underground Emphasis LRT Alternatives were found to be minimal and essentially equal, due to their lack of street-running tracks or changes to the road network (Table ES-13).

The At-Grade Emphasis LRT Alternative, on the other hand, would convert traffic lanes, including bus only lanes, along Flower, 2nd, Main, Los Angeles, and Temple Streets to rail rights-of-way, thus reducing the road capacity for automobiles and buses. Numerous turning restrictions would also force additional around-the-block movements and limit access to some parcels. As such, the traffic modeling revealed that roadway congestion in the PSA would increase as a result of the At-Grade Emphasis LRT Alternative (Table ES-14). There would be four additional LOS E/F intersections and two additional LOS E/F roadway segments beyond year 2030 No Build conditions. As a result, this alternative is the least preferable from the standpoint of roadway traffic congestion, and the other alternatives are all equally favorable. Tables S-13 and S-14 show the performance of some roadway segments in the PSA under each of the alternatives. Table ES-15 summarizes the LOS in various intersections in the PSA. The highest number of LOS E and F intersections occur for both Option A and B of the At-Grade Emphasis LRT Alternative.

Table ES-13 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis
No Build, TSM and Underground Emphasis LRT Alternatives

Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	4	28,000	15,389	0.550	A
	5th St.	Secondary	6	45,000	27,426	0.609	B
	6th St.	Secondary	4	30,000	23,938	0.798	C
	Wilshire Blvd.	Secondary	4	30,000	26,757	0.892	D
	7th St.	Secondary	4	30,000	26,033	0.868	D
2nd St.	Alameda St.	Secondary	3	21,000	10,279	0.489	A
	Central Ave.	Secondary	2	14,000	13,140	0.939	E
	Los Angeles St.	Secondary	3	21,000	20,421	0.972	E
	Main St.	Secondary	3	21,000	24,679	1.175	F
	San Pedro St.	Secondary	2	14,000	16,810	1.201	F
	Spring St.	Secondary	4	28,000	18,095	0.646	B
Los Angeles St.	1st St.	Secondary	4	28,000	23,331	0.833	D
	2nd St.	Secondary	4	28,000	21,568	0.770	C
	Temple St.	Secondary	5	35,000	27,703	0.792	C
Main St.	1st St. 1-Way	Major Class II	3	25,500	15,185	0.595	A
	2nd St. 1-Way	Major Class II	3	25,500	17,237	0.676	B
	Temple St.	Major Class II	4	34,000	32,216	0.948	E

Table ES-13 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis
No Build, TSM and Underground Emphasis LRT Alternatives

Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Temple St.	Judge John Aiso St.	Major Class II	4	32,000	21,516	0.672	B
	Los Angeles St.	Major Class II	4	32,000	21,132	0.660	B
	Main St.	Major Class II	4	32,000	21,412	0.669	B
1st St.	Alameda St.	Secondary	4	28,000	27,077	0.967	E
	Central Ave.	Secondary	4	28,000	29,016	1.036	F
	Los Angeles St.	Secondary	6	42,000	27,783	0.661	B
	Main St.	Secondary	6	42,000	30,056	0.716	C
	Spring St.	Secondary	6	42,000	25,401	0.605	B
3rd St.	Flower St.	Secondary	4	30,000	24,053	0.802	D
	Spring St.	Secondary	3	22,500	22,080	0.981	E
	Los Angeles St.	Secondary	3	22,500	22,585	1.004	F
	Main St.	Secondary	3	22,500	20,304	0.902	E
Alameda St.	1st St.	Major Class II	4	32,000	42,364	1.324	F
	2nd St.	Major Class II	4	32,000	38,338	1.198	F

Table ES-14 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis At-Grade Emphasis LRT Alternative							
Primary Street	Cross Street	Facility Type	Number of Lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	3	21,000	15,389	0.733	C
	5th St.	Secondary	6	45,000	27,426	0.609	B
	6th St.	Secondary	4	30,000	23,938	0.798	C
	Wilshire Blvd.	Secondary	4	30,000	26,757	0.892	D
	7th St.	Secondary	4	30,000	26,033	0.868	D
2nd St.	Alameda St.	Secondary	3	21,000	10,279	0.489	A
	Central Ave.	Secondary	2	14,000	13,140	0.939	E
	Los Angeles St.	Secondary	1	7,000	4,084	0.583	A
	Main St.	Secondary	1	7,000	4,936	0.705	C
	San Pedro St.	Secondary	2	14,000	16,810	1.201	F
	Spring St.	Secondary	1	7,000	3,619	0.517	A
Los Angeles St.	1st St.	Secondary	3	21,000	23,331	1.111	F
	2nd St.	Secondary	4	28,000	21,568	0.770	C
	Temple St.	Secondary	4	28,000	27,703	0.989	D
Main St.	1st St. 1-Way	Major Class II	3	25,500	15,185	0.595	A
	2nd St. 1-Way	Major Class II	3	25,500	17,237	0.676	B
	Temple St.	Major Class II	3	25,500	32,216	1.263	F
Temple St.	Judge John Aiso St.	Major Class II	2	16,000	21,516	1.345	F
	Los Angeles St.	Major Class II	2	16,000	21,132	1.321	F
	Main St.	Major Class II	3	24,000	21,412	0.892	D
1st St.	Alameda St.	Secondary	4	28,000	27,077	0.967	E
	Central Ave.	Secondary	4	28,000	29,016	1.036	F
	Los Angeles St.	Secondary	6	42,000	35,952	0.856	D
	Main St.	Secondary	6	42,000	39,928	0.951	E
	Spring St.	Secondary	6	42,000	32,639	0.777	C
3rd St.	Flower St.	Secondary	4	30,000	24,053	0.802	D
	Spring St.	Secondary	3	22,500	29,318	1.303	F
	Los Angeles St.	Secondary	3	22,500	30,754	1.367	F
	Main St.	Secondary	3	22,500	30,176	1.341	F
Alameda St.	1st St.	Major Class II	4	32,000	42,364	1.324	F
	2nd St.	Major Class II	4	32,000	38,338	1.198	F

Additionally, Table ES-15 also outlines how LOS at each intersection would vary with each alternative.

Table ES-15 Future (2030) Intersection Level of Service
PM Peak Hour

Intersection	No Build		TSM		Option A		Option B		Underground	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Hill St. / 1st St.	0.91	E	0.91	E	0.91	E	0.91	E	0.91	E
Broadway / 1st St.	0.70	B	0.70	B	0.78	C	0.78	C	0.70	B
Spring St. / 1st St.	0.56	A	0.56	A	0.62	B	0.62	B	0.56	A
Main St. / 1st St.	0.67	B	0.67	B	0.91	E	0.91	E	0.67	B
Los Angeles St. / 1st St.	0.71	C	0.71	C	0.88	D	0.88	D	0.71	C
Judge John Aiso St. / 1st St.	0.85	D	0.85	D	1.06	F	1.06	F	0.85	D
Alameda St. / 1st St.	1.10	F	1.10	F	1.10	F	1.10	F	0.87	D
Broadway / 2nd St.	0.57	A	0.57	A	0.54	A	0.54	A	0.57	A
Spring St. / 2nd St.	0.49	A	0.49	A	0.44	A	0.44	A	0.49	A
Main St. / 2nd St.	0.77	C	0.77	C	0.85	D	0.85	D	0.77	C
Los Angeles St. / 2nd St.	0.73	C	0.73	C	0.82	D	0.82	D	0.73	C
San Pedro St. / 2nd St.	0.75	C	0.75	C	0.59	A	0.59	A	0.75	C
Central Ave. / 2nd St.	0.67	B	0.67	B	0.67	B	0.67	B	0.67	B
Alameda St. / 2nd St.	0.89	D	0.89	D	0.89	D	0.89	D	0.89	D
Broadway / 3rd St.	0.74	C	0.74	C	0.92	E	0.92	E	0.74	C
Spring St. / 3rd St.	0.67	B	0.67	B	0.82	D	0.82	D	0.67	B
Main St. / 3rd St.	0.90	D	0.90	D	1.04	F	1.04	F	0.90	D
Los Angeles St. / 3rd St.	0.70	B	0.70	B	0.74	C	0.74	C	0.70	B
San Pedro St. / 3rd St.	0.54	A	0.54	A	0.62	B	0.62	B	0.54	A
Central Ave. / 3rd St.	0.51	A	0.51	A	0.51	A	0.51	A	0.51	A
Alameda St. / 3rd St.	0.70	B	0.70	B	0.70	B	0.70	B	0.70	B
Figueroa St. / 3rd St.	1.22	F	1.22	F	1.22	F	1.22	F	1.22	F
Hope St. / Temple St.	0.96	E	0.96	E	0.96	E	0.96	E	0.96	E
Grand Ave. / Temple St.	0.87	D	0.87	D	0.87	D	0.87	D	0.87	D
Broadway / Temple St.	0.92	E	0.92	E	0.92	E	0.92	E	0.92	E
Spring St. / Temple St.	0.51	A	0.51	A	0.51	A	0.51	A	0.51	A
Main St. / Temple St.	0.85	D	0.85	D	1.00	E	1.00	E	0.85	D
Los Angeles St. / Temple St.	0.77	C	0.77	C	1.34	F	1.34	F	0.77	C
Judge John Aiso St. / Temple St.	0.61	B	0.61	B	0.93	E	0.93	E	0.61	B
Alameda St. / Temple St.	0.80	C	0.80	C	1.04	F	1.04	F	0.80	C
LOS E Intersections	**3**		**3**		**7**		**7**		**3**	
LOS F Intersections	**2**		**2**		**6**		**6**		**1**	

Parking Evaluation

The number of curb parking spaces that would need to be removed was calculated for both of the build alternatives. Neither the No Build nor the TSM Alternatives would result in the loss of curb parking spaces. The Underground Emphasis LRT Alternative would require the removal of 20 curb parking spaces on the east side of Alameda St. near 1st St. in order to accommodate the new underpass structure. The At-Grade Emphasis LRT Alternative would displace a total of 88 parking spaces. Mitigation measures, such as new off-street parking facilities, may be needed to offset the impact of removing these curb spaces.

Summary

The No Build Alternative would result in the smallest increase in transit ridership over current volumes, and would not address the missing link in the LRT system. However, it would have no negative parking or roadway circulation impacts.

The TSM Alternative would result in a small increase in transit ridership, as well as a redistribution of a small number of passengers from rail to buses. It would augment transit service between both ends of the missing link in the LRT system, but would not eliminate any transfers. Like the No Build alternative, it would have no negative parking or roadway circulation impacts.

The Underground Emphasis LRT Alternative would attract the greatest volume of new riders to the transit system of the alternatives considered, and it would bridge the missing link in the LRT system and allow new, transfer-free service from Long Beach to Pasadena and from East Los Angeles to Culver City. It would have no negative impacts on roadway congestion, but would result in the loss of 20 curb parking spaces.

The At-Grade Emphasis LRT Alternative would attract fewer riders than the Underground Emphasis LRT Alternative because it would operate at lower speeds along the new tracks. It would still bridge the missing link in the LRT system and allow the same transfer-free service between the Metro Blue, Gold, and Expo Lines, but the overall trip times would be longer. The removal of traffic lanes for rail use would increase congestion to severe levels at several locations within the PSA, and would result in the loss of 88 curb parking spaces.

ES.9 Environmental Impacts & Benefits

The challenge of defining a major piece of public transit infrastructure within the urban core of downtown Los Angeles where rail rights-of-way do not exist is making the project fit while not compromising service or the quality of life for the area. The 1.8-mile gap between the operating lines includes major civic, entertainment, historic and cultural districts within a dense, ever-changing, high rise environment. This section summarizes the environmental considerations of the recommended build alternatives. The recommended alternatives will undergo further scoping,

analysis and development leading to circulation of a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/EIR) per NEPA and CEQA in the next phase of this project per authorization by Metro's Board of Directors.

Land Use and Economic Development

The at-grade and underground alternatives follow similar routes through downtown and never stray more than two blocks from each other. The At-Grade Emphasis LRT Alternative could create some additional traffic congestion in the area by removing automobile lanes on 2nd, Main, Temple, and Los Angeles Streets, thus making access to the surrounding businesses by car more difficult. The tracks may also be difficult for pedestrians to traverse, making the area unattractive for walking, especially if existing mid-block crosswalks are removed. However, this impact would be offset by the generation of increased pedestrian trips near the stations.

The Underground Emphasis LRT Alternative would have fewer negative impacts on the existing land-use patterns than the At-Grade Emphasis LRT Alternative because it would not involve removing any existing automobile rights-of-way for rail use. The Underground Emphasis LRT Alternative may also attract more transit trips and business patrons to the area than the At-Grade Emphasis LRT Alternative due to the shorter trip times typically associated with fully grade separated rail.

Displacement and Relocation of Existing Uses

The At-Grade Emphasis LRT Alternative may require reduction of sidewalk widths, and partial or full right-of-way acquisitions at Flower and 3rd Streets (Option A) or Flower and 5th Streets (Option B) where the tracks rise to street level. On Main and Los Angeles Streets, a 5-foot wide strip of land from the existing sidewalk or full or partial right-of-way acquisitions will be needed for station construction. Loss of right-of-way and curb parking is likely along 2nd, Main, Los Angeles, and Temple Streets.

The Underground Emphasis LRT Alternative would require fewer acquisitions, but would necessitate purchasing the entire block bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street, which is currently occupied entirely by retail and restaurant businesses. Though no residential units are located in this block, the acquisition could still impact local residents due to the loss of some commercial services. No other displacement or loss of curb parking is anticipated.

Community and Neighborhood Impacts

Construction impacts would be temporary, but significant for both of the build alternatives. Noise, vibration, dust, and increased construction vehicle traffic would be necessary during business hours, and road and sidewalk closures could be in effect for months at a time. Both alternatives will have a pedestrian overpass on Alameda St., which will change the appearance of the streetscape.

The At-Grade Emphasis LRT Alternative will significantly alter the character of 2nd, Temple. Main, Los Angeles, and Flower Streets. Twenty-five-foot tall catenary poles would be erected above the street to supply electricity to the trains, and high-platform stations with canopies would be constructed in the roadway medians or along the curb lanes. The street-running tracks could also present new obstructions to pedestrians wishing to cross. Also, the permanent removal of automobile traffic lanes to install tracks and stations may slow both car and bus trips. The removal of left-turn lanes and curb parking spaces would make navigating the area by car more difficult. Metro Rail currently operates from 4 a.m. to 1 a.m. daily, and trains and stations will generate noise in the form of bells, horns, public address announcements, and rail squealing during these times.

The Underground Emphasis LRT Alternative has few surface impacts aside from the placement of station entrances along existing sidewalks. The operational noises may still be heard where the tracks surface at 1st and Alameda Streets, as well as in the vicinity of tunnel ventilation shafts. Noise emanating from the ventilation shafts would be quieter at street level than noise generated along at-grade tracks.

At-grade stations allow pedestrians to move been the sidewalk and the platform quickly without having to navigate stairwells and concourses.

Visual and Aesthetic Impacts

Both alignments will pass within one-quarter mile of over 200 notable architectural resources. The substantial roadway modifications needed during construction will result in potential visual disruption, though the finished infrastructure will be consistent in character with the existing urban landscape. Both alignments will include a pedestrian overpass at Alameda Street, which will impose visual impacts both during and after construction. Platforms, signage, tracks, and overhead wires would be added along PSA streets and sidewalks for the At-Grade Emphasis LRT Alternative, and the wires at some intersections may be numerous enough to produce an overhead web-like effect.

The Underground Emphasis LRT Alternative would add station portals to the PSA, and these would change the appearance of the parcels on which they are located. They would not be tall enough, however, to block views of the surrounding architectural resources. Aside from the portal area at Alameda St., there would be no other visual or aesthetic impacts associated with the Underground Emphasis LRT Alternative. Further study is needed to determine whether the proposed portals would block views of existing public art installations. Though the At-Grade Emphasis LRT Alternative imposes more long-term visual impacts, the Underground Emphasis LRT Alternative would present greater impacts during the construction phase because tunneling takes longer and involves more machinery than installing at-grade tracks.

Air Quality Impacts

Construction-related emissions are expected to be higher for the Underground Emphasis LRT Alternative because it involves significantly more work over a longer period of time than the At-Grade Emphasis LRT Alternative. Changes in intersection configuration, especially under the At-Grade Emphasis LRT Alternative, could cause localized congestion and CO emissions increases. However, on a regional scale, both alternatives would yield fewer vehicle miles traveled (VMT) than the No Build Alternative, and would thus prove beneficial to the region's air quality.

Noise and Vibration

LRT vehicles on both alternatives would generate noise in the form of rail squealing, brakes, propulsion systems, horns, bells, and station platform announcements. The At-Grade Emphasis LRT Alternative may also include crossing bells at street level, and the Underground Emphasis LRT Alternative would have mechanical HVAC systems that could also generate additional noise. The Underground Emphasis LRT Alternative would generate more noise and vibration at track level due to the higher train speeds associated with grade-separated operation, but the amount escaping to the street through the ventilation structures would be minimal and would likely be drowned out by the already-high ambient noise levels in the downtown area. Overall, the At-Grade Emphasis LRT Alternative presents more potential for noise impacts than the Underground Emphasis LRT Alternative, though the magnitude would be similar to bus operations and can be mitigated through careful design and maintenance.

Ecosystems/Biological Resources

There are no protected wildlife areas or waterways within one-quarter mile of the build alternatives. There are also very few locations for vegetation and wildlife to exist in the dense downtown area. As such, the ecosystem impacts of the build alternatives would be minimal. Nesting sites for birds could be affected if construction requires the removal of street trees.

Geotechnical: Subsurface and Hazardous Materials

There are over 500 hazardous materials regulatory database listings located within the PSA, though some sites are listed on multiple databases. There is significant potential for subsurface hazardous materials to be found in the PSA due to the area's long history of commercial and industrial use. The At-Grade Emphasis LRT Alternative would be less likely to encounter these materials than the Underground Emphasis LRT Alternative due to the relatively little tunneling required.

Water Resources

Both build alternatives present relatively low potential for water resources impacts, since the project is not located within one-quarter mile of any major water bodies or flood zones, the downtown area already has very few pervious surfaces, and runoff is monitored and treated before discharge. The Underground Emphasis LRT Alternative is more likely to encounter groundwater during construction because it involves extensive tunneling. Also, the tunneling could open a new pathway for contaminated groundwater to spread quickly. Any dewatering that is needed during construction would be conducted in a manner that does not impact water quality or runoff volumes.

Energy

Both build alternatives would be powered by an overhead catenary system, and the trains' energy requirements would be similar. The Underground Emphasis LRT Alternative's stations would present greater energy needs than the at-grade stations because of the extra lighting, HVAC systems, elevators, and escalators. It would also consume more energy resources during construction due to the complexity of the additional tunneling. Whichever alternative yields the highest volume of new transit riders would impart the greatest reduction in vehicle miles traveled and regional fuel consumption.

Historic, Archaeological & Paleontological Resources

There are hundreds of known historic resources located within one-quarter mile of each build alternative. Because the routes are located close to each other, the lists are largely the same. There are 21 known archeological resources within one-quarter mile of the At-Grade Emphasis LRT Alternative, versus 11 near the Underground Emphasis LRT Alternative. However, construction of the Underground Emphasis LRT Alternative's tunnels is more likely to disturb these known sites as well as unknown sites that may be uncovered. The increased tunneling involved with the Underground Emphasis LRT Alternative also makes it more likely to damage surrounding historic buildings during construction, and the damage may not be detected until years later. The stations and catenary poles needed for the at-grade alignment could alter the character of any historic districts in which they are located, and potentially alter nearby historic buildings if the wires need to be anchored to their exterior walls. Either construction project would need to be conducted in consultation with a qualified architectural historian and archeologist.

Los Angeles' historic City Hall, as seen from the corner of Main and Temple Streets, adjacent to the alignment of the At-Grade Emphasis LRT Alternative.

Parklands and Other Community Facilities

Public transit service generally enhances access to nearby parklands and community facilities. However, the construction of new light rail infrastructure could impede access to facilities located adjacent to the rights-of-way. The list of nearby community facilities and parklands are similar for both build alternatives, and both call for a potential station portal in the vicinity of the Central Library park space. The At-Grade Emphasis LRT Alternative would require restricted vehicle and pedestrian access at certain points along the alignment, which could impede trips to and from community facilities. The grade crossings could also delay emergency vehicles, which may have to wait for trains to pass. The At-Grade Emphasis LRT Alternative also calls for the removal of 88 curb parking spaces, thus reducing ease of access to community facilities for people arriving by car.

Park space outside of Central Library

The Underground Emphasis LRT Alternative would have fewer impacts on access to community facilities via the road network and circulation of emergency vehicles, although the need for more station entrance portals could necessitate placing them in existing park areas.

Economic & Fiscal Impacts

Construction will be temporarily disruptive to economic activity in the PSA, though its effects will be tempered by the creation of temporary construction jobs. These effects are expected to be more pronounced for the At-Grade Emphasis LRT Alternative Couplet A option than for Couplet B or the Underground Emphasis LRT Alternative. For both alternatives, construction could restrict access to nearby businesses and parking facilities, resulting in fewer customers choosing to visit the area. However, many of the businesses in the Civic Center perform government functions, and do not rely on customers being able to reach their offices.

Both build alternatives will require tunneling, and the method used will determine the extent of the surface street closures and associated access restrictions. The Underground Emphasis LRT Alternative will involve more tunneling and the lane closures will be temporary, whereas the At-Grade Emphasis LRT Alternative calls for permanent removal of curb parking and traffic lanes. The Underground Emphasis LRT Alternative will also require more property acquisitions than the At-Grade Emphasis LRT Alternative, and the loss of tax revenue will be higher. However, the loss of tax revenue associated with both alternatives would be of similar magnitude, and is insignificant when compared to the overall tax revenue generated in the PSA. Over time, the new transit service will cause economic activity in the area to increase, and this is expected to be most noticeable for the At-Grade Emphasis LRT Alternative Couplet A option.

Safety and Security

Pedestrian and vehicular traffic volumes are high in the PSA, and there are significant safety concerns associated with adding light rail trains to the area. The At-Grade Emphasis LRT Alternative is particularly susceptible to pedestrian and automobile safety issues due to the open arrangement of the trackway and stations. Pedestrians could easily walk along the tracks and risk being struck by trains. Also, because trains would cross intersections and crosswalks without crossing arms, there would be no physical barriers to keep the trains from colliding with pedestrians or automobiles. Motorist error could cause an automobile to accidentally swerve into the rail right-of-way and collide with a train. The risk of collision increases with the number of pedestrians, trains, automobiles, and train passengers in the area. Pedestrians may also risk being struck by automobiles when using crosswalks to access stations located in roadway medians. Signal phase timing could be adjusted and additional warning devices could be placed at grade crossings to mitigate the safety hazards.

The Underground Emphasis LRT Alternative presents no pedestrian or motorist safety hazards because the tracks would be located underground for nearly the entire length of the alignment and there would be no grade crossings. Pedestrians might still be injured or struck by a train if the platforms become too crowded or if they are not adequately cautious when trains enter the stations. The stations and tracks along the Underground Emphasis LRT Alternative are concealed from view, and it would be difficult for passersby and local law enforcement officers to notice potential security problems. Underground stations and tracks may also create venues for crime, trespassing, and refuge from the elements for non-domiciled persons. One security benefit, however, is that the Underground Emphasis LRT Alternative would not encounter service delays during demonstrations, civil unrest, and public events taking place on the surface.

Potential for Conflicts between Trains, Automobiles, and Pedestrians will Exist at-grade.

Construction Impacts

Intensive construction activity would be needed for both build alternatives. The heaviest construction activities, including tunneling, trenching, sidewalk construction, and roadway refinishing would last for two to three years. Both projects involve tunneling and the installation of at-grade tracks, and construction staging areas will need to be established. During construction, traffic and emergency vehicle circulation could be impeded, and vibration, noise, dust, and localized short-term air pollution could occur. These effects would be felt over a longer period of time for the Underground Emphasis LRT Alternative, since the construction effort would be more complex.

Growth-Inducing Impacts

New transit service does not typically cause growth. It may, however, redistribute the locations of new growth within a region or cause the growth to be more transit-oriented. Downtown Los Angeles already operates as a transit-oriented area and is well-served by the existing transit system, so the Regional Connector is unlikely to spur additional growth in the PSA. However, the addition of more transit stations to the PSA would help nearby development projects attain their goals of having as many patrons as possible arrive by transit. Since the growth-inducing impacts of the Regional Connector would be minimal, there are no significant differences between the effects of the Underground and At-Grade Emphasis LRT Alternative.

Environmental Justice

The demographic characteristics of the areas within one-quarter mile of the two build alternatives are similar, since the two potential routes are located very close together. Year 2000 census data for both alignments reveals that about 80% of the population within the PSA belongs to a minority group, the median annual household income is approximately $15,000-$19,000, 35% live below the poverty threshold, and about 24% are unemployed. The PSA is home to over two dozen homeless shelters and single room occupancy hotels. The large numbers of low-income residents are likely to be benefited by improved transit service, as this group typically demonstrates the highest degree of transit dependency.

In accordance with federal regulations, several community meetings have been held within the PSA to invite public participation and receive comments about the project. During the public input process, issues of transit service equity, disproportionate impacts borne by low-income or minority communities, health impacts, social and economic impacts, neighborhood impacts, noise, vibration, displacement, and construction impacts were considered. One major difference between the two build alternatives is that the At-Grade Emphasis LRT Alternative would bypass the Little Tokyo neighborhood and add a significant amount of new street-running tracks to the Civic Center area. The Underground Emphasis LRT Alternative would travel through Little Tokyo and the Civic Center beneath 2nd St. and transition to at-grade tracks in the block southwest of 1st and Alameda Streets.

Major Utilities

Both build alternatives will involve tunneling under Flower St., where there are large storm drain and gravity lines spanning the entire route from 3rd St. extending south of 7th St. The deepest of these lines is 15 feet below-grade. The location of these large utility lines will make cut-and-cover tunneling difficult. The Underground Emphasis LRT Alternative will face more conflicts with utilities than the At-Grade Emphasis LRT Alternative, especially in the vicinity of stations. Utilities on 2nd St. extend as far at 16 feet underground, and will need to be relocated or bypassed using tunnel boring machines.

ES.10 Financial Analysis

The At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative are approximately the same length (1.8 miles). The capital costs are estimated to be $795.7 million in year 2008 dollars for the At-Grade Emphasis LRT Option A, $709.3 million for Option B and $910.4 million for the Underground Emphasis LRT Alternative. The shuttle bus TSM Alternative would cost $62.7 million (Table ES-16).

Table ES-16 Capital Costs of Each Alternative (in millions of dollars)

Alternative	2008 Dollars
No Build	$0.00
TSM	$62.74
At-Grade Emphasis LRT Alternative – Option A	$795.67
At-Grade Emphasis LRT Alternative – Option B	$709.30
Underground Emphasis LRT Alternative	$910.36

For all of the build alternatives, about 62 percent of the capital costs will go toward construction. Two to seven percent would pay for new light rail vehicles, about 21 percent would pay for professional services, and nine percent would be reserved for unallocated contingencies.

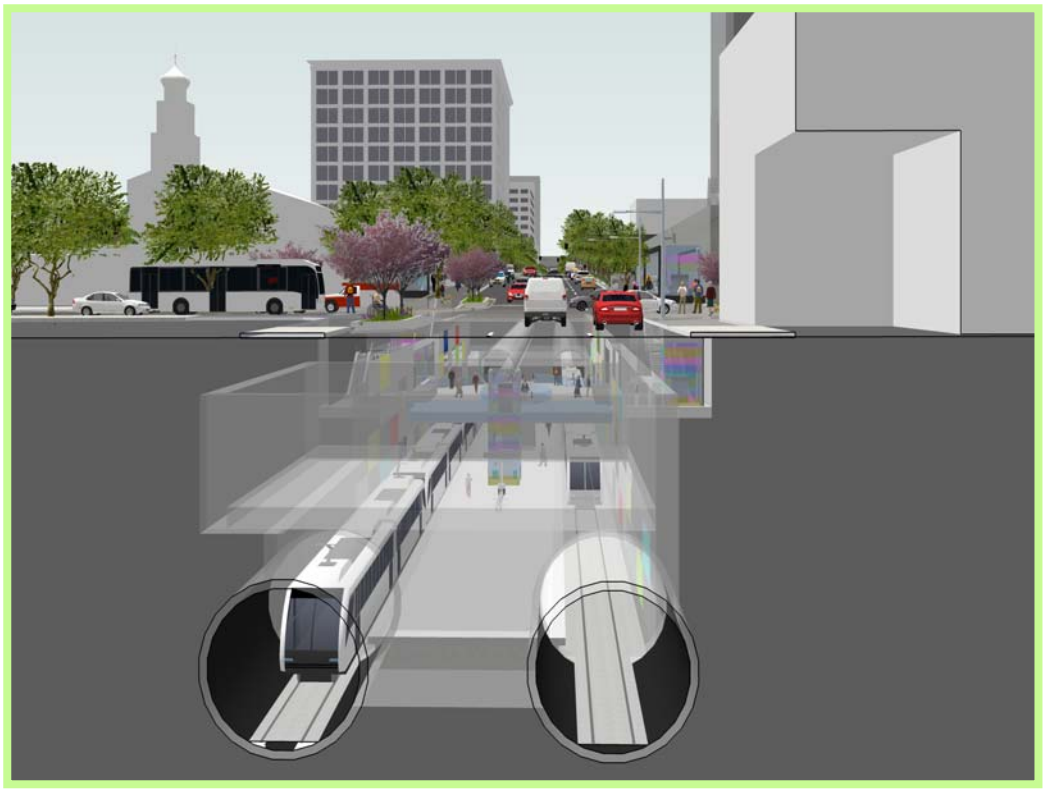
The potential funding sources assume 50 percent local funding through transportation sales taxes, benefit assessment districts, and Mello-Roos community facilities districts. Potentially, local congestion pricing revenues and transportation impact mitigation fees may also be used. The strategies also call for at least 50 percent federal funding through the New Starts program, and in the case of the TSM Alternative, the Section 5309 Bus Discretionary Program. Federal Congestion Management and Air Quality Program (CMAQ) funds could potentially be used to finance the Regional Connector, as the project will be capable of reducing congestion and thereby improving air quality. On the state level, a potential source of funding is the California High-Speed Rail Project, which will offer money to connect existing regional rail services to the new project should it be constructed.

ES.11 Issues to be Resolved

Upon Metro Board Authorization, environmental analysis and continued engineering will support further identification and resolution of project challenges. The following lists current identified issues and the need for further study for both of the alternatives.

- Metro will continue to review safety and security considerations in order to make the Regional Connector a reliable, safe, and secure system for pedestrians, riders, autos, and bicyclists.
- Traffic conditions for the At-Grade Emphasis LRT Alternative will continue to be evaluated during the environmental process in close collaboration with LADOT. The use of the 2nd St., including the 2nd St. tunnel, for LRT operations would transform the roadway into a transit mall. This would mean fewer autos, but not necessarily fewer people, using 2nd St. Street. Parking would be removed in this location, but possibly replaced nearby. An additional station on 2nd St. will be analyzed for potential benefits.
- Construction methods will continue to be evaluated for safety, expediency, and impacts on the environment.
- The environmental process will be completed (Environmental Impact Statement/Environmental Impact Report) based on NEPA and CEQA guidelines.
- Approval from the California Public Utilities Commission will be sought for the proposed grade crossings.
- Further engineering will be undertaken to develop detailed estimates of costs, environmental impacts, utility relocation needs, and potential mitigation measures.
- Station entrance locations will be evaluated based on how well certain locations perform in terms of attracting riders, visibility, close proximity to activity centers, and impacts to surrounding properties.
- Station construction and construction staging will be described in more detail during the environmental process.
- Property impacts will be identified.

2nd and San Pedro Streets, looking west - Before



2nd and San Pedro Streets, Looking West – After (Underground Emphasis LRT Alternative)

ES.12 Conclusion

Metro has completed this AA Study in a collaborative effort with the community to determine the need and benefit of linking three rail lines serving the region, to identify alternatives and evaluate which alternatives achieve certain goals and criteria, and to provide the Metro Board of Directors the information needed to select alternatives to be further engineered and analyzed in a Draft Environmental Impact Statement/Draft Environmental Impact Report per NEPA and CEQA. The engineering and environmental analysis for Board selected alternatives will also be used to prepare documents and submission consistent with the requirements of project pursuing FTA New Starts funding, including the request for authorization from the FTA to initiate preliminary engineering.

The following Table ES-17 provides a quick glance summary comparison of the potential alternatives based on the AA analysis.

Table ES-17 Summary Comparison of Alternatives

Alternative	Transportation	Environment	Cost/Public Support
No Build	No additional transportation benefits beyond Metro's Long Range Transportation Plan	No project would be constructed	No capital costs, and no additional operating costs
Transportation System Management (TSM)	- Smallest increase in transit trips (1,000 daily) - No reduction in transfers for rail users - Greatest travel time - Most stops along route	- No parking impacts outside of peak hours, no reduced roadway capacity - Overall fewer impacts than build alternatives - No property acquisitions needed	- Little public support expressed - Lowest capital cost ($63 million) - Greatest annual operating costs ($13.6 million) - Highest cost per hour of user benefit ($97)
At-Grade Emphasis LRT	- Increase in transit trips (7,600-8,400 daily) - Eliminates up to two transfers for some rail trips - Improved travel time from Union Station to 7th St./Metro Center over No Build and TSM (12 minutes)	- Parking impacts and reduced roadway capacity along segments of Flower, 2nd, Main, Los Angeles, and Temple Streets. - Greatest visual and noise impacts - Most alterations to existing streets - Most property acquisitions	- Public concerns over grade crossings and loss of parking - Capital costs range from $709-$796 million - Moderate annual operating costs ($9.6-9.8 million) - Cost per hour of user benefit ranges from $20-25
Underground Emphasis LRT	- Largest increase in transit trips (10,200 daily) - Eliminates up to two transfers for some rail trips - Shortest travel time from Union Station to 7th St./Metro Center (10 minutes)	- Parking impacts and reduced roadway capacity at intersection of 1st and Alameda only - Fewer visual and noise impacts than At-Grade Alternative - Fewer alterations to existing streets than At-Grade Alternative - Fewest property acquisitions of the build alternatives	- Strongest public support, concerns over 1st and Alameda crossing - Highest capital cost ($910 million) - Lowest annual operating costs ($5.2 million) - Lowest cost per hour of user benefit ($19)

Section 1 Purpose and Need

1.1 Introduction

This report describes the purpose and need for transportation investments in the Regional Connector Project Study Area (PSA). The Regional Connector is a transit project planned by the Los Angeles County Metropolitan Transportation Authority (Metro) to provide more convenient transfers between Metro Rail Lines, dozens of bus lines, and regional commuter rail service for passengers traveling to, from, and through downtown Los Angeles.

There are currently no direct trains for Metro Blue Line light rail passengers from Long Beach travelling to the Metro Gold Line to Pasadena, or vice-versa. These passengers must transfer through the Metro Red or Purple Lines and travel between 7th St./Metro Center Station and Union Station for the connection. When the Metro Expo Line from 7th St./Metro Center Station to Washington/National Station in Culver City opens in 2010, its riders will also need to transfer at 7th St./Metro Center Station and Union Station to reach the Gold Line. The Regional Connector would extend the shared Metro Blue/Expo Line tracks from their present terminus at 7th St./Metro Center Station to a junction with the Metro Gold Line near the Little Tokyo/Arts District Station with continuing service to Union Station and beyond. This would provide a one-seat ride for Metro Blue Line passengers travelling from Long Beach to Pasadena. Metro Expo Line passengers would also be able to ride from Washington/National Station in Culver City to East Los Angeles without transferring, via the Regional Connector and the Metro Gold Line Eastside Extension.

The Regional Connector would also provide increased transit coverage of the Civic Center, Bunker Hill, Historic Core, Little Tokyo, and Financial Core as it travels between 7th St./Metro Center Station and the Metro Gold Line.

See Figure 1-1 for a map of the PSA and Figure 1-2 for an overview map of the Metro Rail system.

This Alternatives Analysis (AA) presents an evaluation of alignments, modes, configurations, and station locations under consideration for the Regional Connector. The alternatives are then screened based on defined criteria to identify preferred alternatives. A final AA Study will provide decision makers the information needed to approve further investigation in the form of a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR).

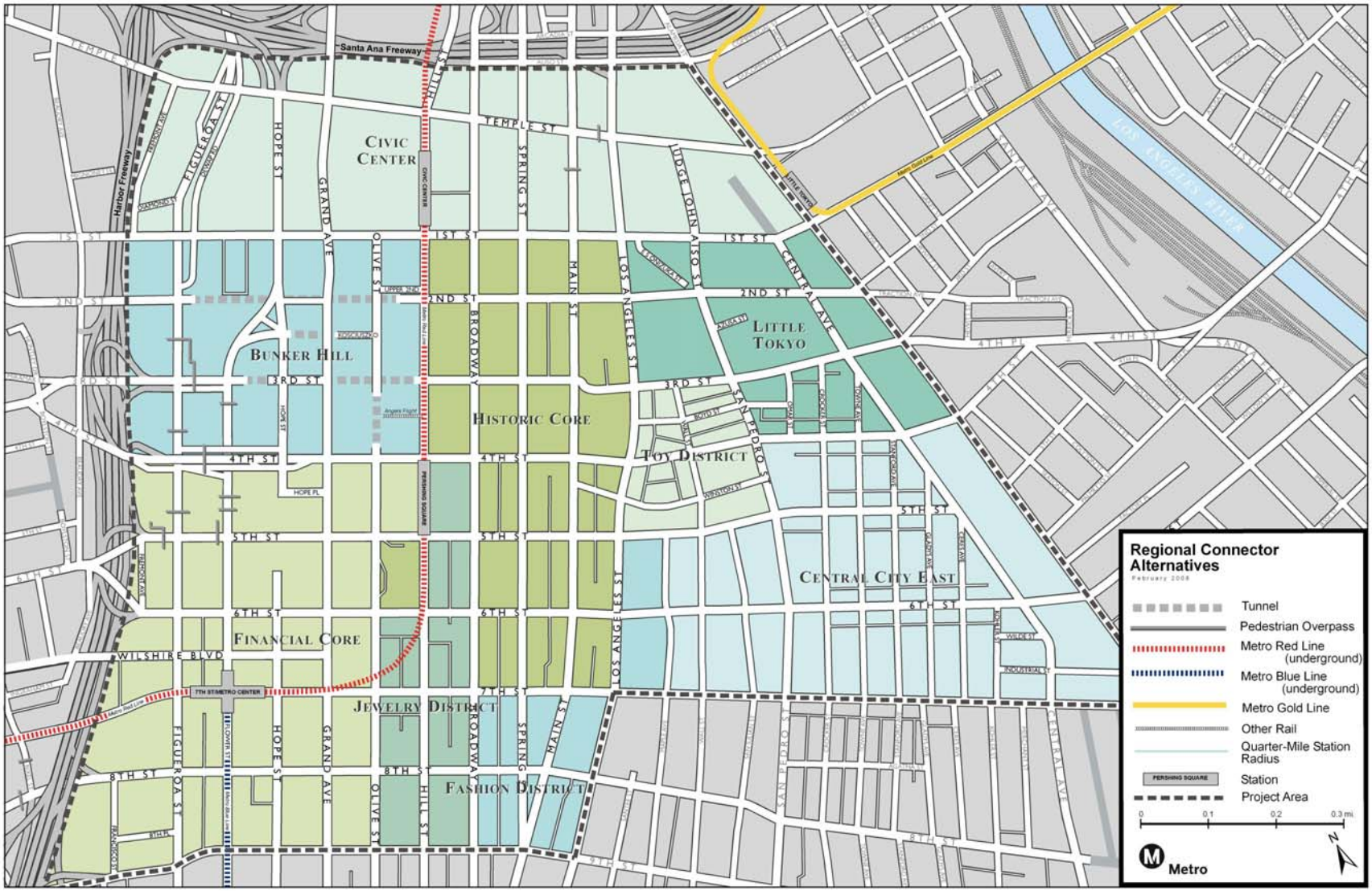


Figure 1-1 Project Study Area (PSA)

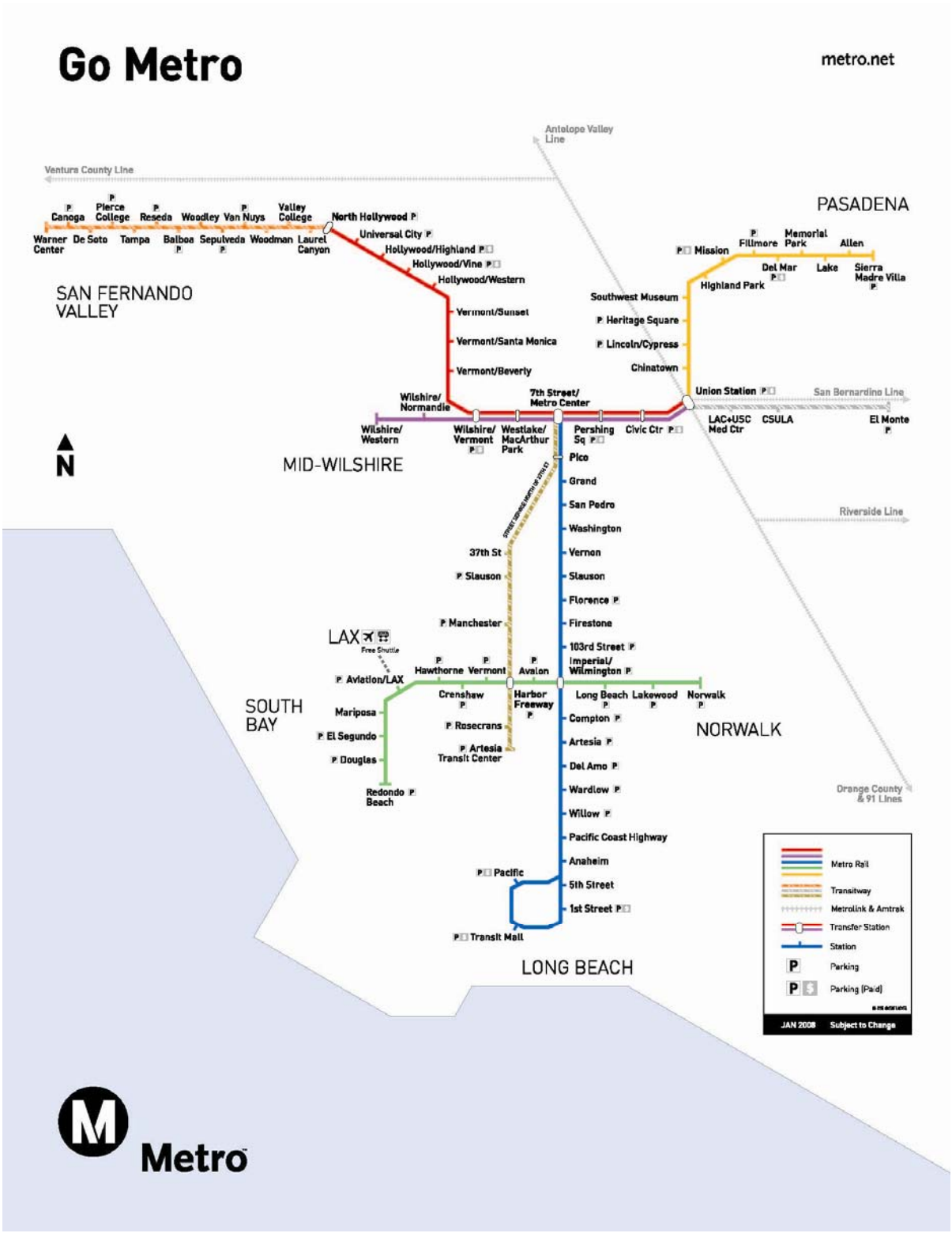


Figure 1-2 Metro Rail Map - Operational System, Fall 2008

1.2 Background

1.2.1 Location

The PSA is located in the downtown area of the City of Los Angeles. The PSA is bounded by the Harbor Freeway (SR-110) on the west, the Santa Ana Freeway (US-101) on the north, Alameda St. on the east, and 7th and 9th Streets on the south. The PSA is within the Central Business District (CBD) of Los Angeles, consisting of a dense urban core with an active Financial District lined with skyscrapers of 40 stories or more, a reviving Historic Core and a thriving cultural and civic center. Because the PSA is built-out, there are no particularly underdeveloped areas that are clear candidates for the Regional Connector. Therefore, all streets and roadways within the PSA are potential candidates for the Regional Connector route.

To the northeast of the PSA lies the Metro Gold Line extending from Union Station south to 1st St. and Alameda St., then heading east on 1st St. with one station just north of 1st St. and east of Alameda. To the southwest of the PSA lies the Metro Blue Line terminus of 7th St./Metro Center Station at 7th St. between Flower and Figueroa Streets.

Because of its central location, the Regional Connector will improve the operation of the entire Metro Rail transit system and provide benefit to the greater Los Angeles County (County) region. The Regional Connector may also replace duplicative bus lines with a single high-capacity link between 7th St./Metro Center Station and Union Station, thus improving bus operations in the County as well.

1.2.2 History

Rail transit in Los Angeles dates to 1872, when Southern Pacific began construction on a passenger rail line from downtown to San Pedro, with the intent of eventually monopolizing the regional transportation system. By the 1920s, the Southern Pacific and Pacific Electric systems had nearly 800 cars in service and hundreds of miles of tracks. Los Angeles Railway also operated a local streetcar system serving the downtown core and the nearby neighborhoods, which carried the bulk of Los Angeles' urban ridership. Notable busy lines included the Aiso St. service to Boyle Heights, the Temple and 2nd St. cable cars on Bunker Hill, and the Angels Flight funicular railway. Pacific Electric's Hollywood, Glendale, and San Fernando Valley trains entered the one-quarter-mile long Belmont Tunnel at the tail end of their trips to the Subway Terminal Building at 4th and Hill Streets in downtown.

Despite the extensive track and power infrastructure, Los Angeles' rail transportation system would last only four more decades. Americans traded streetcars for private automobiles with record speed and moved to neighborhoods beyond the railroads' reach. Rail transit's final zenith came during World War II, when fuel, metal, and rubber rationing briefly forced millions of Americans back onto streetcars to get to their jobs.

With the end of the war came a period of economic and industrial prosperity and the pent-up demand for new automobiles could finally be met. With few rail riders remaining and new diesel bus technology offering a cheap substitute for streetcar service, cash-strapped transit operators nationwide began canceling routes and removing tracks. Los Angeles' system closed entirely, with the last train making its trip from downtown to Long Beach in 1963.

Freed by the heightened mobility that private cars offered, people began working in increasingly suburbanized settings, and the old downtown core plunged into decline for several decades. In recent years, with traffic congestion mounting, the mobility that supported geographically-dispersed job and housing patterns has become increasingly constrained. Longer commute times, ever-climbing gas prices and increased concern about vehicle greenhouse gas emissions leading to climate change have prompted many Los Angeles residents to seek a return to the transit-friendly urban form of decades past. Downtown Los Angeles has seen a recent surge in development and many residents are rediscovering the forgotten urban core.

During the mid-1980s, the Los Angeles County Transportation Commission and Southern California Rapid Transit District began piecing together the railroad rights-of-way abandoned decades earlier with the intent of bringing rail transit back to Los Angeles.

Today, the Metro Rail system consists of 73 track miles and downtown Los Angeles is once again served by a radial network of rail transit lines. The Metro Red Line has assisted in the resurgence of the downtown area, including the PSA, by improving accessibility and facilitating movement between various districts.

In addition, the Southern California Regional Rail Authority has gradually purchased its own right-of-way and developed a 512-mile commuter rail system over the course of the past two decades, linking commuters throughout the region to their downtown jobs.

1.3 Past Studies

Pasadena – Los Angeles Light Rail Transit Project EIR 1988-1993

The concept of a light rail link through the downtown core from 7th St./Metro Center Station to Union Station originated from the Environmental Impact Report (EIR) for the Pasadena-Los Angeles Light Rail Transit Project. This study explored extending the Long Beach-Los Angeles Light Rail Transit line, now the Metro Blue Line, from downtown through Pasadena.

After environmental clearance and public approval, the Pasadena-Los Angeles Light Rail Transit Project, now the Metro Gold Line, was built. The Metro Gold line now runs from the Sierra Madre Villa Station in Pasadena to Union Station.

It was specifically indicated in the study that a Gold Line rail connection is possible between Union Station and 7th/Metro Center Station to reduce transfers between the Metro Red, Gold and Blue Lines.

Blue Line Connection Preliminary Planning Study

In 1993, Metro completed a preliminary planning study to analyze alternatives for connecting the Long Beach Blue Line, already in operation, to the Pasadena Blue Line (now the Metro Gold Line), which was not yet under construction at that time. Although the Metro Gold Line provides a viable service as stand-alone transit from downtown Los Angeles to Pasadena, a potential capacity problem for the Metro Red Line was identified, as it was the sole rail connection between Union Station and the 7th St./Metro Center Station. Metro officials recognized that building a connection between the Long Beach and Pasadena light rail lines would alleviate the capacity issues, and increase the overall usefulness of the system.

Los Angeles Eastside Corridor Final Supplemental EIR/EIS 2002

At the time of the Blue Line Connection Preliminary Planning Study, an extension of the Metro Red Line to Boyle Heights was also being considered. The preferred alternative was a 3.1-mile long heavy rail transit (HRT) subway with 4 stations.

In February 2002, Metro approved the Metro Gold Line Eastside Extension using Light Rail Transit (LRT) in lieu of the Red Line Eastside Extension. Running from Union Station to Atlantic Station in East Los Angeles, this six-mile, eight-station extension traverses Alameda St., 1st St., Indiana St., and 3rd St. A new bridge connects Union Station to the eastern edge of downtown by going south over the US-101 freeway to the intersection of Alameda St. and Temple St. The route is at grade on the eastern side of Alameda St. from Temple St. to 1st St. An at-grade station at 1st and Alameda Streets is sited on the northeast corner of the intersection to minimize traffic impacts.

Regional Light Rail Connector Study 2004

Based on new alignment opportunities created by the approval and construction of the Metro Gold Line Eastside Extension, Metro initiated an engineering study to identify potential alignment, station and configuration alternatives for a new LRT connection between the Metro Blue and Gold Lines. The new alternatives connected the Metro Gold Line Eastside Extension in the vicinity of the Little Tokyo/Arts District Station at 1st and Alameda Streets to the 7th St./Metro Center Station.

Forty-one initial alternatives were developed and initial screening reduced the number of alternatives to 16. The screening was based on characteristics, service area, cost, complexity of engineering and other similar criteria. There was no public input process performed and no preferred alternative identified in this study.

This AA includes several of the alternatives identified in the 2004 study. Some of the other 2004 alternatives are no longer feasible due to changed conditions along the proposed alignments.

1.4 Project Study Area Demographics

Data presented in this section were obtained from the Southern California Association of Governments (SCAG, 2005) and the U.S. Census Bureau (2000). Data are representative of demographic conditions at the time of data-gathering and are used as the basis of evaluation in this AA.

The Regional Connector PSA covers 1.6 square miles, or 0.03 percent of the 4,752 square miles of the County. The total residential population of the PSA is 17,795, or 0.18 percent of the total County population. The average population density within the PSA is 11,685 per square mile, 5.5 times that of the County.

Despite its small size and residential population, the Regional Connector PSA sustains 3.62 percent of the County's Total Employment with 168,328 jobs. Employment density in the PSA is 110,529 employees per square mile which is more than 100 times the County-wide employment density.

Table 1-1 summarizes the PSA and County population and employment information for 2005. Population and employment growth are discussed further with respect to transit dependency in Sections 1.7.4 and 1.7.5.

Table 1-1 Population and Employment

Demographics	PSA	L.A. County	Percent of County
Population	17,795	10,010,315	0.18%
Population Density (people/sq. mi.)	11,685	2107	NA
Total Employment	168,328	4,644,010	3.62%
Employment Density (jobs/sq. mi.)	110,529	977	NA

Source: SCAG, 2005

According to 2000 Census data, the PSA has higher proportions of Asian and Black residents than the County. Black residents compose 30.6 percent of the PSA, compared with 9.6 percent of the County; they reside in the PSA primarily east of Hill St. and south of 1st St.

Asian residents, who live primarily between 1st St. and 5th St., compose 23.5 percent of the PSA, compared with 11.9 percent of the County.

The PSA has significantly lower compositions of White and Hispanic populations when compared to the County.

Table 1-2 shows the racial and ethnic breakdown of the PSA. Figures 1-3 through 1-8 illustrate the population's racial and ethnic distribution throughout the PSA.

Table 1-2 Racial and Ethnic Composition				
Demographics	PSA		Total LA County	
	Number	%	Number	%
Race				
Total Population	17,795	100%	9,519,338	100%
White	4,968	27.9%	4,622,759	48.6%
Black/African American	5,441	30.6%	916,907	9.6%
American Indian	180	1.0%	68,471	0.7%
Asian	4,187	23.5%	1,134,263	11.9%
Pacific Islander/Hawaiian	9	0.1%	27,221	0.3%
Some other race	2,139	12.0%	2,262,925	23.8%
Two or more races	917	5.2%	486,792	5.1%
Ethnicity				
Total Population of PSA	17,795	100%	9,519,338	100%
Hispanic or Latino (regardless of race)	4,258	23.9%	4,242,213	44.6%

Source: U.S. Census Bureau, 2000

Residences in the PSA are categorized in SCAG data as single-family homes, multi-family homes, or group quarter residences, which include military barracks, dormitories, and institutional housing. Data for the number of low, medium, and high-income households in the PSA were available for single-family and multi-family residences only. In 2005, there were 9,673 of these households with a median household income of approximately $45,000. Group quarters added 5,466 residences.

Based on these 2005 data, the PSA is primarily composed of low-income households, with a moderate portion of medium-income household population, as shown in Table 1-3.

Table 1-3 Project Study Area Income Status		
Demographics	PSA	Percent
Total Residences	15,136	N/A
Total Households	9,673	100%
Low Income Households	7,244	75%
Medium Income Households	2,009	21%
High Income Households	417	4%

SCAG, 2005

According to data presented in Table 1-4, only 5.5 percent of the population in the PSA is age 18 or younger, compared to 29.4 percent of the population of the County. The PSA also has a higher percentage of elderly residents (19.7 percent) compared to the County (9.7 percent).

Table 1-4 Population Age				
Age	PSA	%	L.A. County	%
18 and under	976	5.5%	2,798,604	29.4%
65 and over	3,497	19.7%	926,670	9.7%

Source: U.S. Census Bureau, 2000; SCAG, 2005

The young and the elderly have a higher propensity for using public transportation, since these groups are less likely to have driver's licenses or access to private automobiles.

Children and seniors living outside of the PSA will also benefit from the improved mobility and transit access provided by the Regional Connector, especially if they travel to downtown Los Angeles frequently.

The PSA is currently undergoing significant changes in terms of housing and demographics. Within the last four years, new market-rate condominium towers have been completed, historic buildings have been converted to loft housing, and new entertainment centers have been approved for construction, bringing renewed interest to downtown. These activities continue to bring about demographic changes that may not be reflected in data from 2005.

PSA residents use transit more than people in other areas of the County. Twenty-three percent (or 1,025 people) of people age 16 and older who both live and work in the PSA commute via public transportation, compared to seven percent of the entire County.

Figure 1-9 shows the distribution of public transportation users within the PSA. They tend to live in areas where there are high percentages of zero-vehicle households, as shown in Figure 1-10. A much higher proportion of households in the PSA lack vehicle access (69 percent) than in the County as a whole (12 percent).

1.5 Public Transportation Facilities and Services

1.5.1 Project Study Area Public Transit Context

Downtown has the highest concentration of transit service of any area in the County. At present, ten transit operators provide service along 112 bus routes and four Metro Rail lines within the PSA, as illustrated in Figure 1-11. There is also heavy pedestrian activity throughout the PSA. The bus and rail lines branch out in all directions from the PSA to many destinations in Los Angeles County. Freeway express service also allows riders to reach destinations in Orange, San Bernardino, and Ventura Counties during peak commute hours.

1.5.2 Transportation Facilities and Services in the Project Study Area

1.5.2.1 Metro Rail

Metro provides rail service to the PSA with the Metro Red Line from Union Station to North Hollywood, the Metro Purple Line from Union Station to Wilshire Center, the Metro Blue Line from the 7th St./Metro Center Station to Long Beach, and the Metro Gold Line from Union Station to Pasadena. The rail service consists of 62 rail stations and 73 track miles.

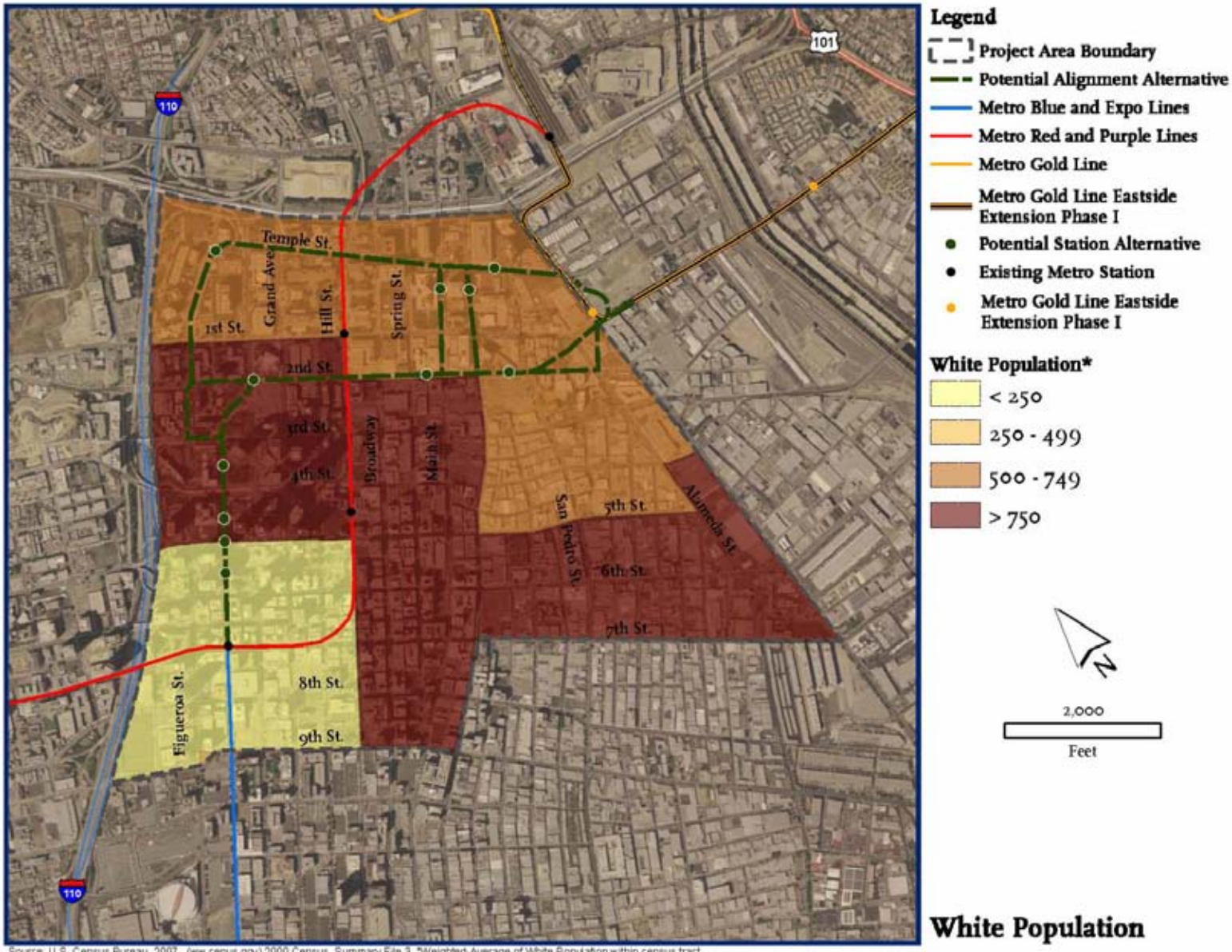


Figure 1-3 Race, White Population in PSA

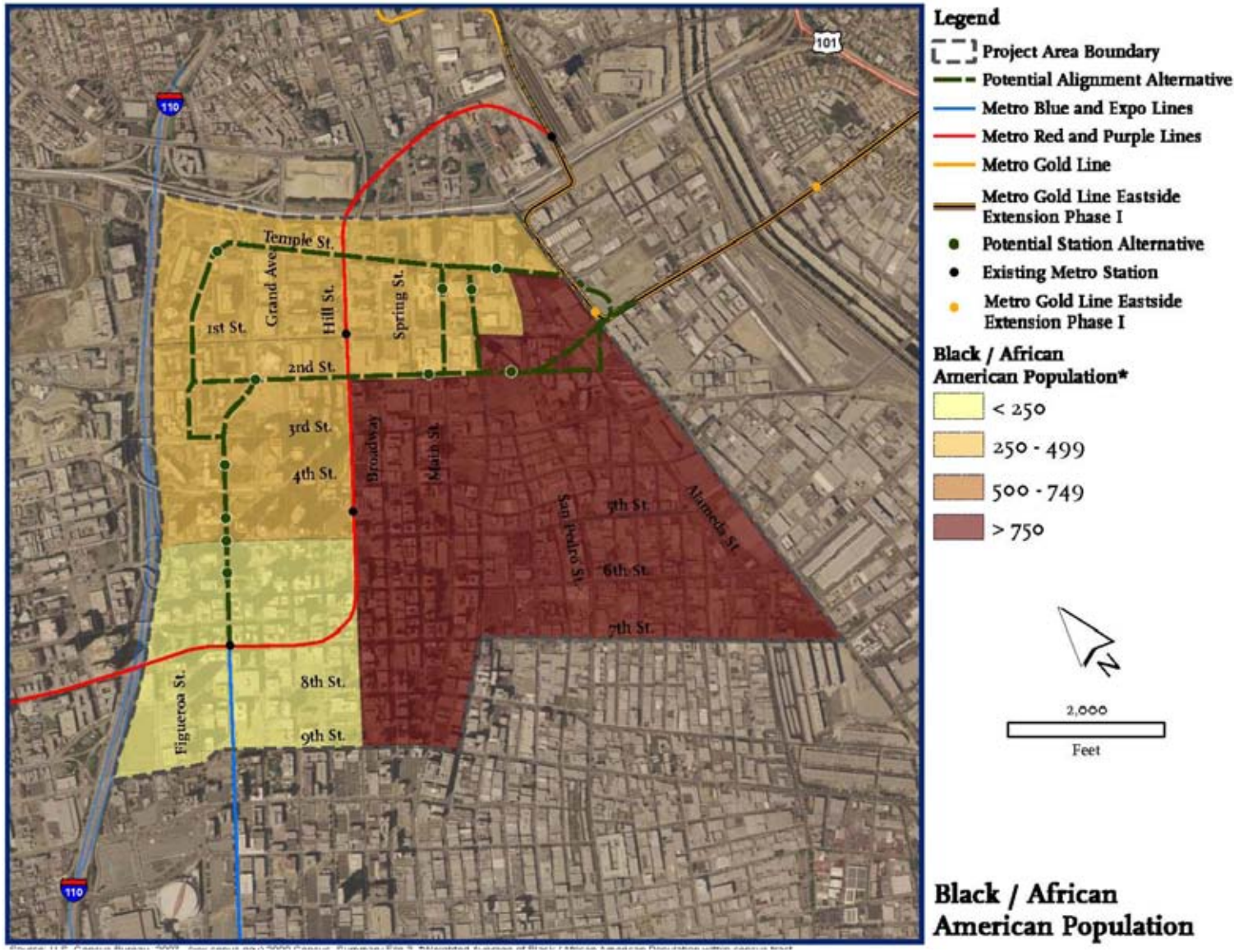
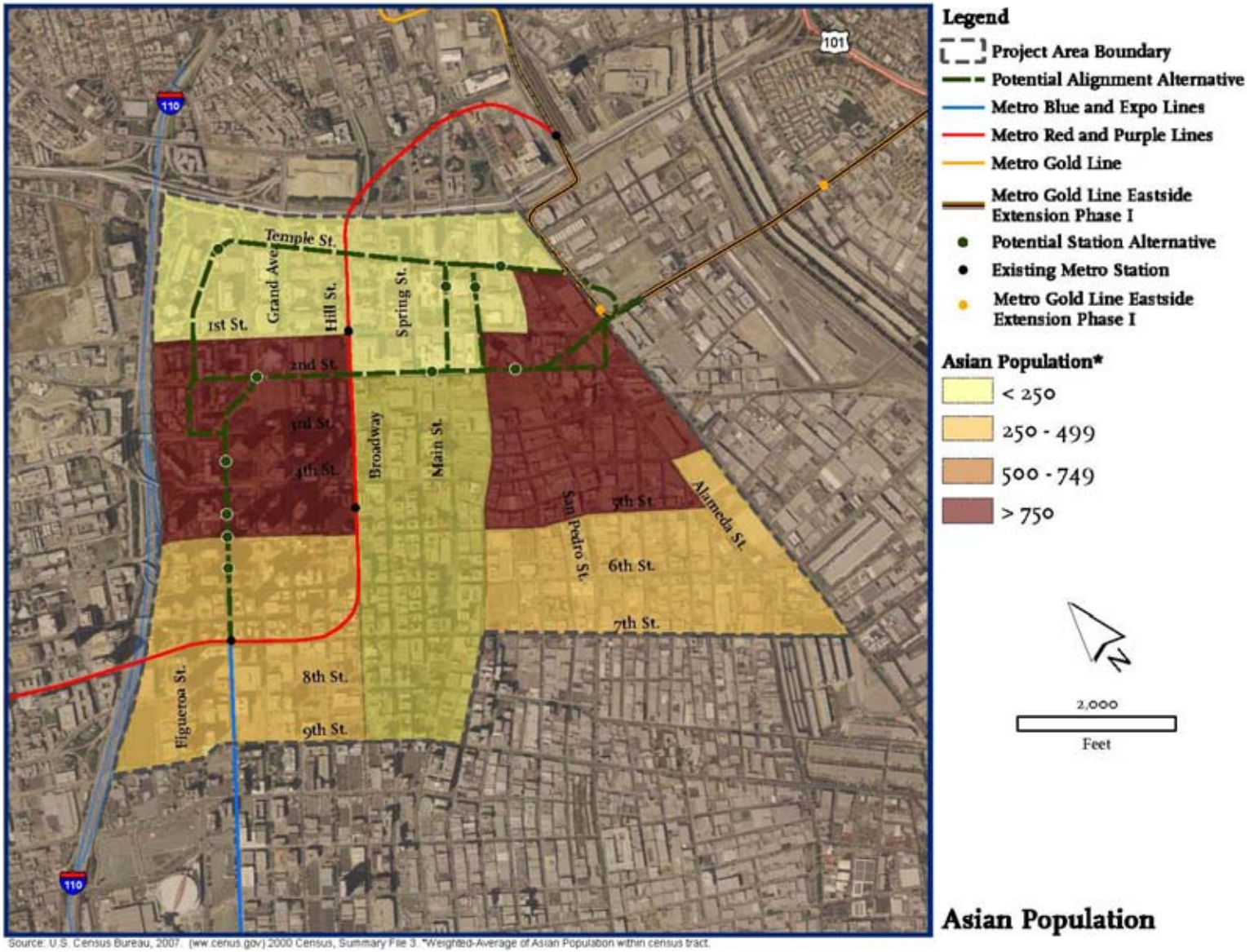
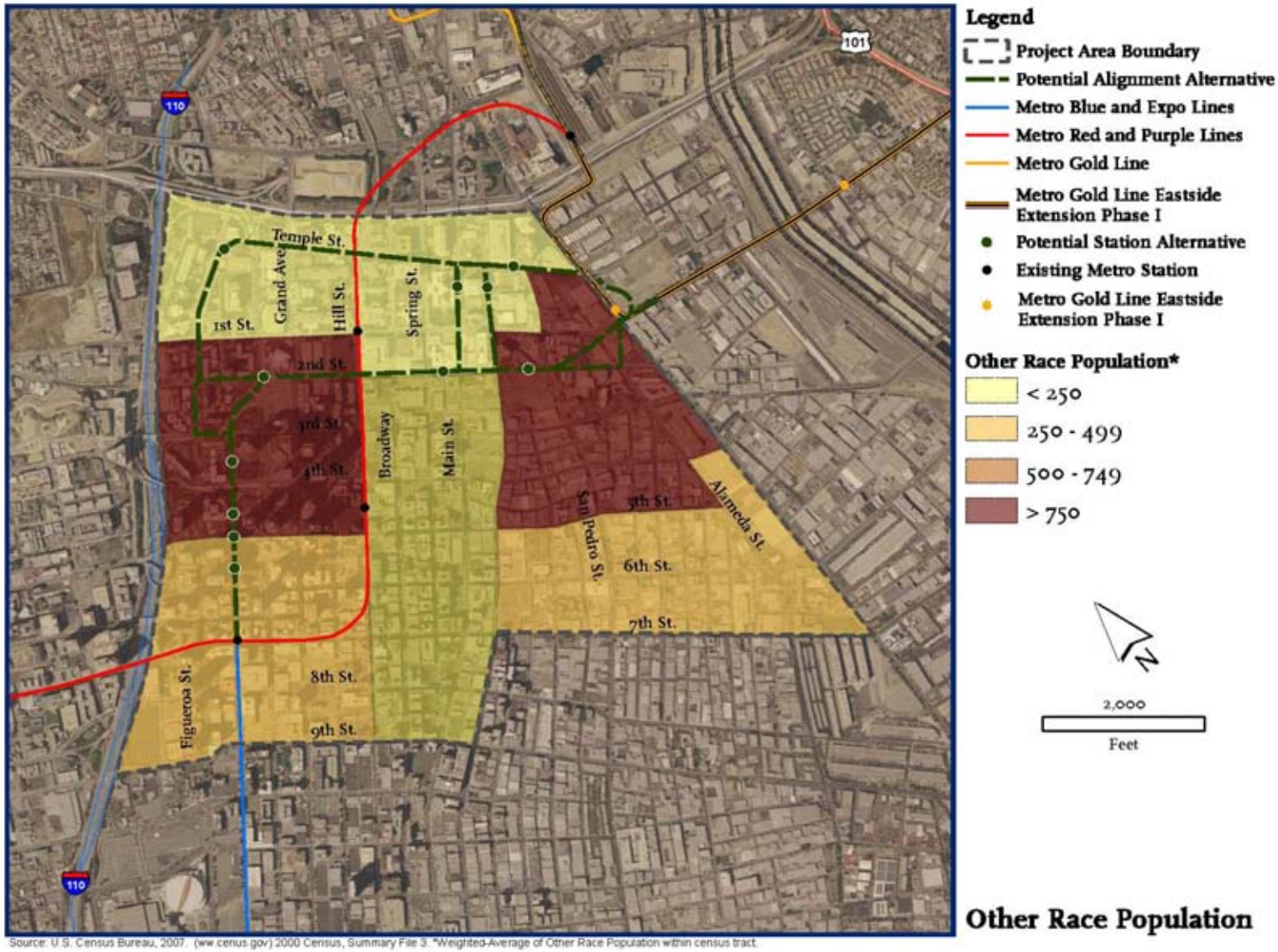


Figure 1-4 Race, Black/African-American Population in PSA



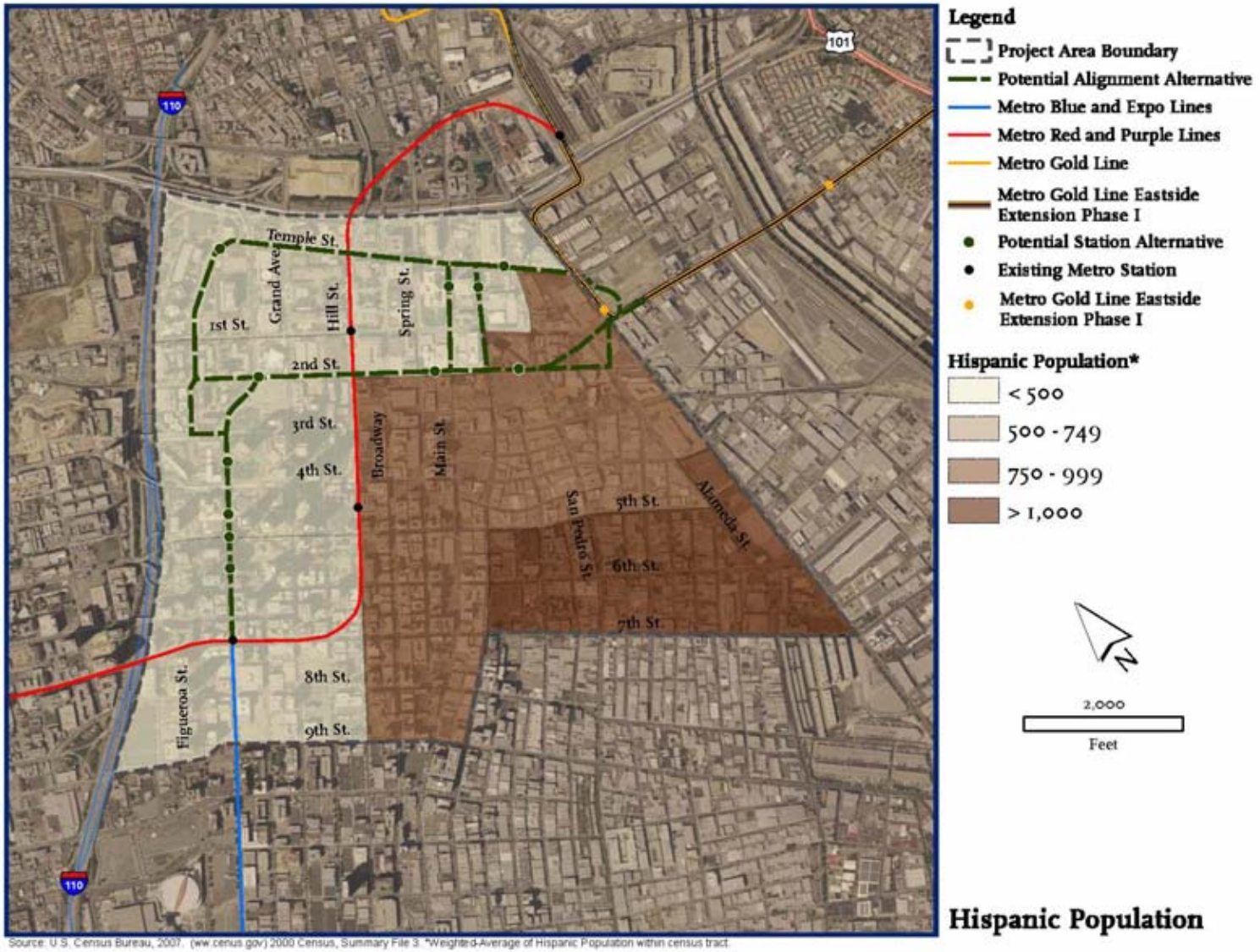
Source: U.S. Census Bureau, 2007. (ww.cenus.gov) 2000 Census, Summary File 3. *Weighted-Average of Asian Population within census tract.

Figure 1-5 Race, Asian Population in PSA



Source: U.S. Census Bureau, 2007. (ww.cenus gov) 2000 Census, Summary File 3. *Weighted-Average of Other Race Population within census tract.

Figure 1-6 Race, Population Identified as "Other Race" in PSA



Source: U.S. Census Bureau, 2007. (ww.cenus.gov) 2000 Census, Summary File 3. *Weighted-Average of Hispanic Population within census tract.

Figure 1-7 Ethnicity, Hispanic Population in PSA

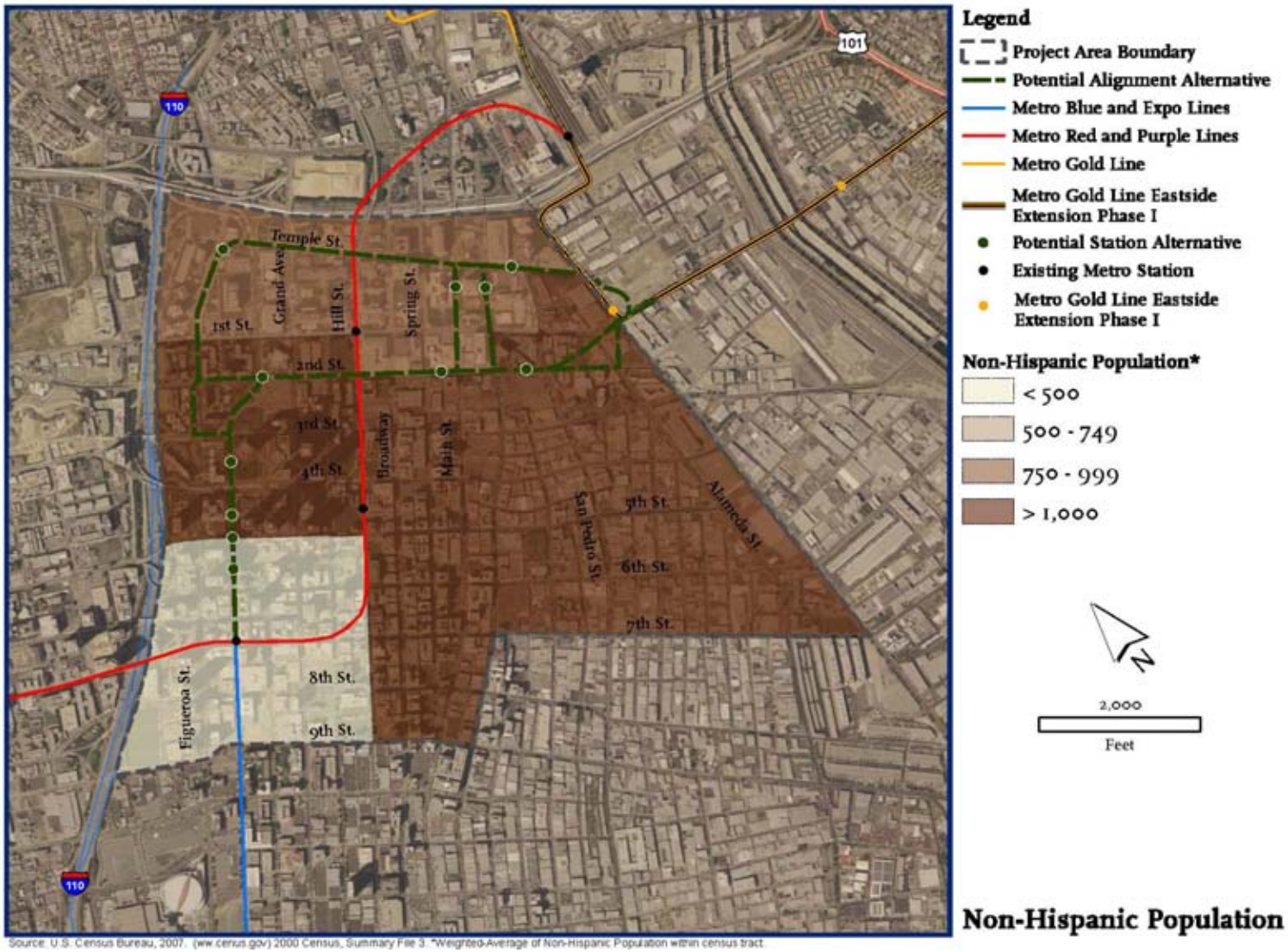
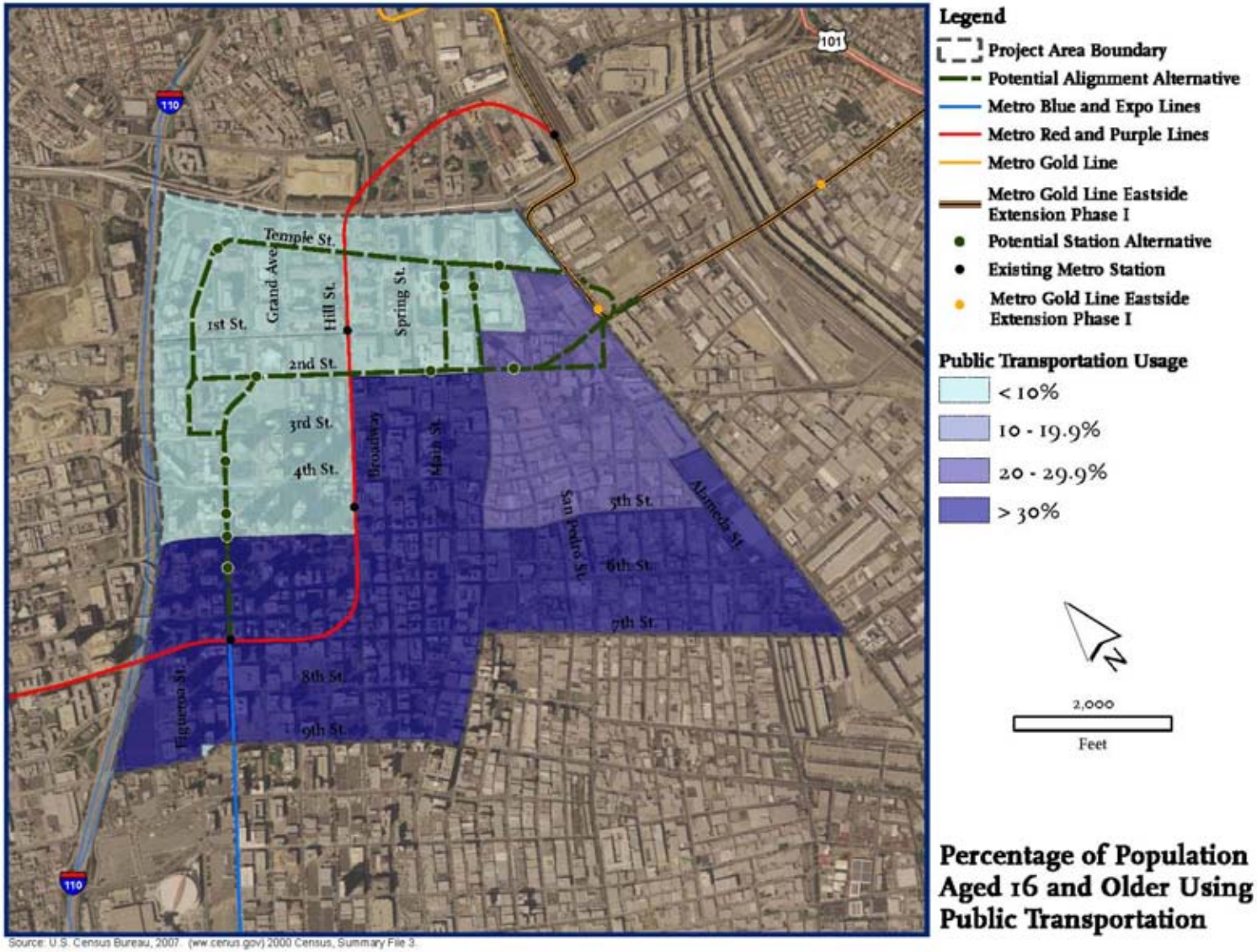
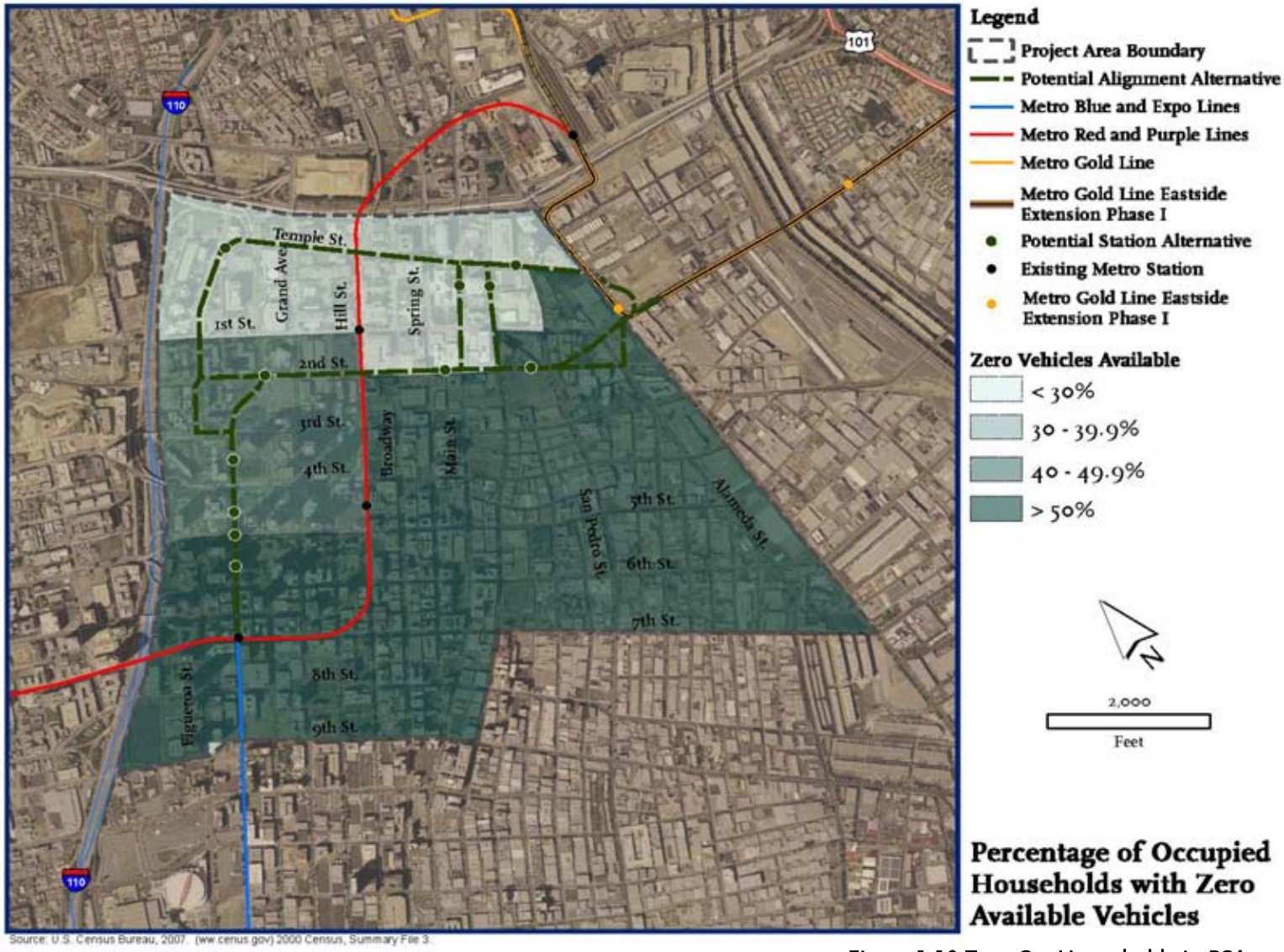


Figure 1-8 Ethnicity, Non-Hispanic Population in PSA



Source: U.S. Census Bureau, 2007. (ww.census.gov) 2000 Census, Summary File 3.

Figure 1-9 Public Transportation Users in PSA



Source: U.S. Census Bureau, 2007. (ww.census.gov) 2000 Census, Summary File 3.

Figure 1-10 Zero-Car Households in PSA

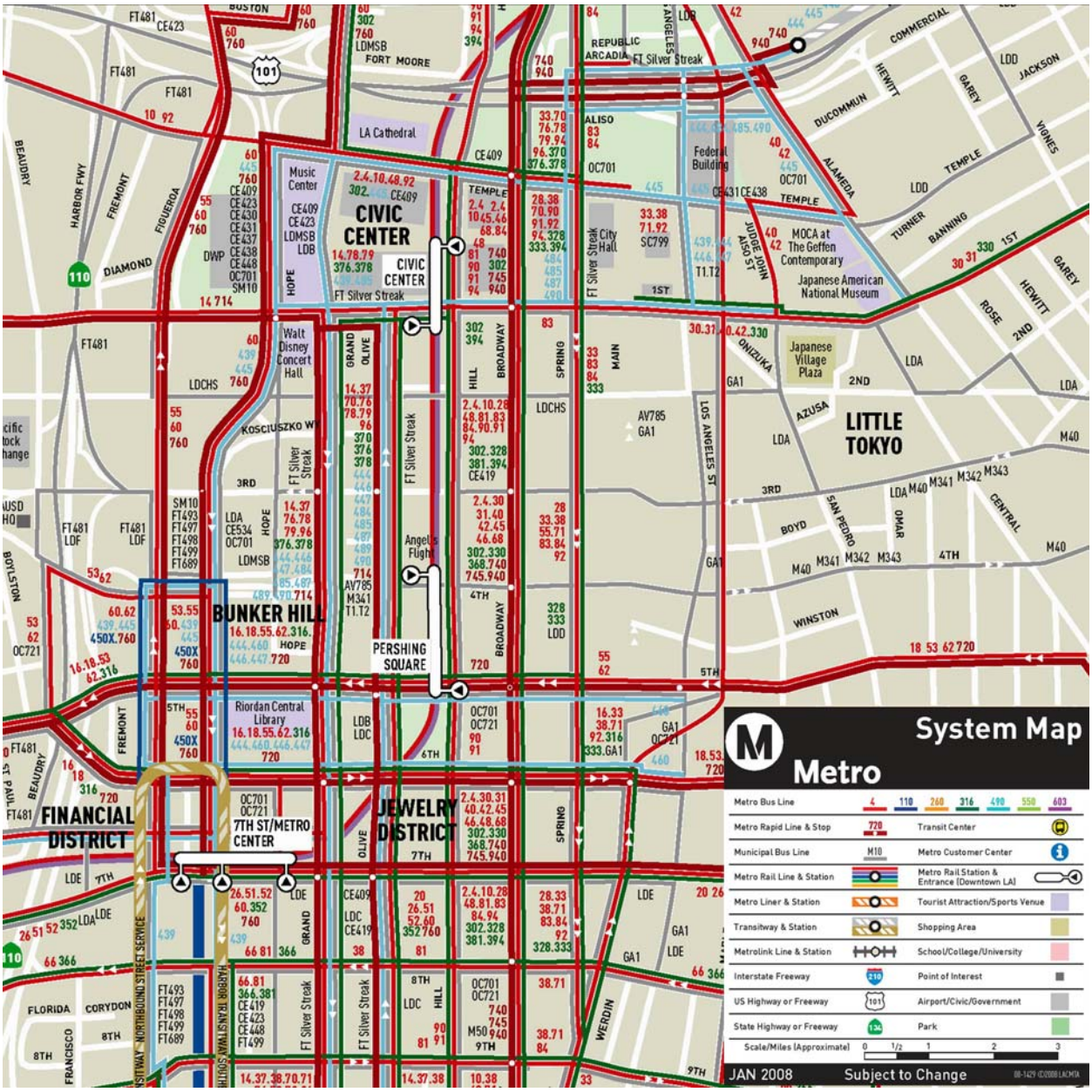


Figure 1-11 Transit in the PSA

Future service will be provided by the light rail extensions currently under construction to East Los Angeles (Metro Gold Line Eastside Extension, scheduled to open in late 2009) and Culver City (Metro Expo Line, scheduled to open in 2010). All Metro Rail stations provide connections to additional public transportation options, including Metrolink and Amtrak commuter rail services and bus service provided by Metro and other transit operators. Table 1-5 summarizes existing and future Metro Rail Lines currently under construction in the PSA.

Table 1-5 Existing and Future Metro Rail Lines in the PSA					
Existing Metro Rail Lines					
Line	Mode	Route	Length	Weekday Ridership	Year Completed
Red/Purple	HRT	Union Station to North Hollywood, Wilshire/Western	17.4 Miles	136,355	1993-2000
Blue	LRT	7th St./Metro Center to Long Beach	22 Miles	77,834	1990-1991
Gold	LRT	Union Station to Sierra Madre Villa	13.6 Miles	19,579	2003
Future (Under Construction) Metro Rail Lines					
Line	Mode	Route	Length	Expected Year 2020 Ridership	Year Complete
Gold	LRT	Union Station to East Los Angeles	6 Miles	23,000	2009
Expo	LRT	7th St./Metro Center to Culver City	8.5 Miles	43,600	2010

Metro Red Line – This HRT subway line originates from Union Station and travels west (Figure 1-12). The line began operating with service between Union Station and Westlake/MacArthur Park station (5 stations) in 1993. An extension to Wilshire/Western station, part of which was later renamed the "Metro Purple Line," was completed in 1996. The extension of the Metro Red Line northwest from Wilshire/Vermont station to Hollywood/Vine station with an additional 5 stations opened in 1999. Three more stations were added with the opening of the extension to North Hollywood in 2000.

Figure 1-12 Metro Red Line

Metro Purple Line – This HRT line originated as an extension of the Metro Red Line with 3 stations from the Wilshire/Vermont Station west to the Wilshire/Western Station. It opened in 1996 and was renamed the Metro Purple Line in 2006. As of the 2007 fiscal year, the Red and Purple Lines experienced approximately 136,355 weekday boardings on 17.4 miles of track.

Metro Blue Line – This line opened in 1990 and was the first LRT system in Los Angeles since the previous rail transit system closed in the 1960s. The 22-mile line has 22 stations and runs from 7th St./ Metro Center Station south to Long Beach. The Blue Line averaged 77,834 weekday boardings in the 2007 fiscal year.

Metro Gold Line – This LRT line from Union Station to Pasadena has 13 stations, 13.6 miles of track, and began operating in 2003 (Figure 1-13). In the 2007 fiscal year, the line averaged 19,579 weekday boardings.

Metro Gold Line Eastside Extension – The first phase of this LRT project is expected to open in 2009, making stops in Little Tokyo, Boyle Heights, and East Los Angeles. The six-mile line will feature eight new stations and connect with the existing Metro Gold Line to Pasadena without requiring riders to transfer at Union Station. Metro estimates that there will be 23,000 riders each weekday on the Eastside Extension by 2020.

Metro Expo Line – The first phase of the Exposition Light Rail Transit line is expected to open in 2010. The 8.5-mile line will run primarily at grade and serve 11 stations from 7th St./Metro Center Station in downtown to the intersection of Washington Blvd. and National Blvd. in Culver City. Average weekday ridership is expected to reach 43,600 by 2020[1].

Figure 1-13 Metro Gold Line

There are three Metro Rail stations located within the PSA. The HRT Metro Red and Purple Line stations are Civic Center Station (Hill St. between Temple and 1st Streets), Pershing Square Station (Hill St. between 4th and 5th Streets), and 7th St./Metro Center Station (7th St. between Figueroa and Hope Streets, and Flower St. between Wilshire Blvd. and 8th St.). The 7th St./Metro Center Station serves as a transfer point to the LRT Metro Blue Line as well. The LRT Little Tokyo/Arts District Station (Alameda St. between Temple and 1st Streets) will be a fourth station when it opens in 2009 as part of the Metro Gold Line Eastside Extension.

The Regional Connector will provide an alternate route between 7th St./Metro Center Station and Union Station, where the existing Metro Red and Purple Lines increasingly experience crowding and capacity issues. The Regional Connector will also provide more capacity to accommodate Metro Blue and Expo Line trains in the downtown area, and will thus enable the planned combined frequency of these two services. It would also reduce the need for Red and Purple Line transfers for downtown-bound Metro Gold, Blue, and Expo Line passengers, who would otherwise need to transfer to reach many destinations in the PSA. Should the Regional

1 www.buildexpo.org, FEIR, 7-123

Connector be constructed as a LRT link, it would allow five-minute headways in each direction. Combined, there could be trains as frequently as every 2 ½ minutes along the Regional Connector.

1.5.2.2 Metro Bus

Because downtown Los Angeles is a regional employment hub, there are numerous bus operators serving the area. These operators are:

- Antelope Valley Transit Authority (AVTA)
- City of Gardena (Gardena Municipal Bus Lines)
- City of Santa Clarita Transit
- City of Santa Monica (Big Blue Bus)
- Foothill Transit
- City of Los Angeles Department of Transportation (LADOT)
- Los Angeles County Metropolitan Transportation Authority (Metro)
- City of Montebello (Montebello Bus Lines)
- Orange County Transportation Authority (OCTA)
- City of Torrance (Torrance Transit)

With the exception of Metro, LADOT, Montebello Bus Lines, and Gardena Municipal Bus Lines, these transit operators run mostly peak commute (rush) hour, peak-direction commuter bus service in and out of the PSA. LADOT provides both long-distance freeway commute service as well as frequent Downtown Area Short Hop (DASH) service along short, mostly circular shuttle routes within the downtown area. In addition to public transit services, several high-rise office tenants within the PSA offer shuttle bus service to Union Station for their employees.

The majority of bus transit service in the PSA, as well as the Los Angeles region, is provided by Metro, which operates a number of short and long-distance radial lines, as well as cross-town service, express service, and limited overnight service. The combined number of transit vehicle boardings and alightings in the PSA on Metro buses alone totals 185,000 on a typical weekday. The 91,823 weekday boardings account for 7.75 percent of the 1,184,720 bus boardings system-wide.

Metro's bus transit services vary considerably in speed and capacity. The most basic routes provide line-haul service to and from downtown along arterial streets. Heavily-traveled routes often have overlaid limited-stop or Metro Rapid bus service.

Metro Rapid bus service includes traffic signal priority, short headways, and limited stops, which increase corridor average bus speeds by about 3-4 mph compared to local service, which typically operates in the 9-12 mph range. Metro currently provides Rapid service into the Regional Connector PSA from major intersections along Beverly Blvd. (during peak hours only), Wilshire Blvd., Whittier Blvd., South Broadway, and Hawthorne Blvd. Six additional Metro Rapid bus lines are scheduled to open by June 2008. Of these future routes, lines 730 (Pico Blvd.) and 753 (Central Ave.) will serve the PSA.

Additionally, Metro Rapid Express rush hour service to downtown commenced in June 2007 with the opening of line 940 (Hawthorne Blvd. Rapid Express). Rapid Express service is essentially the same as Rapid service, but serves only one third of the Rapid route's stops, providing a slight increase in speed.

The Regional Connector will offer the opportunity to consolidate some of this overlapping bus service into one new high-capacity route, thus reducing operating expenses.

The majority of the publicly-provided commuter services originating east of downtown use the El Monte Busway. Constructed in 1976, these high capacity bus-carpool lanes parallel the San Bernardino Freeway (I-10) between the City of El Monte and downtown. Similarly, the commuter buses coming from points south and southeast of downtown primarily use the Harbor Transitway, completed in 1996, which runs along the median of SR-110 between Artesia Blvd. and Adams Blvd.

By linking the Metro Gold, Blue, and Expo Lines, which roughly parallel several of the bus lines along the transitways, the Regional Connector will potentially make the rail system more attractive than the transitway bus service. The Regional Connector would provide better links between the existing LRT stations, many of which are centrally located in dense neighborhoods and business districts. The busway stations are unattractive by comparison because they are located in freeway medians, which are uninviting to pedestrians and usually not immediately adjacent to activity centers.

1.5.2.3 Commuter Rail

Commuter rail service to downtown is provided primarily by Metrolink and Amtrak, with connections to Metro Rail service at Union Station, located one-tenth-mile outside of the PSA. Most passengers arriving at Union Station on Metrolink are bound for the CBD and presently use the Metro Red Line, DASH buses, or employer-provided shuttles to complete their trips. Some passengers may use the Regional Connector if it reduces trip times or transfers.

Metrolink has operated under the Southern California Regional Rail Authority (SCRRA) since 1992, serving the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Metrolink provides 512 miles of service (including tracks shared with Amtrak) to 55 stations on seven routes. Average weekday ridership on Metrolink trains from October through December 2007 was over 42,000 daily boardings, with the majority of trips (56.4 percent) beginning or ending at Union Station.

Amtrak is an inter-city rail system providing passengers at Union Station with regional, statewide, and nationwide service.

1.6 Performance of the Travel System

Southern California is faced with multiple mobility challenges that hinder the region's ability to effectively meet additional travel demand. One of the most pressing issues is population growth. The County alone is expected to increase by 2.2 million people, nearly twice the population of the City of San Diego, to a total of 12.2 million people from 2005 to 2030. This expected population growth will lead to increased travel demand throughout the region.

The transportation network includes 9,000 lane-miles of freeway, more than 42,000 lane-miles of arterials, and several large public transit service providers.[2] Yet growth of the transportation system has not kept pace with population growth and increases in transportation demand. As the population in the region doubled from 1960 to 2000, highway miles increased by less than 30 percent.[3] The congestion caused by insufficient transportation lanes affects both personal travel and goods movement. The majority of the congestion is from travel on the highways and local arterial network regardless of transportation mode. If the current trend persists, travel delays are expected to rise to 5.4 million person hours by 2030, more than double currently experienced delays, which will deeply affect highway productivity.[4]

If inadequately addressed, these challenges could hamper future population growth, economic development, commuter safety, existing infrastructure, goods movement, air quality, and other environmental conditions. If no action is taken to improve transportation mobility, SCAG estimates that daily person hours of delay would increase from 2.2 million hours under the 2000 Base Year to 5.4 million hours under the 2030 Baseline.

To define and address mobility issues, SCAG developed regional performance indicators that help in understanding the problem, setting goals for improvement, and measuring progress towards the goals. The following section describes regional performance indicators and baseline estimates of performance. By providing more attractive alternatives to the automobile, improving transit connections in the downtown Los Angeles area becomes one part of a larger, comprehensive strategy to meet regional travel demand.

1.6.1 Traffic Volumes and Operating Conditions

This section summarizes traffic volumes and operating conditions at key roadway segments and intersections within the PSA. Existing daily, AM peak and PM peak traffic volume data were obtained from LADOT. An analysis of existing conditions was

[2] SCAG 2004 RTP Chapter 2
[3] SCAG 2004 RTP Executive Summary
[4] SCAG 2004 Draft RTP PEIR

performed for the key roadway segments using daily traffic volumes and the key intersections using AM and PM peak hour turning movement data.

The roadway segment analysis was performed using a Volume-to-Capacity (V/C) ratio of the average daily traffic (ADT). Existing volumes were obtained from LADOT and the capacity was based on the roadway's General Plan facility type classification.

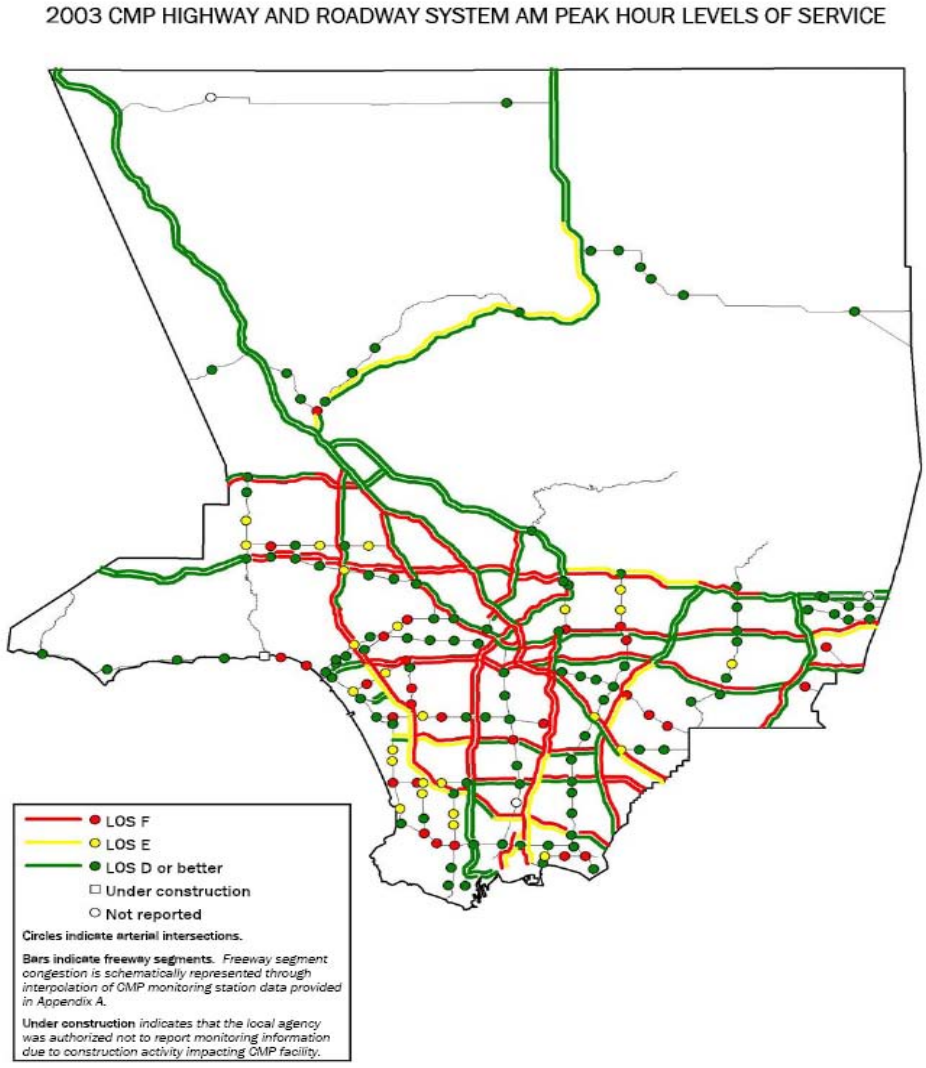
For intersections, the AM and PM peak hour volumes were analyzed using the Intersection Capacity Utilization (ICU) methodology, which determines a V/C ratio based on the critical intersection approach movements and a corresponding Level of Service (LOS). LOS is a qualitative measure used to describe traffic flow conditions, ranging from excellent flow (LOS A) to overloaded, stop-and-go conditions (LOS F). Level of service definitions and corresponding V/C ranges are presented in Table 1-6.

Table 1-6 Level of Service Definitions

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	FREE FLOW. No vehicle waits longer than one red light and no green light phase is fully used.
B	0.601 - 0.700	REASONABLY FREE FLOW. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	STABLE FLOW. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	APPROACHING UNSTABLE FLOW (acceptable for urban conditions). Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	UNSTABLE FLOW (practical capacity). Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FORCED OR BREAKDOWN FLOW. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. There are tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, Highway Capacity Manual, 2000

Freeways within the PSA already operate at LOS F during peak hours and, if not addressed, this trend is expected to worsen through the year 2030. Nearly all areas of the County experience freeway congestion during peak hours. However, the congestion on freeways within the PSA is among the worst and occurs during both the morning and evening rush hour periods, as illustrated in Figure 1-14.


2003 CMP HIGHWAY AND ROADWAY SYSTEM AM PEAK HOUR LEVELS OF SERVICE
LOS F
LOS E
LOS D or better
Under construction
Not reported
Circles indicate arterial intersections.
Bars indicate freeway segments. Freeway segment congestion is schematically represented through interpolation of CMP monitoring station data provided in Appendix A.
Under construction indicates that the local agency was authorized not to report monitoring information due to construction activity impacting CMP facility.

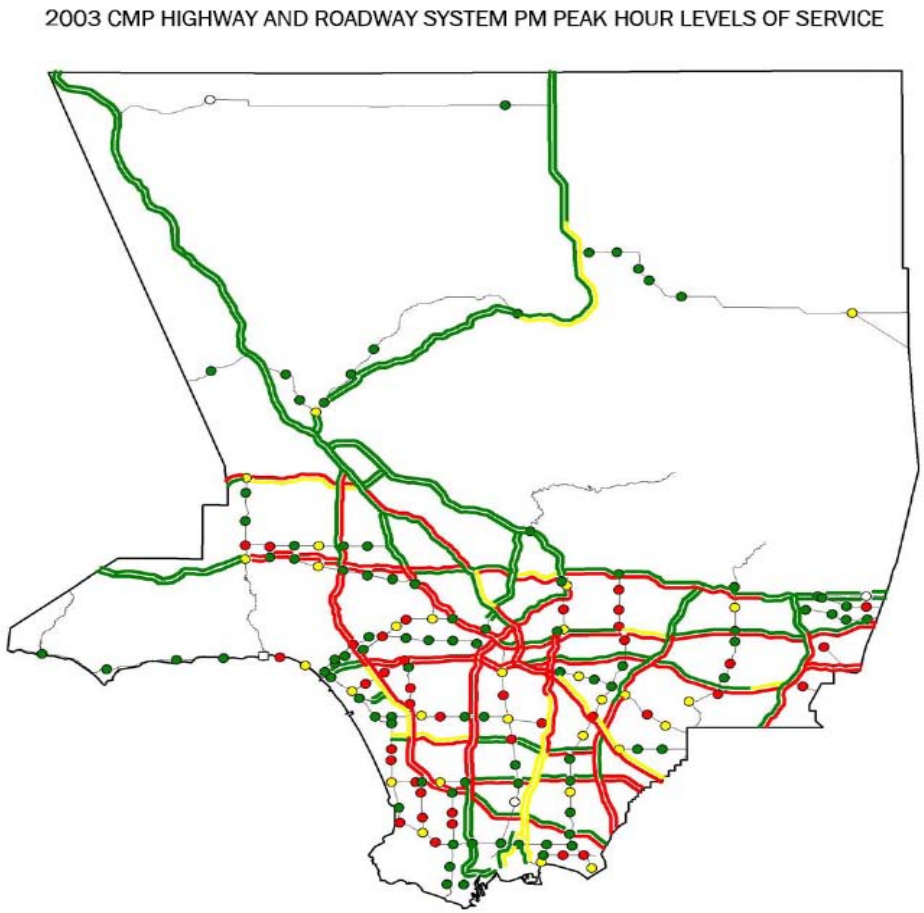


Figure 1-14 Freeway Levels of Service

Table 1-7 and Table 1-8 summarize the existing operating conditions for the key intersections and roadway segments in the PSA. All of the key intersections currently operate at LOS D or better during both the AM and PM peak hours. The only exception is the intersection of Alameda and 1st Streets, which currently operates at LOS F in the AM peak hour.

Table 1-7 Existing (2007) Intersection Level of Service

Intersection	AM Peak Hour		PM Peak Hour	
	V/C Ratio	LOS	V/C Ratio	LOS
Hill St. / 1st St.	0.62	B	0.73	C
Broadway / 1st St.	0.63	B	0.56	A
Spring St. / 1st St.	0.54	A	0.45	A
Main St. / 1st St.	0.44	A	0.55	A
Los Angeles St. / 1st St.	0.53	A	0.58	A
Judge John Aiso St. / 1st St.	0.60	A	0.69	B
Alameda St. / 1st St.	1.03	F	0.88	D
Broadway / 2nd St.	0.84	D	0.46	A
Spring St. / 2nd St.	0.48	A	0.40	A
Main St. / 2nd St.	0.30	A	0.62	B
Los Angeles St. / 2nd St.	0.46	A	0.59	B
San Pedro St. / 2nd St.	0.40	A	0.52	A
Central Ave. / 2nd St.	0.39	A	0.54	A
Alameda St. /2nd St.	0.67	B	0.67	B
Broadway / 3rd St.	0.72	C	0.60	A
Spring St. / 3rd St.	0.59	A	0.55	A
Main St. / 3rd St.	0.53	A	0.73	C
Los Angeles St. / 3rd St.	0.66	B	0.57	A
San Pedro St. / 3rd St.	0.63	B	0.44	A
Central Ave. / 3rd St.	0.58	A	0.41	A
Alameda St. / 3rd St.	0.78	C	0.57	A
Figueroa St. / 3rd St.	0.65	B	0.84	D
Hope St. / Temple St.	0.75	C	0.82	D
Grand Ave. / Temple St.	0.65	B	0.68	B
Broadway / Temple St.	N/A	N/A	0.76	C
Spring St. / Temple St.	0.58	A	0.42	A
Main St. / Temple St.	0.39	A	0.69	B
Los Angeles St. / Temple St.	0.55	A	0.63	B
Judge John Aiso St. / Temple St.	0.36	A	0.50	A
Alameda St. / Temple St.	0.64	B	0.65	B

Most of the key roadway segments currently operate at LOS D or better except for three locations which operate at LOS E. Two of these locations are on 2nd St. and the third location is on Alameda St.

Table 1-8 Existing (2007) Roadway Segment Average Daily Traffic (ADT) Analysis							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	4	28,000	11,177	0.399	A
	5th St.	Secondary	6	45,000	19,920	0.443	A
	6th St.	Secondary	4	30,000	17,386	0.580	A
	Wilshire Blvd.	Secondary	4	30,000	19,434	0.648	B
	7th St.	Secondary	4	30,000	18,908	0.630	B
2nd St.	Alameda St.	Secondary	3	21,000	8,176	0.389	A
	Central Ave.	Secondary	2	14,000	10,452	0.747	C
	Los Angeles St.	Secondary	3	21,000	16,244	0.774	C
	Main St.	Secondary	3	21,000	19,630	0.935	E
	San Pedro St.	Secondary	2	14,000	13,371	0.955	E
	Spring St.	Secondary	4	28,000	14,394	0.514	A
Los Angeles St.	1st St.	Secondary	4	28,000	18,559	0.663	B
	2nd St.	Secondary	4	28,000	17,156	0.613	B
	Temple St.	Secondary	5	35,000	22,036	0.630	B
Main St.	1st St. 1-Way	Major Class II	3	25,500	12,079	0.474	A
	2nd St. 1-Way	Major Class II	3	25,500	13,711	0.538	A
	Temple St.	Major Class II	4	34,000	25,626	0.754	C
Temple St.	Judge John Aiso St.	Major Class II	4	32,000	17,114	0.535	A
	Los Angeles St.	Major Class II	4	32,000	16,809	0.525	A
	Main St.	Major Class II	4	32,000	17,032	0.532	A
1st St.	Alameda St.	Secondary	4	28,000	21,538	0.769	C
	Central Ave.	Secondary	4	28,000	23,081	0.824	D
	Los Angeles St.	Secondary	6	42,000	22,099	0.526	A
	Main St.	Secondary	6	42,000	23,908	0.569	A
	Spring St.	Secondary	6	42,000	20,205	0.481	A
3rd St.	Flower St.	Secondary	4	30,000	19,133	0.638	B
	Spring St.	Secondary	3	22,500	17,564	0.781	C
	Los Angeles St.	Secondary	3	22,500	17,965	0.798	C
	Main St.	Secondary	3	22,500	16,151	0.718	C
Alameda St.	1st St.	Major Class II	4	32,000	30,514	0.954	E
	2nd St.	Major Class II	4	32,000	27,881	0.871	D

1.6.2 Transit Operating Conditions

Bus service runs in a grid pattern through the downtown area, with most lines terminating at the downtown periphery after having passed through. Nearly all streets within the PSA have bus service during peak hours.

On several routes, headways shrink to less than five minutes during rush hour. Some stops are served by over a dozen lines during peak hours. Some of the most heavily transit-served streets in the PSA are 1st St., the 4th St./5th St. couplet, Hill St., Broadway, the Main St./Spring St. couplet, and the Grand St./Olive St. couplet. Downtown streets with the highest bus ridership include Broadway, Hill St., Spring St., Main St., Flower St., and Grand Ave.

Of the numerous bus routes serving downtown, 28 pass within one block of both Union Station and the 7th St./Metro Center Station, the termini of the Regional Connector corridor. Eighteen of these lines are operated by Metro, with nearly 16,000 daily passenger boardings and alightings within the PSA.

Table 1-9 shows the bus lines provided by each bus operator, and the frequency of available service for each bus route.

The four busiest Metro bus lines serving the downtown area all originate in West Los Angeles or Santa Monica. The Metro bus lines with the highest number of boardings within the PSA serve areas east and south of downtown. This establishes the Westside, the Eastside, and South Los Angeles as primary origins and destinations for current bus passengers traveling in and out of the PSA. See Table 1-10 for a summary of Metro bus transit ridership by line and direction.

Of the 18 Metro bus lines that pass within a block of both Regional Connector termini (Union Station and 7th St./Metro Center Station), 11 are freeway commuter lines, and all have only low-to-moderate ridership. Even the busiest of these lines only exhibit a modest number of boardings within the PSA, ranging from 50 to 1400 per day.

Four of the five Metro bus lines with the lowest ridership in downtown are also within a block of both Regional Connector termini (442 – Hawthorne via Harbor Transitway, 489 – Temple City via El Monte Busway, 439 – Aviation Green Line via Culver City, and 445 – San Pedro via Harbor Transitway).

Please see Table 1-11 for a summary of ridership on these lines.

Most of the lines paralleling the Regional Connector route (serving both Union Station and 7th St./Metro Center Station) originate from points east of downtown, and five of them use the El Monte Busway. Most of the lines function primarily as peak hour commuter buses; low ridership compared to other Metro bus lines may be attributable to their lack of off-peak service.

Metro operates 125 bus stops within the PSA. The five busiest Metro bus stops, each with 3,800-7,200 daily boardings, are located along Hill St. and Broadway between 5th and 7th Streets (Table 1-12). All of these stops are within one-quarter mile of the existing Pershing Square Station. If the Regional Connector stops near Broadway, Hill, and Spring Streets, it will enable transfers to the busiest north-south bus corridors in the area.

Table 1-9 Bus Transit Routes and Frequency of Bus Service in Project Study Area					
Operator	*Line*	*Mode*	*Weekday Hours of Operation*	*Peak Hour Frequency*	*Route Description*
AVTA	785	Freeway Express Bus	4AM-6AM, 3PM-6PM	20 mins	Palmdale/Lancaster
BBB	10 Express	Freeway Express Bus	6AM-8PM	15 mins	Santa Monica
Gardena	1	Freeway Express Bus	5AM-12AM	15 mins	Gardena/Lawndale
Foothill	481	Freeway Express Bus	6AM-9AM, 3PM-6PM	20 mins	El Monte/Wilshire Center
Foothill	493	Freeway Express Bus	5AM-8AM, 2PM-8PM	10 mins	Pomona/Phillips Ranch
Foothill	497	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	Chino
Foothill	498	Freeway Express Bus	5AM-8AM, 2PM-7PM	7 mins	Covina/Azusa
Foothill	499	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	San Dimas
Foothill	699	Freeway Express Bus	4AM-8AM. 2PM-7PM	9-12 mins	Montclair
Foothill	Silver Streak	Freeway Express Bus	24 Hours	10 mins	Montclair
LADOT	CE 409	Freeway Express Bus	6AM-9AM, 4PM-6PM	15 mins	Sylmar/Sunland/Tujunga/Montrose/Glendale
LADOT	CE 413	Freeway Express Bus	7AM-9AM, 4PM-6PM	25 mins	Van Nuys/North Hollywood/Burbank
LADOT	CE 419	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Chatsworth/Northridge/Granada Hills/Mission Hills
LADOT	CE 422	Freeway Express Bus	5AM-9AM, 4PM-8PM	8 mins	Hollywood/San Fernando Valley/Agoura Hills/Thousand Oaks
LADOT	CE 423	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Encino/Woodland Hills/Agoura Hills/Thousand Oaks/Newbury Park
LADOT	CE 430	Freeway Express Bus	6AM-7AM, 5PM-6PM	30-50 mins	Brentwood/Pacific Palisades
LADOT	CE 431	Freeway Express Bus	7AM-9AM, 5PM-6PM	30 mins	Westwood/Rancho Park/Palms
LADOT	CE 437	Freeway Express Bus	7AM-9AM, 4PM-6PM	15-30 mins	Venice/Marina del Rey/Culver City
LADOT	CE 438	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Redondo Beach/Hermosa Beach/Manhattan Beach/El Segundo
LADOT	CE 448	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Rancho Palos Verdes/Torrance/Lomita/Wilmington Harbor City

Table 1-9 Bus Transit Routes and Frequency of Bus Service in Project Study Area					
Operator	*Line*	*Mode*	*Weekday Hours of Operation*	*Peak Hour Frequency*	*Route Description*
LADOT	CE 534	Freeway Express Bus	7AM-8AM, 4PM-5PM	30 mins	Century City/Westwood
LADOT	DASH A	Circulator Bus	7AM-7PM	7 mins	Little Tokyo/City West
LADOT	DASH B	Circulator Bus	6AM-7PM	8 mins	Chinatown/Financial District
LADOT	DASH C	Circulator Bus	7AM-7PM	7 mins	Financial District/South Park
LADOT	DASH D	Circulator Bus	6AM-7PM	5 mins	Union Station/South Park
LADOT	DASH E	Circulator Bus	7AM-7PM	5 mins	City West/Fashion District
LADOT	DASH F	Circulator Bus	7AM-7PM	10 mins	Financial District/Exposition
LADOT	DASH CH	Circulator Bus	6AM-6PM	6 mins	City Hall Shuttle
LADOT	DASH DD	Circulator Bus	Weekend Only	20 mins	Downtown Discovery
LADOT	DASH MBH	Circulator Bus	7AM-9AM, 3PM-6PM	10 mins	Metrolink/Bunker Hill
Metro	2/302	Local/Limited Stop Bus	24 Hours	5 mins	Pacific Palisades via Sunset Blvd.
Metro	4	Local Bus	24 Hours	7 mins	Santa Monica via Santa Monica Blvd.
Metro	10	Local Bus	5AM-12AM	7 mins	West Hollywood via Temple St. and Melrose Ave.
Metro	14/37	Local Bus	24 Hours	10 mins	Beverly Hills via Beverly Blvd./West LA via Adams Blvd.
Metro	16/316	Local/Limited Stop Bus	4AM-1AM	3 mins	Century City via 3rd St.
Metro	18	Local Bus	24 Hours	3 mins	Wilshire Center - Montebello via 6th St. and Whittier Blvd.
Metro	20	Local Bus	24 Hours	4 mins	Santa Monica via Wilshire Blvd.
Metro	26/51/52/352	Local/Limited Stop Bus	24 Hours	4 mins	Hollywood - Compton - Artesia Blue Line via Avalon Blvd.
Metro	28	Local Bus	5AM-1AM	8 mins	Century City via Olympic Blvd.
Metro	30/31/330	Local/Limited Stop Bus	24 Hours	4 mins	Pico-Rimpau - Monterey Park via Pico Blvd. and E 1st St.
Metro	33/333	Local/Limited Stop Bus	24 Hours	2 mins	Santa Monica via Venice Blvd.
Metro	38	Local Bus	24 Hours	8 mins	Fairfax and Washington via Jefferson Bl.
Metro	40	Local Bus	24 Hours	6 mins	South Bay Galleria via Hawthorne Blvd., Crenshaw Blvd., and MLK Blvd.
Metro	42/42A	Local Bus	5AM-12AM	12 mins	LAX via MLK Blvd., Stocker St., and La Tijera Blvd.
Metro	45	Local Bus	24 Hours	6 mins	Montecito Heights - Rosewood via Broadway and Mercury Ave.
Metro	48	Local Bus	5AM-11PM	7 mins	Avalon Green Line via Main St. and S. San Pedro St.

Table 1-9 Bus Transit Routes and Frequency of Bus Service in Project Study Area					
Operator	*Line*	*Mode*	*Weekday Hours of Operation*	*Peak Hour Frequency*	*Route Description*
Metro	53/350	Local/Limited Stop Bus	24 Hours	5 mins	Carson via Central Ave.
Metro	55/355	Local/Limited Stop Bus	24 Hours	4 mins	Imperial Blue/Green Line via Compton Ave.
Metro	60	Local Bus	24 Hours	6 mins	Artesia Blue Line via Long Beach Blvd.
Metro	62	Local Bus	5AM-11PM	15 mins	Hawaiian Gardens via Telegraph Rd.
Metro	66/366	Local/Limited Stop Bus	4AM-1AM	2 mins	Wilshire Center - Montebello via 8th St. and Olympic Blvd.
Metro	68/84	Local Bus	24 Hours	8 mins	West LA - Montebello via Washington Blvd. and Cesar Chavez Ave.
Metro	70/71/370	Local/Limited Stop Bus	24 Hours	5-9 mins	El Monte via Garvey Ave.
Metro	76/376	Local/Limited Stop Bus	24 Hours	10 mins	Arcadia via Valley Blvd., Huntington Dr. and Las Tunas Dr.
Metro	78/79/378	Local/Limited Stop Bus	5AM-1AM	10 mins	Arcadia via Huntington Dr. and Las Tunas Dr.
Metro	81/381	Local/Limited Stop Bus	5AM-1AM	5 mins	Eagle Rock - Exposition Park via Figueroa St.
Metro	83	Local Bus	24 Hours	10 mins	Eagle Rock via York Ave.
Metro	90/91	Local Bus	5AM-12AM	10 mins	Sunland via Foothill Blvd., Cañada Blvd., and Glendale Ave.
Metro	92	Local Bus	24 Hours	12 mins	Burbank via Glendale
Metro	94/394	Local/Limited Stop Bus	5AM-1AM	5 mins	Sylmar via San Fernando Rd. and Spring St.
Metro	96	Local Bus	5AM-8PM	20 mins	Sherman Oaks via Griffith Park Dr. and Riverside Dr.
Metro	439	Freeway Express Bus	5AM-9PM	40-60 mins	Aviation Green Line via Culver City
Metro	442	Freeway Express Bus	6AM-8AM, 4PM-6PM	30 mins	Hawthorne via Harbor Transitway, Manchester Blvd., and La Brea Ave.
Metro	444	Freeway Express Bus	5AM-8PM	10-20 mins	Rancho Palos Verdes via Harbor Transitway and Hawthorne Blvd.
Metro	445	Freeway Express Bus	5AM-7PM	30 mins	San Pedro via Harbor Transitway, 1st St., and Pacific Ave.
Metro	446/447	Freeway Express Bus	5AM-12AM	15 mins	San Pedro via Harbor Transitway, Avalon Blvd., and Pacific Ave.
Metro	450X	Freeway Express Bus	6AM-9AM, 4PM-6PM	15 mins	South Bay Express via Harbor Transitway
Metro	460	Freeway Express Bus	5AM-12AM	30 mins	Disneyland via Harbor Transitway, I-105, and I-5
Metro	484	Freeway Express Bus	5AM-12AM	5 mins	Pomona via El Monte Busway and Valley Blvd.
Metro	485	Freeway Express Bus	5AM-12AM	20 mins	Altadena via El Monte Busway, Oak Knoll Ave., and Lake Ave.

Table 1-9 Bus Transit Routes and Frequency of Bus Service in Project Study Area					
Operator	*Line*	*Mode*	*Weekday Hours of Operation*	*Peak Hour Frequency*	*Route Description*
Metro	487	Freeway Express Bus	6AM-9PM	30 mins	Sierra Madre Villa Gold Line via El Monte Busway
Metro	489	Freeway Express Bus	6AM-8AM, 3PM-5PM	12 mins	Temple City via El Monte Busway and Rosemead Blvd.
Metro	490	Freeway Express Bus	5AM-11PM	10 mins	Pomona via El Monte Busway and Ramona Blvd.
Metro	704	Rapid Bus	6AM-8PM	8 mins	Santa Monica Blvd. Rapid
Metro	714	Rapid Bus	6AM-9AM, 3PM-6PM	15 mins	Beverly Blvd. Rapid
Metro	720	Rapid Bus	4AM-1AM	4 mins	Wilshire Blvd. - Whittier Blvd. Rapid
Metro	728	Rapid Bus	5AM-8PM	8 mins	Olympic Blvd. Rapid
Metro	740	Rapid Bus	5AM-8PM	10 mins	Hawthorne Blvd. Rapid
Metro	745	Rapid Bus	5AM-8PM	5 mins	South Broadway Rapid
Metro	760	Rapid Bus	5AM-8PM	8 mins	Long Beach Blvd. Rapid
Metro	770	Rapid Bus	6AM-6PM	12 mins	Garvey Ave. - Cesar Chavez Ave. Rapid
Metro	940	Rapid Express Bus	6AM-8AM, 4PM-6PM	30 mins	Hawthorne Blvd. Rapid Express
Metro	Blue Line	Light Rail	5AM-12AM	5 mins	Long Beach via South Los Angeles, Willowbrook, and Compton
Metro	Red Line	Heavy Rail	5AM-12AM	5 mins	Wilshire Center and North Hollywood
Montebello	40	Local Bus	5AM-10PM	8 mins	Montebello and Whittier via Beverly Blvd.
Montebello	50	Local Bus	5AM-12AM	30 mins	Whittier and La Mirada via Washington Blvd.
Montebello	341	Limited Stop Bus	7AM-9AM, 4PM-6PM	30 mins	Montebello and Whittier via Beverly Blvd.
Montebello	342	Limited Stop Bus	7AM, 5PM	One Trip	Montebello and Whittier via Beverly Blvd.
Montebello	343	Limited Stop Bus	7AM-8AM, 5PM-6PM	30 mins	Montebello and Whittier via Beverly Blvd.
OCTA	701	Freeway Express Bus	5AM-6AM, 4PM-5PM	20 mins	Huntington Beach
OCTA	721	Freeway Express Bus	6AM-9AM, 3PM-6PM	30 mins	Fullerton
Santa Clarita	799	Freeway Express Bus	5AM-7AM, 3PM-7PM	20 mins	Valencia/Santa Clarita
Torrance	1	Freeway Express Bus	6AM-9AM, 4PM-10PM	30 mins	Torrance via Harbor Transitway and Artesia Transit Center
Torrance	2	Freeway Express Bus	7AM-7PM	60 mins	Torrance via Harbor Transitway

Source: Antelope Valley Transit Authority, City of Santa Monica, Foothill Transit, City of Los Angeles Department of Transportation, Los Angeles County Metropolitan Transportation Authority, Montebello Bus Lines, Orange County Transportation Authority, Santa Clarita Transit, Torrance Transit, 2007-2008

Table 1-10 Metro Bus Ridership, Fiscal Year 2007				
Line	Direction	Average Daily Boardings within PSA	Average Daily Alightings within PSA	Line Ridership
2/302	East	335	1825	25440
	West	1779	609	
4/304	East	238	1402	35170
	West	1220	361	
10	East	786	1624	15659
	West	1736	979	
14/37	North	909	882	20370
	South	791	874	
16/316	East	359	4594	30561
	West	4302	333	
18	East	2506	4847	27163
	West	4001	2603	
20	East	586	1627	20897
	West	1630	323	
26/51/52/352	East	3214	3177	29036
	West	2314	2818	
28/328	North	2148	2075	31916
	South	1263	1721	
30/31/330	East	2548	2514	28238
	West	2435	1915	
33/333	East	268	1072	26199
	West	1051	290	
38/71	East	532	527	10510
	West	546	734	
40	North	511	1790	20645
	South	2033	465	
42/42A	North	296	819	4982
	South	807	223	
45/46	North	1394	2041	21558
	South	2537	1377	
53/350	North	763	2503	14668
	South	2590	684	
55/355	North	69	821	12571
	South	919	88	
60	North	2678	5526	30509
	South	5985	2913	
62	East	732	168	4354
	West	298	875	
66/366	East	2221	2692	27336
	West	2450	2374	
68/368	North	1512	1121	23393
	South	1293	1393	
70/370	East	1200	169	15569
	West	130	1081	

Table 1-10 Metro Bus Ridership, Fiscal Year 2007				
Line	Direction	Average Daily Boardings within PSA	Average Daily Alightings within PSA	Line Ridership
76/376	East	1011	139	11106
	West	97	877	
78/79/378	East	1277	153	11868
	West	128	1254	
81/381	North	1763	1037	20006
	South	1379	2387	
90	North	1035	124	7387
	South	69	1009	
92	North	897	127	8864
	South	79	955	
94/394	North	1910	250	13287
	South	127	1571	
96	North	288	55	3407
	South	55	342	
439	North	15	112	946
	South	126	20	
442	North	2	59	249
	South	54	7	
444	North	22	295	3132
	South	263	79	
445	North	13	230	1243
	South	197	38	
446/447	North	19	242	4373
	South	270	55	
450X	Clockwise	166	168	619
460	East	445	27	3630
	West	11	437	
484	East	1375	45	8914
	West	18	1290	
485	North	423	17	3683
	South	8	572	
487	East	392	25	2985
	West	18	394	
489	North	114	5	584
	South	8	245	
490	East	625	16	5568
	West	6	763	
714	East	5	163	1860
	West	156	15	
720	East	2020	2896	46351
	West	3360	2388	
740	North	104	1040	9182
	South	1227	130	

Table 1-10 Metro Bus Ridership, Fiscal Year 2007				
Line	Direction	Average Daily Boardings within PSA	Average Daily Alightings within PSA	Line Ridership
745	North	210	2135	8632
	South	2121	239	
	TOTAL	**91823**	**93276**	**654620**
		TOTAL BOARDINGS AND ALIGHTINGS IN PSA	**185099**	

Source: Los Angeles County Metropolitan Transportation Authority, 2007

Table 1-11 Metro Bus Ridership on Lines Passing Within One Block of Both Union Station and 7th St./Metro Center Station, Fiscal Year 2007			
Line	Average Daily Boardings within PSA	Average Daily Boardings for Entire Line	Route Description
78/79/378	1405	11868	Arcadia via Huntington Dr. and Las Tunas Dr.
484	1393	8914	Pomona via El Monte Busway and Valley Blvd.
70/370	1330	15569	El Monte via Garvey Ave.
76/376	1108	11106	Arcadia via Valley Blvd., Huntington Dr. and Las Tunas Dr.
490	631	5568	Pomona via El Monte Busway and Ramona Blvd.
485	431	3683	Altadena via El Monte Busway, Oak Knoll Ave., and Lake Ave.
487	410	2985	Sierra Madre Villa Gold Line via El Monte Busway
446/447	289	4373	San Pedro via Harbor Transitway, Avalon Blvd., and Pacific Ave.
444	285	3132	Rancho Palos Verdes via Harbor Transitway and Hawthorne Blvd.
445	210	1243	San Pedro via Harbor Transitway, 1st St., and Pacific Ave.
439	141	946	Aviation Green Line via Culver City
489	122	584	Temple City via El Monte Busway and Rosemead Blvd.
442	56	249	Hawthorne via Harbor Transitway, Manchester Blvd., and La Brea Ave.
TOTAL	7811		

Source: Los Angeles County Metropolitan Transportation Authority, 2007

Most of the other busy Metro bus stops in the PSA are located in the Financial Core and Civic Center areas, both of which will be served by the Regional Connector. Additionally, other transit operators have bus stops within the PSA, although their ridership data were not available for this AA.

Table 1-12 Average Daily Boardings and Alightings at Metro Bus Stops Within the Project Study Area, Fiscal Year 2007			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
6TH	BROADWAY	6,523	7,438
7TH	BROADWAY	7,187	5,493
5TH	BROADWAY	6,172	4,516
7TH	HILL	3,804	4,425
5TH	HILL	3,891	3,586
9TH	BROADWAY	2,657	3,875
1ST	HILL	2,242	3,078
5TH	SPRING	2,801	2,275
5TH	GRAND	2,028	2,574
6TH	HILL	1,192	3,315
7TH	FLOWER	3,075	1,244
7TH	SPRING	2,101	2,117
6TH	HOPE	1,613	2,502
1ST	BROADWAY	1,973	2,141
8TH	BROADWAY	2,365	1,623
7TH	MAIN	1,932	2,038
8TH	HILL	1,949	1,834
3RD	BROADWAY	2,158	1,456
7TH	OLIVE	2,175	1,138
4TH	BROADWAY	1,420	1,311
5TH	OLIVE	1,897	507
7TH	SAN PEDRO	1,134	1,085
3RD	HILL	885	1,311
TEMPLE	BROADWAY	1,171	1,024
5TH	LOS ANGELES	1,270	910
TEMPLE	HILL	904	1,136
7TH	GRAND	949	1,074
8TH	HILL	853	1,170
TEMPLE	SPRING	925	1,027
8TH	SPRING	963	904
9TH	MAIN	812	1,047
6TH	MAIN	612	1,047
7TH	HOPE	338	1,303
7TH	ALAMEDA	740	853
1ST	SPRING	808	769
6TH	SPRING	773	736
6TH	CENTRAL	786	703
7TH	MAPLE	768	718
7TH	FIGUEROA	335	1,104
7TH	CENTRAL	690	713
6TH	LOS ANGELES	480	822
5TH	FLOWER	915	288
4TH	HILL	643	434
5TH	WALL	798	255
4TH	SPRING	360	641

Table 1-12 Average Daily Boardings and Alightings at Metro Bus Stops Within the Project Study Area, Fiscal Year 2007			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
9TH	HILL	341	615
7TH	LOS ANGELES	521	413
8TH	OLIVE	599	299
6TH	GRAND	184	708
6TH	SAN PEDRO	273	539
9TH	OLIVE	319	479
6TH	WALL	253	528
3RD	GRAND	173	603
WILSHIRE	FLOWER	381	361
9TH	GRAND	293	396
6TH	ALAMEDA	344	339
5TH	SAN PEDRO	492	188
TEMPLE	GRAND	107	522
GENERAL THADDEUS	OLIVE	395	224
8TH	FLOWER	361	256
1ST	HOPE	344	265
8TH	GRAND	335	272
1ST	MAIN	248	356
3RD	SPRING	291	298
WILSHIRE	FIGUEROA	251	284
6TH	GLADYS	112	361
8TH	MAIN	141	306
1ST	CENTRAL	199	234
7TH	TOWNE	157	208
7TH	CERES	58	292
1ST	JUDGE JOHN AISO	190	148
9TH	HOPE	136	198
7TH	GLADYS	258	66
5TH	CENTRAL	198	121
1ST	OLIVE	269	39
8TH	FIGUEROA	151	122
5TH	TOWNE	212	60
1ST	LOS ANGELES	85	167
9TH	FIGUEROA	111	134
TEMPLE	FIGUEROA	79	160
7TH	FRANCISCO	99	129
ALISO	SPRING	200	20
6TH	TOWNE	57	152
ALISO	LOS ANGELES	143	62
6TH	KOHLER	69	134
5TH	FIGUEROA	34	160
TEMPLE	LOS ANGELES	77	108
1ST	GRAND	10	160
6TH	FLOWER	105	57
3RD	MAIN	76	81
WINSTON	MAIN	63	70

Table 1-12 Average Daily Boardings and Alightings at Metro Bus Stops Within the Project Study Area, Fiscal Year 2007			
East/West Street	North/South Street	Average Daily Boardings	Average Daily Alightings
3RD	CENTRAL	116	6
3RD	LOS ANGELES	115	5
DIVISION 1 LAYOVER		68	52
TEMPLE	JUDGE JOHN AISO	60	57
4TH	FLOWER	82	34
1ST	SAN PEDRO	60	55
2ND	SPRING	32	80
TEMPLE	MAIN	27	67
WILSHIRE	HOPE	4	89
5TH	MAIN	18	65
4TH	TOWNE	4	76
2ND	GRAND	12	59
4TH	WALL	6	56
4TH	LOS ANGELES	9	51
4TH	SAN PEDRO	3	56
DIAMOND	FIGUEROA	2	51
JAMES M WOOD	FRANCISCO	28	25
TEMPLE	HOPE	45	7
3RD	FLOWER	24	25
3RD	FIGUEROA	5	41
4TH	MAIN	15	29
2ND	OLIVE	21	22
3RD	SAN PEDRO	39	2
2ND	MAIN	19	21
4TH	FIGUEROA	37	3
2ND	FIGUEROA	5	28
6TH	MAPLE	13	9
4TH	ALAMEDA	8	2
1ST	ALAMEDA	4	4
9TH	FLOWER	5	3
2ND	HILL	2	5
8TH	FRANCISCO	4	3
1ST	FIGUEROA	0	3
MAPLE LOT		1	1

Source: Los Angeles County Metropolitan Transportation Authority, 2007

1.6.3 Regional Objectives

SCAG is responsible for regional transportation planning for six counties within Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In 2004, SCAG released "Destination 2030, the Regional Transportation Plan (RTP)." In May 2008, it released an update entitled "Making the Connections." The documents provide a basic policy and program framework to improve the transportation system and integrate it with the population growth patterns for the region through 2030.

Destination 2030 is a performance-based plan with the following goals:

- maximize mobility and accessibility,
- ensure safety and reliability,
- preserve our transportation system,
- maximize productivity of our system,
- protect the environment, and
- encourage land-use and growth patterns that complement our transportation system.

SCAG developed performance indicators and measures to quantify the goals and evaluate progress towards achieving the goals. Table 1-13 lists the performance indicators, associated measures, and final projected outcomes. The outcomes are estimated for the Plan as a whole for 2030, and not for individual projects.

If no action is taken, performance in the region will worsen. SCAG projects that between Base Year 2000 and 2030:

- Daily vehicle miles traveled in the region will increase by 35 percent from 361.5 million to 488.8 million.
- Average travel speed will reduce by 11 percent from 35.9 miles per hour (mph) to 31.9 mph.
- Daily person-hours of delay will increase by 250 percent from 2.2 million hours to 5.4 million hours.
- Average daily delay per person will increase by 78 percent from 8.0 minutes to 14.2 minutes.
- The percentage of peak period evening work trips completed within 45 minutes for autos will decrease from 88 percent to 82 percent; for public transit, it will decrease from 33 percent to 29 percent.
- Home to work average travel times will increase by 25 percent from 21.6 minutes to 25.9 minutes.

The Regional Connector would contribute to alleviating the mobility problem in the region and to achieving the Destination 2030 goals. It would do this by:

- extending the reach and connectivity of all but one of Metro's operational and under-construction LRTs;

- broadening the range of downtown destinations reachable with one transfer from the Metro Red and Metro Purple Lines;
- alleviating congestion on the downtown bus network; and
- increasing the availability of direct service to multiple destinations in Los Angeles County for passengers arriving on intercity services at Union Station.

The Regional Connector offers a public transit connection that would improve mobility and accessibility in the region and provide commuters with a simplified and reliable transportation option.

The area from which Regional Connector ridership is expected to be drawn includes several freeways and major intersections that have significant traffic congestion and long delays. The improved convenience of the Regional Connector would encourage use of a public transit alternative that would reduce daily vehicle trips, miles traveled, and congestion on the region's roadways.

The Regional Connector would augment public transportation service originating in areas with high population densities and households dependent on public transit. This would increase potential ridership, thereby increasing the project benefits and making it more cost-effective. In addition, the Regional Connector's service area covers the County's most highly-concentrated employment area and a major cultural, entertainment, and tourist destination.

1.7 Project Purpose

The purpose of this project is to improve the region's public transit service and mobility by linking the Metro Rail services of the Metro Gold Line, Metro Gold Line Eastside Extension, Metro Blue Line, and Metro Expo Line, thereby providing direct access to one of the region's major employment centers.

Since the completion of studies on the Metro Blue Line to Pasadena performed in 1993 and 1994, the Metro Rail system has grown substantially, with rail lines in operation or under construction extending over 70 track-miles within Los Angeles County. Currently, the Metro Red and Metro Purple subway lines serve as an interim connection between the Metro Blue Line at 7th St./Metro Center and the Metro Gold Line at Union Station, but the transfers involved are time-consuming, contribute to crowding on the subway platforms and trains, and may dissuade passengers from riding.

Table 1-13 Performance Indicators, Measures, and Outcomes of Destination 2030 Goals					
Performance Indicator	Performance Measure		Plan 2030	Base Year 2000	Baseline 2030
Mobility	Average Daily Speed (Miles per Hour)		35.2	35.9	31.9
	Average Daily Delay (Daily Person Hours in millions)		3.2	2.2	5.4
Accessibility	Percent PM peak period work trips within 45 minutes of home	Autos Transit	90% 37%	88% 33%	82% 29%
Reliability	Percent variation in travel time	6AM-7AM 7AM-8AM 8AM-9AM 3PM-4PM 4PM-5PM 5PM-6PM 6PM-7PM	10% 13% 13% 19% 18% 17% 20%	11% 15% 15% 21% 20% 19% 22%	N/A
Safety	Daily accident rates per million persons	Fatalities	0.27	0.28	0.28
		Injuries	10.7	11.0	11.0
		Property Damage	17.5	18.2	18.2
Productivity	Roadway capacity – vehicles per hour/lane (Lost Lane Miles)	AM peak PM peak	377 302	332 266	N/A
Sustainability	Total cost per capita to sustain current system performance		Plan 2030 estimates an additional cost of $20 per capita per year over base year		
Preservation	Maintenance cost per capita to preserve system at base year conditions (base year 2002, constant 2002 dollars)		~$80	~$63 (2002)	N/A
Environmental	Emissions generated by travel (over Baseline 2030)	CO PM10 Exhaust PM10	Plan 2030 estimates: 6-8% reduction 6-8% reduction 8-11% reduction		
Environmental Justice	Benefit vs. Burden by quintiles – Auto Percentage of Tax Paid and Time Savings (Quintile 1=lowest income, Quintile 5=highest income)	1 2 3 4 5	Plan 2030 estimates: Expenditure 9% 13% 18% 24% 37%	Time Savings 6% 14% 21% 29% 30%	
	Benefit vs. Burden by quintiles – Local Transit Percentage of Tax Paid and Time Savings (Quintile 1=lowest income, Quintile 5=highest income)	1 2 3 4 5	Plan 2030 estimates: Expenditure 9% 13% 18% 24% 37%	Time Savings 23% 30% 23% 16% 8%	

Source: SCAG Destination 2030, 2004

The Regional Connector will improve service for communities locally and across the region, allowing greater mobility and accessibility while supporting the revitalization of downtown. New stations will provide greater coverage of the downtown area, thus enhancing the convenience of the existing rail and bus system.

1.8 Major Themes Supporting Transit Needs in the Project Study Area

In evaluating the mobility problem and travel conditions within the PSA, several themes emerge which reinforce the need for transportation improvements. These themes are listed below, while subsequent sections address each theme in greater detail.

- Need for Transit Improvements Based on Current and Future Transit Conditions
- Transit Usage within the PSA
- Significant Transit Dependent Populations
- Regional Population and Employment Growth
- Population and Employment Densities
- Travel Demand Justifies Need for Transit Services
- Local Land Use Policies and Guidelines that Support Transit

1.8.1 Need for Transit Improvements Based on Current and Future Transit Conditions

According to Metro's 2004 Metro Rail Onboard Survey, 42 percent of Metro Gold Line riders indicated that they rode two trains on their one-way trips, and seven percent rode three trains. Additionally, Sierra Madre Villa Station to 7th St./Metro Center Station and Lake Station to 7th St./Metro Center Station were among the most popular station pairs on the Metro Rail system. Since Union Station is the only current rail-to-rail transfer point on the Metro Gold Line, these results suggest that a large portion of Metro Gold Line riders are transferring to the Metro Red Line to complete their trips. See Table 1-14 for a summary of survey results.

Table 1-14 Train/Bus Use per Trip

	All Lines	Blue	Red	Green	Gold
1 Train	53%	47%	60%	56%	49%
2 Trains	38%	44%	34%	31%	42%
3 Trains	7%	8%	4%	10%	7%
4 Trains	2%	1%	2%	2%	1%
1 Bus/Train	22%	16%	26%	20%	24%
2 Bus/Train	34%	34%	41%	26%	38%
3 Bus/Train	25%	28%	21%	29%	21%
4+ Bus/Train	19%	21%	13%	24%	17%

Source: 2004 Metro Rail Onboard Survey

Upon completion of the Metro Gold Line Eastside Extension, passengers bound for the PSA will generate many additional Metro Red and Purple Line transfers at Union Station, as well as new bus and Metrolink transfers. Metro Red and Purple Line trains typically layover at Union Station with their doors open for several minutes before departing, so patrons may be able to board waiting trains immediately upon entering the station, thereby potentially reducing platform crowding issues. However, the extent to which the opening of the Eastside Extension will affect platform crowding at Union Station remains to be seen.

Crowding in the passageways and rail platforms may, however, become a significant issue at 7th St./Metro Center Station. Once in operation, Metro Expo Line trains from Culver City will share the existing Metro Blue Line terminal platforms, where trains already operate on five-minute headways during peak hours. This could create rail congestion and rush hour delays at locations where existing facilities to reverse light rail trains consist of scissor crossovers at either end of the station. Scissor crossovers are diamond-shaped crossovers that allow trains to switch from one track to the other, but block all other train movements.

The Metro Blue Line boarding area consists of two side platforms, but typically only one of the platforms is used, and this currently contributes to passenger crowding at the station. Metro Red and Purple Line passengers wishing to use the Flower St. escalators must also share the crowded passageways leading to the Metro Blue Line platform. Metro Expo Line passengers would add to the crowds on the existing Metro Blue Line platform, as transfers to the Metro Red and Purple Lines also contribute to crowding on the lower platform. In such crowded conditions, the ability to quickly evacuate the station in an emergency could be compromised.

The proposed Regional Connector LRT services are shown in Figure 1-15.

The Regional Connector would eliminate many transfers and alleviate crowding at 7th St./Metro Center Station. In addition, it will reduce the number of transfers from the Metro Gold Line to the Metro Red and Purple Lines at Union Station by providing new single-vehicle LRT service through the downtown area. This will shorten walking distances and trip times for all rail passengers bound for the Bunker Hill area.

The Regional Connector would also eliminate many transfers at Union Station, as many of the passengers traveling to the Financial District from East Los Angeles or Pasadena would likely stay on the Metro Gold Line trains and continue along the Regional Connector instead of transferring to the Metro Red Line. Metro's 2004 Metro Rail Onboard Survey indicates that relatively few Metro Gold Line riders currently continue beyond 7th St./Metro Center Station toward Long Beach on the Metro Blue Line. This could indicate a lack of travel demand between Pasadena and Long Beach.

Downtown-bound Metro Blue Line and Metro Expo Line trains will merge onto a single set of tracks at Washington Blvd. and Flower St. and travel along the existing Flower St. right-of-way to 7th St./Metro Center Station. Trains would then continue along the Regional Connector to Little Tokyo where the lines would again split, with Metro Blue Line trains

continuing to Union Station and Pasadena, and Metro Expo Line trains traveling to East Los Angeles. If Long Beach-Pasadena service and East Los Angeles-Culver City service each operate with 5-minute peak hour headways, the Regional Connector tracks would see trains every 2 ½ minutes in each direction. This means that any at-grade intersections would see trains approximately every 75 seconds, or one to two trains per signal cycle.

The Regional Connector would allow for more efficient train maintenance, as it would link the Metro Gold Line and Metro Blue Line maintenance facilities via new LRT track. Because the Metro Gold Line has only a light-duty maintenance yard, trains must currently be loaded onto trucks and driven to the Metro Blue Line yard in Long Beach when they require major services. The Regional Connector would allow Metro Gold Line trains to simply deadhead to Long Beach along the service tracks, eliminating the need for costly trucking and expediting their arrival to the yard.

In addition, connecting the LRT lines as a single network enables vehicles to be stored and operated on multiple lines. Currently, storage surplus on one LRT network is not available to the other network. The Regional Connector would make centralized vehicle maintenance and storage facility serving the entire network possible.

1.8.2 Transit Usage

As the largest employment center in Los Angeles County, there are unique opportunities in the PSA for residents to live near their jobs in an area with dense transit service. While the Regional Connector would not extend rail transit service into previously un-served regions of the County, it will broaden coverage within downtown Los Angeles and speed rail trips through the area by eliminating transfers. Both of these improvements would result in time savings; new stations mean shorter walking distances for many current passengers and fewer transfers mean less time spent waiting for trains and buses.

The ridership benefits of increasing trip speeds have been demonstrated in Los Angeles by the Metro Rapid program. The 2002 Demonstration Program Final Report noted that the implementation of the rapid bus service led to 23-29 percent improvement in trip speeds, an increase from 9mph to 12mph. While this difference may seem small, ridership on the Wilshire/Whittier corridor increased by 42 percent as a result. The other demonstration corridor, Ventura Blvd., experienced a ridership increase of 27 percent.

The Regional Connector is expected to result in similar increases in ridership among Metro Blue Line and Gold Line passengers. The transfer between the Red/Purple and Blue Lines at 7th St./Metro Center can currently take one to five minutes during peak hours, three to ten minutes during off-peak hours, and five to eight minutes on weekends. The transfer between the Metro Red or Purple Line and Gold Lines at Union Station takes three to eight minutes during peak hours, five minutes during off-peak hours, and five minutes on weekends.

By eliminating these transfers, assuming speeds similar to the Metro Red Line, the Regional Connector could reduce travel times by:

- five to 13 minutes during peak times,
- eight minutes during off-peak times, and
- eight minutes on weekends.

1.8.3 Regional Population and Employment Growth

Much of the greater Los Angeles metropolitan area consists of fairly dense populations which are expected to grow by the year 2030. Figures 1-16 and 1-17 show the regional population densities in 2005 and the 2030 projection, respectively. In 2005, areas of highest population density were found in Central Los Angeles, Hollywood, Southgate, East Los Angeles, and the Westside.

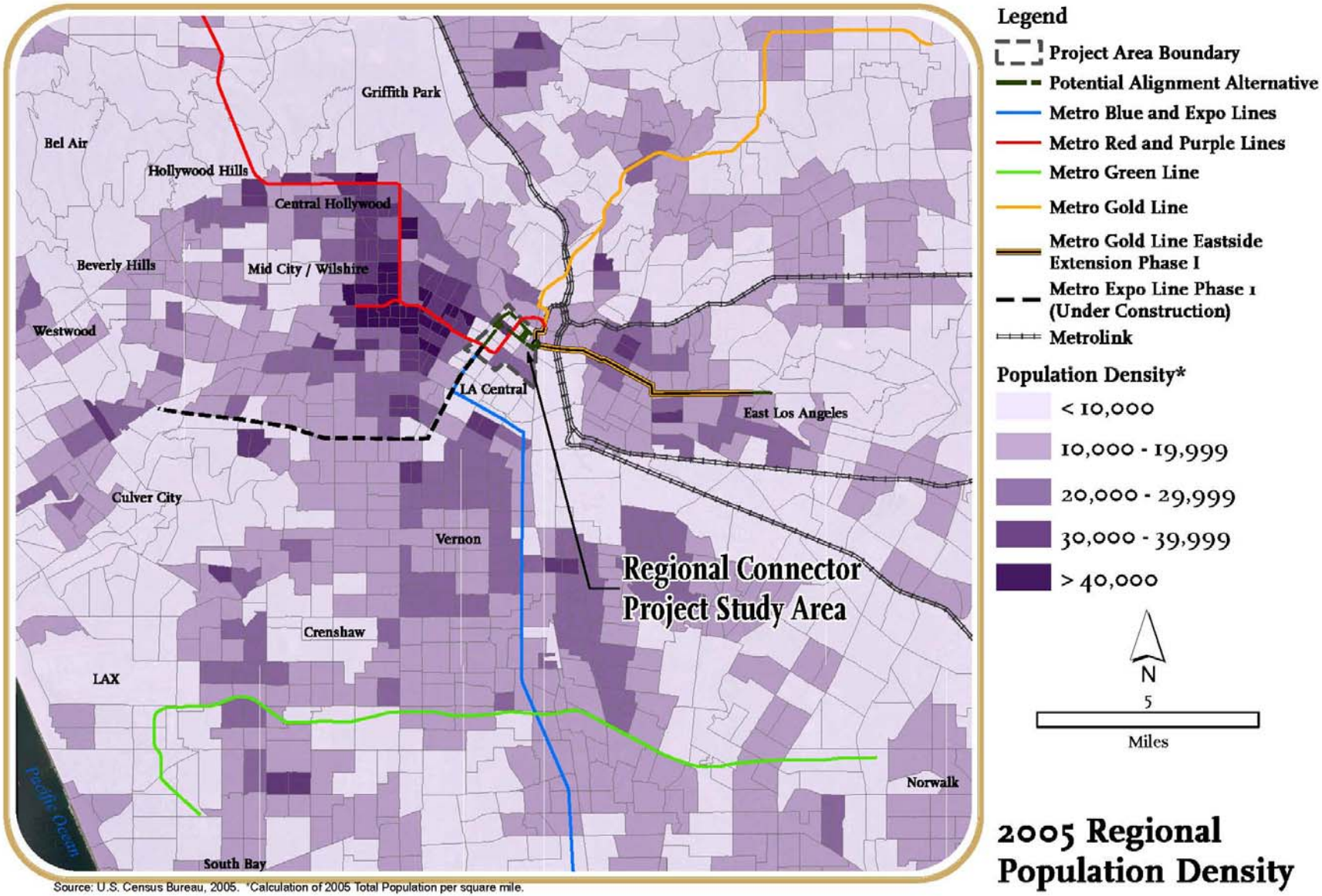
Population densities will increase throughout the region, particularly in those with already-high density. Significant increases in density will develop in the South Bay and the Eastside, particularly along the I-10 corridor.

Areas of high population density tend to have workers who need to travel to employment centers throughout the region. Figures 1-18 and 1-19 show the regional employment densities in 2005 and projected in 2030, respectively.

In 2005, the highest employment densities overlapped the PSA in Central Los Angeles. Areas of moderate employment density included Westwood, Santa Monica, Hollywood, Culver City, Pasadena, the South Bay and East Los Angeles. Employment densities are expected to increase in census tracks around these employment centers. The improvement of transit services in downtown will help bring workers from areas of higher population density and lower employment density to the PSA, where the highest concentration of employment opportunities is located. The Regional Connector will also improve access to areas of moderate employment density by eliminating transfers and reducing travel time for commuters.

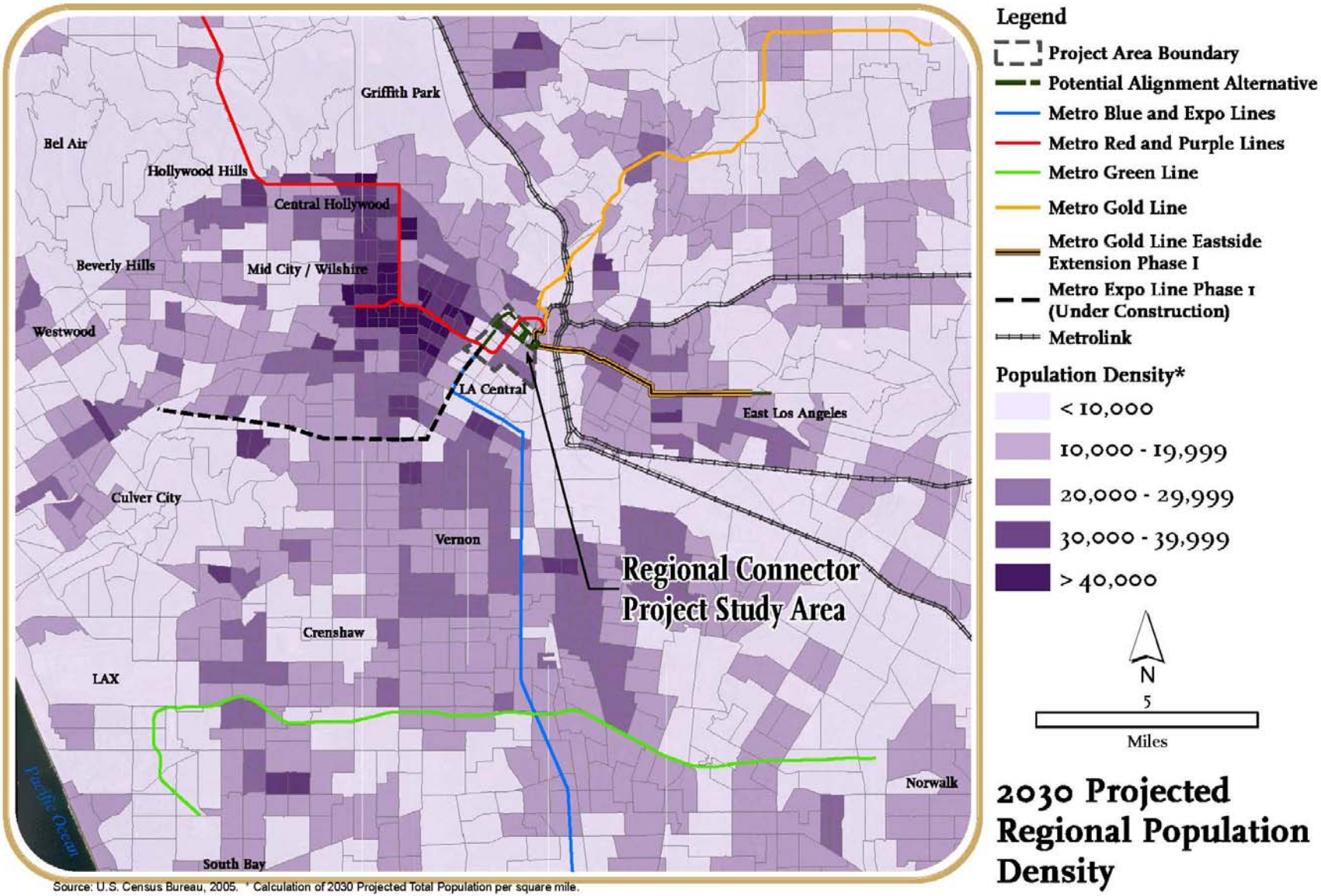
Current transit usage in the region is the highest in Central Los Angeles, with additional areas of moderate transit usage in the Westside, Hollywood, Pasadena, the South Bay, and Pasadena, as shown in Figure 1-20. Transit usage is projected to increase in these areas by 2030, as shown in Figure 1-21. The highest transit usage areas are found along the existing Metro Red Line and Metro Purple Line corridors. There is also high transit usage in the Westside area where there are many students who are reliant on public transportation.

Additional transit opportunities created by the Regional Connector for commuters on the Metro Blue and Gold lines are expected to increase the number of trips along the corridors of both. The Regional Connector will alleviate congestion on the already heavily-used Metro Red and Purple Lines by eliminating the need for Metro Blue and Gold line commuters to transfer through them.



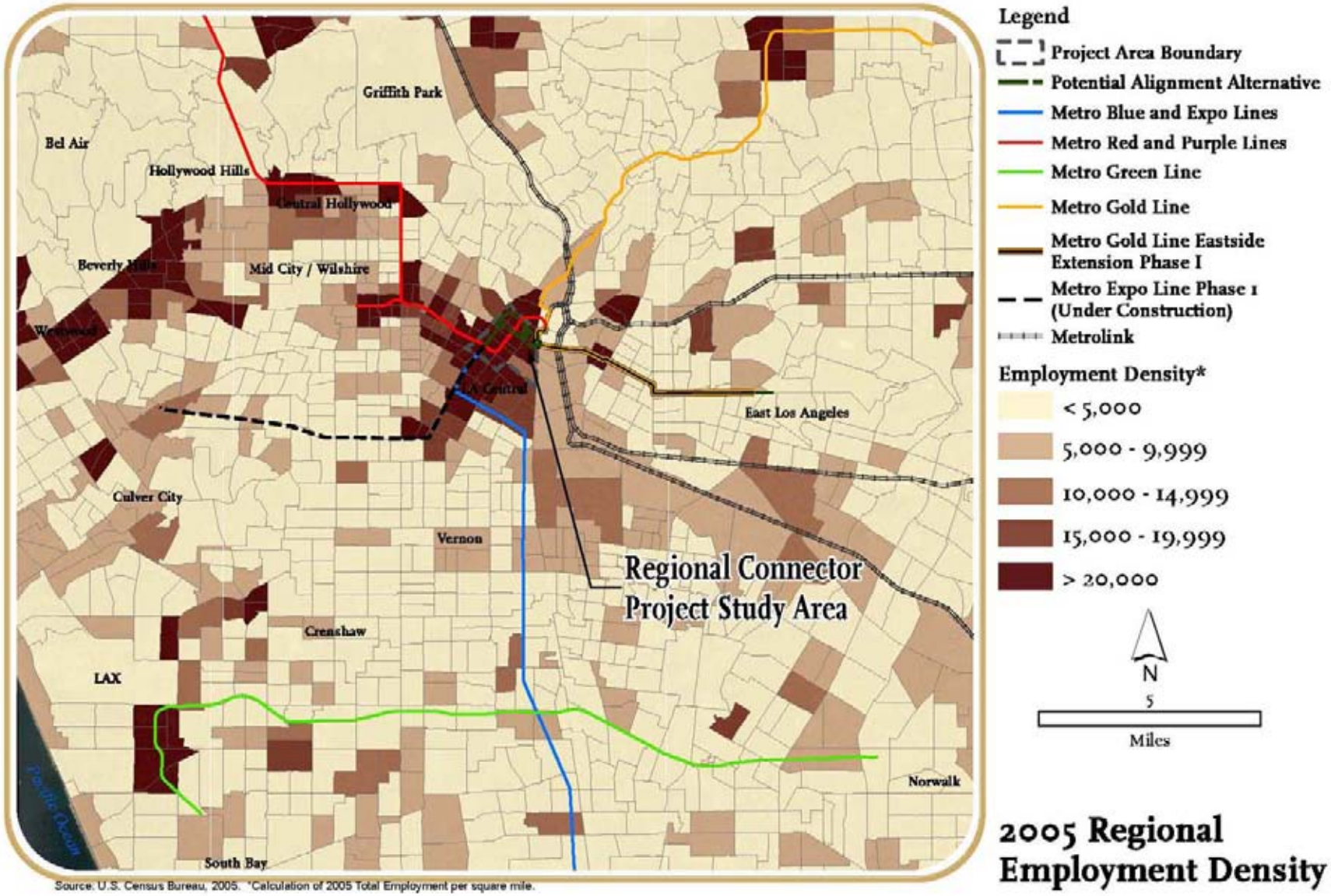
Source: U.S. Census Bureau, 2005. *Calculation of 2005 Total Population per square mile.

Figure 1-15 2005 Regional Population Density



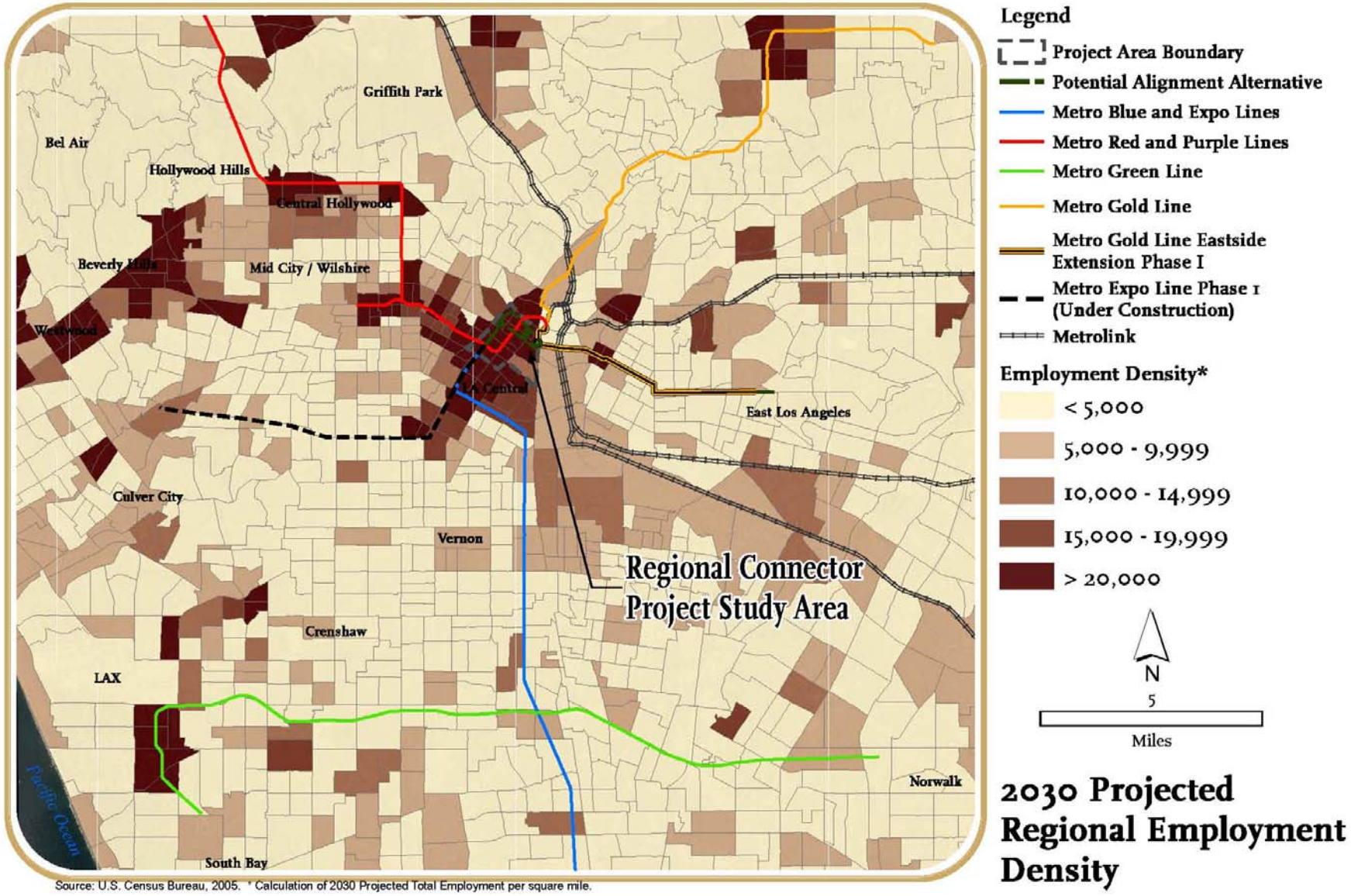
Source: U.S. Census Bureau, 2005. * Calculation of 2030 Projected Total Population per square mile.

Figure 1-16 2030 Regional Population Density



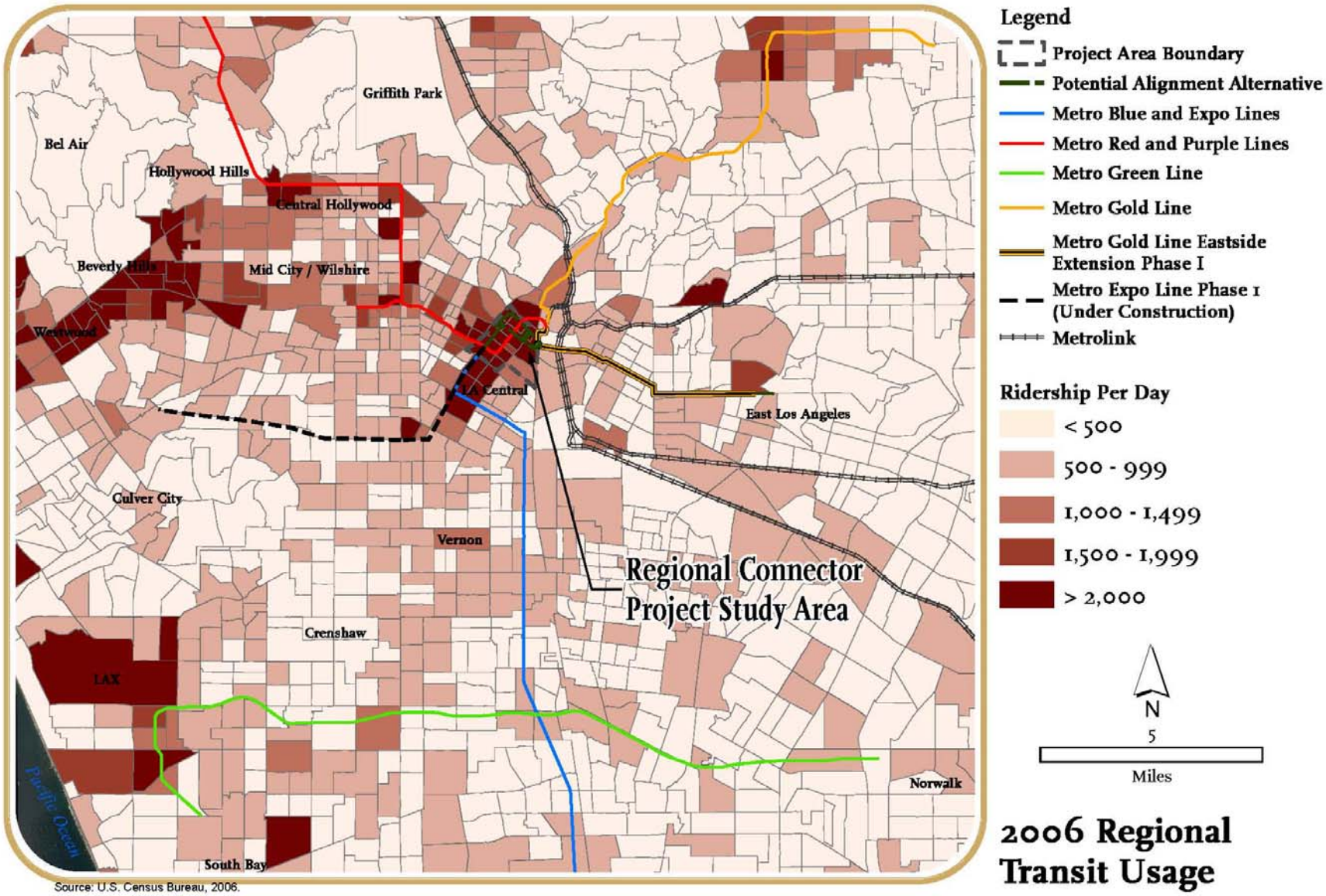
Source: U.S. Census Bureau, 2005. *Calculation of 2005 Total Employment per square mile.

Figure 1-17 2005 Regional Employment Density



Source: U.S. Census Bureau, 2005. * Calculation of 2030 Projected Total Employment per square mile.

Figure 1-18 2030 Regional Employment Density



Source: U.S. Census Bureau, 2006.

Figure 1-19 2006 Regional Transit Usage

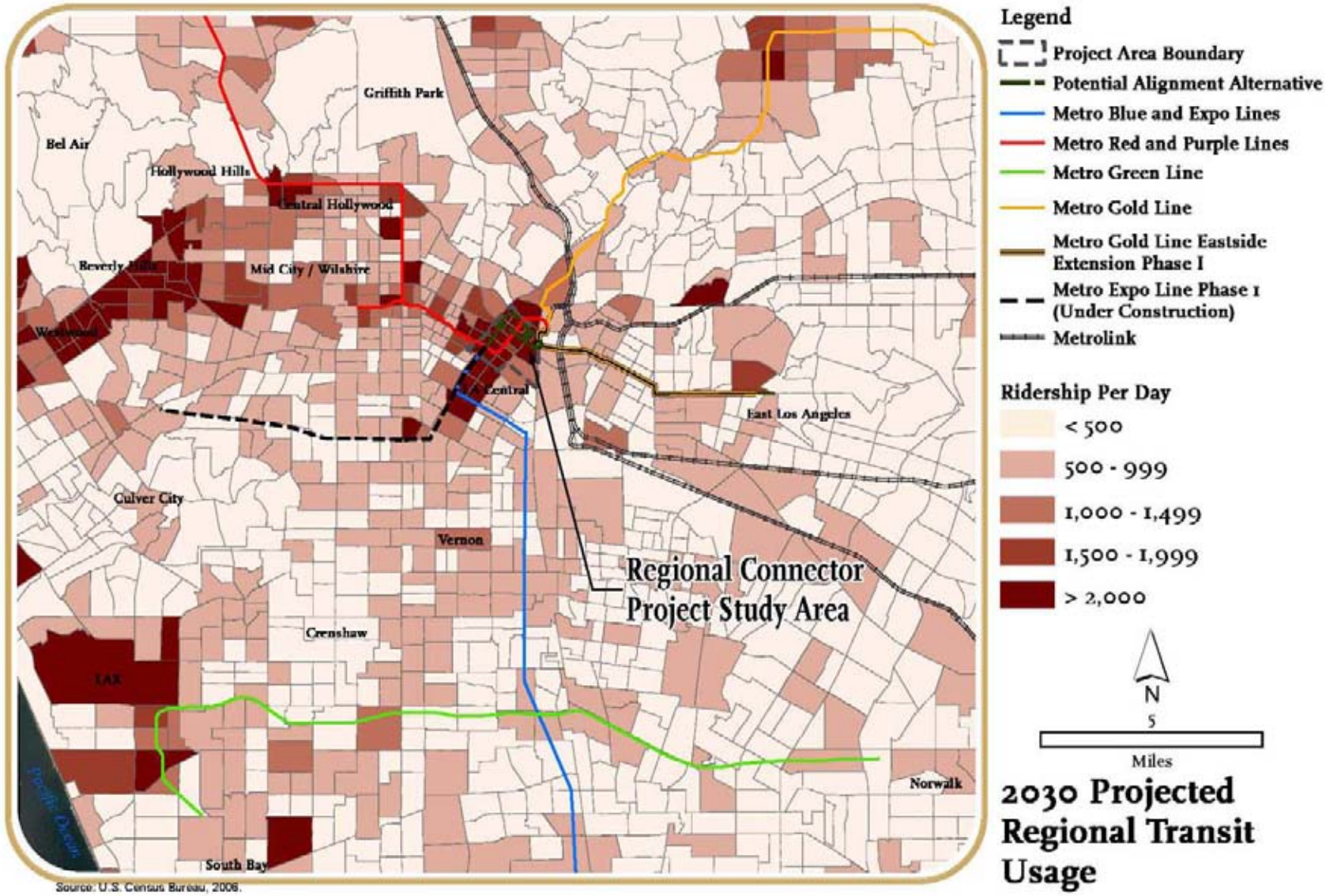


Figure 1-20 2030 Regional Transit Usage

1.8.4 Significant Transit-Dependent Populations in the Project Study Area

The PSA can be characterized as more transit-dependent than the County as a whole because of its dense population, proportionately low income levels, number of households with zero vehicles, and public transportation users. A significant portion of the County's transit riders live and/or work within the PSA; this is projected to increase through 2030. Improvements in transit service would help to mitigate impacts associated with the increased concentration of transit-dependent communities in and around the Regional Connector PSA.

Population, Households, and Employment

Census tracts with the largest populations (greater than 2000 people) are found within the PSA east of Main St. between 1st St. and 7th St. and east of San Pedro St. between Temple St. and 1st St. According to SCAG projections, in 2030, slightly less growth is expected in the PSA compared to the whole County. The population in the PSA is expected to grow by about 18 percent from about 18,000 in 2005 to 21,000 people in 2030.

The largest growth in the PSA is projected in two locations:

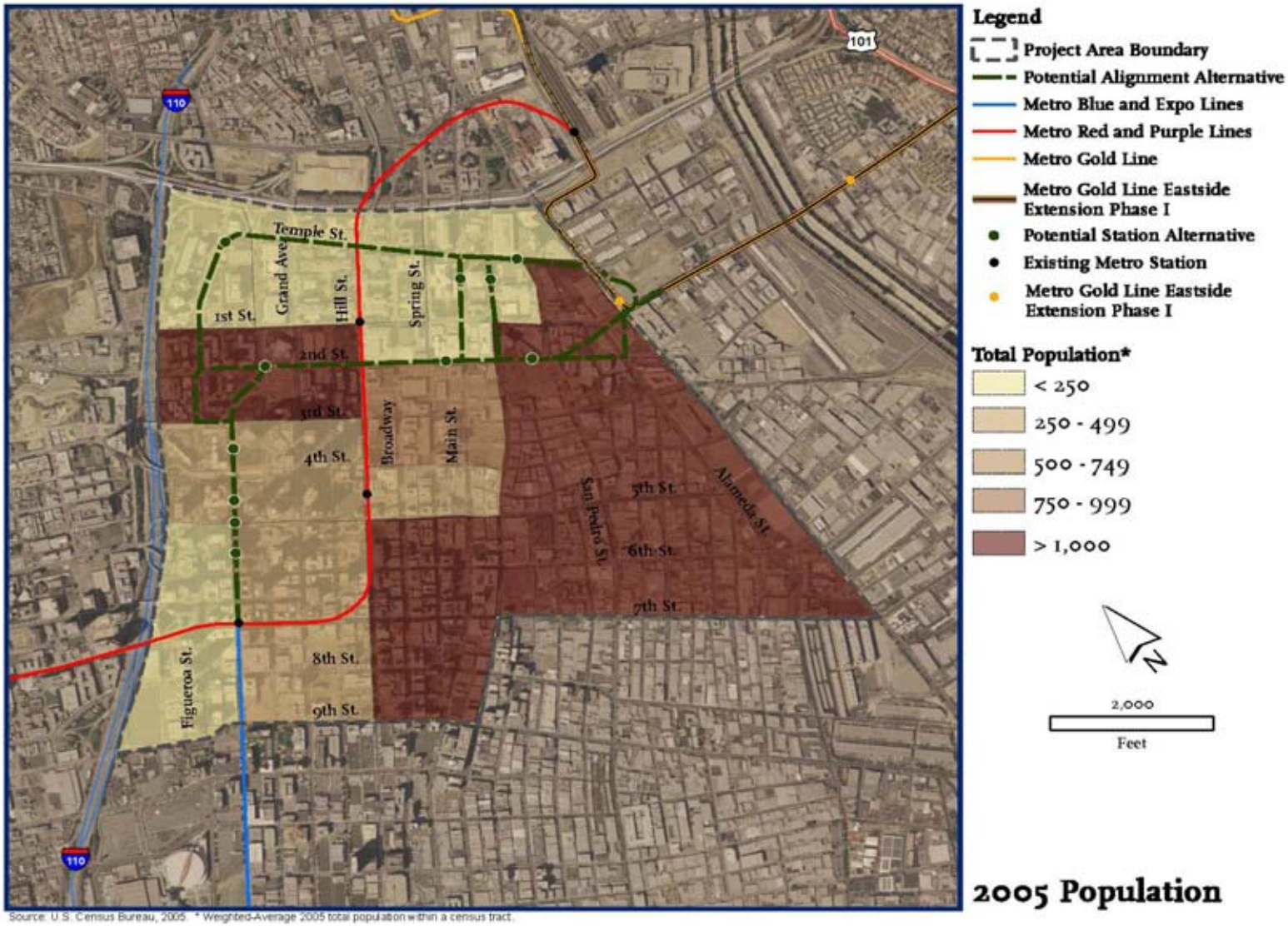
- the area bounded by SR-110, Hill St., 1st St., and 3rd St., which will increase from between 1,500 to 1,999 people to over 2,000 people; and
- the area bounded by Hill St., Main St., 7th St., and 9th St., which will increase from 1,000 to 1,499 people to 1,500 to 1,999 people.

Projected population is based on fairly conservative estimates made by SCAG in 2005. Figures 1-22 and 1-23 show the distribution of existing and projected total population within the PSA.

Several planned high-rise residential projects in the PSA contribute to the high level of expected growth. These include the Park Fifth condominium project at 5th and Hill Streets, the Block 8 condominium and rental project under construction between 2nd, 3rd, San Pedro, and Los Angeles Streets, and the 8th & Grand condominium and retail project at 8th St. and Grand Ave.

The total number of households are also projected to increase 27 percent from about 9,600 in 2005 to 12,200 in 2030, which is higher than the 25 percent projected for the County.

The employment base is projected to increase by about 12 percent from over 168,000 individuals in 2005 to over 188,000 in 2030. Current and projected employment within the PSA are both between three and four percent of total County employment.



Source: U.S. Census Bureau, 2005. * Weighted-Average 2005 total population within a census tract.

Figure 1-21 2005 Population in PSA

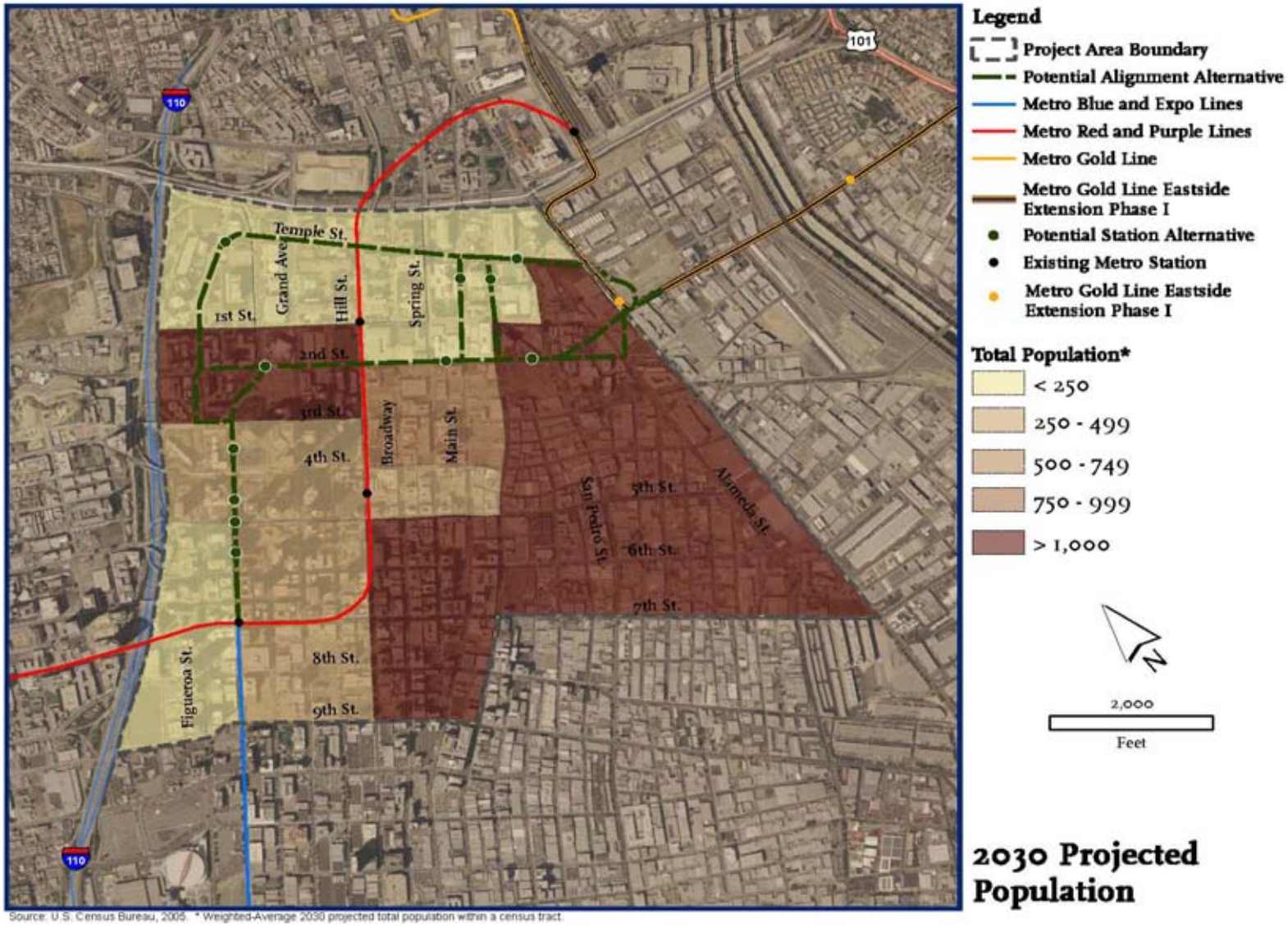


Figure 1-22 2030 Population in PSA

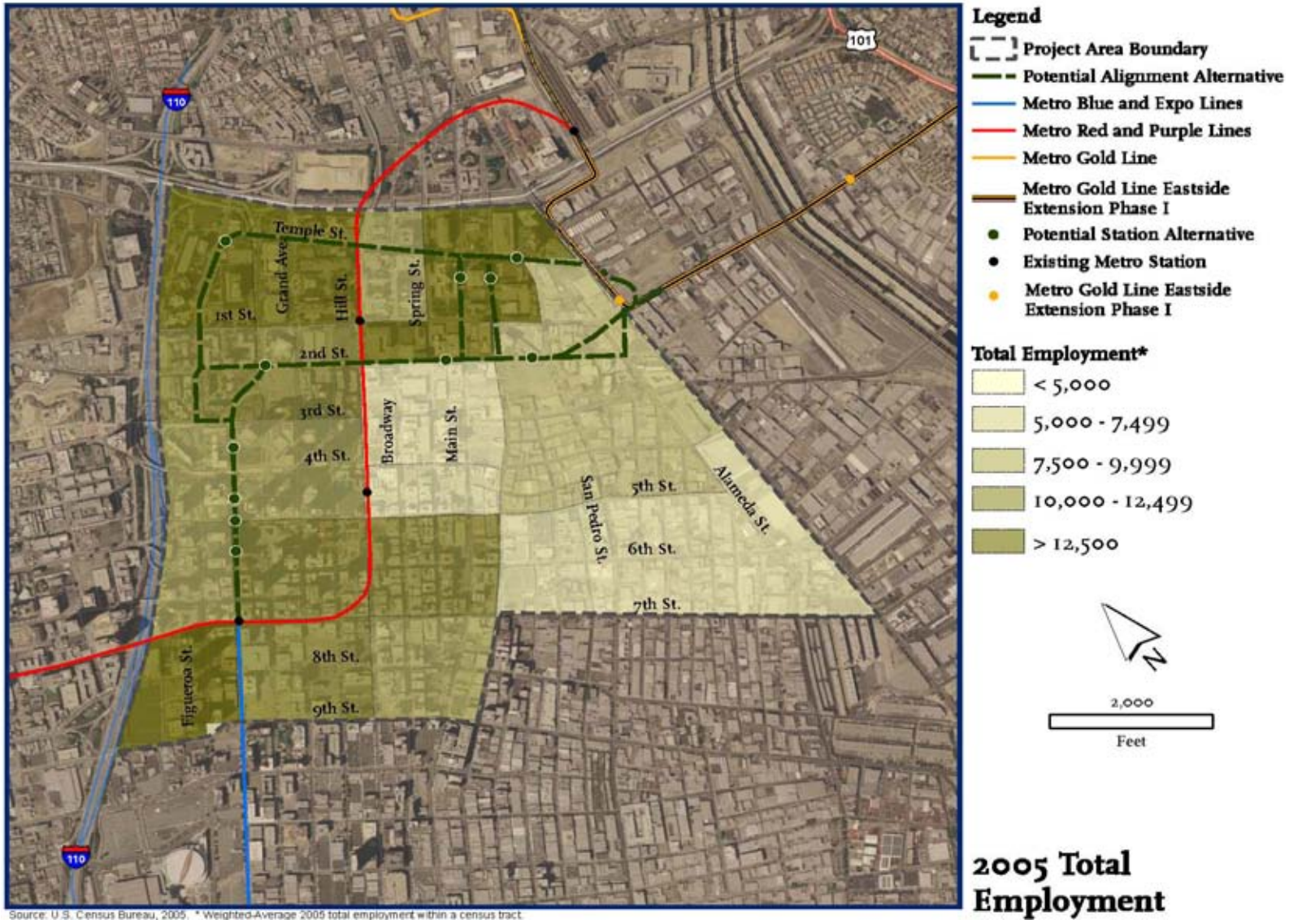


Figure 1-23 2005 Employment in PSA

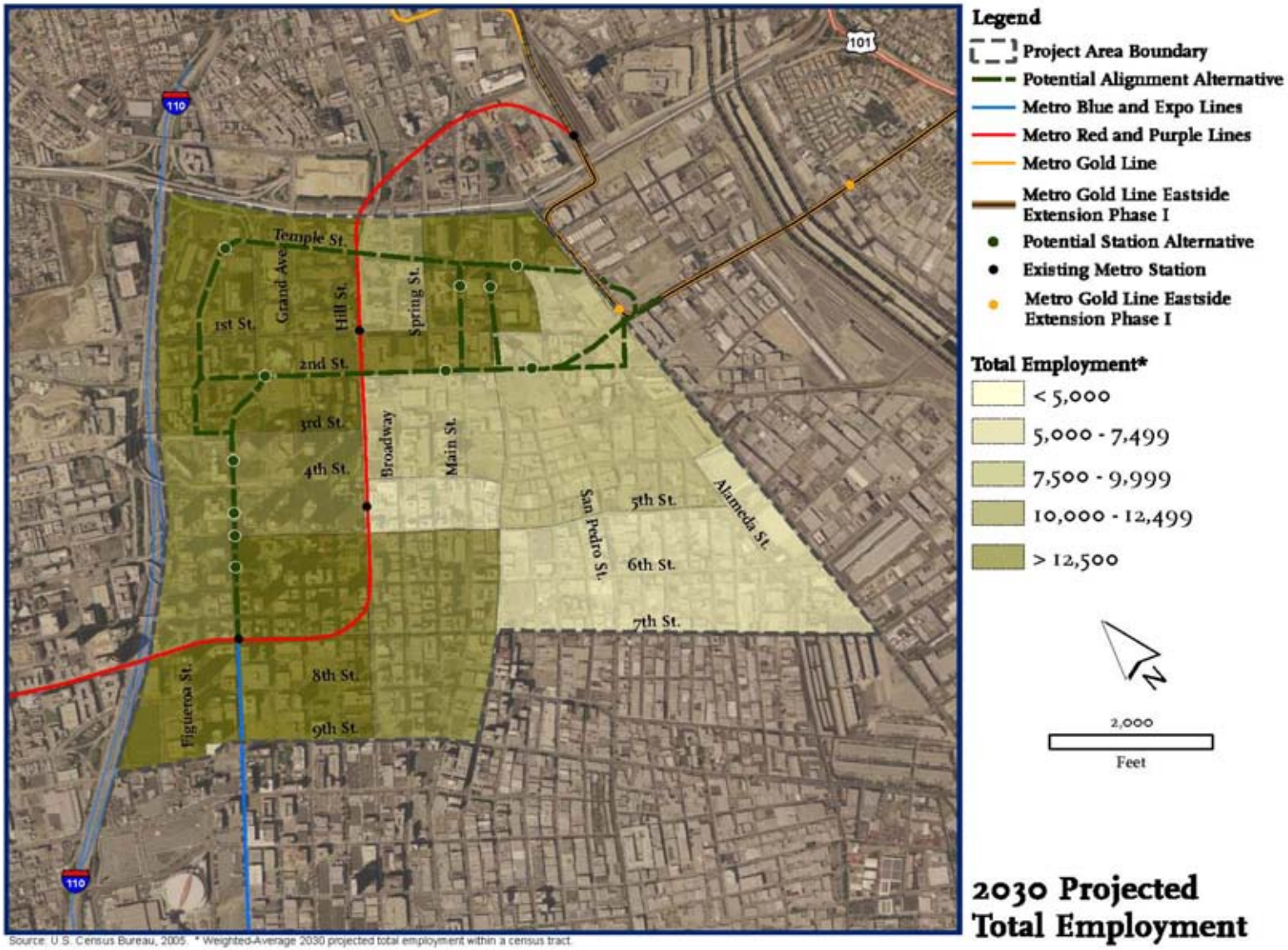


Figure 1-24 2030 Employment in PSA

Figure 1-24 shows the distribution of employment in the PSA in 2005. At that time, total employment in a majority of the census tracts within the PSA was over 5,000, with areas of highest concentration (greater than 12,500 jobs) in three locations:

- the area bounded by SR-110, Flower St., 7th St., and 9th St.;
- the area bounded by SR-110, Hill St.,US-101, and 1st St.; and
- part of the area bounded by Hill St., Alameda St., US-101, and 2nd St.

A large employment base indicates that a significant number of workers commute within, into, and out of the PSA. Figure 1-25 shows the projected distribution of employment in 2030.

Table 1-15 summarizes the PSA's projected growth in population, households and employment relative to the entire County.

Table 1-15 Population, Household, and Employment Growth

	2005	2030	Forecast Increase Between 2005-2030
Population			
PSA	17,795	20,738	16.5%
LA County	10,010,315	12,193,030	21.8%
PSA % of LA County	0.18%	0.17%	---
Households			
PSA	9,673	12,287	27.0%
LA County	3,298,210	4,116,567	24.8%
PSA % of LA County	0.29%	0.39%	---
Employment			
PSA	168,328	188,591	12.0%
LA County	4,644,010	5,651,043	21.7%
PSA % of LA County	3.62%	3.34%	---

Source: SCAG, 2005 data and 2030 projections

Household Income

Socioeconomic trends in the PSA are correlated to transit-dependent communities; household income is an important factor. In 2005, the PSA had about 7,000 low-income households, about 2,000 medium-income households, and only about 400 high-income households.

Low-income households include those households considered to be living in poverty. The US Census Bureau's defined 2005 poverty threshold as an annual average salary of $12,755 for a two-person household. Low-income households represented about 75 percent of the PSA's total households. The high proportion of low-income households underscores the need for public transit.

Figure 1-26 shows the distribution of low-income households in 2005. Census tracts within the PSA that have greater than 1,000 low-income households were:

- the area bounded by SR-110, Hill St., 1st St., and 3rd St.; and
- the area bounded by Hill St., Alameda St., 5th St., and 7th St.

Figure 1-27 shows the projected distribution of low income households in 2030. The number of low-income households is projected to increase by roughly 26 percent to about 9,000 in 2030.

Age Distribution

Demographic data are presented in 1.4 Demographics. Figure 1-28 shows the distribution of residents age 65 and over in the PSA. The senior population is highest west of Hill St. and south of 1st St. Figure 1-29 shows the distribution of residents age 18 and under in the PSA. The youth population is found primarily in the southern part of the PSA, south of 5th St.

Young and elderly residents within the PSA are more likely to depend on public transit because of inability to drive or lack of private vehicle accessibility.

Public Transportation Ridership and Vehicle Accessibility

Nearly 70 percent of the households in the PSA have no car. Figure 1-9 shows the distribution of households with no available vehicles.

Figure 1-30 shows the percentage of the employed population age 16 and over who lived in the PSA relied on public transportation in 2005. Twenty-three percent of employed residents age 16 and over rely on public transit for their commuting needs. Some of the PSA's transit-dependent population live within convenient walking distance (one-quarter to one-half mile) of the Regional Connector termini, while the rest will be able to easily access the Regional Connector with a bus or rail transfer. When comparing vehicle accessibility and public ridership patterns in the Regional Connector PSA, the trends suggest that even households in the PSA with one or more cars have a higher propensity to use public transportation than similar households elsewhere in the County.

There are also a large number of commuters from outside the PSA who utilize transit to get to employment and other opportunities within the PSA. As explained earlier in this section, they will benefit from the development of the Regional Connector.

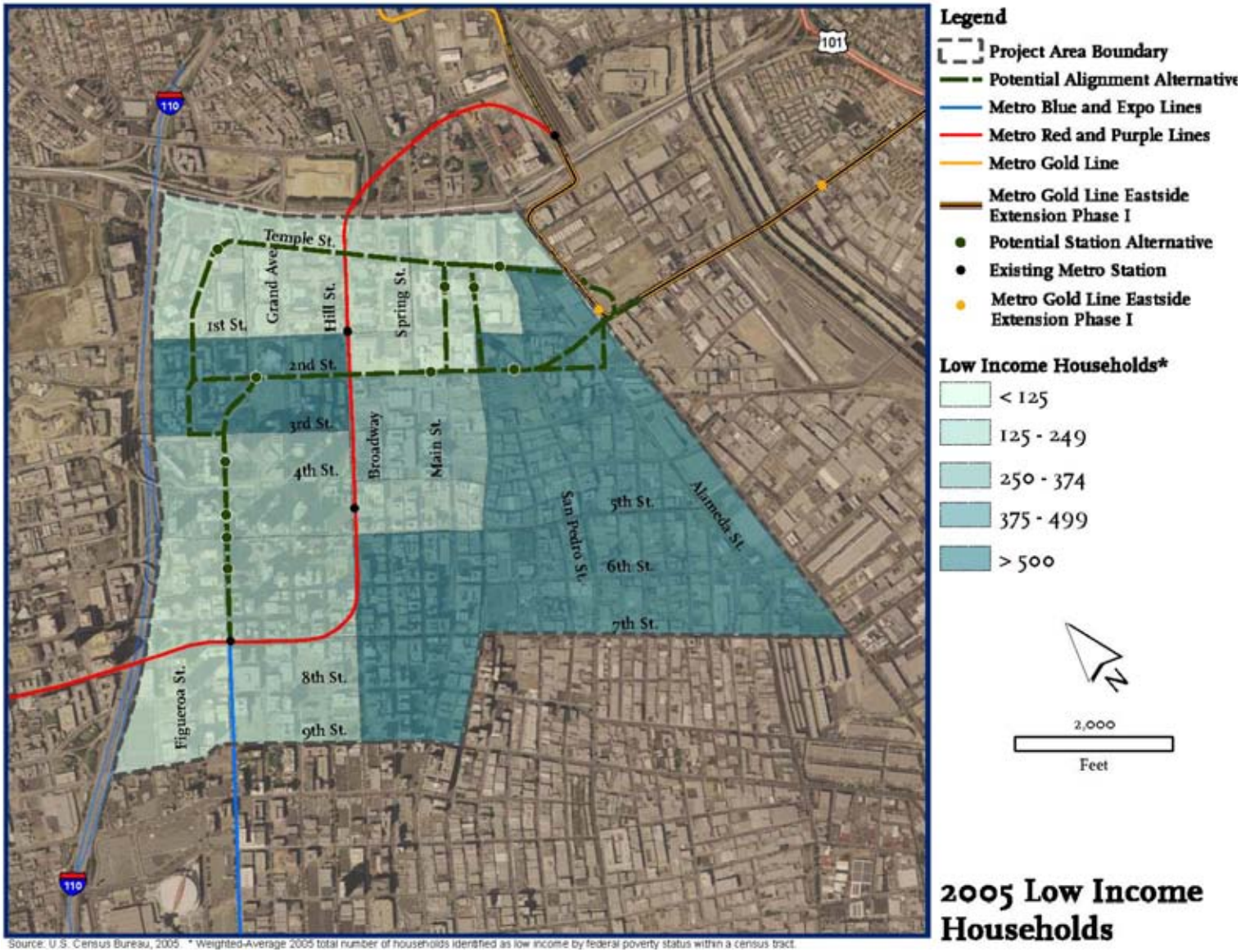
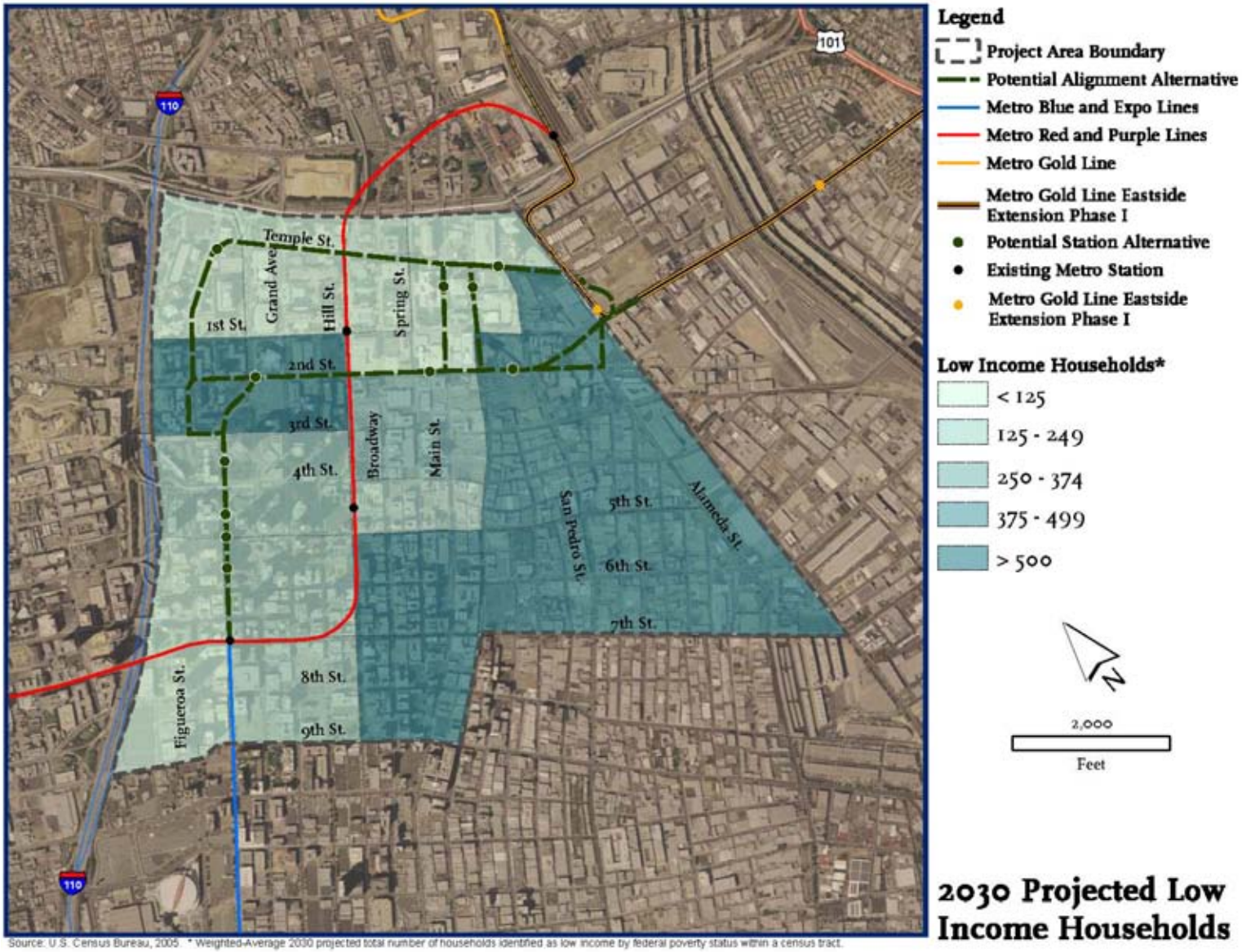


Figure 1-25 2005 Low Income Households



Source: U.S. Census Bureau, 2005. * Weighted-Average 2030 projected total number of households identified as low income by federal poverty status within a census tract.

2030 Projected Low Income Households

Figure 1-26 2030 Low Income Households

Table 1-16 summarizes the transit dependency characteristics in the PSA relative and the entire County.

Table 1-16 Transit Dependent Demographic Information

	PSA	LA County	PSA % of LA County
Population	17,795	10,010,315	0.18%
Under 18 years	976	2,798,604	0.03%
Over 65 years	3,497	926,670	0.38%
Households	9673	3,298,210	0.29%
No vehicle households	8586	671,214	1.28%
Use public transportation	1025	254,091	0.40%
Low income households	7,244	1,481,896	0.49%
Total employment	168,328	4,644,010	3.62%

Source: SCAG, 2005 data and 2030 projections

1.8.5 Project Study Area Population and Employment Growth

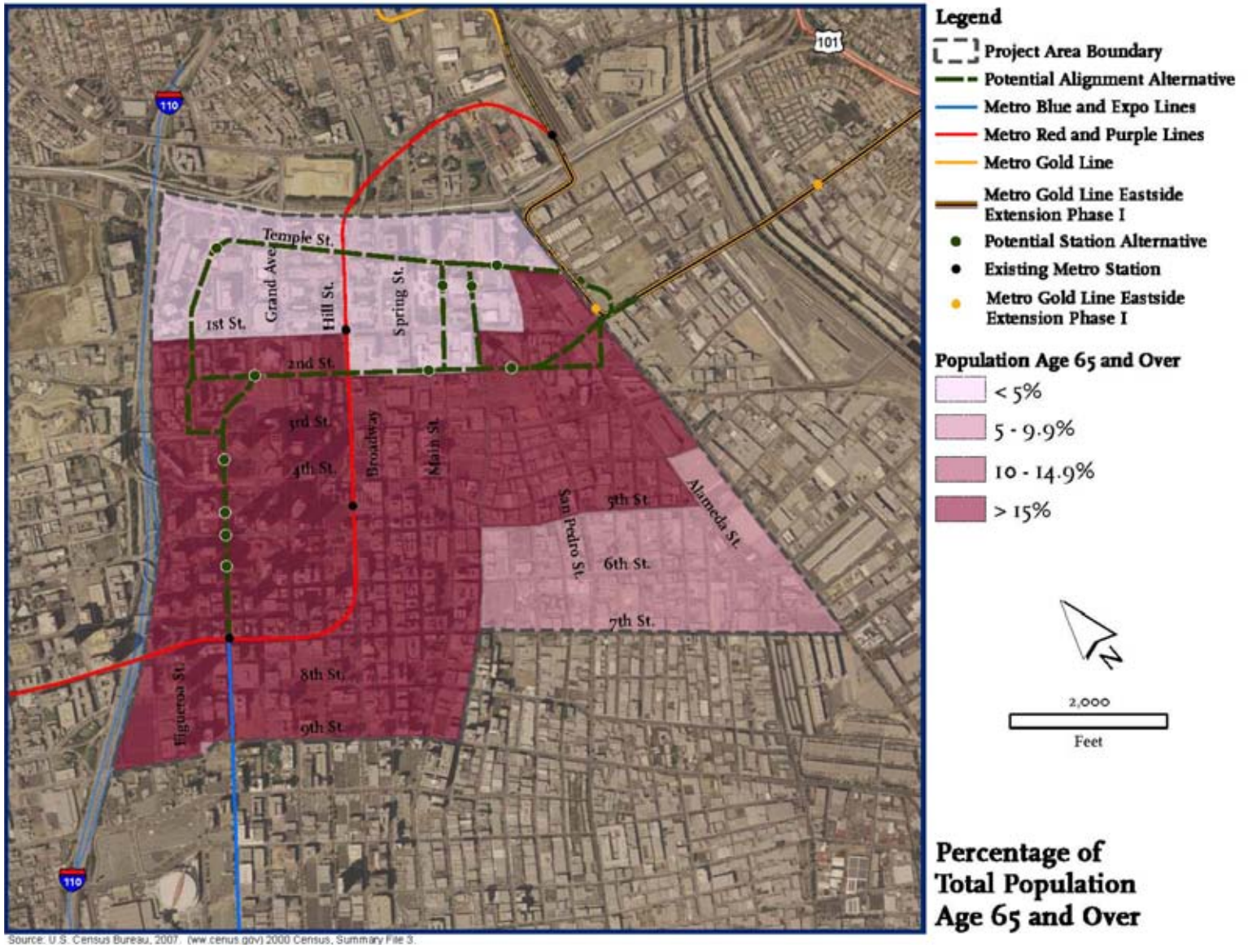
Providing public transportation to densely-populated areas can increase ridership by making transit more accessible to a larger population. Population and employment density data for the PSA are presented in 1.4 Project Study Area Demographics. The areas of highest population density are found in two locations within the PSA:

- the area bounded by 1st St., 3rd St., SR-110, and Hill St.; and
- the area south of 5th St. and east of Hill St.

Figure 1-31 shows the distribution of population densities in 2005.

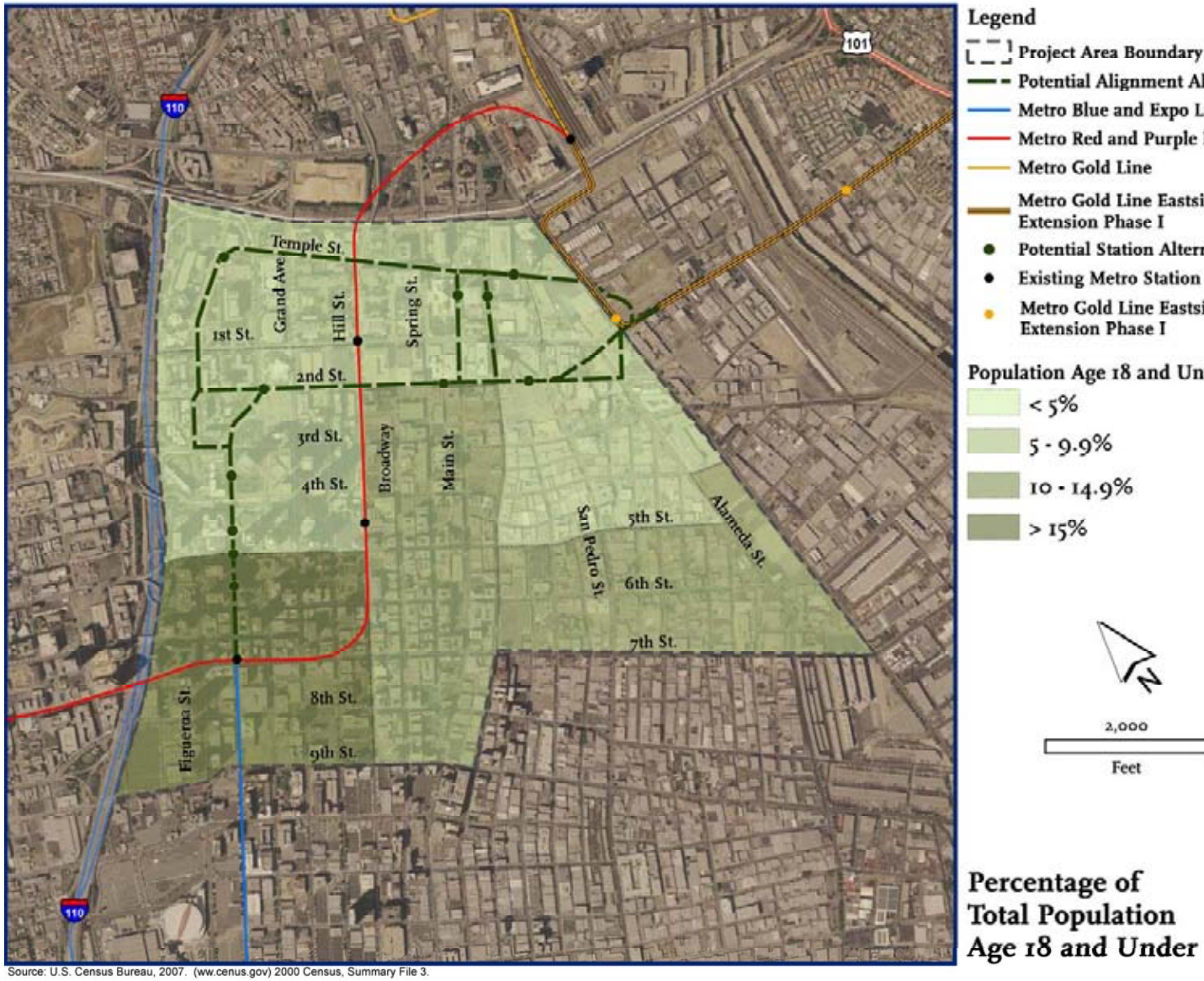
The highest employment density exists in the PSA in the area bounded by US-101, 3rd St., SR-110, and Hill St. Figure 1-32 shows the distribution of employment densities in 2005.

Population and employment densities are projected to increase in the PSA in 2030. Average population density is projected to grow to roughly 13,600 persons per square mile, and average employment density is expected to be nearly 124,000 employees per square mile. Figures 1-33 and 1-34 show projected 2030 population and employment densities.



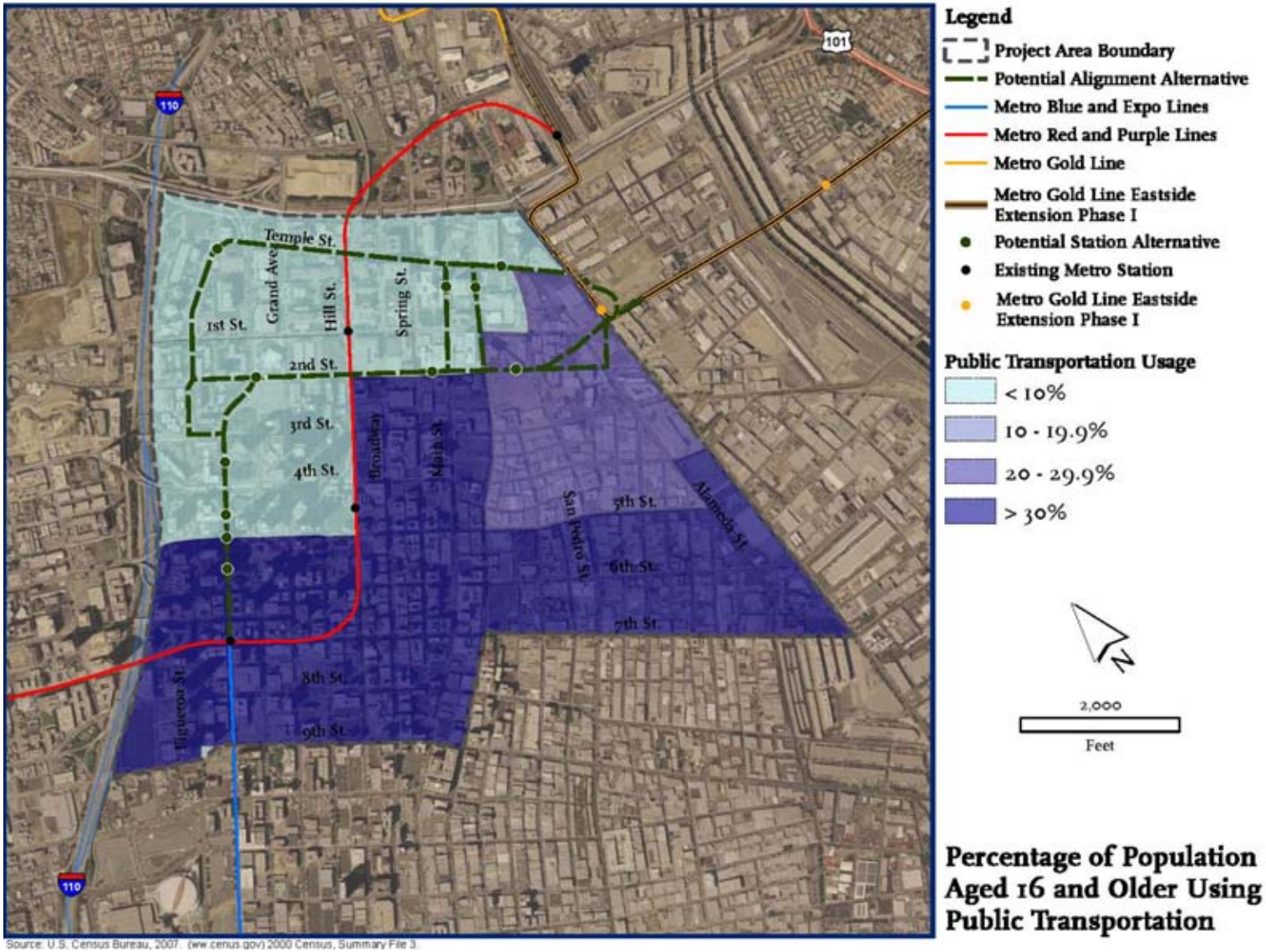
Source: U.S. Census Bureau, 2007. (ww.cenus.gov) 2000 Census, Summary File 3.

Figure 1-27 Population Age 65 and Over



Source: U.S. Census Bureau, 2007. (ww.cenus.gov) 2000 Census, Summary File 3.

Figure 1-28 Population Age 18 and Under



Source: U.S. Census Bureau, 2007. (ww.cenus.gov) 2000 Census, Summary File 3.

Figure 1-29 Population Age 16 and Over Who Use Public Transportation

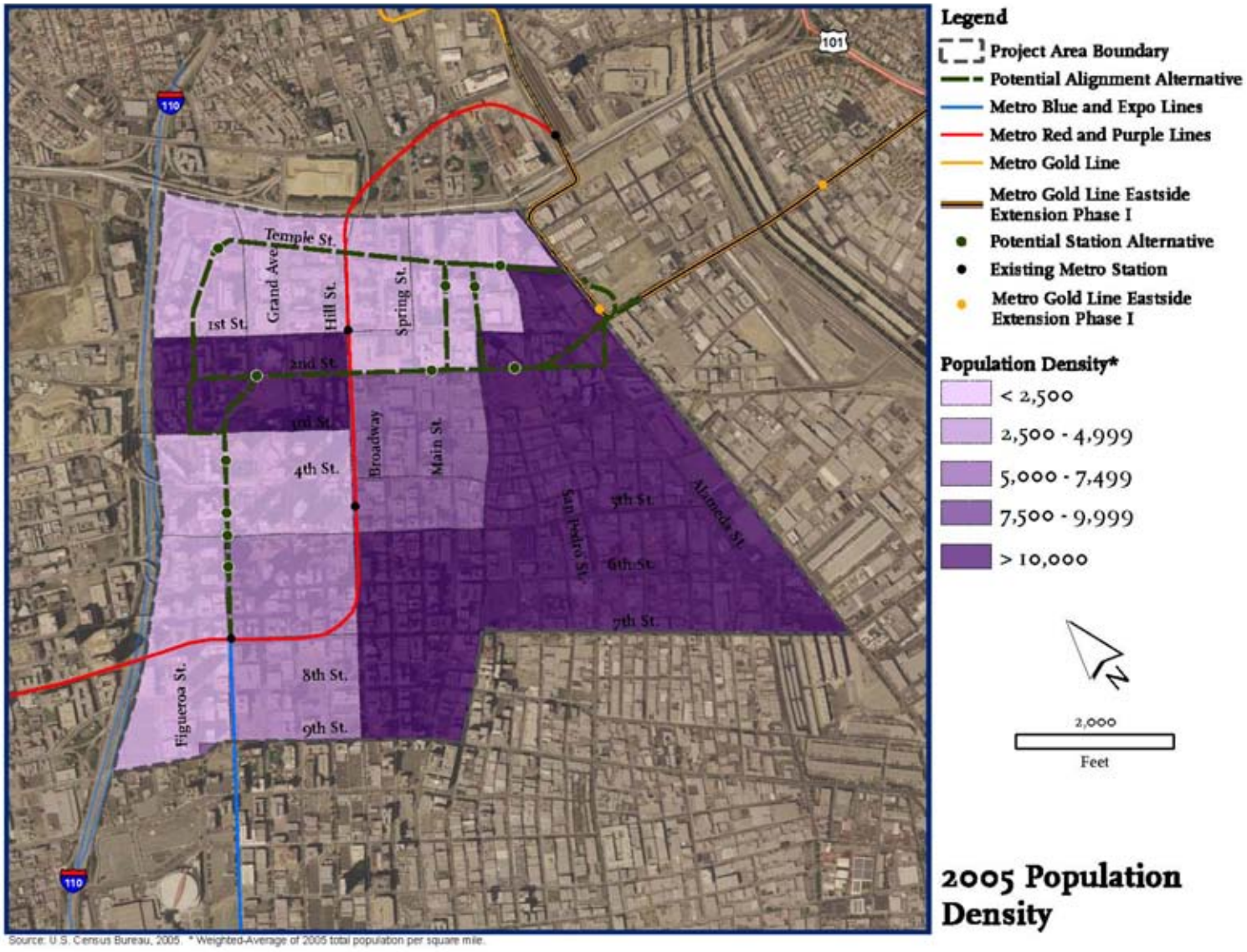


Figure 1-30 2005 Population Density

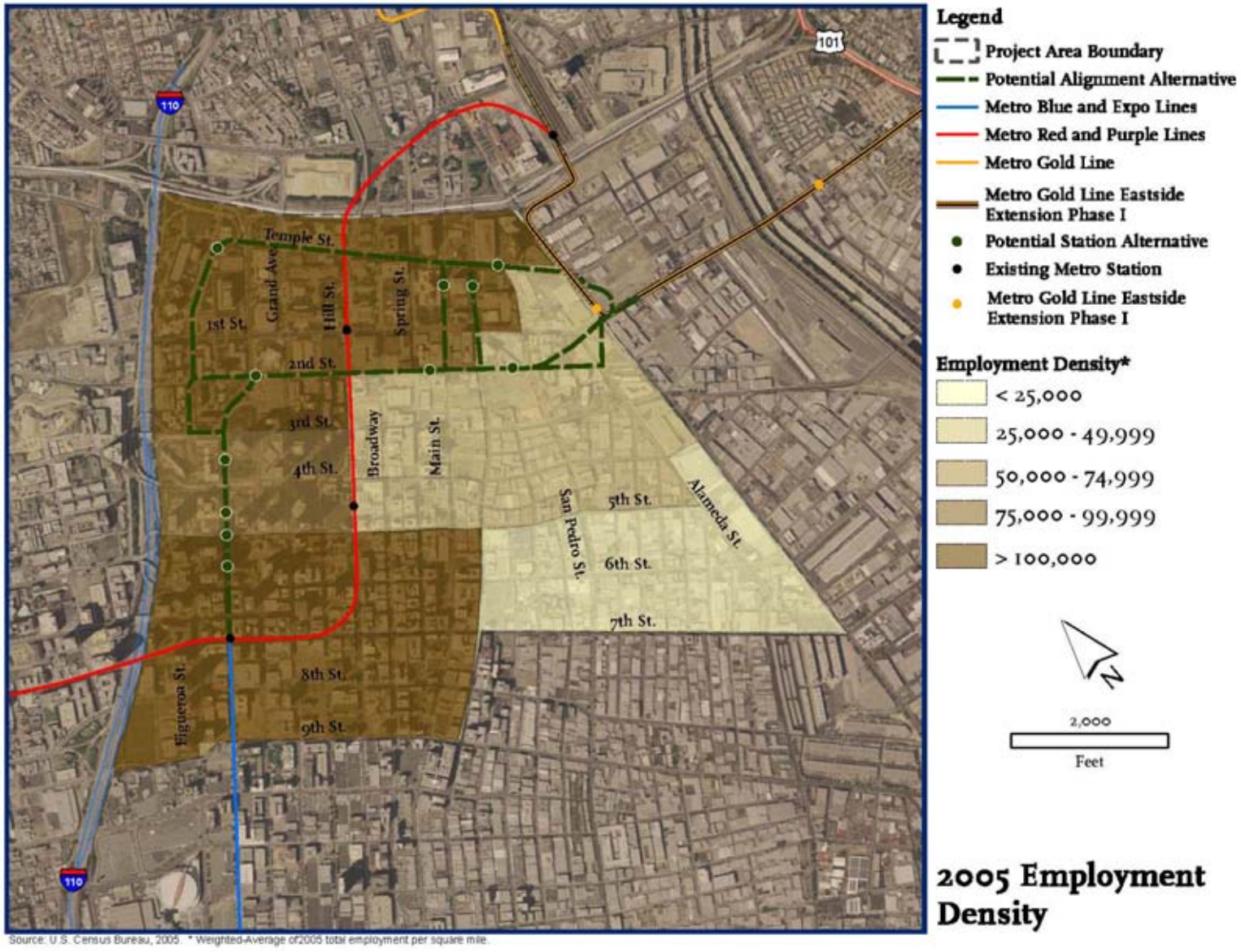


Figure 1-31 2005 Employment Density

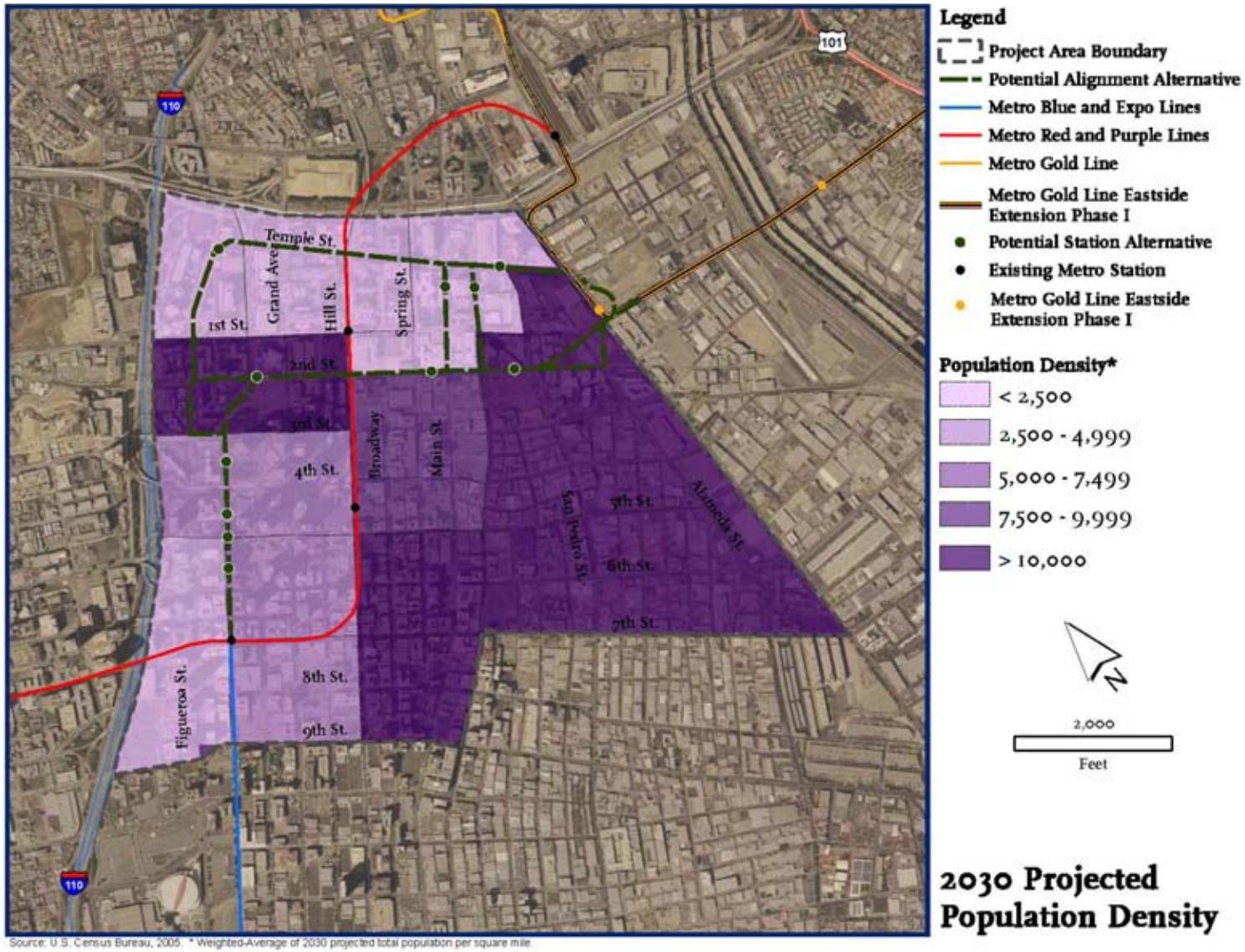


Figure 1-32 2030 Population Density

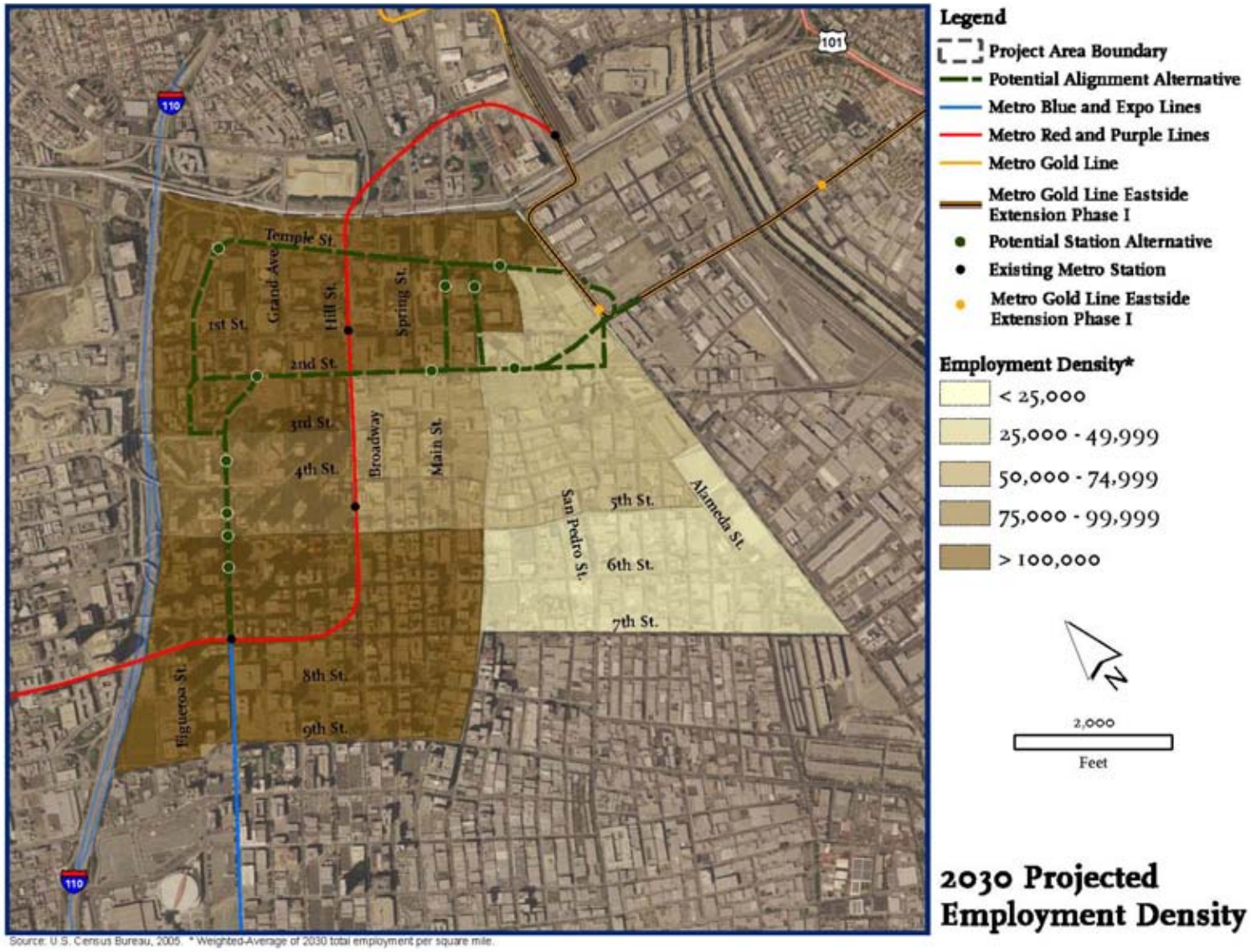


Figure 1-33 2030 Employment Density

1.8.6 Travel Demand Justifies the Need for Transit Services

Traffic patterns in the PSA are discussed in 1.6 Performance of the Travel System. Table 1-17 presents traffic volumes within the PSA, illustrating the high volume of vehicles on the arterial network. These high volumes in concert with high pedestrian traffic result in blockages at many intersections within the PSA. The result is a strong and growing demand for a high-capacity transit alternative.

1.8.7 Local Land Use Policies and Guidelines that Support Transit

Recognizing the significant limitations on construction or expansion of roadways within the PSA, there is increased focus on increasing the use of public transit rather only making roadway improvements for personal vehicle travel.

County of Los Angeles General Plan

The County's General Plan establishes a number of goals and corresponding policies that support the development of public transit.

- Goal C-1: An accessible circulation system that ensures the mobility of people and goods throughout the County.
  - Policy C1.1: Expand the availability of transportation options throughout the County
  - Policy C1.2: Encourage a range of transportation services at both the regional and local levels, especially for transit dependent populations.
  - Policy C1.3: Secure an affordable countywide transportation system for all users.
  - Policy C1.4: Maintain transportation right-of-way corridors for future transportation.
- Goal C-2: An efficient circulation system that effectively utilizes and expands multi-modal transportation options.
  - Policy C2.1: Support the linking of regional transportation systems.
  - Policy C2.2: Expand transportation options throughout the County.

Table 1-17 Arterial Traffic Volumes by Intersection											
Intersection	Time	Total Number of Vehicles at Intersection									
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	TEMPLE
ALAMEDA	AM	3913	2546	4267	NA	NA	NA	NA	NA	NA	3022
	PM	4120	2755	2927	NA	NA	NA	NA	NA	NA	3427
BROADWAY	AM	3430	3189	2739	2370	2599	2069	2170	1834	2494	NA
	PM	3357	2290	2704	2897	2574	2717	3273	2854	2807	3509
CENTRAL	AM	2443	1506	3041	NA	NA	NA	NA	NA	NA	NA
	PM	2711	1799	1904	NA	NA	NA	NA	NA	NA	NA
FIGUEROA	AM	NA	NA	3863	2786	4021	4353	3679	2498	4540	1990
	PM	NA	NA	5862	4002	5565	4780	3630	3913	3297	2025
FLOWER	AM	NA	NA	NA	NA	NA	NA	NA	2150	2515	NA
	PM	NA	NA	NA	NA	NA	NA	NA	3758	3347	NA
GRAND	AM	3562	NA	NA	NA	2614	2828	2889	2105	NA	2603
	PM	4148	NA	NA	NA	3028	2484	3379	2778	NA	3306
HILL	AM	3649	NA	3309	2635	2660	2316	2360	2034	2164	NA
	PM	4551	NA	3520	3068	2500	2607	3382	2649	2702	NA
HOPE	AM	NA	NA	NA	NA	NA	NA	NA	1567	NA	2693
	PM	NA	NA	NA	NA	NA	NA	NA	2318	NA	3342
LOS ANGELES	AM	2919	1822	2797	NA	1825	1745	NA	NA	NA	3041
	PM	3398	2236	2324	NA	2072	2374	NA	NA	NA	3466
MAIN	AM	2249	1263	2176	1473	1710	1552	1821	NA	NA	1730
	PM	3308	2783	2923	3060	2514	2324	2509	NA	NA	3382
OLIVE	AM	2590	NA	NA	2029	2609	2461	2838	2329	2986	NA
	PM	3655	NA	NA	2765	3430	2950	2823	2632	2374	NA
SAN PEDRO	AM	2256	1437	3040	1653	NA	NA	NA	NA	NA	1456
	PM	2737	2036	2197	2764	NA	NA	NA	NA	NA	1729
SPRING	AM	3445	2131	2555	1996	2149	1646	2058	1548	2681	2973
	PM	2919	1851	2431	2284	1704	2125	2231	1791	3171	2167

Source: Data compiled from recent traffic studies conducted for downtown projects.

Downtown Design Guidelines

The Community Redevelopment Agency of the City of Los Angeles (CRA) has drafted design guidelines for all new developments within downtown Los Angeles. These guidelines provide incentives for residential development by complementing or modifying code requirements such as density limits. With the overall goal of creating a livable downtown, guidelines focus on providing the following:

- a broad range of housing types;
- accessible transportation with emphasis on walking, biking, and transit other than autos;
- shops and services within walking distance to housing;
- safe, visually-pleasing and walkable streets;
- parks and other gathering places near to shops and services; and
- public recreational open space within walking distance to home.

The guidelines set forth specific standards for design and construction, including use of sustainable materials and practices, preserving historically- and culturally-significant buildings, and supporting environmental and aesthetic resources. The guidelines ultimately call for developers to consider pedestrians and not cars in their design process. The objective is to create a cohesive transition along blocks while creating inviting and open spaces that encourage pedestrian traffic. As outlined above, increasing public transit options is one way to meet this objective.

Little Tokyo Planning & Design Guidelines

As a result of recent resurgence and popularity in the Little Tokyo district of downtown (see Figure 1-1 for a map), a set of design guidelines was created with the intent of encouraging individual expression and continuity of the surrounding environment through building and street design, while enhancing elements and aesthetics that are significant to the Japanese-American Community. In addition to the preservation of existing physical and cultural spaces, the guidelines identify specific standards for new developments and streetscapes in order to maintain continuity throughout. Street dedication requirements, such as those in place for new development east of Alameda St. between Temple St. and 1st St., promote pedestrian- and transit-friendly designs which support cohesiveness through the corridor while maintaining cultural integrity. This, in turn, will enhance pedestrian activity and increase the attractiveness of walking and transit use in the area.

CommuteSmart®

Metro provides services through CommuteSmart® to help people find alternatives to a single-person car commute such as carpooling, vanpooling, park-and-ride, and public transit. CommuteSmart® also assists employers to set up rideshare programs, create incentives for commuting, and perform ongoing assessments and training. Improvement

of public transit options while promoting the use of public transit would increase ridership more than either done alone.

1.9 Potential Transit Markets

Potential transit markets are two-fold for the Regional Connector:

- the activity centers and major destinations that include public and private uses, density of population and employment, and major travel patterns that traverse the PSA;
- travel patterns through the PSA, since the Regional Connector would link over 50 miles of Metro LRT service from Pasadena to Long Beach, and from Culver City to the Eastside and everywhere in between.

This AA will result in projections of ridership generated by people moving within the PSA and through the PSA to get to and from homes, jobs, services, and entertainment.

Key advantages for the Regional Connector presented by the PSA are the easy bus connections provided by the dense transit network, convenient regional and intercity rail interface, and the location of activities and services within walking and biking distance of each other.

1.9.1 Activity Centers and Destinations

Several activity centers exist within the PSA. These include Educational, Recreational, Business/Industrial and Commercial centers. Figure 1-35 illustrates activity centers within the PSA.

Downtown has long been considered a major destination for employment and services; it is experiencing a resurgence as a center for entertainment and the arts, and increasingly, residential living.

Bunker Hill

The Bunker Hill District is located generally between First St. on the north, Hill St. on the east, Third St. on the south, and Figueroa St. on the west. Major downtown destinations located within Bunker Hill include the Walt Disney Concert Hall, Museum of Contemporary Art (MOCA) and several high-rise office towers, senior and market-rate housing, hotels and commercial/retail centers. Bunker Hill offers over 3,200 residential units mainly in mid- and high-rise buildings.

Large development projects planned for this area include Civic Park and the Grand Avenue Development Project, which will transform this area into a regional arts, entertainment, and residential destination. The Grand Avenue Development is a $3 billion project that includes 3.6 million square feet of development with 449,000 square feet of retail. It is currently planned for 2,600 housing units, almost doubling the existing number of units in the area.

Civic Center

Bordering Bunker Hill to the northeast is the Civic Center, which serves as a hub for City, County, State, and Federal government with the second-largest concentration of civic buildings in the country. The Cathedral of Our Lady of the Angels, the Ahmanson Theater, Mark Taper Forum, and the Dorothy Chandler Pavilion are other major destinations in this district.

Civic Center is undergoing active redevelopment. The new headquarters for the state Department of Transportation (Caltrans) District 7 has recently been completed, development of the new Los Angeles Police Department Headquarters is underway, and construction of a U.S. Federal Courthouse is soon to begin.

Little Tokyo

East of Civic Center is Little Tokyo, which serves as the center of the largest Japanese-American community in the continental United States. The Japanese American National Museum and The Geffen Contemporary at MOCA are located here, along with a lively shopping district.

The popularity of Little Tokyo is evidenced by the active residential development underway, with recently completed and current projects adding more than 2,000 residential units. Significant developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo Arts District Station of the Metro Gold Line. Early concepts from developers identified high-density combination of office and housing with strong connections to the adjacent Metro Gold Line Eastside Expansion.

Toy District

The Toy District is a 12-block shopping area with over 500 retail businesses located south of Little Tokyo and north of Central City East. Development here is centered on mixed-use. The proposed Medallion building, one of several projects currently under construction, will provide 192 residential lofts and over 200,000 square feet of retail space.

Financial Core

The Financial Core District is located south of Bunker Hill and is dominated by high-rise office buildings. The Central Library, built in 1926, destroyed by fire in 1986, and rebuilt, expanded, and re-opened in 1993 is located here. Other landmarks in this district include the Millennium Biltmore Hotel (built in 1923) and Pershing Square (dating back as far as 1866 as a park).

The proposed 2.7-million square-foot, four-phase Metropolis mixed-use development will be located in the southwestern end of the Financial District. Phase I of this project, which began construction in 2008, will provide 360 residential units. Park Fifth is another major planned 76-story high-rise development across from Pershing Square and will include over 700 condos and a 200-room hotel.

Historic Core

To the east of the Financial Core is the Historic Core District, containing a large concentration of historic and architecturally-significant buildings, including the Bradbury Building (built in 1893). The Grand Central Market (dating back to 1917 as an open-air market) and the Broadway Historic Theater District (with theaters dating back to the early 1900s) are destinations in this district.

Development here is focused on conversion of old neglected buildings into lofts and apartments. The Historic Core experiences high volume retail sales on Broadway St., which is a largely sidewalk-oriented retail district. Due to the shortage of parking in the area, the retail district is reliant on public transit to bring patrons to the neighborhood.

Jewelry District

The largest jewelry district in the U.S. and second largest in the world is located southwest of the Historic Core, where 5,000 businesses generate billions of dollars in revenue.

Development in this area includes the proposed construction of 875 condominium units at 8th St. and Grand Ave. Like the Historic Core, parking is in short supply and the district attracts a high volume of retail sales.

Central City East

The Central City East District is located south of the Toy District and consists primarily of commercial uses, including wholesale buildings and warehouses. The Flower Market, produce, fish and food processing industries as well as import/export businesses employ nearly 20,000 people in this area. Housing in this district consists mainly of the 6,500 single-room occupancy hotel units. This area is also important in providing social services, including alcohol treatment, mental health services, and job training.

Outside of the Project Study Area

Other important downtown development projects outside of the PSA include the recently-opened LA Live, a 4-million square foot complex of retail, restaurants, office, theater, hotel, parking, and residential space adjacent to the Staples Center.

Regional Activity Centers and Destinations

Due to the improved linkages provided by the Regional Connector, LRT will be enhanced throughout the region thereby attracting new ridership on existing lines.

Key regional activity centers that will attract riders to ride seamlessly through the PSA to get destinations that, today, require more than one transfer, include:

- University of Southern California via Metro Expo Line
- Los Angeles Trade Technical College via Metro Blue Line
- Downtown Long Beach via Metro Blue Line

- Downtown Culver City via Metro Expo Line
- Crenshaw District via Metro Expo Line
- Downtown Pasadena via Metro Gold Line
- Old Town Pasadena via Metro Gold Line
- South Pasadena via Metro Gold Line
- Chinatown via Metro Gold Line
- City of Compton via Metro Blue Line
- Highland Park via Metro Gold Line
- Boyle Heights via Metro Gold Line Eastside Extension
- Arts District via Metro Gold Line Eastside Extension
- East Los Angeles Civic Center via Metro Gold Line Eastside Extension
- East Los Angeles College via Metro Gold Line Eastside Extension
- Los Angeles Coliseum via Metro Expo Line
- Los Angeles County Museum of Natural History via Metro Expo Line
- Watts via Metro Blue Line

1.9.2 Local Redevelopment Plans and Transit Improvements

Many of the communities in the PSA are focusing on redevelopment projects to meet increasing residential and commercial demands. Several large commercial centers or mixed-use developments have been identified within the PSA. These centers are typically ideal locations for public transit services due to the large number of patrons and opportunity to alleviate inbound and outbound traffic congestion.

Following are some of the current CRA projects in the PSA:

- 2nd St. Connection – This project, financed mostly by Metro and Surface Transportation Program-Local funds, will complete Upper 2nd St. between Grand Ave. and Olive St. Construction on the connection is underway.
- Bunker Hill Design for Development – This project would amend the 1971 Design for Development (DFD) and increase the maximum floor area ratio in the Bunker Hill Redevelopment Area from 5.0 to 6.0. This would in turn allow 20 percent more square footage than the current DFD. The project is currently in the Environmental Impact Report (EIR) phase.

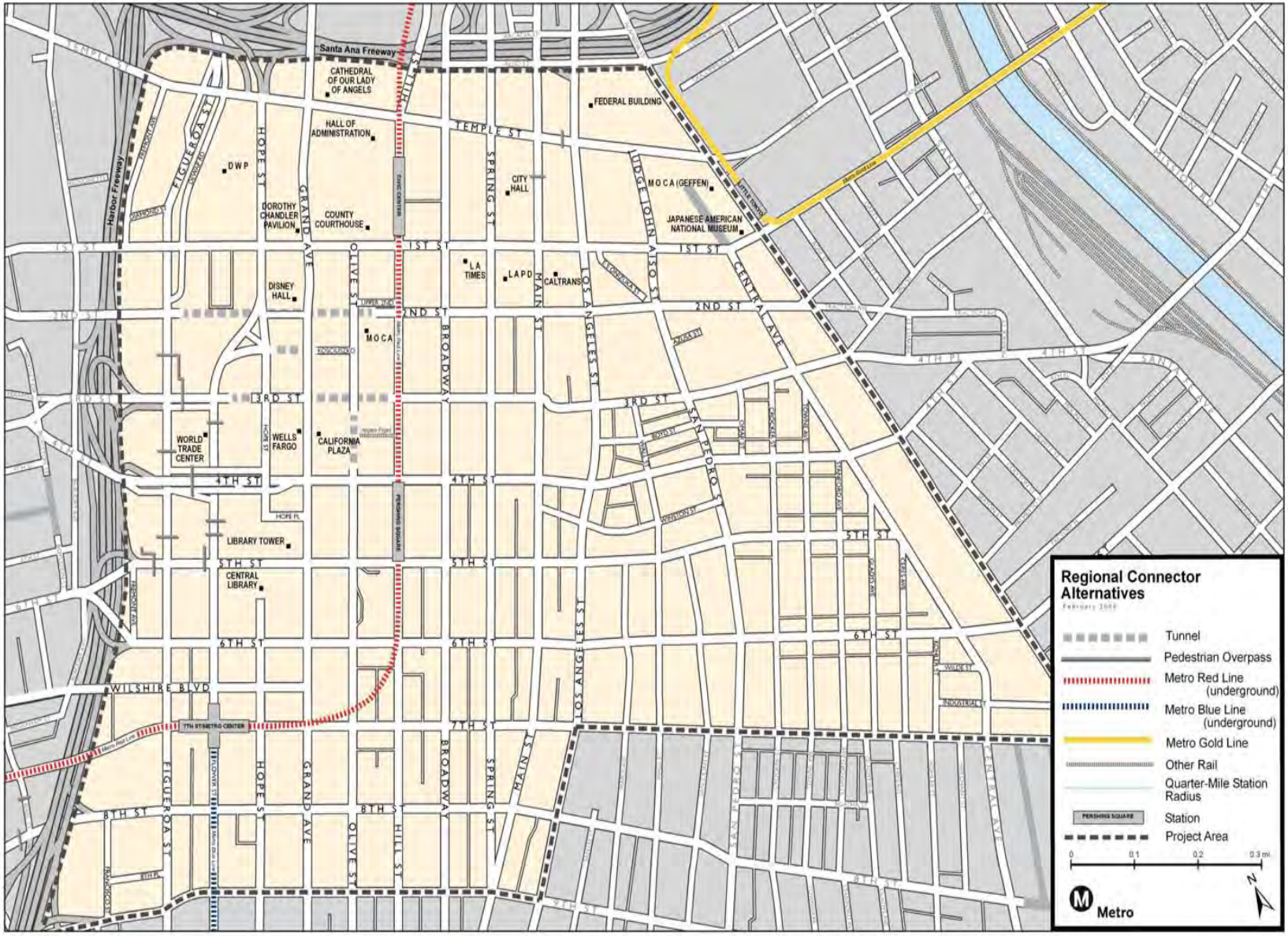


Figure 1-34 Activity Centers within PSA

- Grand Avenue Project – This project consists of a full-scale redesign of Grand Ave. as well as the addition of a 16-acre park in the Civic Center and 3.9 million square feet of retail, hotel, and office space.

- Parcel Y-1 Development – Under this plan, the existing Angels' Knoll Park will be developed into a third California Plaza office tower, potentially with retail and residential space. The project is currently in the DFD and EIR phase.

- Los Angeles Sports and Entertainment District/L.A. Live! – Large portions of this project are open as of this writing, but some are still under development. This project creates a major sports and entertainment destination just south of the Financial District, surrounding the existing Los Angeles Convention Center and Staples Center. Additional auditoriums and theaters, as well as retail and office space, will be added by the end of 2009. Condominium and rental apartment buildings are presently under construction. This redevelopment project is located one block south of the PSA, within one-quarter mile of the Pico Ave. on the Metro Blue and Expo Lines. The Regional Connector LRT alternatives directly connect the Metro Gold Line and Eastside Expansion lines to the complex.

- Park Fifth – An EIR is currently being prepared for a new high-rise residential building on 5th St. between Hill and Olive Streets, proposed as the tallest U.S. residential structure west of Chicago. The project will contain market-rate condominium units, a five-star hotel, and ground floor commercial space.

- 8th & Grand – This is a condominium project with ground floor restaurants and retail located on 8th St. between Grand Ave. and Olive St. The project was approved by the CRA Board and the City Council in 2006.

- Mangrove Site – CRA issued a request for proposals which closed in late 2007 for the parcel adjoining the future Metro Gold Line Little Tokyo/Arts District Station at 1st and Alameda Streets. CRA hopes to pursue a mixed-use project on the site with market rate and affordable residential units, commercial space, and public parking. The site is located east across Alameda St. from the PSA.

- Block 8 Mixed Use – This parcel in Little Tokyo is located between 2nd, 3rd, San Pedro, and Los Angeles Streets. The proposed development will include affordable rental units, market-rate condominium and rental units, commercial space, and open space. The site plan includes a mid-block walkway between San Pedro and Los Angeles Streets and is currently under construction.

- Metropolis Project – Located on the southwest corner of 8th and Francisco Streets, this recently-approved development will add 2.8 million square feet of new condominium, office, hotel, and retail space.

- Little Tokyo Central Avenue Art Park – This project involves redeveloping the closed section of Central Ave. between Temple and 1st Streets into a landscaped community park and underground parking facility linking the existing MOCA, The Japanese American National Museum, and Go For Broke monument.

- The Medallion – This project seeks to replace a surface parking lot with market-rate apartments and commercial space on a site located between Main, Los Angeles, 3rd, and 4th Streets. Construction on Phase 1 of the project has begun, and Phase 2 relies on the demolition of the existing Downtown Women's Center (see next project).

- Downtown Women's Center Relocation/Expansion – This project will remove the existing Downtown Women's Center on San Pedro St. between 4th and 5th Streets in order to make way for The Medallion. The City will renovate its Renaissance Building as the new Women's Center, and will provide an additional 75 permanent housing units and eight day rest beds for homeless women. CRA is currently reviewing development plans for the relocation/expansion project.

- Residential Hotels Rehabilitation Program – Under this plan, CRA will acquire approximately 30 single-room occupancy hotels, lease them to non-profit housing operators, and preserve the units as low-income housing. CRA cites public ownership as a means of cleaning up crime-ridden slum hotel areas within the PSA.

Additionally, CRA is preparing development plans for the Central Industrial District, located in the southeast portion of the PSA. The City does not have any Specific Plan areas within the PSA; however there are three in the downtown area that border the PSA:

- Alameda District (North of the PSA) covers Union Station and the surrounding parcels.

- Los Angeles Sports and Entertainment District (South of the PSA) includes the L.A. Live development, Staples Center, the Convention Center, and surrounding parcels slated for high-density development.

- Central City West (West of the PSA) covers the area immediately west of the 110 freeway.

1.9.3 Air Quality and Environmental Sustainability

The City is one of the most congested metropolitan areas in the nation and has been designated as a federal non-attainment area for air quality. The growing concern over global climate change and poor air quality is a predominant concern for Southern California. The use of fossil fuels for transportation generates large amounts of carbon dioxide (a greenhouse gas) emissions, which continue to disrupt progress toward improved air quality. Vehicle-related emissions account for over one-third of all air pollutants in the County.[5]

[5] SCAG 2006 State of the Region Report Executive Summary

During the 1990s, the County saw a significant increase in transit use. In 2002, SCAG reported that the City ranked 7th in the nation in public transit usage.[6] These changes are due in large part to investments in the regional public transportation system.

Investments in public transportation can contribute to alleviating the air quality challenges faced by the region and mitigating the negative effects suffered by Southern California residents. The Regional Connector will contribute to improved mobility by increasing the speed and convenience of the rail system, thereby providing a more viable alternative to the automobile. As a result, projected degradation of air quality will be reduced (at a minimum) or reversed (at a maximum) through reduced automobile-related greenhouse gas emissions in the region.

1.9.4 Travel Demand and Patterns

Historic growth patterns have resulted in a multi-centered region with multiple transportation corridors converging in the PSA. The transportation network includes 9,000 lane-miles of freeway, more than 42,000 lane-miles of arterials, and several large public transit service providers.[7] Yet growth of the transportation system has not kept pace with population growth and increases in transportation demand. As the population in the region doubled from 1960 to 2000, highway miles increased by less than 30 percent.[8] The congestion caused by insufficient transportation lanes affects both personal travel and goods movement. The majority of the congestion is from travel on the highways and local arterial network regardless of transportation mode. If the current trend persists, travel delays are expected to rise to 5.4 million person hours by 2030, more than double currently experienced delays, which will deeply affect highway productivity.[9] Expanding the public transportation system will provide more choices for commuters and potentially reduce travel demand and patterns on major highway and arterial systems.

The PSA is at the central core of activity for the County. The PSA is ranked very high as a destination zone for people coming from outside of the PSA. For instance, over 50,000 daily trips (approximately 25 percent of external trip destinations) are made for work from the greater Eastside, to Central Los Angeles. The CBD is also one of the top attractors of trips from the Westside. In 2006, of the more than 53,000 daily person trips from the PSA to other parts of Central Los Angeles, 11,000 were on public transit.

Among passengers riding on the Metro Gold Line from Pasadena to Union Station, nearly three-quarters transfer to the Metro Red Line for continued service into other parts of the City. Figures 1-36 and 1-37 illustrate travel patterns to and from the PSA.

[6] SCAG 2002 State of the Region Score Card
[7] SCAG 2004 RTP Chapter 2
[8] SCAG 2004 RTP Executive Summary
[9] SCAG 2004 Draft RTP PEIR

1.9.5 Summary of Public Transit Markets

The PSA is located in the crossroads of the region's transportation system because of historic development and population growth patterns. It contains the highest concentration of jobs in the County. Improving access to and through the PSA is a vital part of a larger strategy for meeting the economic, social, and environmental goals of the region.

Areas with large and growing populations represent a large public transit market because of high travel demands on already-congested public transit, roads, and freeways. As described in Section 1.8.4, the total population in the PSA is projected to increase by almost 25 percent by 2030, increasing the population density. High population densities can increase potential ridership on public transit.

Increasing economic development and employment opportunities in the PSA also increases the size of the public transit market. Employment is expected to increase by about 15 percent by 2030. This will increase demands for public transit from commuters wishing to avoid travel in private vehicles during peak traffic hours on roads and freeways.

Improving public transit connectivity in the PSA offers opportunities to increase ridership through access to regional transit markets. Balanced local land use and transportation policies can reduce auto travel and support more pedestrian-friendly, mixed-use and transit-oriented developments throughout the region.

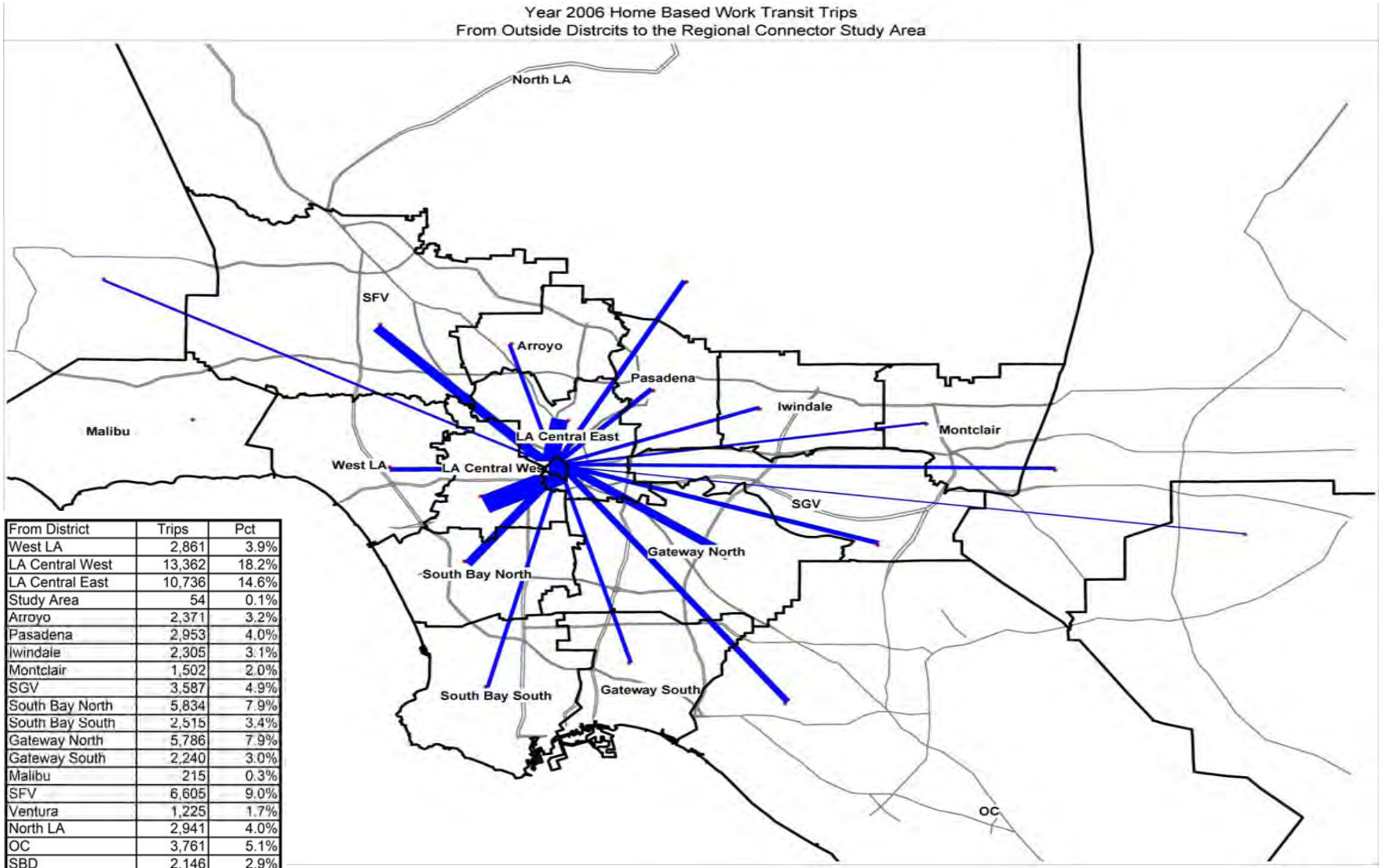
Public transit provides an alternative means of personal mobility, supports increases in demands to alternatives to private transportation, and contributes to improving the quality of life in metropolitan communities.

Transit facilities, services and centers are best when they are customer-friendly, community-oriented and well-designed. A network of transit-based centers and corridors, supported by in-fill development, maximizes the use of existing infrastructure, supports transit ridership, reduces automobile air pollution and preserves natural areas. These improvements will help improve the region's economic vitality, quality of life, and environment.

1.10 Goals and Objectives

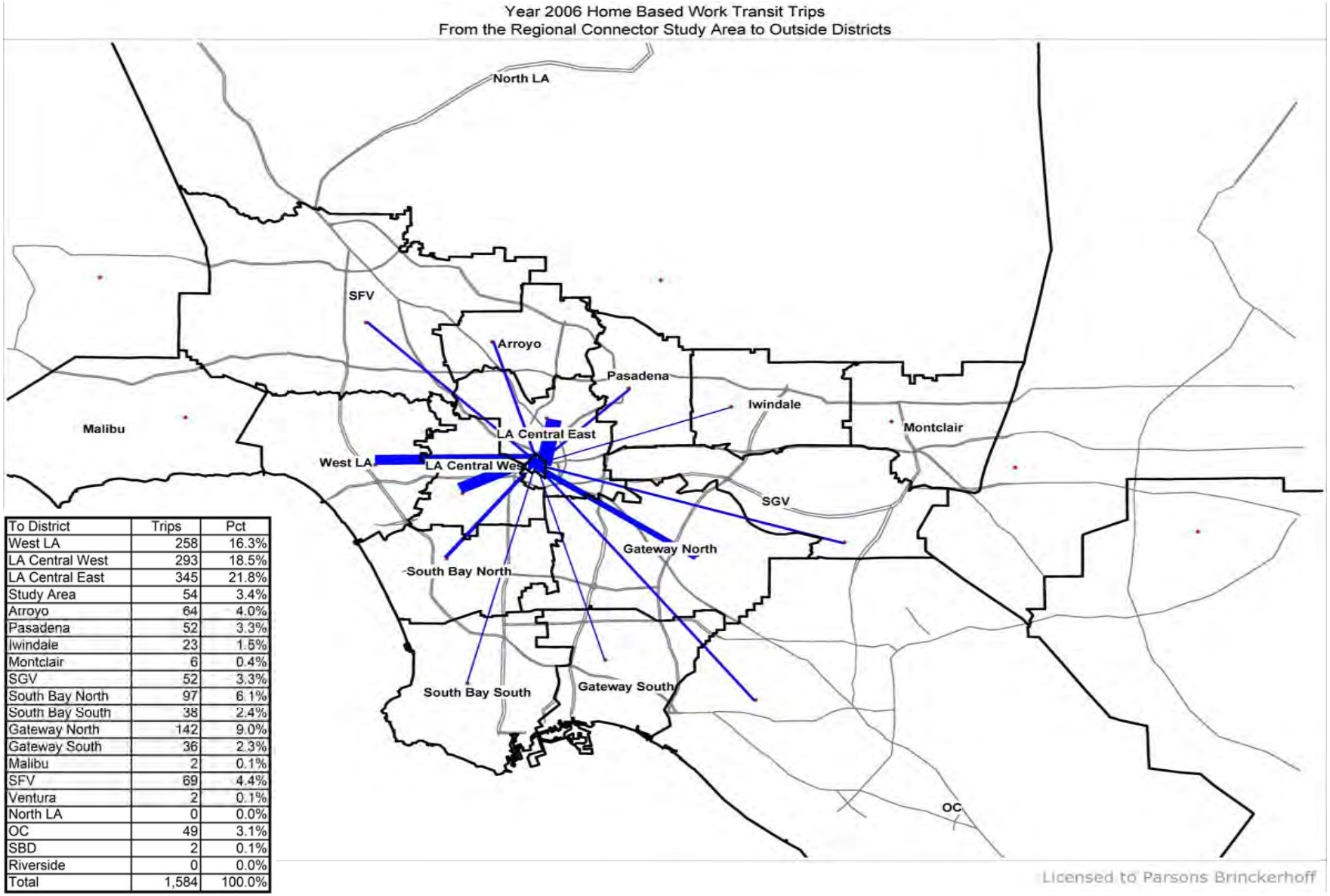
The purpose of the Regional Connector is to improve the connections within the existing Metro Rail system and eliminate the need for existing transfers. The project will also expand Metro Rail coverage within downtown. A set of goals was identified at the outset of the project to identify the potential of each alternative to meet these objectives.

These goals and objectives were generated during the early scoping process to reflect input from public agencies, community groups, and individual stakeholders. They address major considerations regarding:



From District	Trips	Pct
West LA	2,861	3.9%
LA Central West	13,362	18.2%
LA Central East	10,736	14.6%
Study Area	54	0.1%
Arroyo	2,371	3.2%
Pasadena	2,953	4.0%
Iwindale	2,305	3.1%
Montclair	1,502	2.0%
SGV	3,587	4.9%
South Bay North	5,834	7.9%
South Bay South	2,515	3.4%
Gateway North	5,786	7.9%
Gateway South	2,240	3.0%
Malibu	215	0.3%
SFV	6,605	9.0%
Ventura	1,225	1.7%
North LA	2,941	4.0%
OC	3,761	5.1%
SBD	2,146	2.9%
Riverside	517	0.7%
Total	73,516	100.0%

Figure 1-35 Travel Patterns to PSA in 2006



To District	Trips	Pct
West LA	258	16.3%
LA Central West	293	18.5%
LA Central East	345	21.8%
Study Area	54	3.4%
Arroyo	64	4.0%
Pasadena	52	3.3%
Iwindale	23	1.5%
Montclair	6	0.4%
SGV	52	3.3%
South Bay North	97	6.1%
South Bay South	38	2.4%
Gateway North	142	9.0%
Gateway South	36	2.3%
Malibu	2	0.1%
SFV	69	4.4%
Ventura	2	0.1%
North LA	0	0.0%
OC	49	3.1%
SBD	2	0.1%
Riverside	0	0.0%
Total	1,584	100.0%

Figure 1-36 Travel Patterns from PSA in 2006

- maximization of transportation benefits,
- integration of the project with local land use enhancements, and
- building a system that is compatible with the dense downtown environment.

The goals are:

Goal 1 - Improve Mobility and Accessibility both Locally and Regionally

Develop an efficient and sustainable level of mobility within the County to accommodate planned growth and a livable environment.

Goal 2 - Provide a Cost Effective Transportation System

Develop a project that provides sufficient regional benefits to justify the investment.

Goal 3 - Provide a Safe and Secure Alternative Transportation System

Develop a project that is safe for riders, pedestrians and drivers while meeting the region's need for security.

Goal 4 - Achieve a Financially Feasible Project

Develop a project that maximizes opportunity for funding and financing that is financially sustainable.

Goal 5 – Support Public Involvement and Community Preservation

Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Tokyo, the Arts District, Bunker Hill, Civic Center, and the Historic Core.

Goal 6 - Support Efforts to Improve Environmental Quality

Develop a project that minimizes environmental impacts.

Goal 7 – Support Community Planning Efforts

Support the progression of the regional center as an integrated destination and a dynamic and livable area accommodating projected growth in a sustainable manner.

1.11 Role of This Alternatives Analysis

This AA is intended to provide a more in-depth review of the most promising alternatives identified during prior screening processes. The report describes how eight alternatives were identified from an initial 32 conceptual alternatives for screening. The report then summarizes the evaluation leading to the selection of the two most-promising alternatives for final screening and refinement.

To determine which of the two most-promising alternatives would best achieve the project goals, the AA compares each alternative's transportation benefits and impacts, environmental effects, financial feasibility, and level of community support. The report concludes with a comparative summary of each screened alternative's performance under these criteria and recommends a shorter list of preferred alternatives for further study in a subsequent DEIS/DEIR phase.

Section 2 Alternatives Considered

2.1 Evaluation Method

The process used to develop alternatives, screen them, and select a Locally Preferred Alternative (LPA) is shown in Figure 2-1 and described below.

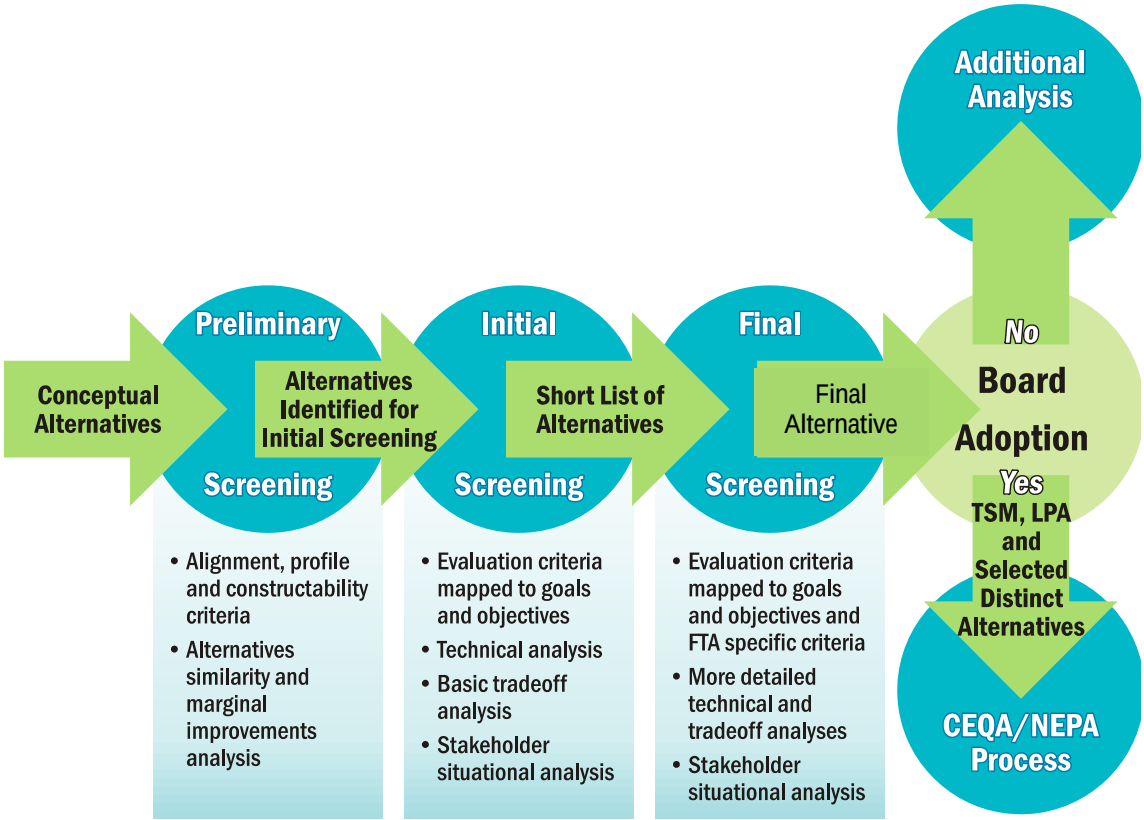


Figure 2-1 Project Process

- Conceptual Alternatives – Alternatives were identified based on previous studies and an evaluation of changed conditions. Alternatives previously studied but no longer viable due to changes in land use, availability of property, and/or efficiency, flexibility, and cost due to construction of new Metro Rail lines were eliminated. There were 36 Conceptual Alternatives identified, the extents of which are shown in Figure 2-2.

Figure 2-2 Regional Connector Potential Corridors

- Preliminary Screening – Based on input received from the Early Scoping process and initial engineering analysis, the initial set of conceptual alternatives was screened based on clear issues related to constructability, right-of-way constraints, impacts of configurations and operational concerns. This preliminary screening resulted in eight Alternatives Identified for Initial Screening. The preliminary screening is documented in the Draft Alternatives Identification Report (January 2008).

- Initial Screening – The eight Alternatives Identified for Initial Screening were evaluated according to the goals, objectives, and evaluation criteria established for the Regional Connector using a multi-criteria comparison method. The Initial Screening resulted in a reduced set of promising alternatives for which details for engineering, environmental and urban design opportunities and issues will be developed. The Initial Screening is documented in the Draft Initial Screening of Alternatives Report (April 2008).

These steps are discussed in more detail below.

2.1.1 Previous Studies

The Regional Connector was originally conceived in 1993 as part of the Metro Blue Line extension to Pasadena. The project was not pursued due to lack of funding availability as well as a plan to use the Metro Red Line as an interim link until the system matured. Since 1993, a few studies were conducted to determine new alternatives considering the changing land uses and expanding Metro Rail system. An overview of these past studies is presented in Section 1.3, Past Studies.

2.1.2 Metro/FTA Scoping

According to the Federal Transit Administration (FTA) New Starts criteria, a scoping period during the AA must be conducted in order to inform the public, organizations, and local, regional, state, and federal agencies on all issues concerning the project, including benefits, costs, and impacts. Early Scoping for the Regional Connector was initiated with the publication of the Early Scoping Notice in the Federal Register on October 31, 2007 and continued for 30 days.

A Public Notice was developed to inform the public of Early Scoping on the project, associated meetings, and other opportunities to provide input concerning the scope of the AA. A copy of the Public Notice, as well as other detailed Scoping Information, can be found in the Project Early Scoping Report, March 2008.

2.1.3 Screening Criteria

The Alternatives Identified for Screening were selected based on their feasibility given the street configuration and dense development in downtown. Several light rail alignments were adapted from previous studies and reports, and additional ones were added and synthesized from combinations of others. Particular thought was given to routes providing better coverage of major activity centers within the PSA between 7th St./Metro Center Station and the Metro Gold Line Eastside Extension.

Some of the formerly proposed routes were not considered because they made use of previously vacant parcels where new dense developments have since been constructed. Some of these parcels included the new location of City Police Department (LAPD) Headquarters, the Grand Avenue Project, and Caltrans Headquarters. Alignments which required a significant number of acquisitions and/or relocation were also removed from consideration. Some smaller, narrow street alignments that were previously surrounded by industrial uses now have adjacent dense residential developments nearby; these noise-sensitive land uses would be incompatible with light rail in a narrow right-of-way.

Some previous studies had identified alternatives that included a significant amount of aerial configuration, as seen in Figure 2-3, with the purpose of reducing impacts to vehicular traffic and allowing for easier grade changes. However, comments received during the Early Scoping period showed little public support for aerial configurations due to aesthetics and sensitive land uses. Also, it was determined that traffic improvements would not be fully achieved as lane reductions would still be necessary for aerial beam supports.

Figure 2-3 Aerial Bridge

Other alignments which were screened and removed from consideration included those which considered a new extension from the recently constructed Metro Gold Line LRT bridge over US-101, as seen in Figures 2-4 and 2-5. Those proposed alignments would require a major alteration and, in some instances, complete demolition and reconstruction. These options would not be financially feasible for the project.

Figure 2-4 LRT Bridge over US-101

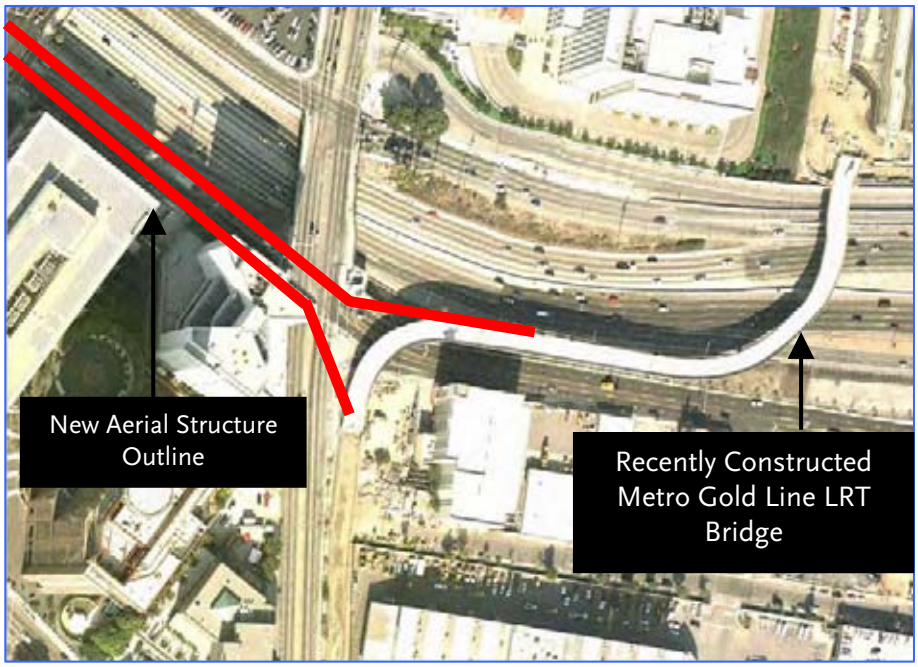


Figure 2-5 LRT Bridge Extension

Finally, a number of previous studies included the possible use of the 3rd St. tunnel for one segment. After further evaluation to the current conditions of the tunnel, it was determined that the tunnel could not be used in either a single or dual-track configuration. The tunnel, as seen in Figure 2-6, is located directly below residential housing. Modifications could result in increased noise and vibration for residents, and constructability difficulties due to the narrow width.

Figure 2-6 3rd St. Tunnel

2.1.4 Screening Criteria Development

Beginning with the goals discussed in Section 1, specific objectives were developed for the Regional Connector. Initial and Final Screening Criteria for each objective were developed during Early Scoping with input from the community and public agencies. The Initial and Final Screening Criteria were developed in the form of specific and detailed performance measures. Table 2-1 summarizes the Regional Connector goals, objectives, Initial Screening Criteria, and Final Screening Criteria.

2.2 Alternatives Identified for Initial Screening

Following completion of Preliminary Screening, eight Alternatives for Initial Screening were identified. A corridor description is provided for each alternative, including alignment configurations and station locations, in Table 2-2. Maps and engineering plans for each alternative are shown in Figure 2-7 to 2-17. A summary of known issues and opportunities is presented in Table 2-3.

2.3 Result of Initial Screening

Each of the alternatives was evaluated in detail with regard to the Initial Screening Criteria. Table 2-4 through Table 2-10 summarizes the results of Initial Screening for Goals 1 though 7, respectively, of the project.

2.4 Short List of Alternatives

Following Initial Screening, two of the most promising alternatives were selected for the Short List of Alternatives: the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. Final Screening will include these alternatives, along with a No Build Alternative and Transportation System Management (TSM) Alternative, which are described below.

2.4.1 No Build Alternative

The No Build Alternative includes all existing transportation facilities as well as all committed transportation projects outlined in the Metro Long-Range Transportation Plan (2001) and SCAG Regional Transportation Plan (2004). This includes the Metro Gold Line Eastside Extension scheduled to open by the end of 2009, the first and second phases of the Metro Expo Line scheduled to open in 2010, and the second phase of the Metro Rapid Bus expansion plan scheduled to be completed in 2008.

These transportation options were discussed in detail in Section 1.5 Transportation Facilities and Services and Section 1.6 Performance of the Travel System. Figure 2-18 shows the existing public transportation system in the PSA that serves as the No Build Alternative. Appendix B contains a list of transit lines serving the PSA and Appendix C shows the lines that closely parallel the general route of the Regional Connector.

Table 2-1 Regional Connector Goals, Objectives, and Performance Measures

Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
1 Support Community Planning Efforts *Support the progression of the regional center area as an integrated destination and a dynamic and livable area accommodating projected growth in a sustainable manner*	▸ Support land use policies and Community Plans ▸ Support and coordinate with development and redevelopment efforts ▸ Support the City's effort to improve urban design and the pedestrian environment by contributing to a healthy environment ▸ Support efforts to improve safety and security for downtown residents, employees and visitors ▸ Support transit dependent communities	▸ Population, *Population Density, Households, Household Density for year 2030 ¼ mile of alignment* ▸ Transit *Oriented Design supportive plans and policies in place (Score 1 -worst to 5 -best)* ▸ Number *of jobs, employment density for year 2030 within a ¼ mile of alignment* ▸ Number *of direct connections to key activity centers within ¼ mile of alignment (Score 1 -worst to 5 -best)* ▸ Number *of opportunities for redevelopment within ¼ mile of alignment (underdeveloped or underutilized properties along alternative alignment)*	▸ *Number of planned development projects in the area over the next 10 years, including residential/office space/commercial units within a 1/4 mile of stations* ▸ *Number of connections with sidewalks that support the City's Downtown Street Standards*
2 Support Public Involvement and Community Preservation *Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Tokyo/Arts District, Bunker Hill, Civic*	▸ Balance the benefits and impacts to low income and minority communities ▸ Enable workers and visitors to gain access to the regional center to increase its economic vitality and benefit from its economic opportunity	▸ *Evaluation of potential disproportionate effects: Environmental justice effects will be evaluated per CEQA/NEPA requirements (Score 1 to 5)* ▸ *Initial areas identified for potential acquisitions for stations and alignment (does not include actually in construction) within ¼ mile of alignment* ▸ *Evaluation of potential disproportionate effects: Number of low* income *HH within¼ mile of proposed alignment* ▸ *Number of residents by ethnicity within ¼ mile of alignment (US Census)* ▸ *Urban fit potential for alignment and for stations, including physical scale, visual fit, and cultural preservation (Score 1 to 5)* ▸ *Percentage of service grade separated* ▸ *Community Acceptance (High, Medium, Low)*	▸ *Number of potential acquisitions* ▸ *Percentage of service grade separated* ▸ *Evaluation of potential disproportionate effects and risk to environmental justice populations related to construction activities (Score 1 to 5)* ▸ *Urban fit potential, including pedestrian accessibility and urban design enhancement opportunities (Score 1 to 5)*

Table 2-1 Regional Connector Goals, Objectives, and Performance Measures

Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
Improve Mobility and Accessibility both Locally and Regionally 3 *Develop an efficient and sustainable level of mobility within LA County to accommodate planned growth and a livable environment*	▸ Improve the connectivity of the regional transit service and provide a more attractive travel alternative for residents, workers and visitors in the region ▸ Facilitate sustainable regional development ▸ Increase ridership of the Metro transit system and reduce single occupancy trips ▸ Maintain or enhance transit services to the transit dependent ▸ Improve travel time for transit users system-wide ▸ Improve person throughput ▸ Reduce growth of congestion in corridor	▸ *Increase in daily transit boardings (amount of transit users increased compared to No Build)* ▸ *New daily transit trips compared to No Build and Transportation System Management (TSM) alternatives* ▸ *Traffic impacts (Number of intersections with E or F Level of Service)* ▸ *Reduction in number of transfers system-wide by operational plan of alignment (daily reductions at US & 7th St./Metro)* ▸ *Total number of lanes reduced (cumulative for all streets)* ▸ *Number of potentially impacted intersections* ▸ *Peak period travel time through Regional Connector Alignment (including 5 min for each transfer)* ▸ *Number of left turn pockets affected* ▸ *Number of parking spaces potentially affected* ▸ *Number of driveways affected* ▸ *Daily hours of transportation user benefits (Compared to No Build)*	▸ *Hours of transportation user benefits* ▸ *Congestion relief (Reduction in highway travel demand in the corridor)* ▸ *Comparison of highway, bus, and fixed guideway peak period travel times between major travel pairs (Run times, head ways, average speed, station spacing)* ▸ *Peak period travel time (door to door)* ▸ *Travel time savings (Union Station to 7th/Flower)* ▸ *Reduction in Vehicle Miles Traveled (VMT) (VMT compared to No Build)* ▸ *Assessment of expandability (Score 1 to 5)*

Table 2-1 Regional Connector Goals, Objectives, and Performance Measures

Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
4 Support Efforts to Improve Environmental Quality *Minimize adverse environmental impacts*	▸ Minimize adverse environmental impacts ▸ Implement mitigation measures to reduce environmental effects to acceptable levels ▸ Reduce emissions and improve air quality	▸ *Noise (Number of curves for LRT alignment)* ▸ *Potential visual impacts to notable architectural resources within ¼ mile of alignment (Score 1 to 5)* ▸ *Number of Potential Sensitive Receptors within ¼ mile of alignment (Score 1 to 5)* ▸ *Potential impacts to historically significant locations within ¼ mile alignment (Score 1 to 5)* ▸ *Geologic and geotechnical issues along alignment (Score 1 to 5)*	▸ *Expected level of impacts after mitigation to biological, social, and physical resources will be evaluated per CEQA/NEPA requirements (Score 1 to 5)* ▸ *Reductions in PM10, NOx, and SOx emissions* ▸ *Reduction in carbon footprint for average user*
5 Provide a Cost Effective Alternative Transportation System *Develop a system that serves as an alternative to travel economically*	▸ Increase ridership on the Metro system ▸ Minimize cost per passenger ▸ Maximize travel time savings	▸ *Rough order of magnitude annual O&M (2008$) costs per alignment (millions)* ▸ *User cost - Cost effectiveness compared to No Build ($/hour of transit user benefit)*	▸ *Annualized cost per hour of transit system user benefit compared to No Build and Transportation System Management (TSM) alternatives* ▸ *Annual O&M costs*
6 Achieve a Financially Feasible Project *Develop a project that maximizes opportunities for funding and financing and that is financially sustainable*	▸ Opportunities for private/public funding ▸ Opportunities for Federal and outside funding	▸ *ROM Capital costs — total and per mile per alignment (2008$) (millions)* ▸ *Evaluation of availability and eligibility of capital funds at federal/state/local levels to construct, operate and maintain (Score 1 to 5)*	▸ *Capital cost estimate disaggregated by right of way (ROW), guideway, stations, yards, and vehicles on a cost per mile basis*

Table 2-1 Regional Connector Goals, Objectives, and Performance Measures

Goal	Objectives	Initial Screening Criteria (Performance Measures)	Final Screening Criteria (Performance Measures)
7 Provide a Safe and Secure Alternative Transportation System *Develop a project that is safe for riders, pedestrians, and drivers while meeting the regions needs for security*	▸ Secure entire alignment, stations, track and other facilities ▸ Develop direct and indirect safety measures that exceed safety precautions typical of the Metro system ▸ Develop a system that balances the need for accessibility and mobility with security ▸ Develop a system that uses accessibility and mobility as measures for safety and security	▸ *Safety – determined to be able to provide measures typical of requirements per ADA, per typical CPUC requirements, fire life safety guidelines, and per Metro Design Guidelines for access to and from stations (amount grade separated) (Score 1 to 5)* ▸ *Number of emergency facilities located within ¼ mile of the alignment, i.e., fire stations, police stations, hospitals.* ▸ *Number of public events within ¼ mile of alignment*	▸ *Number of crossing with high pedestrian activities on a daily basis* ▸ *Number of events along the alignment* ▸ *Number of potential issues related to accessibility and line of sight for pedestrians and vehicle drivers (Score 1 to 5)*

Table 2-2 Alternatives Identified for Initial Screening Stations and Configurations				
Alternative	Mode	Configuration	Stations	Comments
1a	LRT	Underground / At-Grade	2 : One underground station located on Flower St. between 5th St. & 6th St. One at-grade station located on 2nd St. between Spring St. & Main St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 4th St., just below 3rd St. At-Grade Segments: Remaining alignment including under 2nd St. tunnel
1b	LRT	Underground / At-Grade	2: One at-grade station located on Flower St. between 4th St. & 3rd St. One at-grade station located on 2nd St. between Spring St. & Main St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 5th St., just below 4th St. At-Grade Segments: Remaining alignment including under 2nd St. tunnel
2	LRT	Underground / At-Grade / Aerial	3: One underground station located on Flower St. between 5th St. & 6th St. One aerial station located on Dewap Rd. & Temple St. One at-grade station located on Temple St. between Los Angeles St. & Judge John Aiso	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 4th St. , just below 3rd St. At-Grade Segments: 3rd St. and Figueroa St. and Temple St. Aerial Segments: Dewap Rd. headed north to Temple St.
3a	LRT	Underground / At-Grade	3: One underground station located on Flower St. between 5th St. & 4th St. One underground station located under Grand Ave Development One at-grade split station located adjacent to City Hall parcel, between Main St. & Los Angeles St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 4th St., just below 3rd St. and partial underground before 'punch' through 2nd St. tunnel. At-Grade Segments: Remaining alignment including under 2nd St. tunnel
3b	LRT	Underground / At-Grade	3: One at-grade station located on Flower St. between 3rd St. & 4th St. One underground station located under Grand Ave Development One at-grade split station located adjacent to City Hall parcel, between Main St. & Los Angeles St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 5th St., just below 4th St. and partial underground before 'punch' through 2nd St. tunnel. At-Grade Segments: Remaining alignment including under 2nd St. tunnel
4a	LRT	Underground / At-Grade	3: One at-grade station located on Flower St. between 3rd St. & 4th St. One underground station located under Grand Ave Development One at-grade station located on 2nd St. between Spring St. & Main St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 5th St., just below 4th St. and partial underground before 'punch' through 2nd St. tunnel. At-Grade Segments: Remaining alignment including under 2nd St. tunnel
4b	LRT	Underground / At-Grade	3: One underground station located between 4th St. & 5th St. One underground station located under Grand Ave Development One at-grade station located on 2nd St. between Spring St. & Main St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 4th St., just below 3rd St. and partial underground before 'punch' through 2nd St. tunnel. At-Grade Segments: Remaining alignment including under 2nd St. tunnel

Table 2-2 Alternatives Identified for Initial Screening Stations and Configurations				
Alternative	Mode	Configuration	Stations	Comments
5	LRT	Underground / At-Grade	3: One underground station located on Flower St. between 4th St. & 5th St. One underground station located under Grand Ave Development One underground station located on 2nd St. between Spring St. & Main St.	Underground Segments: Flower St. headed north from 7th St./Metro Center, under 2nd St. tunnel, until the vicinity of Central Ave. At-Grade Segments: Segment crossing Office Depot parcel
6	LRT	Underground / At-Grade	3: One underground station located at intersection of Flower St. & 5th St. One underground station located under Grand Ave Development One underground station located on 2nd St. between Los Angeles St. & San Pedro St.	Underground Segments: Entire alignment
7	LRT	Underground / At-Grade	3: One underground station located on Flower St. between 5th St. & 6th St. One underground station located under Grand Ave Development One at-grade station located on Los Angeles St. between Temple St. & 1st St.	Underground Segments: Flower St. headed north from 7th St./Metro Center until north of 4th St., just below 3rd St. and partial underground before 'punch' through 2nd St. tunnel. At-Grade Segments: Remaining alignment including 2nd St. tunnel
8	LRT	Underground / At-Grade	3: One underground station located on Flower St. between 4th St. & 5th St. One underground station located under Grande Ave Development One underground station located on Office Depot parcel	Underground Segments: Entire alignment

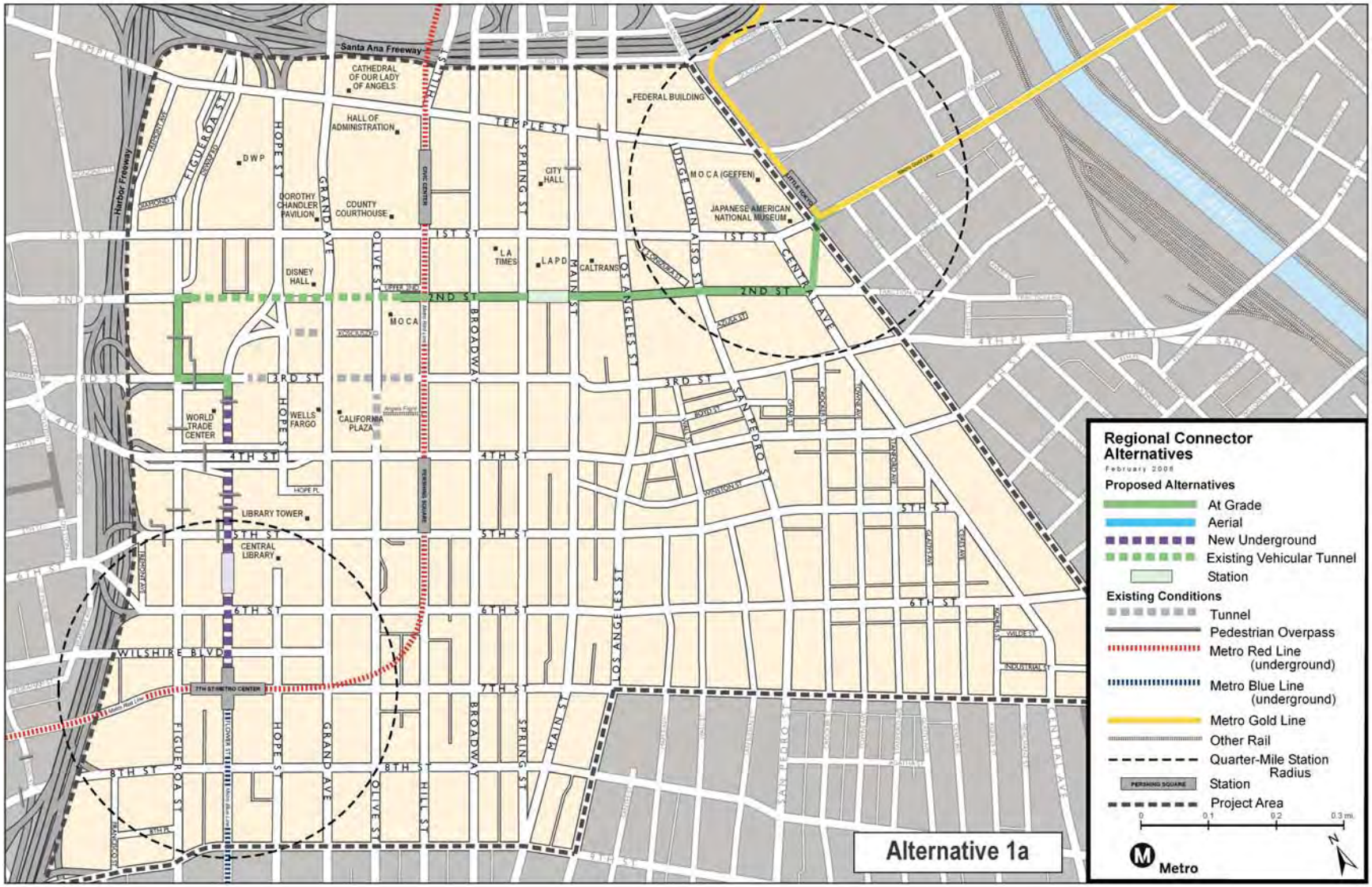


Figure 2-7 Alternative 1a

Figure 2-8 Alternative 1b

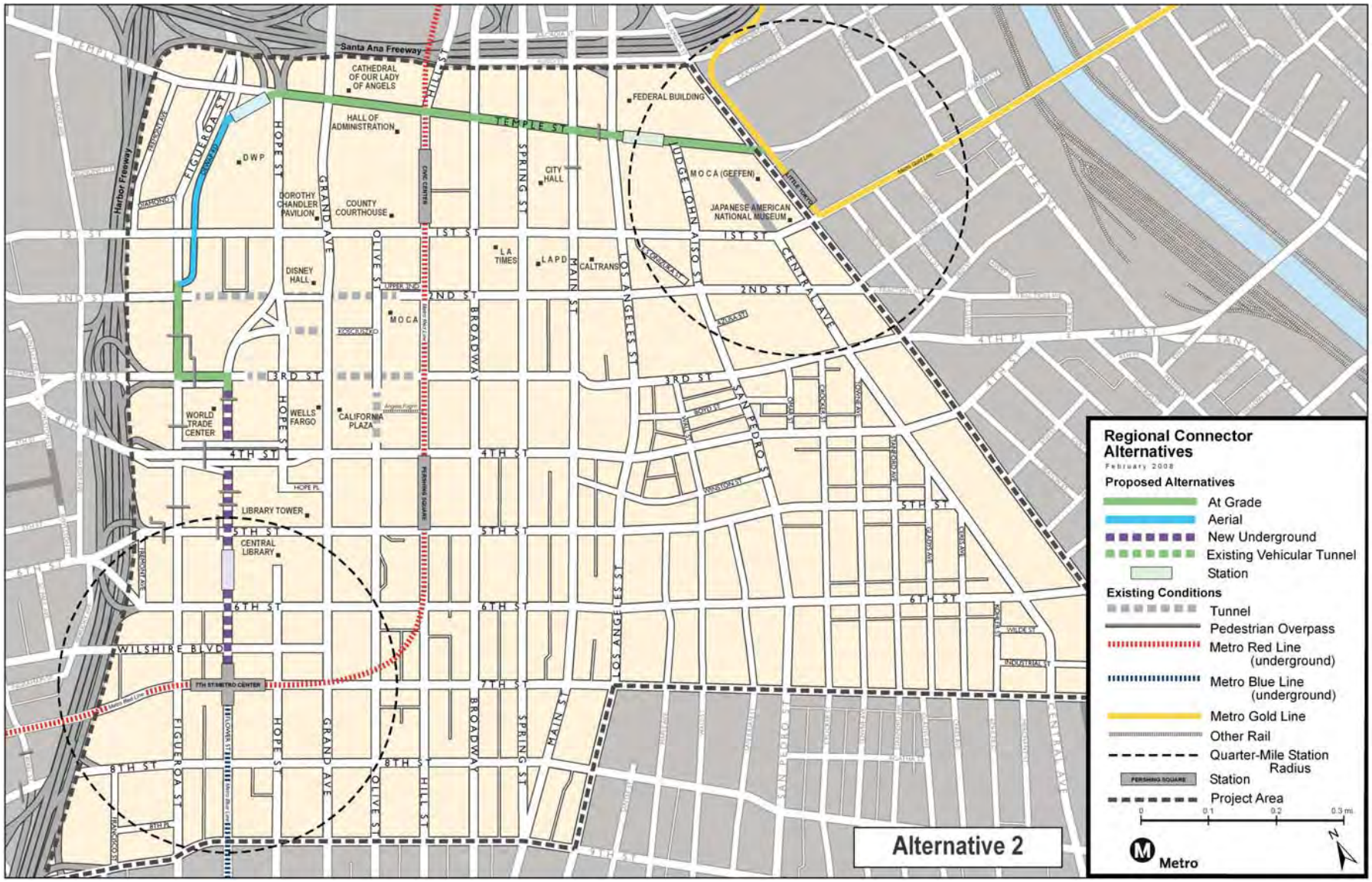


Figure 2-9 Alternative 2

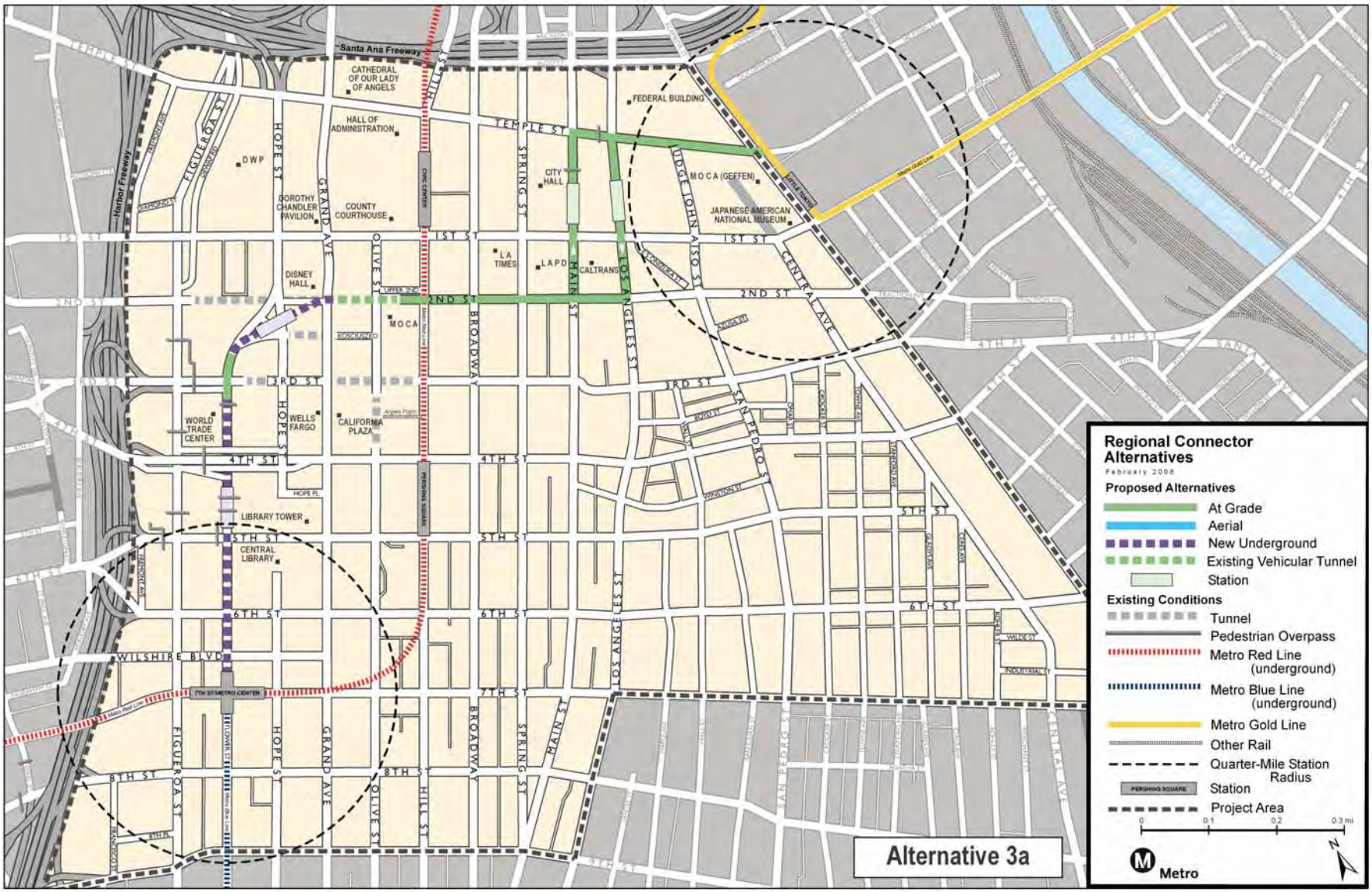


Figure 2-10 Alternative 3a

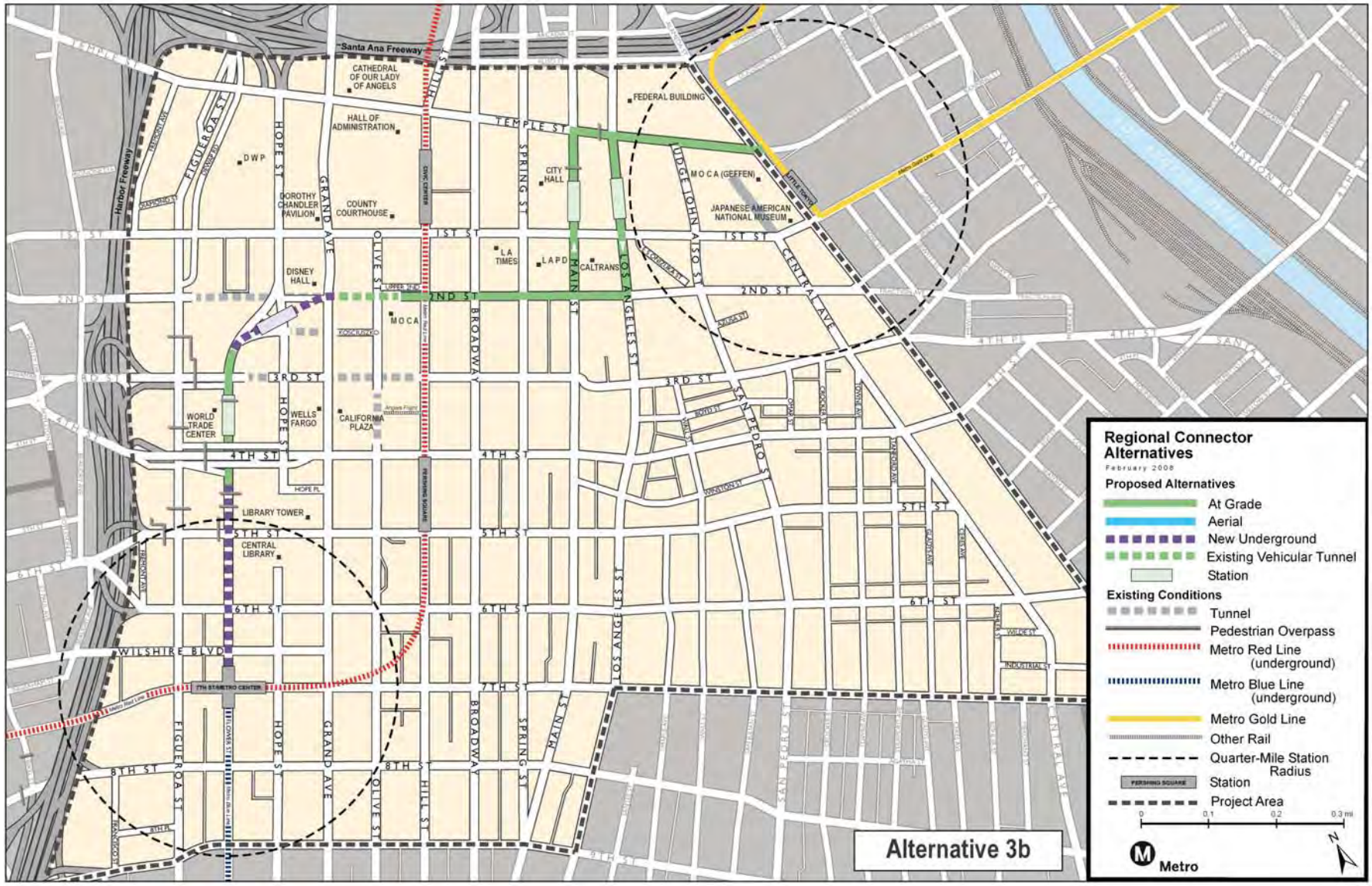


Figure 2-11 Alternative 3b

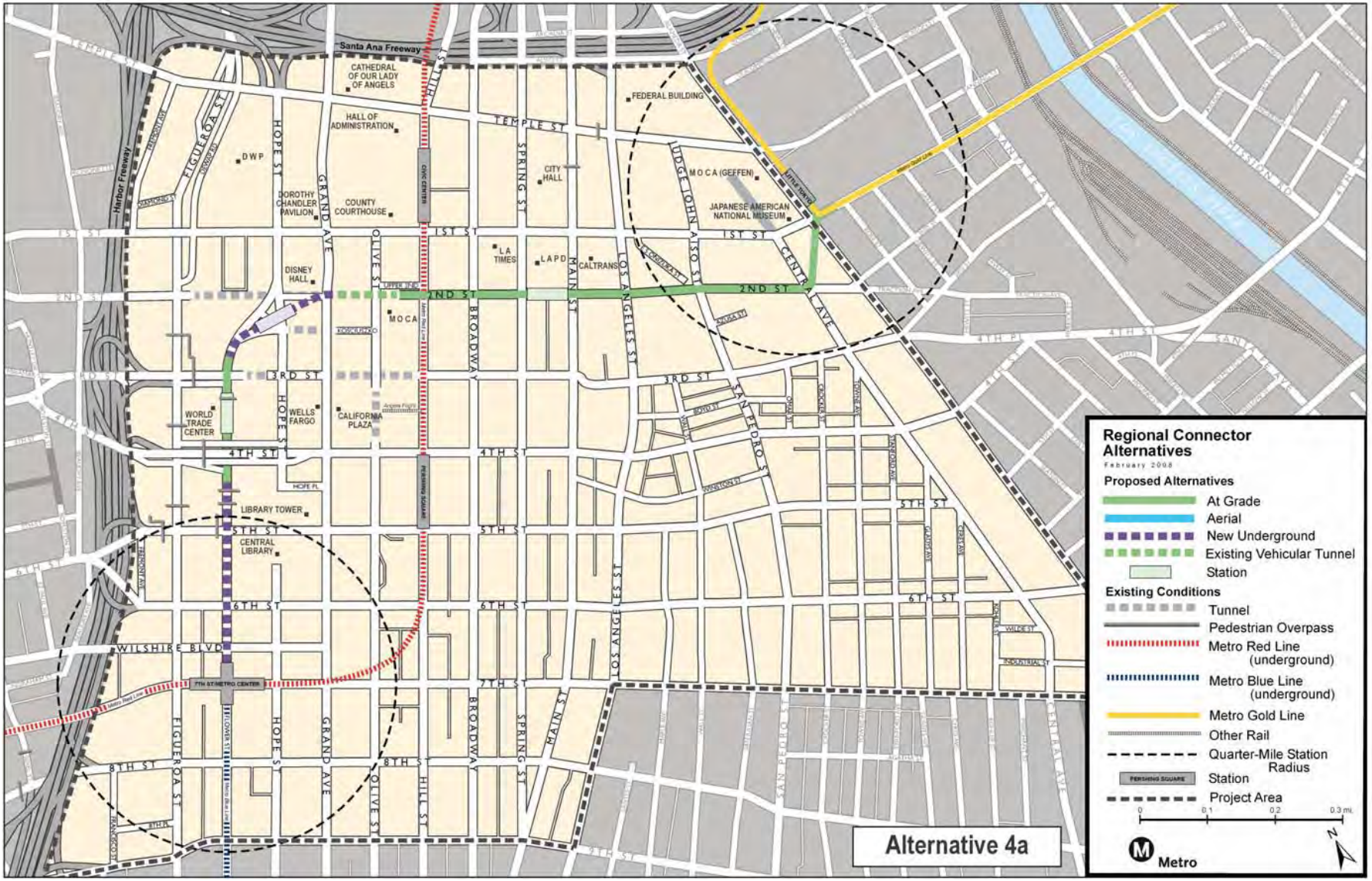


Figure 2-12 Alternative 4a

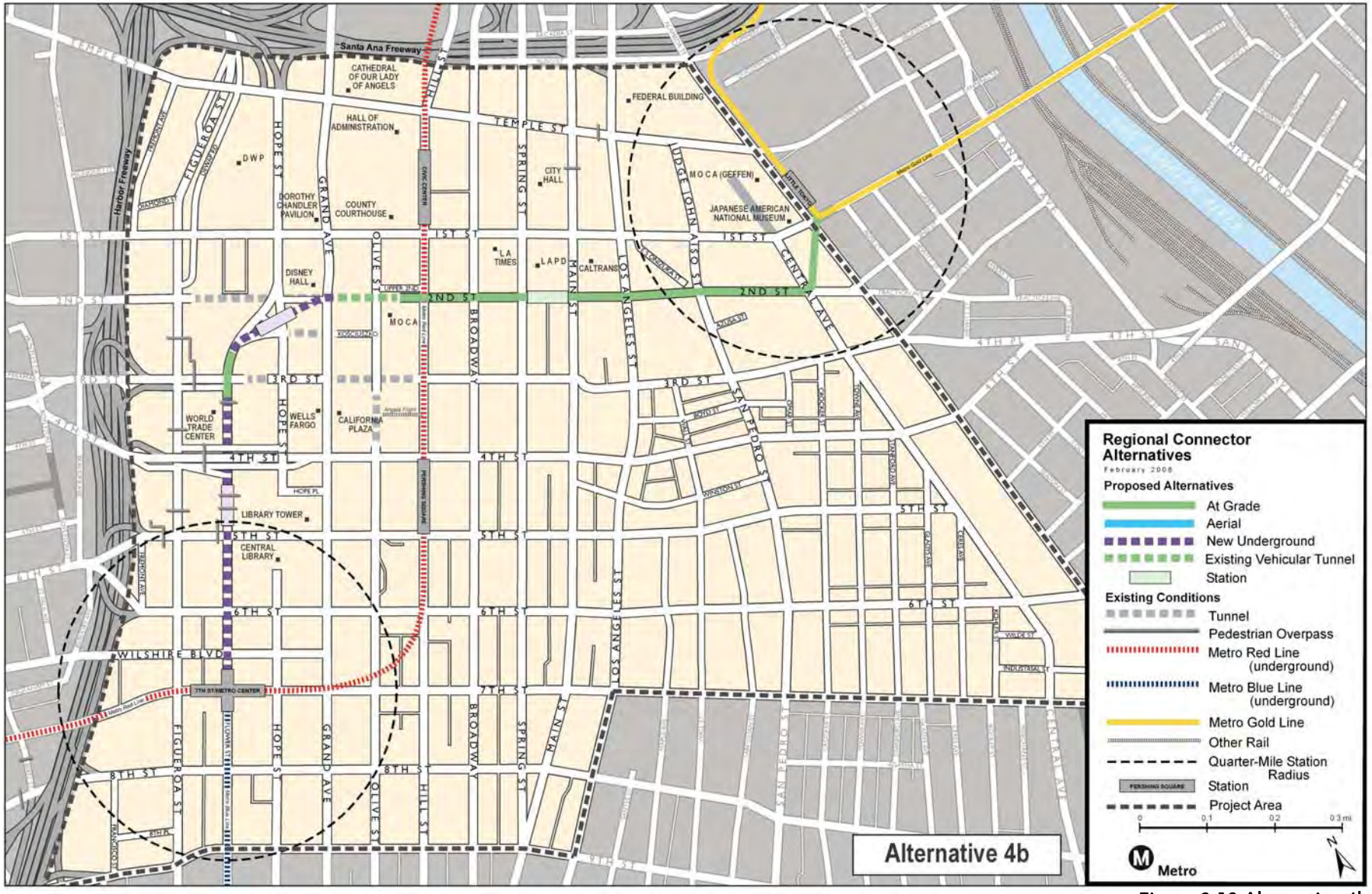


Figure 2-13 Alternative 4b

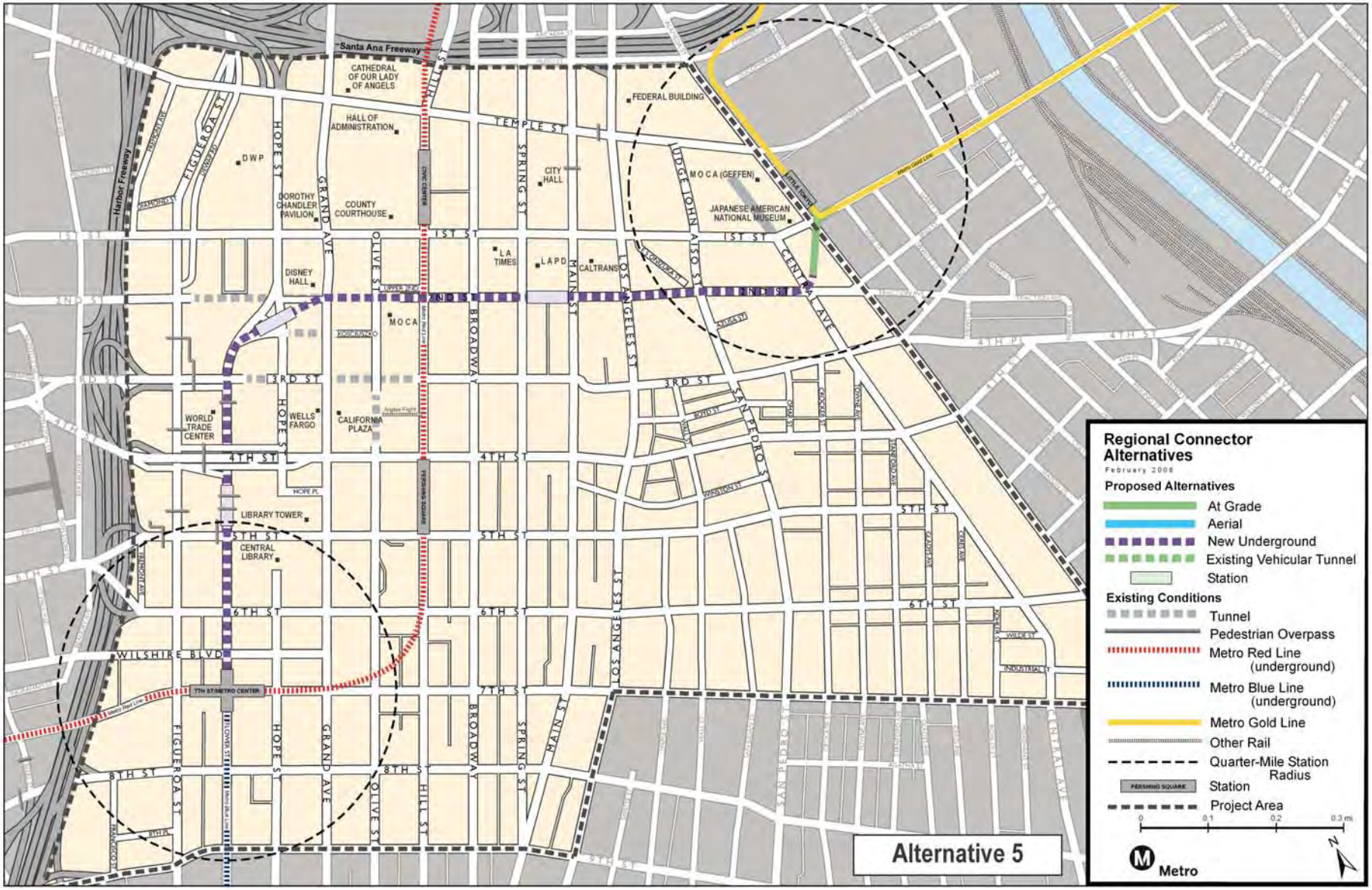


Figure 2-14 Alternative 5

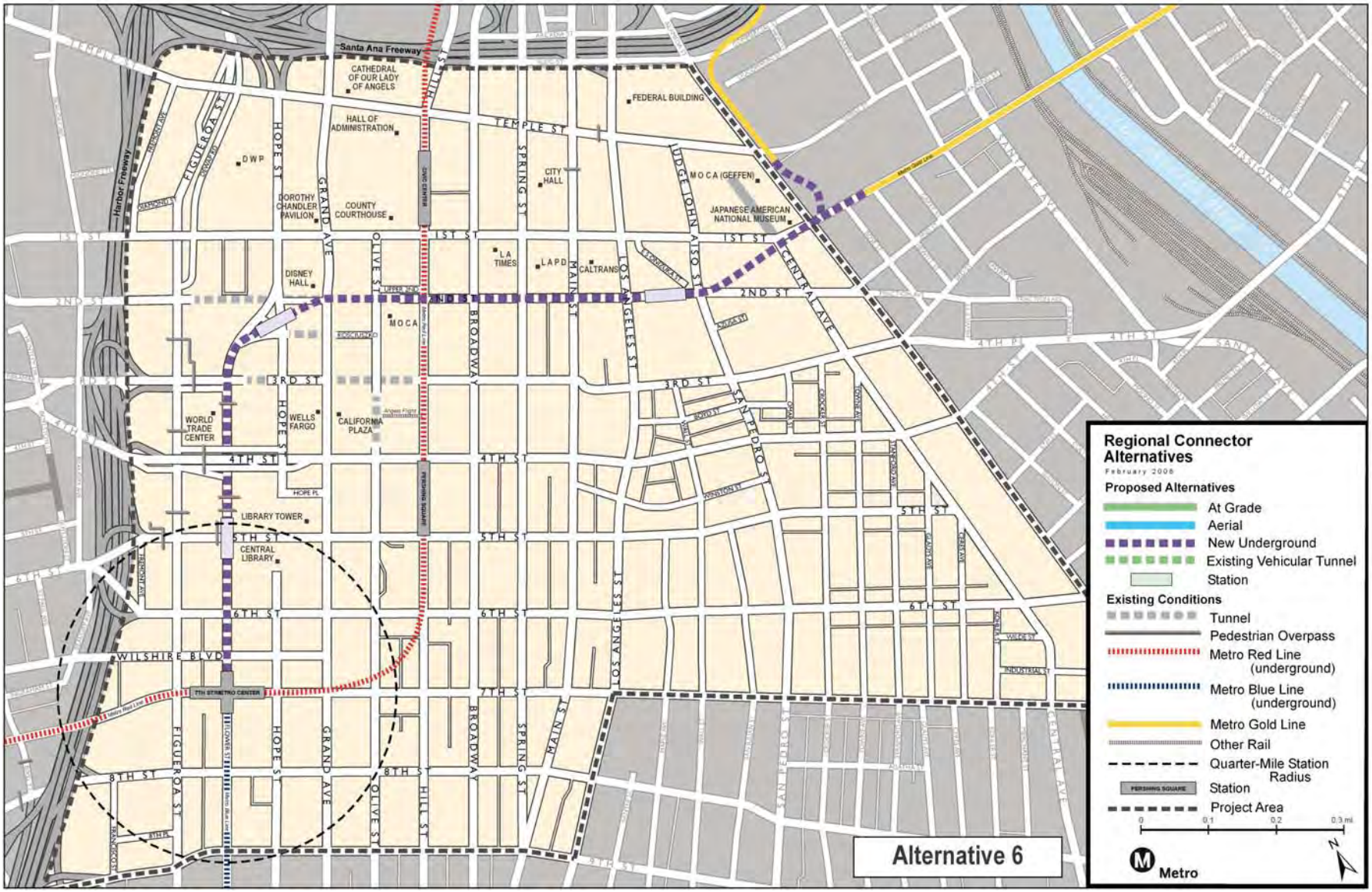


Figure 2-15 Alternative 6

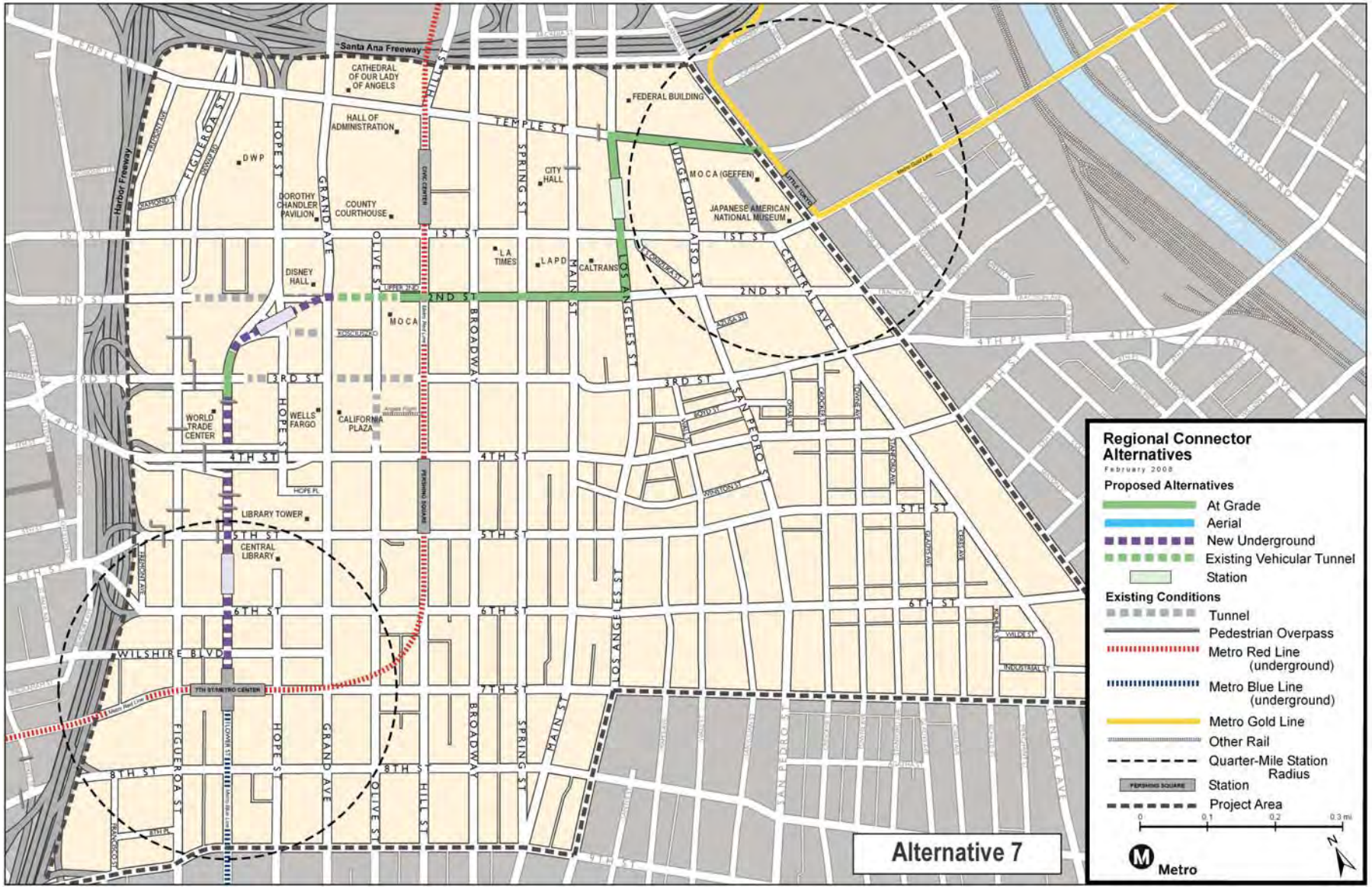


Figure 2-16 Alternative 7

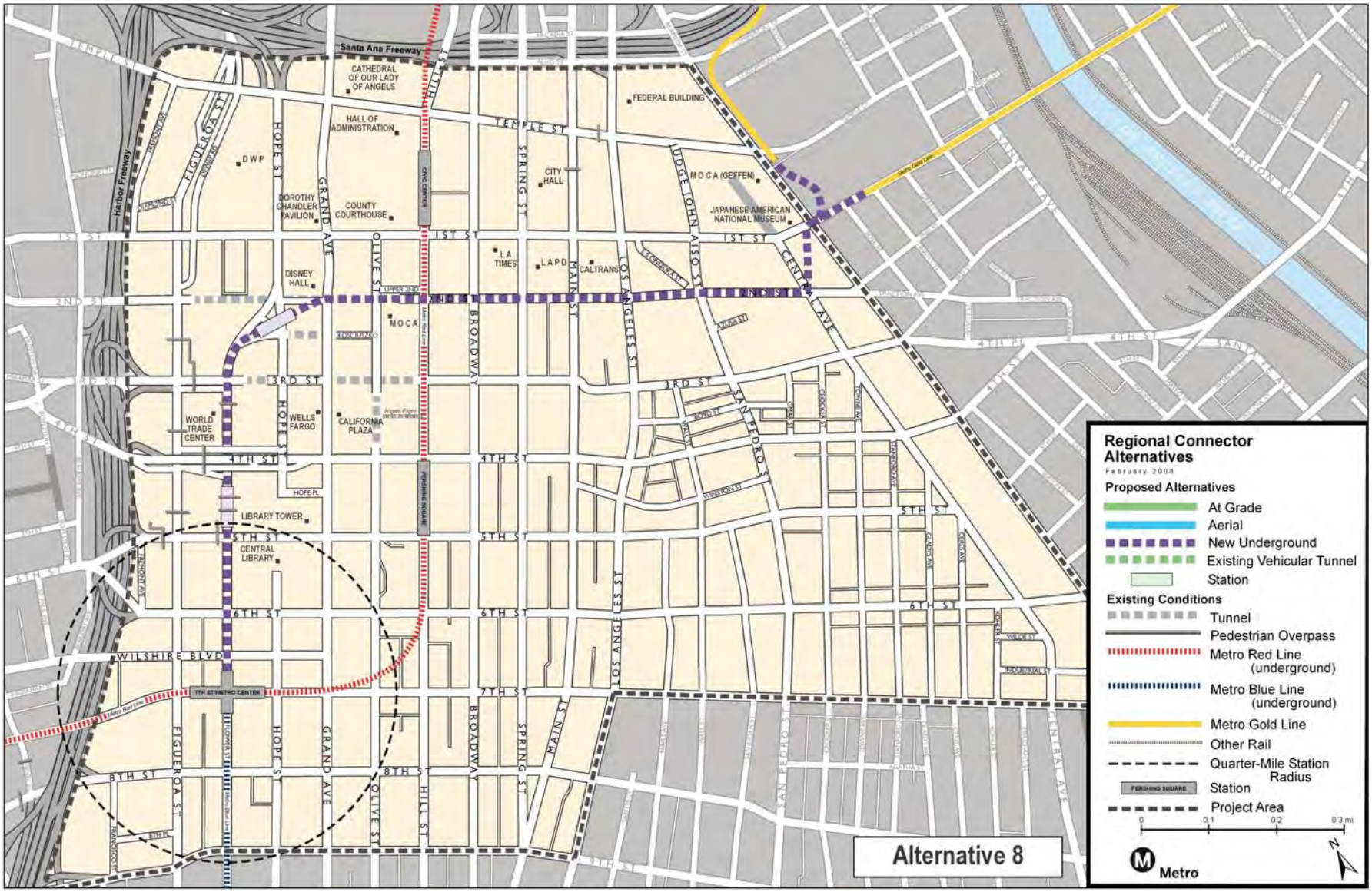


Figure 2-17 Alternative 8

Table 2-3 Constraints and Opportunities

General Station Location	Alignment	Constraints/Issues	Opportunities
2nd St. between Main St. and Spring St.	1a, 1b, 4a, 4b	*Narrow ROW on 2nd St *LAPD Headquarters currently under construction may cause traffic/emergency issues *Pedestrian safety outside high volume location *Station set back from street onto LAPD property	*Newly revitalized 2nd St. restaurants/bars/art spaces would be easily accessible *Station would be located in central location to LA Times, LAPD, Caltrans and only 1 block from City Hall and Civic Center *Modern/architectually significant design can be incorporated into LAPD Headquarters *Station will serve adjacent Little Tokyo community and Block 8 residential housing
Flower St. between 5th St and 6th St.	1a, 2, 7	*Station must be located considerably below Arco Plaza underground shopping center- geotechnical/soil issues *Arco Plaza underground shopping center - physical as well as noise, vibration	*Opportunity to incorporate station into Arco Plaza shopping center *Opportunity to incorporate station into Central Library *Central location to financial/business core
Flower St. between 3rd St and 4th St.	1b, 3b, 4a	*Station is located in partially isolated area *Station is located underneath pedestrian bridge - contruction issues *Station may cause security issues at World Trade Center	*Station is located adjacent to World Trade Center *Station is located within walking distance of business as well as residential properties
Temple St. between Los Angeles St. and Judge John Aiso St.	2	*Station is located adjacent to federal buildings as well as new metropolitan detention center which may cause security issues *Transient activity at station would need constant vigilance	*Station is adjacent to Civic Center *Station is located next to arts' centers such as MOCA's Geffen, The Japanese American Museum, and the future Children's Art Park *Station design may tie into the adjacent arts institutions *Opportunities to revitalize the LA Mall
Dewapp St. between Figueroa St. and Hope St.	2	*Structural issues on elevated Dewapp St *DWP property availability *Pedestrian safety at station and Hope St. due to 101 fwy on/off ramps	*Station serves city offices such as DWP, Health Services Administration, and the Los Angeles building *Station is located adjacent to Grand Ave Project and arts' centers such as Dorothy Chandler and Disney Hall *Station is one block from Our Lady of the Angels Cathedral
Flower St. between 4th St. and 5th St.	9a, 4b, 5, 8	*Station located under Bonaventure Hotel - noise/vibration issues	*Station is located in central location to financial core and LA Library *Central location and popular stop among tourists and visitors to downtown Los Angeles
Grand Avenue Development	3a, 3b, 4a, 4b, 5, 6, 7, 8	*Adverse effects to 2nd St. tunnel structure *Incorporation of station into residential housing above *Incorporation of station adjacent to Grand Ave Project underground parking/storage/facilities *Location of entrance/exit portal on street level	*Incorporation of station design and artwork with the Grand Ave Development *Ideal location for tourists and visitors to arts/theater districts - encourage activity *Exit from station would be located at the top of Bunker Hill, making for easier pedestrian movement *Station portals can serve both upper Grand Ave as well as businesses on 3rd and Flower
Main St. and Los Angeles St. between Temple St. and 1st St. (Couplet)	3a, 3b	*Station is located on City Hall Parcel - possible security issues *Station would cause for removal of public open space	*Station serves Civic Center and public services buildings *Station is located one block from Little Tokyo district *Station can serve as 'link' for the eastern portion of future Civic Park
Los Angeles St. between Temple St. and 1st St.	7	*Station would require removal of center median/trees on Los Angeles St. *Station is adjacent to metropolitan detention center - possible security issues	*Station serves Civic Center and public services buildings *Station is located one block from Little Tokyo district
2nd St. between Main St. and Spring St.	5,8	*Station may conflict with LAPD underground facilities *Station may conflict with LA Times underground facilities	*Station does not impact surface level traffic and/or narrow 2nd St. ROW *Station serves surrounding Civic and arts establishments *Station is within reasonable walking distance of Little Tokyo district and Historic Core
2nd St. between Los Angeles St. and San Pedro St.	6	*Station and portals may cause noise issues for Block 8 residential development above	*Station is adjacent to Little Tokyo district and may incorporate art/cultual architecture *Station is in relatively close distance to all Little Tokyo residential housing *Opportunity to incorporate station into Block 8 development *Station is located adjacent to Historic Core and new Arts districts along 3rd St.
6th St. and Flower St. (Under Intersection)	6	*Station must be located considerably below Arco Plaza underground shopping center- geotechnical/soil issues *Arco Plaza underground shopping center - physical as well as noise, vibration	*Opportunity to incorporate station into Arco Plaza shopping center *Opportunity to incorporate station into Central Library *Central location to financial/business core

Table 2-4 Goal 1: Support Community Planning Efforts

Goal 1: Support Community Planning Efforts	*Support land use policies and Community Plans *Support and coordinate with development and redevelopment efforts *Support the City's efforts to improve urban design and the pedestrian environment by contributing to a healthy environment *Support efforts to improve safety and security for downtown residents, employees and visitors *Support transit dependent communities										
Alternative	**1a**	**1b**	**2**	**3a**	**3b**	**4a**	**4b**	**5**	**6**	**7**	**8**
Total Length of Alignment (Miles)	1.83	1.83	1.88	2.03	2.03	1.62	1.62	1.62	1.65	1.69	1.67
Total Area within One Quarter Mile of Alignment	1.04	1.04	1.11	1.02	1.02	0.98	0.98	0.98	0.98	1	0.98
1.a Population, Population Density, Households, Housing Density for year 2030 within 1/4 mile of alignments											
Population (within 1/4 mile of alignment)	11,926	11,926	11,323	10,889	10,889	10,997	10,997	10,997	10,997	10,760	10,997
Population (within 1/4 mile of all stations)	2,038	4,073	3,091	6,578	8,245	7,786	6,119	6,119	6,437	5,449	6,119
Population Density (within 1/4 mile of alignment)	11,467 persons per square mile	11,467 persons per square mile	10,201 persons per square mile	10,675 persons per square mile	10,675 persons per square mile	11,201 persons per square mile	11,201 persons per square mile	11,201 persons per square mile	11,201 persons per square mile	10,760 persons per square mile	11,201 persons per square mile
Households (within 1/4 mile of alignment)	9,122	9,122	7,794	8,523	8,523	8,744	8,744	8,744	8,744	8,467	8,744
Households (within 1/4 mile of all stations)	1,611	3,047	2,128	5,002	6,183	5,770	4,589	4,589	5,003	4,132	4,589
Household Density (within 1/4 mile of alignment)	8,771 units per square mile	8,771 units per square mile	7,022 units per square mile	8,356 units per square mile	8,356 units per square mile	8,922 units per square mile	8,922 units per square mile	8,922 units per square mile	8,922 units per square mile	8,467 units per square mile	8,922 units per square mile
1.b Transit Oriented Design supportive plans and policies in place (Score 1 -worst- to 5-best)											
	Low number of stations to take advantage of TOD plans and policies *LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **2**	Same as 1a **2**	*LA City General Plan *CRA 2006 Streetcar Study *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **2**	*LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **4**	Same as 3a **4**	Track alignment on 2nd Street between Central and Los Angeles is inconsistent with TOD plans *LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **3**	Track alignment on 2nd Street between Central and Los Angeles is inconsistent with TOD plans *LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **3**	Same as 3a **5**	This alternative requires removal of the existing Little Tokyo/Artist District Station which is inconsistent with TOD plans. *LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **2**	Same as 1a **5**	This alternative requires removal of the existing Little Tokyo/Artist District Station which is inconsistent with TOD plans. *LA City General Plan *CRA 2006 Streetcar Study *CRA Identified Redevelopment Areas *CRA City Center Redevelopment Plan *Little Tokyo Planning & Design Guidelines **2**
1.c Number of jobs, employment density for year 2030 within 1/4 mile of alignment											
Employment (within 1/4 mile of alignment)	129,833	129,833	150,997	133,888	133,888	124,110	124,110	124,110	124,110	132,547	124,110
Employment (within 1/4 mile of all stations)	46,153	44,062	76,366	107,310	109,174	79,395	77,531	77,531	71,066	84,699	77,531
Employment Density (within 1/4 mile of alignment)	129,833 jobs per square mile	124,839 jobs per square mile	136,033 jobs per square mile	131,263 jobs per square mile	131,263 jobs per square mile	126,643 jobs per square mile	126,643 jobs per square mile	126,643 jobs per square mile	126,643 jobs per square mile	132,547 jobs per square mile	126,643 jobs per square mile
1.d Number of direct connections to key activity centers within 1/4 mile of alignment (Score 1 -worse to 5 best)	**2** (based on the number of stations for this alternative)	**2** (based on the number of stations for this alternative)	**3**	**5**	**5**	**5**	**5**	**5**	**3** (based on the removal of the Little Tokyo/Arts District Station for this alternative)	**4** (based on single platform versus split platform)	**3** (based on the removal of the Little Tokyo/Arts District Station for this alternative)
Scores by Station:	2nd @ Spring, Main & Broadway **5**	2nd @ Spring, Main & Broadway **5**	Temple between Los Angeles Streets and Aliso **5**	Split Platforms @ Main and Los Angeles **5**	Split Platforms @ Main and Los Angeles **5**	2nd @ Spring, Main and Broadway **5**	2nd @ Spring, Main & Broadway **5**	2nd between Spring & Main **5**	2nd between Los Angeles & San Pedro **5**	Los Angeles between 1st & Temple **5**	2nd between Spring & Main **5**
	Between 5th & 6th on Flower **5**	Between 3rd & 4th on Flower **3**	Temple Street, Dewap Road and Hope Streets **4**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**	2nd & Hope under Grand Avenue Development **5**
			Between 5th & 6th on Flower **5**	Between 4th & 5th on Flower **5**	Between 3rd & 4th on Flower **3**	Between 3rd & 4th on Flower **3**	Between 4th & 5th on Flower **5**	Between 4th & 5th on Flower **4**	5th & Flower **5**	Between 5th & 6th on Flower **5**	Between 4th & 5th on Flower **5**
1.e Number of opportunities for redevelopment within 1/4 mile of alignment (underdeveloped or underutilized properties along alternative alignment)	9	9	5	8	8	9	9	9	9	8	9

*** NOTE: Score 1-5 is use for some criteria where 1 = WORST and 5 = BEST**

Table 2-5 Goal 2: Support Public Involvement and Community Preservation

Goal 2:
Support Public Involvement and Community Preservation

*Balance the benefits and impacts to low income and minority communities
*Enable workers and visitors to gain access to the regional center to increase its economic vitality and benefit from its economic opportunity

Alternative	1a	1b	2	3a	3b	4a	4b	5	6	7	8
Total Length of Alignment (Miles)	1.83	1.83	1.88	2.01	2.01	1.62	1.62	1.62	1.65	1.69	1.67
Total Area within One Quarter Mile of Alignment	1.04	1.04	1.11	1.02	1.02	0.98	0.98	0.98	0.98	1	0.98
2.a Evaluation of potential disproportionate effects: Environmental justice effect will be evaluated per CEQA/NEPA requirements (Score 1 to 5)	1	1	4	4	4	1	1	2	5	4	5
2.b Initial areas identified for potential acquisitions for stations and alignment (does not include actually in construction) within 1/4 mile of alignment	4 Locations	3 Locations	2 Locations	2 Locations	1 Location	4 Locations	5 Locations	4 Locations	5 Locations	2 Locations	5 Locations
2.c Evaluation of potential disproportionate effects: Number of low income HH within 1/4 mile of proposed alignment											
# of Low income HH	3,390/9,602 or 35.3%	3,390/9,602 or 35.3%	2,590/8,830 or 29.3%	3,702/10,680 or 34.7%	3,702/10,680 or 34.7%	3,390/9,602 or 35.3%	3,390/9,602 or 35.3%	3,390/9,602 or 35.3%	3,390/9,602 or 35.3%	3,702/10,680 or 34.7%	3,390/9,602 or 35.3%
Number of SROs and Shelters	20 (approximately 1,042 beds/rooms)	20 (approximately 1,042 beds/rooms)	16 (approximately873 beds/rooms)	19 (approximately 997 beds/rooms)	19 (approximately 997 beds/rooms)	20 (approximately 1,042 beds/rooms)	20 (approximately 1,042 beds/rooms)	20 (approximately 1,042 beds/rooms)	20 (approximately 1,042 beds/rooms)	19 (approximately 997 beds/rooms)	20 (approximately 1,042 beds/rooms)
Number of Homeless Service Providers	9	9	5	9	9	9	9	9	9	9	9
2.d Number of residents by ethnicity within 1/4 mile of alignment (US Census)											
	White 3,163	White 3,163	White 2,146	White 3,105	White 3,105	White 3,163	White 3,163	White 3,163	White 3,163	White 3,105	White 3,163
	African American 3,390	African American 3,390	African American 2,359	African American 3,437	African American 3,437	African American 3,390	African American 3,390	African American 3,390	African American 3,390	African American 3,437	African American 3,390
	American Indian/Eskimo 119	American Indian/Eskimo 119	American Indian/Eskimo 54	American Indian/Eskimo 103	American Indian/Eskimo 103	American Indian/Eskimo 119	American Indian/Eskimo 119	American Indian/Eskimo 119	American Indian/Eskimo 119	American Indian/Eskimo 103	American Indian/Eskimo 119
	Asian 4,699	Asian 4,699	Asian 8,635	Asian 8,978	Asian 8,978	Asian 4,699	Asian 4,699	Asian 4,699	Asian 4,699	Asian 8,978	Asian 4,699
	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/ PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23	Hawaiian/PI 23
	Other 54	Other 54	Other 48	Other 60	Other 60	Other 54	Other 54	Other 54	Other 54	Other 60	Other 54
	Two or More 322	Two or More 322	Two or More 275	Two or More 334	Two or More 334	Two or More 322	Two or More 322	Two or More 322	Two or More 322	Two or More 334	Two or More 322
	Hispanic 7,769	Hispanic 7,769	Hispanic 8,810	Hispanic 5,861	Hispanic 5,861	Hispanic 7,769	Hispanic 7,769	Hispanic 7,769	Hispanic 7,769	Hispanic 5,861	Hispanic 7,769
2.e Urban fit potential for alignments and for stations, including physical scale, visual fit, and cultural preservation	1	1	3	4	4	2	2	4	3	4	3
Scores by Station:	2nd @ Spring, Main& Broadway 3	2nd @ Spring, Main& Broadway 3	Temple & Los Angeles 5	Split Platform @ Los Angeles Street and Main Street 5, 4	Split Platform @ Los Angeles Street and Main Street 5,4	2nd @ Spring, Main& Broadway 4	2nd @ Spring, Main& Broadway 4	2nd between Main and Spring 4	Los Angeles and San Pedro on 2nd 3	Los Angeles Street between 1st and Temple 5	2nd between Main and Spring 4
	Between 5th & 6th on Flower 5	Between 3rd & 4th on Flower 2	Temple Street, Dewap Road & Hope Street 4	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5	2nd & Hope under Grand Avenue Development 5
			Between 5th & 6th on Flower 5	Between 4th & 5th on Flower 3	Between 3rd & 4th on Flower 2	Between 3rd & 4th on Flower 2	Between 4th & 5th on Flower 3	Between 4th & 5th on Flower 3	5th on Flower 5	Between 5th & 6th on Flower 5	Between 4th & 5th on Flower 3
2.f Percentage of service grade separated	22%	13%	39%	34%	21%	24%	34%	91%	103%	32%	103%
Total underground - new tunnel & existing 2nd St. tunnel	44%	33%	36%	46%	38%	49%	60%	94%	*103% (includes grade separating some of the Eastside Extension)	56%	103%
2.g Community Acceptance (High, Medium, Low)	Low	Low	Medium	High	High	Medium	Medium	High	Low	Medium	Low

*** NOTE: Score 1-5 is use for some criteria where 1 = WORST and 5 = BEST**

Table 2-6 Goal 3: Improve Mobility and Availability both Locally and Regionally

Goal 3:
Improve Mobility and Accessibility both Locally and Regionally

*Improve the connectivity of the regional transit service and provide a more attractive travel alternative for residents, workers and visitors in the region
*Facilitate sustainable regional development
*Increase ridership of the Metro transit system and reduce single occupany trips
*Maintain or enhance transit services to the transit dependent
*Improve travel time for transit users system-wide
*Improve person throughput
*Reduce growth of congestion in corridor

Alternative	1a		1b		2		3a		3b		4a		4b		5		6		7		8	
Total Length of Alignment (Miles)	1.83		1.83		1.88		2.03		2.03		1.62		1.62		1.62		1.65		1.69		1.67	
Total Area within One Quarter Mile of Alignment	1.04		1.04		1.11		1.02		1.02		0.98		0.98		0.98		0.98		1		0.98	
3.a Increase in daily transit boardings (amount of transit users increased compared to No Build)	9,570	1	9,570	1	8,590	1	10,125	2	10,125	2	11,524	2	11,524	2	19,768	5	14,457	3	10,125	2	14,457	3
3.b New daily transit trips compared to No Build and Transportation System Management (TSM) alternatives																						
No Build	5,787	2	5,787	2	4,670	1	5,165	2	5,165	2	6,984	4	6,984	4	8,099	5	7,548	4	5,165	2	7,548	4
3.c Traffic impacts (**Number of intersections** with E or F Level of Service)	5		5		4		3		3		5		5		1		1		2		1	
3.d Reduction in number of transfers system-wide by operational plan of alignment (Daily reductions at US & 7th/Metro)	21,100	2	21,100	2	18,400	1	20,600	2	20,600	2	22,100	3	22,100	3	25,900	5	23,200	3	20,600	2	23,200	3
3.e Total number of lanes reduced (cumulative for all streets)	19		22		21		24		27		20		17		0		0		21		0	
3.f Number of potentially impacted intersections	11		12		12		12		13		10		9		1		1		10		1	
3.g Peak period travel time through Regional Connector Alignment (including 5 min foe each transfer)																						
North-South : US to 7th/Metro	12.60 min		12.60 min		11.80 min		11.50 min		11.50 min		12.30 min		12.30 min		7.60 min		7.10 min		11.50 min		7.10 min	
East-West: 1st /Utah (to US) to 7th/Metro	10.70 min		10.70 min		12.55 min		11.95 min		11.95 min		10.40 min		10.40 min		6.85 min		6.40 min		11.95 min		6.40 min	
3.h Number of Left Turn Pockets affected	3		5		15		8		10		2		0		4		3		10		3	
3.i Number of on-street public parking spaces	99		99		31		88		88		99		99		0		0		70		0	
3.j Number of driveways affected	21		25		21		26		30		22		18		2		0		21		0	
3.k daily hours of transportation user benefits (Compared to No Build)	8,855		8,855		7,231		8,938		8,938		9,271		9,271		12,045		11,222		8,938		11,222	

*** NOTE: Score 1-5 is use for some criteria where 1 = WORST and 5 = BEST**

Note for 3c,3e,3f,3h,3i:
Assumptions:
-Center running LRT with center stations.
-Train envelope (influence area) for one center running track and no station is 13 feet = one lane width.
-Train envelope (influence area) for one center running track with center station is 26 feet = two lane widths.
-Train envelope (influence area) for two center running tracks and no station is 26 feet = two lane widths.
-Train envelope (influence area) for two center running tracks with center station is 39 feet = three lane widths.
-For all alternative alignments it is assumed that at least one traffic lane will be available and operational in each direction.
-Right of way will be provided if difference between the street curb to curb width and the train envelope is less than the width needed to accomodate a traffic lane in each direction of travel.

Table 2-7 Goal 4: Support Efforts to Improve Environmental Quality

| **Goal 4: Support Efforts to Improve Environmental Quality** | *Minimize adverse environmental impacts
*Implement mitigation measures to reduce environmental effects to acceptable levels
*Reduce emissions and improve air quality | | |

Table 2-9 Goal 6: Achieve a Financially Feasible Project

Goal 6: Achieve a Financially Feasible Project	*Opportunities for private/public funding *Opportunities for Federal and outside funding																	
Alternative	**1a**		**1b**		**2**		**3a**		**3b**		**4a**		**4b**		**5**		**6**		**7**		**8**	
Total Length of Alignment (Miles)	1.83		1.83		1.88		2.03		2.03		1.62		1.62		1.62		1.65		1.69		1.67	
Total Area within One Quarter Mile of Alignment	1.04		1.04		1.11		1.02		1.02		0.98		0.98		0.98		0.98		1		0.98	
6.a ROM Capital costs- total and per mile per alignment (millions) (2008 $)	$528	4	$441	5	$561	3	$707	1	$640	2	$571	3	$658	2	$643	2	$740	1	$693	2	$744	1
	$301	4	$254	5	$322	4	$424	2	$339	3	$367	3	$418	2	$414	2	$477	1	$385	3	$473	1
6.b Evaluation of availability and eligibility of capital funds at federal/state/local levels to construct, operate and maintain (Score 1 to 5)																						
Federal (CEI)	2		3		1		1		2		2		2		5		4		1		4	
State (Cost)	4		5		3		1		2		3		2		2		1		2		1	
Local (Cost & subway restriction)	4		5		3		1		2		3		2		1		1		2		1	

*** NOTE: Score 1-5 is use for some criteria where 1 = WORST and 5 = BEST**

Table 2-10 Goal 7: Provide a Safe and Secure Alternative Transportation System

Goal 7: Provide a Safe and Secure Alternative Transportation System	*Secure entire alignment, stations, track and other facilities *Develop direct and indirect safety measures that exceed safety precautions typical of the Metro system *Develop a system that balances the need for accessibility and mobility with security *Develop a system that uses accessibility and mobility as measures for safety and security																	
Alternative	**1a**		**1b**		**2**		**3a**		**3b**		**4a**		**4b**		**5**		**6**		**7**		**8**	
Total Length of Alignment (Miles)	1.83		1.83		1.88		2.03		2.03		1.62		1.62		1.62		1.65		1.69		1.67	
Total Area within One Quarter Mile of Alignment	1.04		1.04		1.11		1.02		1.02		0.98		0.98		0.98		0.98		1		0.98	
7.a Safety- determined to be able to provide measures typical of requirements per ADA, per typical CPUC requirements, fire life safety guidelines, and per Metro Design Guidelines for access to and from stations (amount grade separated) (Score 1 to 5)	22%	1	13%	1	39%	2	34%	2	21%	1	24%	1	34%	2	91%	5	103%	5	32%	2	103%	5
Total underground - new tunnel, existing 2nd Street tunnel and aerial	44%		33%		36%		46%		38%		49%		60%		94%		*103% (Includes grade separating some of the Eastside Extension)		56%		103%	
7.b Number of emergency facilities located within 1/4 mile of the alignment, i.e., fire stations, police stations, hospitals.	4		4		4		4		4		4		4		4		4		4		4	
7.c Number of public events with 1/4 mile alignment	14		14		14		14		14		14		14		14		14		14		14	

*** NOTE: Score 1-5 is use for some criteria where 1 = WORST and 5 = BEST**

Figure 2-18 No Build Alternative

2.4.2 Transportation System Management

The TSM Alternative (Figure 2-19) imitates the proposed light rail link between 7th St./Metro Center Station and Union Station using two shuttle bus routes. Buses would run frequently, perhaps just a few minutes apart during peak hours, and the routes would be designed to move passengers between the two stations as quickly as possible. Intermediate stops would provide additional transit coverage of Bunker Hill, Little Tokyo, and the Civic Center. A variety of bus sizes could be used to tailor capacity to demand, ranging from 30-ft. DASH style buses to 60-ft. articulated buses.

In addition to frequent headways, the TSM Alternative could employ a Transit Priority System (TPS) similar to the ones currently used on Metro Rapid Lines within the City. Due to the constant pick up and discharge of passengers, buses usually fall out of synchronization with signal progression, lengthening the time spent at red lights. Installation of a TPS system or re-coordination of the signals along the TSM would counter this effect.

In a TPS, transponders mounted to the undersides of the buses would trigger detector loops embedded in the pavement in advance of each signalized intersection along the route. Upon detecting the bus, the City's central Automated Traffic Surveillance and Control (ATSAC) system would trigger the signal controller to grant additional time on the green light to the oncoming bus (usually 10-15% of the total cycle time), up to once per cycle. The existing Metro Rapid Lines have shown that the TPS keeps buses moving quickly, reduces trip times, and increases passenger throughput. Use of existing or creation of new bus-only lanes where right-of-way is available could also improve travel speeds.

There are two proposed alignments for the TSM Alternative, described below.

Grand/Temple/Los Angeles Alignment: This alignment is similar to the existing LADOT DASH Line B service. Buses travel from Chinatown to 7th St./Metro Center Station using Los Angeles St., Temple St., and Grand Ave. The route could be easily modified to serve the Little Tokyo/Arts District Station by using Alameda St. instead of Los Angeles St. between Temple St. and Union Station. Service currently operates every 8 minutes, but the frequency could be increased to make the line more convenient to Regional Connector passengers. This alignment provides good coverage of the Bunker Hill and Civic Center areas, but bypasses most of Little Tokyo.

Figueroa/Flower/2nd/3rd/Alameda Alignment: This alignment would take advantage of the existing northbound bus-only lane on Figueroa St. and the light usage of 2nd and 3rd Streets by other bus services. TPS would be easier to implement here because buses would only travel in one direction along most streets, eliminating signal priority conflicts between two competing buses. The alignment passes by both the Little Tokyo/Arts District Station and Union Station, so easy connections would be available to both East Los Angeles- and Pasadena-bound passengers. This route provides good coverage of Little Tokyo and the southern edge of the Civic Center, but passengers would be required to undertake a two-block uphill climb to reach Bunker Hill.

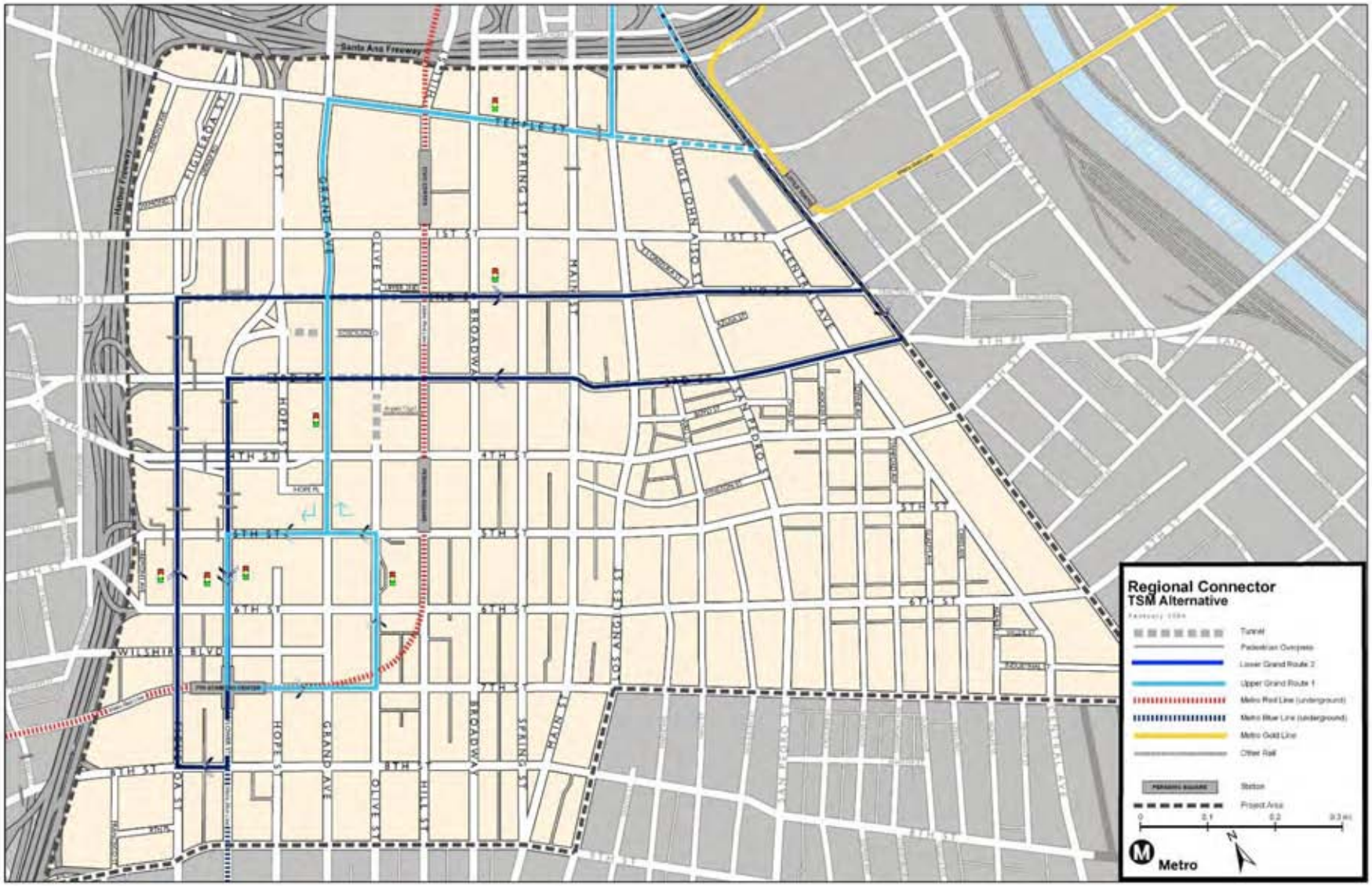


Figure 2-19 TSM Alternative

Bus speeds along the two TSM Alternative alignments were approximated using eight time runs (two per route, per direction) conducted during the afternoon peak period on Monday, May 5, 2008. Table 2-11 through Table 2-16 show the distance between arbitrarily-selected time points along each route, the time it took to traverse each segment, and the corresponding speed. The time runs were performed without pulling over to simulate picking up and discharging passengers, so an estimated dwell time of thirty seconds was used to account for the time penalty of stopping. Both of the TSM bus routes have two terminal stops and six intermediate stops, so the total dwell time estimate added to each run was three minutes.

Overall, the calculations predicted average bus speeds of 9-12mph, a range similar to the observed speeds of Metro's local bus service. Thus, a typical trip on the Upper Grand TSM route during the weekday afternoon peak period would take approximately 11-13 minutes and a trip on the 2nd St. route would take 11-15 minutes.

The time runs were conducted using a small car, which was capable of much better handling, braking, and acceleration performance than a typical bus. Data limitations arose as a result of not having an actual transit bus available to conduct the time runs. The car attained much shorter trip times than the TSM bus service likely would for a number of reasons. While the driver avoided maneuvers that would be difficult for a bus to perform, it also would have been unsafe and disruptive to traffic flow for a passenger car to drive slowly enough to imitate the speed of a bus. Similarly, pulling over and stopping at each of the proposed TSM bus stops would have interrupted existing bus service and violated the "no stopping anytime" restriction signs posted at the bus zones.

Another potential source of delay in bus service is the tendency for buses to fall out of the aforementioned synchronization with street signal progression; buses would then have additional wait time at red lights. The 30-second dwell time was used to account not only for the time that the bus would actually be stopped, but also the slower speed and additional red light wait time that would be incurred.

Another data limitation arose at one intersection along the Upper Grand TSM route where only buses are allowed to turn left (7th St. and Olive St.). In order to proceed along the route without violating the left turn restriction, the driver had to estimate the wait time needed to make the left turn, then detour around the block to continue north on Olive St. It is unlikely, however, that this deviation from the TSM route significantly affected the recorded trip time.

Table 2-11 Upper Grand Route Southbound (via Los Angeles)

		4:08 PM	4:31 PM		
Timepoint	**Distance (miles)[2]**	**Time Run 1 (mm:ss)**	**Time Run 2 (mm:ss)**	**Avg. Time (mm:ss)**	**Avg. Speed (mph)**
Alameda St & Los Angeles St.	0.00	00:00	00:00	00:00	
Temple St. & Los Angeles St.	0.30	01:10	01:10	01:10	15.4
Temple St. & Broadway	0.22	00:20	00:27	00:23	33.7
Grand Ave. & 1st St.	0.46	02:38	02:42	02:40	10.4
Grand Ave. & 3rd St.	0.23	00:30	00:37	00:34	24.7
Grand Ave. & 5th St.	0.25	01:34	02:02	01:48	8.3
7th St. & Flower St.	0.40	03:43	02:03	02:53	8.3
Total (without stops):	**1.86**	**09:55**	**09:01**	**09:28**	**11.8**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**12:55**	**12:01**	**12:28**	**9.0**

Table 2-12 Upper Grand Route Northbound (via Los Angeles)

		4:18 PM	4:41 PM		
Timepoint	**Distance (miles)[2]**	**Time Run 1 (mm:ss)**	**Time Run 2 (mm:ss)**	**Avg. Time (mm:ss)**	**Avg. Speed (mph)**
7th St. & Flower St.	0.00	00:00	00:00	00:00	
Grand Ave. & 5th St.	0.56	02:29	03:12	02:51	11.8
Grand Ave. & 3rd St.	0.25	00:41	01:00	00:51	17.8
Grand Ave. & 1st St.	0.23	00:38	00:49	00:44	19.0
Temple St. & Broadway	0.46	01:34	01:40	01:37	17.1
Temple St. & Los Angeles St.	0.22	01:16	01:15	01:15	10.5
Alameda St & Los Angeles St.	0.30	01:15	01:15	01:15	14.4
Total (without stops):	**2.02**	**07:53**	**09:11**	**08:32**	**14.2**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**10:53**	**12:11**	**11:32**	**10.5**

Table 2-13 Upper Grand Route Southbound (via Alameda)[3]

Timepoint	Distance (miles)[2]	4:08 PM Time Run 1 (mm:ss)	4:31 PM Time Run 2 (mm:ss)	Avg. Time (mm:ss)	Avg. Speed (mph)
Alameda St & Los Angeles St.	0.00	00:00	00:00	00:00	
Alameda St. & Temple St.	0.34	01:10	01:00	01:05	18.8
Temple St. & Los Angeles St.	0.22	01:03	01:05	01:04	12.4
Temple St. & Broadway	0.22	00:20	00:27	00:23	33.7
Grand Ave. & 1st St.	0.46	02:38	02:42	02:40	10.4
Grand Ave. & 3rd St.	0.23	00:30	00:37	00:34	24.7
Grand Ave. & 5th St.	0.25	01:34	02:02	01:48	8.3
7th St. & Flower St.	0.40	03:43	02:03	02:53	8.3
Total (without stops):	**2.12**	**10:58**	**09:56**	**10:27**	**12.2**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**13:58**	**12:56**	**13:27**	**9.5**

Table 2-14 Upper Grand Route Northbound (via Alameda)[3]

Timepoint	Distance (miles)[2]	4:18 PM Time Run 1 (mm:ss)	4:41 PM Time Run 2 (mm:ss)	Avg. Time (mm:ss)	Avg. Speed (mph)
7th St. & Flower St.	0.00	00:00	00:00	00:00	
Grand Ave. & 5th St.	0.56	02:29	03:12	02:51	11.8
Grand Ave. & 3rd St.	0.25	00:41	01:00	00:51	17.8
Grand Ave. & 1st St.	0.23	00:38	00:49	00:44	19.0
Temple St. & Broadway	0.46	01:34	01:40	01:37	17.1
Temple St. & Los Angeles St.	0.22	01:16	01:15	01:15	10.5
Alameda St. & Temple St.	0.22	00:46	00:36	00:41	19.3
Alameda St & Los Angeles St.	0.34	01:16	02:43	02:00	10.2
Total (without stops):	**2.28**	**08:40**	**11:15**	**09:58**	**13.7**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**11:40**	**14:15**	**12:58**	**10.6**

Table 2-15 2nd St. Route Southbound

Timepoint	Distance (miles)[2]	3:10 PM Time Run 1 (mm:ss)	3:45 PM Time Run 2 (mm:ss)	Avg. Time (mm:ss)	Avg. Speed (mph)
Alameda St & Los Angeles St.	0.00	00:00	00:00	00:00	
Alameda St. & 1st St.	0.50	01:55	02:34	02:15	13.4
3rd St. btwn. Main St. & Los Angeles St.	0.74	01:51	02:08	02:00	22.3
3rd St. & Broadway	0.21	01:39	01:33	01:36	7.9
Flower St. & 3rd St.	0.39	00:58	00:59	00:59	24.0
Flower St. & 5th St.	0.25	00:31	00:28	00:29	30.5
Flower St. & 7th St.	0.25	00:47	00:48	00:47	18.9
Total (without stops):	**2.34**	**07:41**	**08:30**	**08:06**	**17.4**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**10:41**	**11:30**	**11:05**	**12.7**

Table 2-16 2nd St. Route Northbound

Timepoint	Distance (miles)[2]	3:30 PM Time Run 1 (mm:ss)	3:54 PM Time Run 2 (mm:ss)	Avg. Time (mm:ss)	Avg. Speed (mph)
Figueroa St. & 7th St.	0.00	00:00	00:00	00:00	
Figueroa St. & 5th St.	0.25	00:40	00:47	00:44	20.7
Figueroa St. & 3rd St.	0.25	01:11	01:10	01:11	12.8
2nd St. & Broadway	0.61	02:49	01:48	02:18	15.9
2nd St. @ Caltrans Building	0.20	02:02	01:31	01:46	6.8
Alameda St. & 1st St.	0.59	03:50	03:52	03:51	9.2
Alameda St & Los Angeles St.	0.50	02:28	02:41	02:35	11.7
Total (without stops):	**2.40**	**13:00**	**11:49**	**12:25**	**11.6**
Total Dwell Time (Avg. Dwell x # Stops):		03:00	03:00	03:00	
Trip Time with Stops:		**16:00**	**14:49**	**15:25**	**9.3**

[1] *Excluding terminal stops*
[2] *Source: Environmental Systems Research Institute (ESRI)*
[3] *Includes optional detour to Little Tokyo/Arts District Station; times estimated using runs via Los Angeles St.*

2.4.3 At-Grade Emphasis LRT Alternative (Options A and B)

The At-Grade Emphasis LRT Alternative, as shown in Figure 2-20, will provide a direct connection from the Metro Gold Line at Temple St. to the existing underground 7th St./Metro Center Station with at least three new station locations in between. The At-Grade Emphasis LRT Options A and B are identical, with the exception of the station locations on Flower St. It is assumed that street-running trains will operate by existing traffic signals and will not require crossing gates and bells.

Description

In this alternative, dual-track service from the Metro Gold Line at Temple Street is extended using a "Y" track configuration across Alameda St., utilizing existing traffic and parking lanes to travel. The tracks would extend to the west across Alameda St. and run along the south side of Temple St. An existing Mechanically Stabilized Earth (MSE) ramp connects tracks from the bridge over US-101 to the tracks on surface just north of Temple St. In order to accommodate the turning radius for the trains, the ramp will need to be adjusted to provide a steeper grade.

As trains continue west on Temple St. in a dual-track configuration, the track will return to the center of Temple St. As the track arrives at Los Angeles St., the alignment splits into two single-track alignments. One track would continue west to Main St. while the other track would continue south on Los Angeles St. The track alignments would run on the eastern side of both streets and a split station would be planned for each track alignment just north of 1st St. The track alignments then would continue south across 1st St. At 2nd St., the track on Los Angeles St. heads west where it then reconnects with the track on Main St. Both track alignments would return to a dual-track configuration.

At 2nd St., adjacent to Broadway Ave. and Spring St., another split station is possible if property was acquired and easements provided on adjacent properties. This station is currently optional and will be further analyzed for ridership and cost implications in the next phase of the project. With or without a station, the street would be transit-dedicated with the two travel lanes and two parking lanes reduced to a single travel lane primarily for access to parking lots or loading zones. This type of configuration would extend from Los Angeles St. to Hill St.

As the track alignment continues west past Hill St., it would be on the southern side of the street and enter into the existing 2nd St. tunnel. This alignment would then reduce the 2nd St. tunnel from four travel lanes to one or two travel lanes, pending further detailed engineering. About halfway through the 2nd St. tunnel, the alignments then would veer to the south, through the existing tunnel wall. This would place the alignment in close proximity to Grand Ave., near the second station.

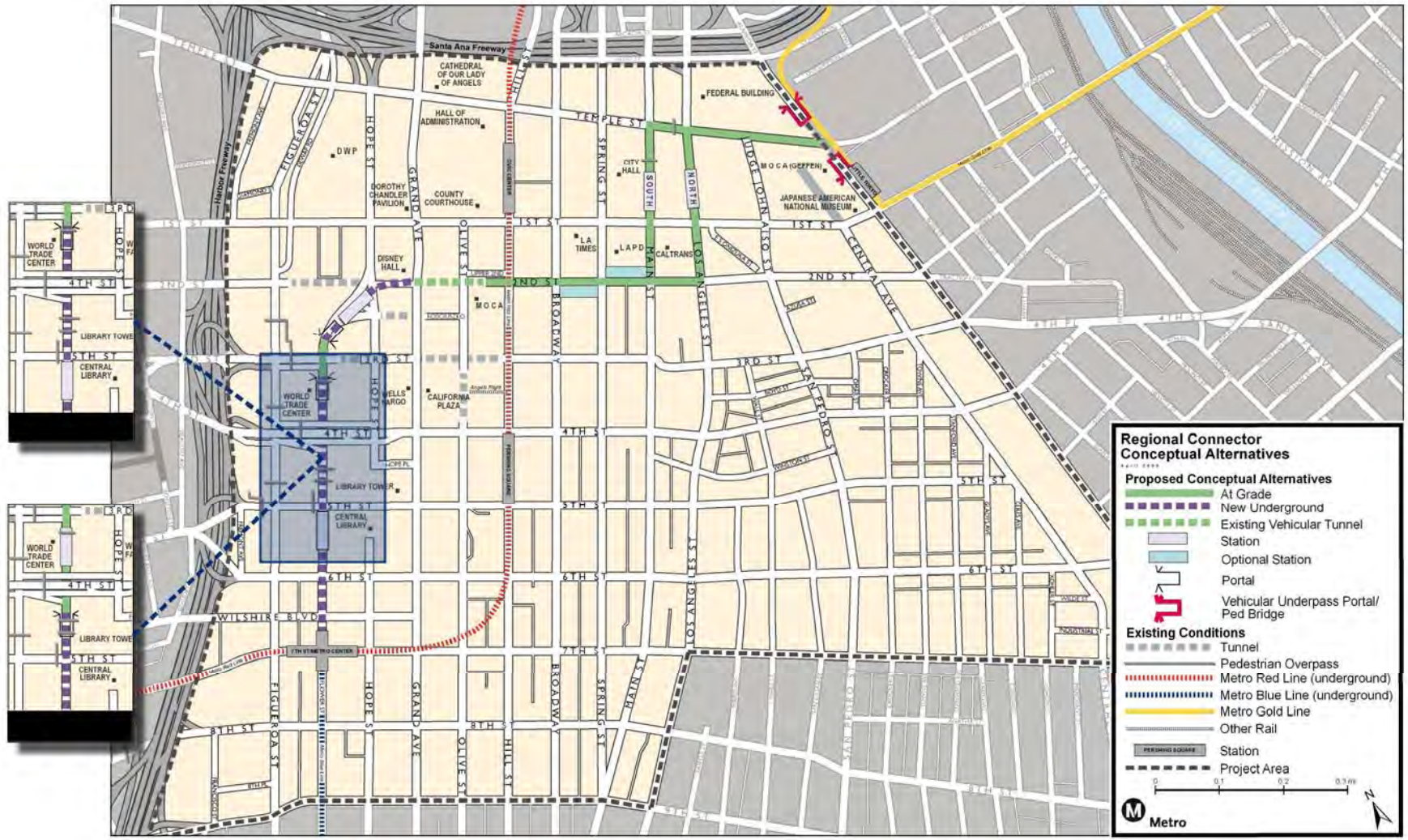


Figure 2-20 At-Grade Emphasis LRT Options A & B

Using the natural grade change of the hillside, the alignment would then resurface from a portal, off-street, just north of 3rd St. It would cross 3rd St. at-grade and continue south on Flower St. A third station is contemplated on or under Flower St., either at-grade south of 3rd St. or underground south of 5th St. In either case, south of 3rd St. and north of 5th St., the track alignment then enters into a portal in order to be fully underground before reaching 5th St. The underground track alignment then directly connects to the 7th St./Metro Center Station under Flower St.

Construction

Construction of this alternative assumes using the center of the street for staging and construction of the at-grade areas. Utilization of the 2nd Street tunnel for construction will also be necessary. Cut and cover construction techniques will be used for the underground segment from 7th St. and Flower St. to 3rd St. and Flower St. as well as at the Grand Avenue Station. Locations adjacent to the alignment may be used for some storage, vehicle equipment, offices and materials. Those locations will be identified when further engineering is conducted during the later phases of this project and as part of the EIR/EIS process.

Conclusion

The At-Grade Emphasis LRT Alternative accomplishes many of the goals and objectives of this project. Both options connect major activity centers within the PSA while introducing an element of pedestrian integration through the at-grade configuration. The couplet arrangement along Main St. and Los Angeles St. provides for creative ways to integrate the system through urban design with the surrounding Civic Center and municipal activities as well as the growing Little Tokyo community. An at-grade system allows pedestrians to view and understand the direction of a train. The alternative also provides a unique opportunity to incorporate an integrated pedestrian transit mall along 2nd St.

Figures 2-21 through 2-47 provide examples of alignments, station locations, and urban design elements. For display purposes, characteristics of the at-grade station on Flower St. in Option B are shown. All other renderings pertain to both Options A and B.

2.4.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative, as shown in Figure 2-48, uses the same type of "Y" dual-track configuration as the At-Grade Emphasis LRT Alternative.

Description

From the Little Tokyo/Arts District Station, the tracks lead at-grade southwest across 1st and Alameda Streets. Here, the property within the area bounded by Central Ave., 1st St., Alameda St., and 2nd St. would be acquired to construct a portal and create twin tunnels.

The twin tunnels would extend west under 2nd St. to a new station in the vicinity of 2nd and Los Angeles Streets. The alignment continues west underground with a second new station in the vicinity of Grand Ave. near 2nd St. The alignment then veers south to a final underground station in the vicinity of Flower St. and 5th St. The tunnels then continue south to connect to the existing 7th St./Metro Center Station.

Figure 2-21 At-Grade Emphasis LRT Options A & B – Alameda St. underpass looking north from 1st St.

Figure 2-22 At-Grade Emphasis LRT Options A & B – Alameda St. underpass looking north from Alameda and 1st Streets intersection

Figure 2-23 At-Grade Emphasis LRT Options A & B – Alameda St. Underpass Looking North on Alameda and Temple Streets Intersection

Figure 2-24 At-Grade Emphasis LRT Options A & B – Alameda St. Underpass at Temple and Alameda Streets Intersection

Figure 2-25 At-Grade Emphasis LRT Options A & B – Alameda and Temple Streets Intersection

Figure 2-26 At-Grade Emphasis LRT Options A & B – Split station at City Hall along Los Angeles and Main Streets

Figure 2-27 At-Grade Emphasis LRT Options A & B – Split station at City Hall

Figure 2-28 At-Grade Emphasis LRT Options A & B – Main St. Station Looking North from 1st St.

Figure 2-29 At-Grade Emphasis LRT Options A & B – Los Angeles St. Station

Figure 2-30 At-Grade Emphasis LRT Options A & B – Los Angeles St. looking north from 1st St.

Figure 2-31 At-Grade Emphasis LRT Option A & B – Main St. looking north from 2nd St.

Figure 2-32 At-Grade Emphasis LRT Options A & B – Main St. looking south between Main and Temple St.

Figure 2-33 At-Grade Emphasis LRT Option A & B – Temple St. between Los Angeles and Main Streets

Figure 2-34 At-Grade Emphasis LRT Option A & B – 2nd St. looking west from Broadway St.

Figure 2-35 At-Grade Emphasis LRT Option A & B – 2nd St. Looking East from Broadway St.

Figure 2-36 At-Grade Emphasis LRT Options A & B – 2nd St. Looking East from Broadway St.

Figure 2-37 At-Grade Emphasis LRT Options A & B – 2nd St. Looking West between Main and Spring Streets

Figure 2-38 At-Grade Emphasis LRT Option A & B – 2nd and Spring St. Intersection

Figure 2-39 At-Grade Emphasis LRT Option A & B – 2nd St. at Main St.

Figure 2-40 At-Grade Emphasis LRT Option A & B – 2nd St. looking East at Main St. Intersection

Figure 2-41 At-Grade Emphasis LRT Option B – Flower and 3rd St. Intersection Looking Northeast from Flower St.

Figure 2-42 At-Grade Emphasis LRT Option B – Flower St. between 3rd and 4th Streets

Figure 2-43 At-Grade Emphasis LRT Option B – Flower St. Looking Southwest from 3rd St.

Figure 2-44 At-Grade Emphasis LRT Option B – Flower and 3rd St. Intersection Looking South from 3rd St.

Figure 2-45 At-Grade Emphasis LRT Option B – Flower St. Looking North from 4th St.

Figure 2-46 At-Grade Emphasis LRT Option B – Flower St. and Station Looking South

Figure 2-47 At-Grade Emphasis LRT Option B – Flower St. and Station Looking South from 3rd St.

Construction

Tunnel boring machines (TBM) would be required to create the twin tunnels. Cut and cover construction techniques will likely be utilized for the new underground stations and staging area for the launching of TBMs.

As additional details are developed on this alternative, the specific locations of and need for ancillary facilities will be identified.

Conclusion

The Underground Emphasis LRT Alternative also accomplishes many of the project objectives. Many of the comments received in Early Scoping supported an underground configuration due to the dense development in the PSA and reducing adverse impacts to traffic congestion and personal safety.

Figure 2-48 Underground Emphasis LRT Alternative

In consideration of the built-out environment of downtown, this analysis was conducted to identify available and appropriate station and portal locations which would benefit the most users and best-integrate with the surrounding street-level environment.

Due to the high traffic and pedestrian volume on Alameda St., a rail underpass at the Little Tokyo/Arts District Station would keep vehicular, pedestrian, and rail movements separate, smoothing the flow of each through the area. This location, on the north eastern edge of Little Tokyo, would serve as a gateway into the growing community and could create an opportunity to create a vibrant and engaging center of street-level activity.

Figures 2-49 through 2-63 show examples of alignments, station locations, and urban design elements.

2.4.5 Station Locations

The At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative have a set of station locations which serve various parts of the PSA. Station locations were chosen through the investigation of past studies, the current downtown dynamics and travel characteristics, and track alignments.

2.4.5.1 Underground Station on Flower St.

The underground station on Flower St. would be between 5th and 6th Streets in the heart of the Financial District. The station would serve the extremely high density of workers in the surrounding businesses, including the Bonaventure Hotel, 444 Flower, Arco Plaza, and the Central Library. As seen in Figure 2-64, the station has a center platform. Station portals would be located on the eastern and western side corner of Flower St. at 5th St. These locations allow users to come up to street level and instantly assess their surroundings.

The area is an important activity center in the PSA, surrounded by notable business towers as well as tourist attractions. Previously, the idea of possibly creating a joint use station with adjacent businesses had been analyzed, specifically at the Bonaventure Hotel and the underground Arco Plaza (now City National Plaza). Further analysis must be conducted in order to evaluate the possibilities. Opportunities to create pedestrian linkages and bike centers also exist, which will reenergize these underutilized urban spaces.

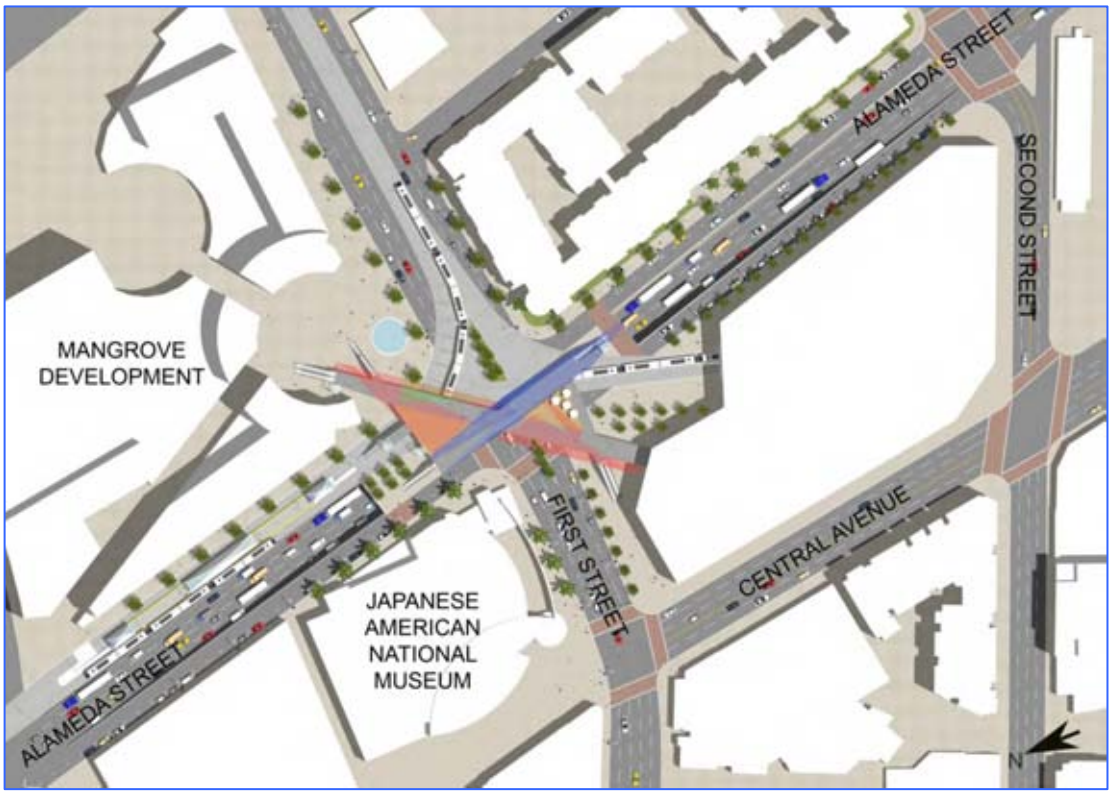


Figure 2-49 Underground Emphasis LRT Alternative – Intersection of Alameda and 1st Streets

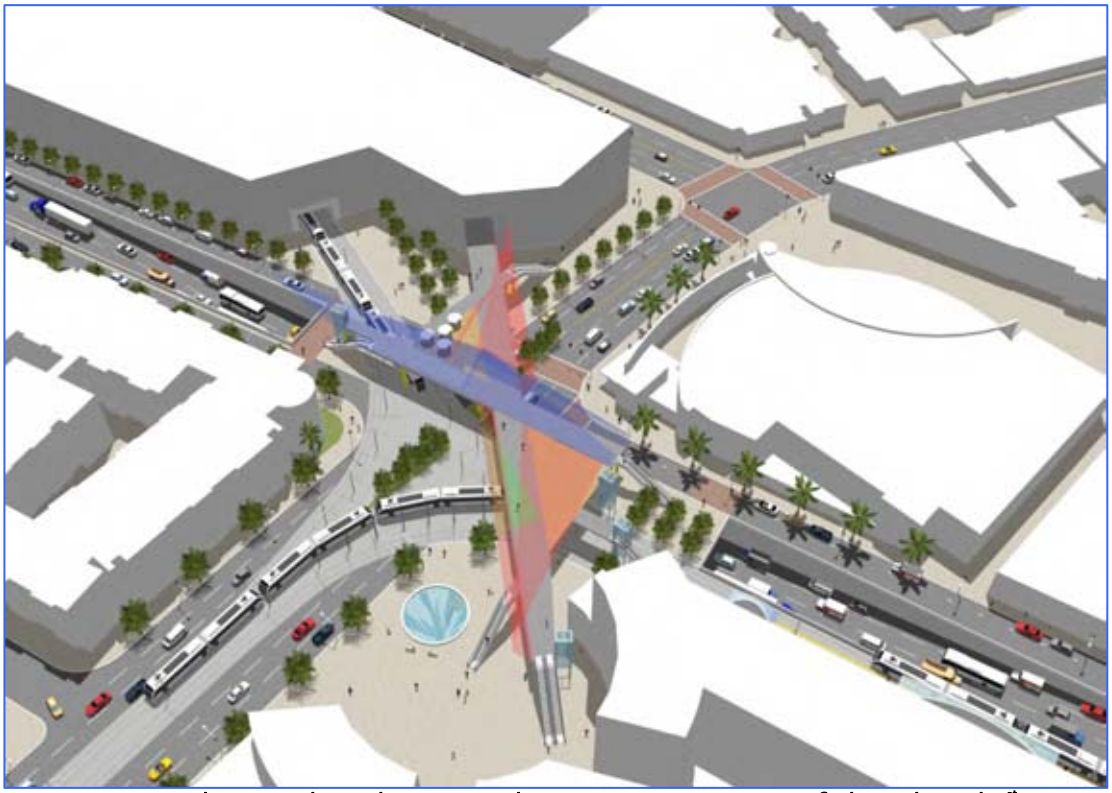


Figure 2-50 Underground Emphasis LRT Alternative – Intersection of Alameda and 1st Streets Looking Southwest

Figure 2-51 Underground Emphasis LRT Alternative – Alameda St. Underpass Looking South

Figure 2-52 Underground Emphasis LRT Alternative – Alameda St. Underpass Looking South on Alameda St.

Figure 2-53 Underground Emphasis LRT Alternative – Alameda St. and Pedestrian Bridge Looking South

Figure 2-54 Underground Emphasis LRT Alternative – Alameda St. looking south from Temple St.

Figure 2-55 Underground Emphasis LRT Alternative – 2nd and Los Angeles St. Intersection Looking Southwest on 2nd St.

Figure 2-56 Underground Emphasis LRT Alternative – 2nd St. between Main and Los Angeles Streets

Figure 2-57 Underground Emphasis LRT Alternative – 2nd St. and Los Angeles St Intersection

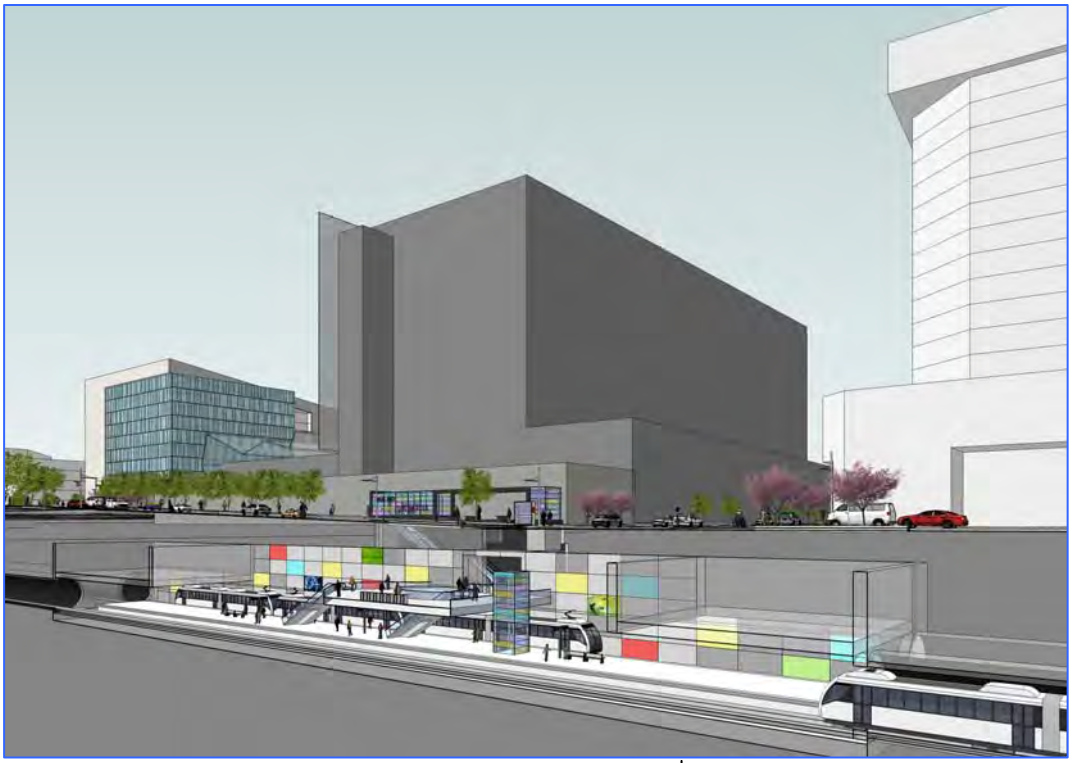


Figure 2-58 Underground Emphasis LRT Alternative – 2nd St. Underground Alignment and Station

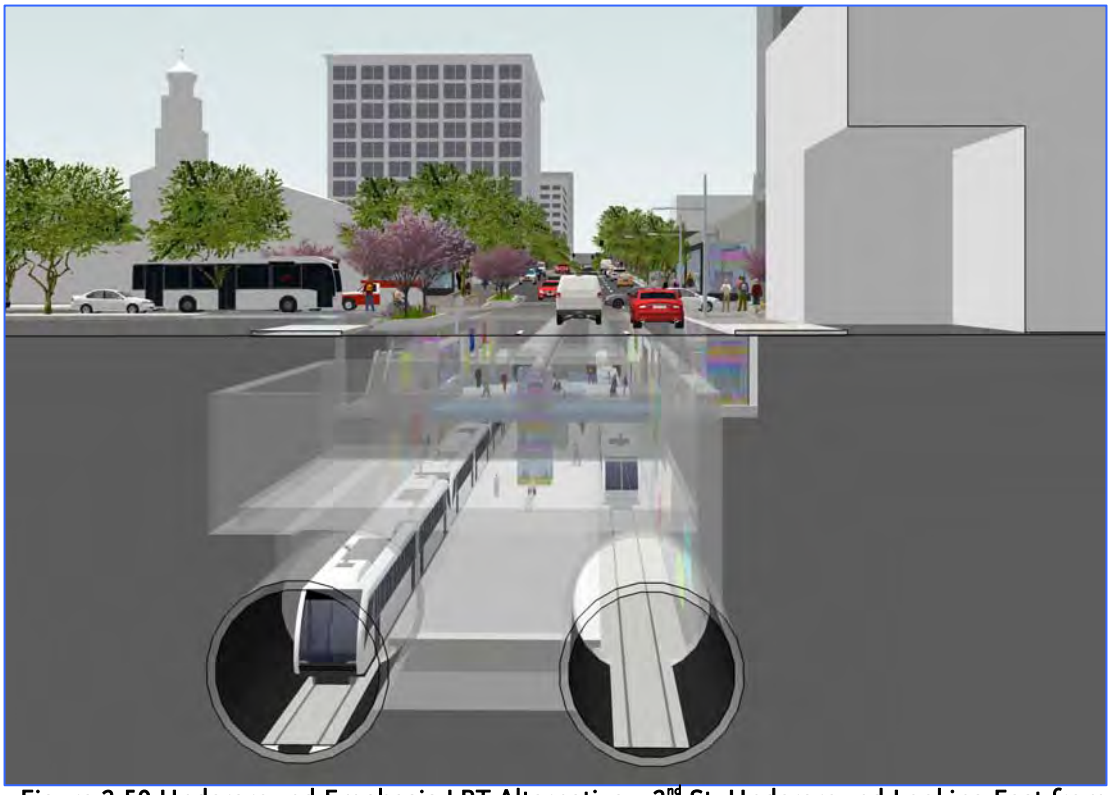


Figure 2-59 Underground Emphasis LRT Alternative – 2nd St. Underground Looking East from Los Angeles St.

Figure 2-60 Underground Emphasis LRT Alternative – 2nd St. Underground Station Looking West from Los Angeles St.

Figure 2-61 Underground Emphasis LRT Alternative – Flower St. Underground and Station

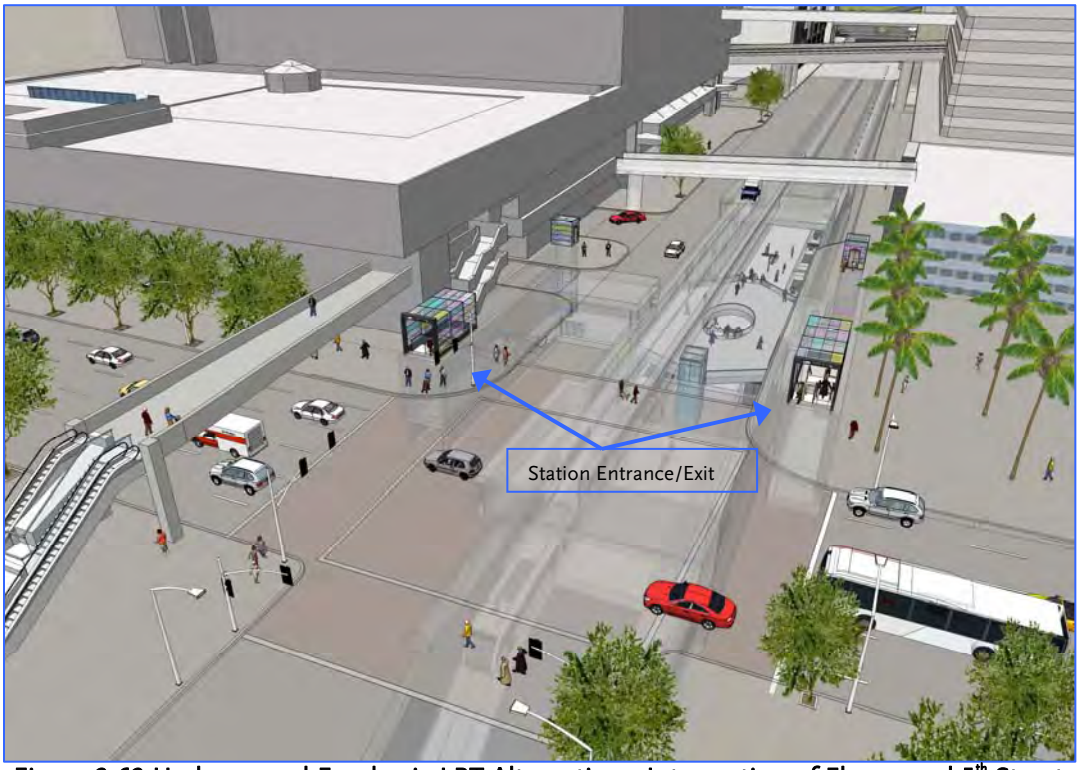


Figure 2-62 Underground Emphasis LRT Alternative – Intersection of Flower and 5th Streets Looking Northwest

Figure 2-63 Underground Emphasis LRT Alternative – Flower St. Looking North from 5th St.

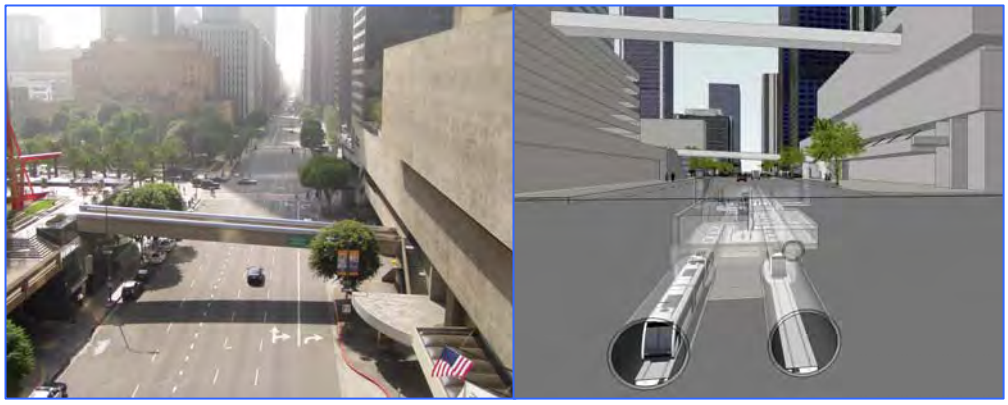


Figure 2-64 Underground Station on Flower St.

2.4.5.2 At-Grade Station on Flower St.

The at-grade station on Flower St. would be located between 3rd and 4th Streets. The station would have a center platform for northbound and southbound trains on either side as well as two lanes of traffic for vehicular movements, as seen in Figure 2-65. The station utilizes stairs on either end, allowing for users and pedestrians to enter/exit onto crosswalks, one located across the 3rd St. intersection and the other located mid-block on Flower St. between 3rd and 4th Streets.

The station would be on the northern end of Flower St. in front of the World Trade Center and BP Plaza. Traditionally an underutilized space, this station provides an opportunity to re-introduce a vibrant urban experience through the use of street treatments, landscaping, and street furniture. Because the station location is close to an important on-ramp to US-110, the use of these elements can soften the overall environment and make it more pedestrian and transit-friendly.

The World Trade Center is a multiuse facility which, apart from being home to a number of import/export companies and law offices, teams with teaching institutions to provide instruction and classroom locations for students. A station in this location would support these activities in addition to improving access to the Financial District.

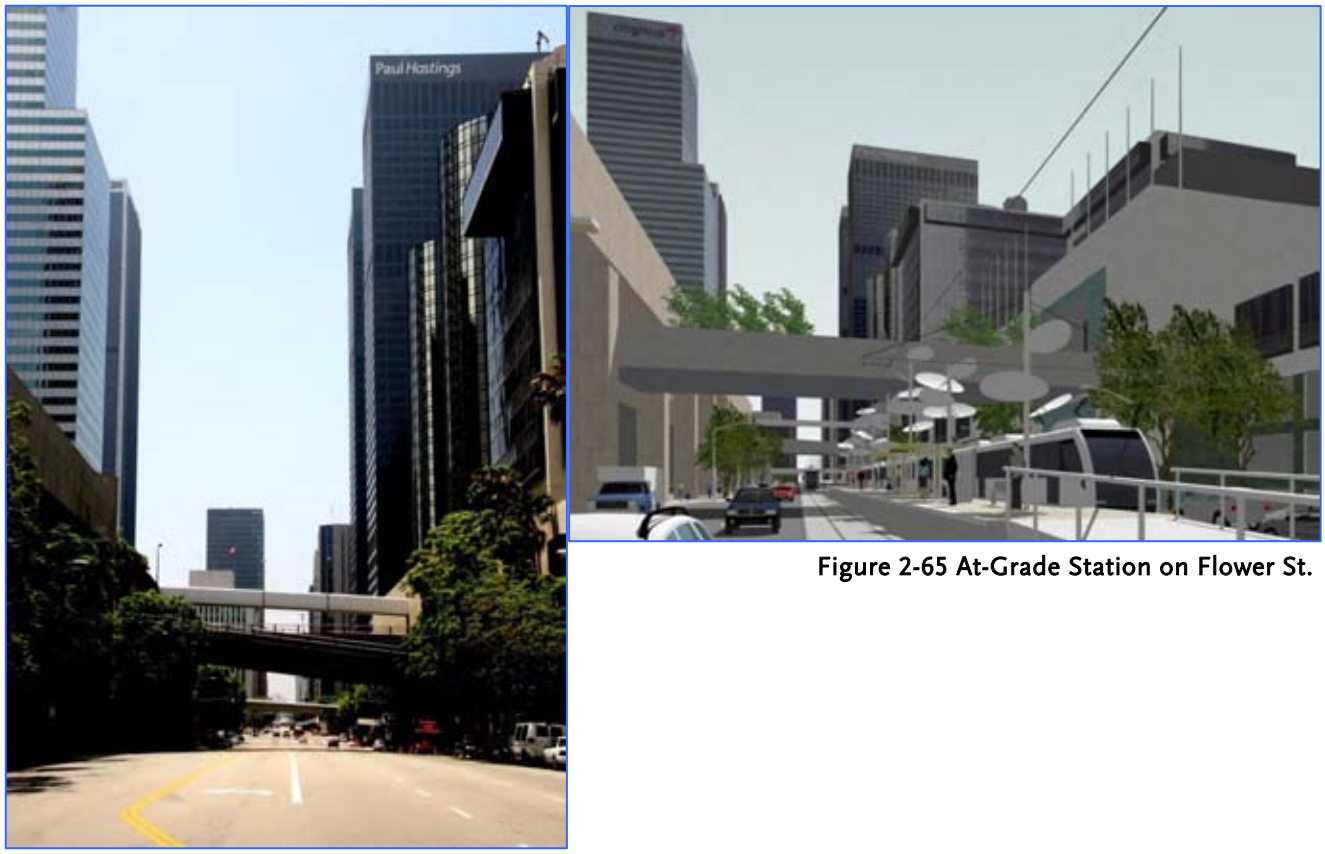


Figure 2-65 At-Grade Station on Flower St.

2.4.5.3 Grand Avenue Station

The Grand Avenue Station would be located under the 2nd St. vehicular bridge. Because the station tunnel would be diagonally-angled, access to both upper and lower Grand Ave. is possible. This station is part of the Grand Avenue Project, a much larger vision by the City to create a vibrant new regional center with mixed commercial, residential, and entertainment uses. The Grand Avenue Project is projected to be a first-class destination point not only for city residents but for tourists alike. The station would be incorporated into other underground facilities and provide direct access to the street. Comments received during Early Scoping indicated high interest in having a station in this location.

2.4.5.4 Split Station (City Hall)

The At-Grade Emphasis LRT Alternative has a split station with platforms on both Main St. and Los Angeles St, as shown in Figure 2-66. The Main St. platform is located on the eastern side of the street and is used by southbound trains. The Los Angeles St. platform is also located on the eastern side of the street and is used by northbound trains. The width of both streets allows for four lanes to remain for vehicular traffic.

The split platform design allows for transit users and pedestrians alike to have a free flowing through passage in the outdoor plaza area, while providing visual directions for train movements. The station is situated on the eastern portion of the Civic Center and is walking distance from federal and municipal buildings as well as new developments which have high levels of activity, such as the LAPD Headquarters currently under construction and the Caltrans building. The Little Tokyo community is also within 2 blocks of the station, which makes this a good location for a variety of users.

Figure 2-66 Split Station (City Hall)

Located next to historically-significant City Hall, the station design incorporates elements which would maintain the feel of the existing environment. Urban design treatments can be used to enhance the station identity and give the user a unique transit experience.

2.4.5.5 Underground Station on 2nd St.

The underground station on 2nd St. is located between Main St. and Los Angeles St. The station is a center platform configuration and sits directly beneath the newly constructed LAPD Headquarters building. Portals are located on either side of 2nd St. at Los Angeles St. as seen in Figure 2-67. Although the street environment in this location is very dense and built-out, the portals fit well in terms of visibility and location. The portal on the southern side is adjacent to the St. Vibiana Arts complex and Little Tokyo Library; on the north it is next to the Caltrans building.

Figure 2-67 Underground Station on 2nd St.

The station supports the eclectic street environment of residents and downtown workers. Currently, there are various residential developments which are planned or under construction in this vicinity. The St. Vibiana Arts complex is a planned residential development which will have over 300 units. Across the street is the Block 8 development which will play a significant role in shaping the Little Tokyo community while at the same time creating the missing 'link' along the 2nd St. corridor. These residential complexes, along with many redeveloped buildings, are breathing life back into this district which is now home to a variety of sidewalk restaurants, bars, and art galleries.

2.4.5.6 Optional Station on 2nd St.

The At-Grade Emphasis LRT Alternative has an optional split station on 2nd St. between Main St. and Broadway St. One station would be located directly in front of the new LAPD Headquarters with an elevated platform which would create a secured, green open space on the parcel. A second station would be located on the south side of 2nd St. between Spring St. and Broadway St. All pedestrian movements at all intersections would remain the same; however, east-west vehicular traffic would not be allowed due to the space needed for train movements. Currently, the parcel adjacent to the station between Spring St. and Broadway St. serves as a surface parking lot. Plans for a residential complex have

been identified. Other surrounding buildings include the Los Angeles Times headquarters and the future home of the Federal Courthouse. The station area is shown in Figure 2-68.

This split station serves many purposes. Still centrally located to the Civic Center and within walking distance of Little Tokyo, the station is closer to the western end of 2nd St. and Broadway St. During Early Scoping, some comments indicated interest to incorporate a station on Broadway St., a main corridor in the PSA. Currently, the City has a plan called 'Bring Back Broadway' to rehabilitate businesses and create a major activity center. The location of the split station would support the needs of people traveling to Broadway St. while supporting future plans such as the possible addition of a trolley line. Coordination with the 'Bring Back Broadway' committee will be needed in order to remain up-to-date on project developments in the future.

Figure 2-68 Optional Station on 2nd St.

Conclusion

The alternatives recommended for further study will provide a direct connection from the Metro Gold Line at Alameda St. to the existing underground 7th St./Metro Center Station with at least three new stations in between. As the project continues to be refined from an environmental and engineering perspective, alignments, station locations and configurations may need to be adjusted. In addition, supporting ancillary facilities such as traction power substations, ventilation shafts, and station emergency exits will be detailed in the next phase of the study.

Section 3 Transportation Issues and Analysis

3.1 Introduction

This section summarizes the existing transportation system in downtown that would be affected by the proposed Regional Connector. Impacts to the transportation system for each alternative under consideration (At-Grade Emphasis LRT, Underground Emphasis LRT, TSM, and No Build) will be provided in the following sections.

3.2 Transit Analysis

The build alternatives consist of LRT links. Other transit technologies such as monorail, personal rail transit, "people mover," commuter rail, heavy rail, and trolley/streetcars were eliminated from consideration because they require a transfer, are incompatible with the current transportation system, or are not cost-effective.

In addition, year 2030 transit ridership forecasts for the build alternatives are presented. Only transit lines that parallel the proposed operating plans for the Regional Connector project (between Pasadena and Long Beach, and between East Los Angeles and Culver City) are presented in this section. A more detailed listing of all lines passing through the downtown area, all of which could potentially provide transfers to the Regional Connector, can be found in the Section 1.5.

3.2.1 Existing Service

Downtown Los Angeles has the highest concentration of transit service in the County. Ten transit operators manage three existing rail transit lines, two rail lines currently under construction and scheduled for operation by 2010, and 112 bus routes through the PSA. The transit operators are:

- Antelope Valley Transit Authority (AVTA)
- Gardena Municipal Bus Lines
- City of Santa Clarita
- City of Santa Monica (Big Blue Bus)
- Foothill Transit
- LADOT
- Metro
- Montebello Bus Lines
- Orange County Transportation Authority (OCTA)
- Torrance Transit

Figure 3-1 Project Study Area

Services vary considerably in speed, frequency and capacity. The types of service provided include traditional line-haul bus service, peak-hour freeway express buses, downtown circulator shuttles, LRT, and HRT. Although Metro and LADOT carry the majority of the passengers, other operators provide peak-hour, peak direction commuter bus service as well. In addition to public transit services, several high-rise office tenants also offer shuttle bus service to Union Station for their employees.

Almost all streets in the downtown area are served by buses during the peak hours, often with five minute or shorter headways (frequency). Bus service runs in a grid pattern with the predominant flow of passengers traveling in an east-west direction. There are heavily utilized bus lines that run in the north-south direction as well. The most heavily-served streets are 1st St., the 5th St./6th St. couplet, Hill St., Broadway, the Main St./Spring St. couplet, and the Grand Ave./Olive St. couplet.

Almost all of the bus lines in the PSA could double as rail feeder lines and provide transfers to the Metro Rail system along the Regional Connector, as the Regional Connector stations would be positioned within two or three blocks of most bus lines serving the downtown area.

Tables 3-1 through 3-4 summarize the bus lines that currently parallel Metro Rail lines that would feed into the Regional Connector. Each table shows the bus routes with their destinations, hours of operation, and peak hour frequencies.

Table 3-1 Bus Routes Paralleling the Future Gold Line Eastside Extension Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	18	Local Bus	24 Hours	3 mins	Wilshire Center - Montebello via 6th St. and Whittier Blvd.
Metro	30/31/ 330	Local/Limited Stop Bus	24 Hours	4 mins	Pico-Rimpau - Monterey Park via Pico Blvd. and E 1st St.
Metro	62	Local Bus	5AM-11PM	15 mins	Hawaiian Gardens via Telegraph Rd.
Metro	66/366	Local/Limited Stop Bus	4AM-1AM	2 mins	Wilshire Center - Montebello via 8th St. and Olympic Blvd.
Metro	68/84	Local Bus	24 Hours	8 mins	West LA - Montebello via Washington Blvd. and Cesar Chavez Ave.
Metro	720	Rapid Bus	4AM-1AM	4 mins	Wilshire Blvd. - Whittier Blvd. Rapid
Metro	770	Rapid Bus	5AM-9PM	8 mins	Garvey Ave. – Cesar Chavez Ave. Rapid
LADOT	Dash Boyle Heights/East LA	Dash	7AM-7PM	20 mins	Herbert & Whittier via Wabash, Gage Ave. and Rowan
Montebello	40	Local Bus	5AM-10PM	8 mins	Montebello and Whittier via Beverly Blvd.
Montebello	341	Limited Stop Bus	7AM-9AM 4PM-6PM	30 mins	Montebello and Whittier via Beverly Blvd.
Montebello	342	Limited Stop Bus	7AM & 5PM	One Trip	Montebello and Whittier via Beverly Blvd.
Montebello	343	Limited Stop Bus	7AM-8AM 5PM-6PM	30 mins	Montebello and Whittier via Beverly Blvd.

Table 3-2 Bus Routes Paralleling the Existing Pasadena Gold Line Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	78/79/ 378	Local/ Limited Stop Bus	5AM-1AM	10 mins	Arcadia via Huntington Dr. and Las Tunas Dr.
Metro	81/381	Local/ Limited Stop Bus	5AM-1AM	7 mins	Eagle Rock – Exposition Park via Figueroa St.
Metro	83	Local Bus	24 Hours	10 mins	Eagle Rock via York Blvd.
Metro	485	Freeway Express Bus	5AM-12AM	20 mins	Altadena via El Monte Busway, Oak Knoll Ave. and Lake Ave.

Table 3-3 Bus Routes Paralleling the Existing Blue Line Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	53	Local Bus	24 Hours	6 mins	Carson via Central Ave.
Metro	55/355	Local/Limited Stop Bus	24 Hours	5 mins	Imperial Blue/Green Lines via Compton Ave.
Metro	60	Local Bus	24 Hours	6 mins	Artesia Blue Line via Long Beach Blvd.
Metro	753	Rapid Bus	5AM-9PM	10 mins	Central Ave. Rapid
Metro	760	Rapid Bus	5AM-8PM	8 mins	Long Beach Blvd. Rapid Bus
Metro	445	Freeway Express Bus	5AM-7PM	30 mins	San Pedro via Harbor Transitway, 1st St. and Pacific Ave.
Metro	446/447	Freeway Express Bus	5AM-12AM	15 mins	San Pedro via Harbor Transitway, Avalon Bl. and Pacific Ave.

Table 3-4 Bus Routes Paralleling the Future Exposition Line Phase 1 Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	33/333	Local/Limited Stop Bus	24 Hours	2 mins	Santa Monica via Venice Blvd.
Metro	35/335	Local/Limited Stop Bus	4AM-12AM	10 mins	West LA via Washington Blvd.
Metro	37	Local Bus	4AM-11PM	10 mins	Beverly Hills via Beverly Blvd./West LA via Adams Blvd.
Metro	40	Local Bus	24 Hours	10 mins	Redondo Beach via Hawthorne Blvd.
Metro	42	Local Bus	5AM-12AM	12 mins	LAX via Martin Luther King Jr. Blvd.
Metro	439	Freeway Express Bus	5AM-9PM	40-60 mins	Aviation Green Line via Culver City
Metro	740	Rapid Bus	6AM-9PM	15 mins	Hawthorne Blvd. Rapid
LADOT	CE437	Freeway Express Bus	7AM-9AM 4PM-6PM	15-30 mins	Venice/Marina del Rey/Culver City
Big Blue Bus	10	Freeway Express Bus	6AM-9PM	15 mins	Santa Monica (Nonstop) via I-10

3.2.2 No Build Alternative

Transit service under the No Build Alternative is focused on the preservation of existing services and projects. By the projection year of 2030, the Metro Expo Line and the Metro Gold Line Eastside Extension Phase 1 will have opened, and some bus service will have been reorganized and expanded to provide connections with the new rail lines. The transit network within the PSA will otherwise be largely the same as it is now. The anticipated year 2030 No Build transit services are summarized here:

Rail Lines:

- Metro Gold Line from Union Station to Pasadena. This route is a 13.6-mile light rail transit line along the northeastern edge of the PSA.

- Metro Blue Line from Downtown Long Beach to 7th St./Metro Center Station. This 22-mile LRT line travelling south from the PSA is the first modern light rail system in Los Angeles.

- Metro Red and Purple Lines from North Hollywood and Wilshire/Western to Union Station through the 7th St./Metro Center Station. These routes comprise a 17.4-mile HRT system that connects 7th St./Metro Center Station to Union Station and other major destinations in downtown Los Angeles, Hollywood, and the San Fernando Valley. The two lines share tracks within the PSA. Because light rail trains cannot operate on heavy rail tracks, LRT passengers wishing to travel between 7th St./Metro Center Station and Union Station are required to transfer to the Metro Red and Purple Lines or buses such as Metro Local or LADOT DASH routes.

- Metro Gold Line Eastside Extension from Union Station to East Los Angeles. Lying to the east of Downtown Los Angeles, this six-mile long LRT line is expected to be complete and operational in 2009.

- Metro Expo Line from 7th St./Metro Center Station to Culver City. This 8.5-mile route is scheduled to open in 2010, directly connecting Downtown Los Angeles with the dynamic Westside.

The Metro Blue Line, which ends at 7th St./Metro Center Station, does not directly connect to the Metro Gold Line, as seen in Figure 3-2. Currently, passengers have to use the Metro Red and Purple Lines or buses to travel between 7th St./ Metro Center Station and the Metro Gold Line at Union Station.

Bus Lines:

Bus service in the PSA would predominantly remain the same through the year 2030 No Build condition with increased headways for some of the heavily travelled lines. Increases along the lines listed in Tables 3-1 through 3-4 would help transport more passengers into downtown along the rail corridors that would be joined by the Regional Connector.

Commuter Service:

Amtrak and Metrolink would continue to provide commuter rail services to Union Station from other cities in the region. Arriving passengers have the choice of transferring to the Metro Red and Purple Lines, LADOT DASH bus service, or other buses or shuttles to continue their trips to the Central Business District or other parts of the City.

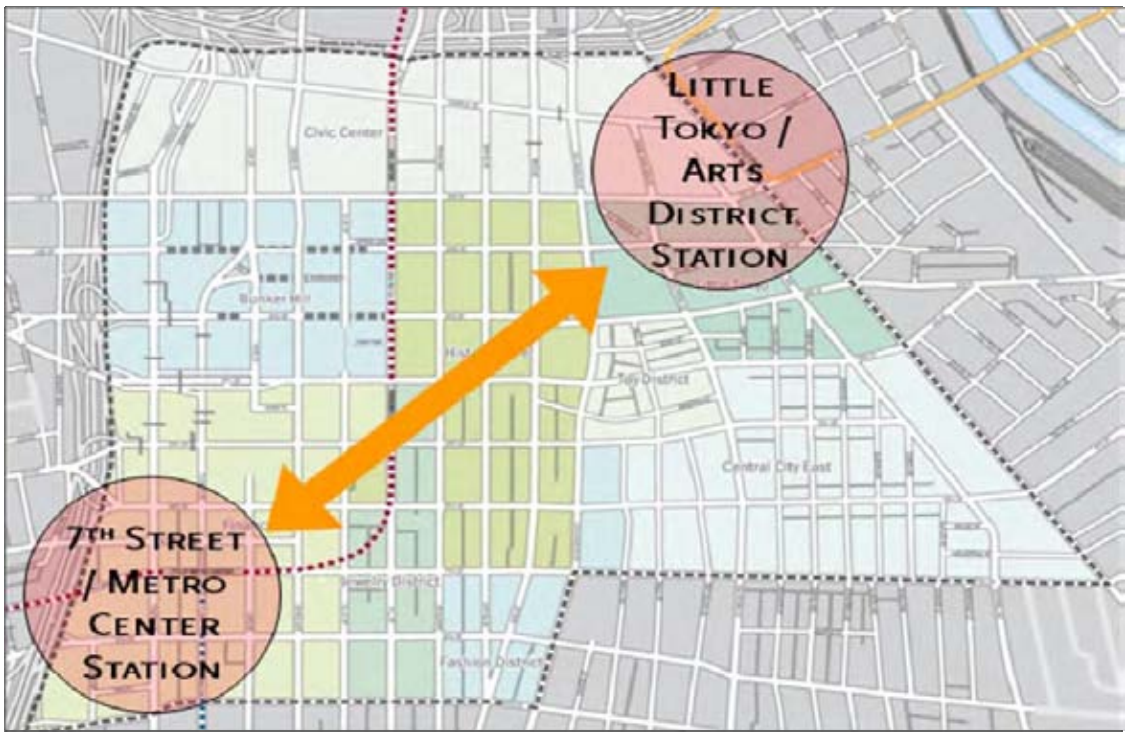


Figure 3-2 Gap in the Light Rail System

3.2.3 Transportation System Management (TSM) Alternative

This alternative consists of shuttle bus routes instead of a light rail link between the 7th St./Metro Center Station and Union Station. Two shuttle routes are designed to move passengers between the two stations:

Grand/Temple/Los Angeles Alignment: The alignment is assumed to follow the same route as part of the existing LADOT DASH Route B service, proceeding from Union Station to 7th St./Metro Center using Los Angeles St., Temple St., and Grand Ave. Shuttle buses will run less than eight minutes apart, providing coverage of the Bunker Hill and Civic Center areas.

Figueroa/Flower/2nd/3rd/Alameda Alignment: This route will utilize the existing northbound bus-only lanes on Figueroa St., 2nd St. and 3rd St., which are lightly used by other bus lines. The alignment passes by both the Little Tokyo/Arts District Station and Union Station, and provides good coverage of Little Tokyo and the southern edge of the Civic Center.

The shuttle routes would be operated by Metro, and could use vehicles ranging from 30-foot shuttle buses to 60-foot articulated buses. They would run every few minutes during peak periods, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. Similar to the Metro Rapid Bus lines, a TPS will also be employed where possible to increase bus speed and efficiency.

3.2.4 At-Grade Emphasis LRT Alternative

The alignment of this alternative extends from the underground 7th St./Metro Center Station, heads north under Flower St., resurfaces to at grade north of 4th St. in the case of Option A (or just north of 5th St. in the case of Option B), enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd St. tunnel. The alignment continues along 2nd St. and splits into an at-grade couplet configuration traveling north Main and Los Angeles Streets with one track on each roadway. Then it heads east on Temple St., realigns into a dual track configuration just north of the Little Tokyo/Arts District Station on Alameda St.

Due to the high volume of trains that will traverse the Regional Connector, an automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts.

This alignment includes both underground and at-grade configurations, with 46 percent of the route underground (38 percent if the underground tracks on Flower St. surface at 5th St. instead of 4th St.), serving the Civic Center, Grand Ave., and the Financial District. Conversion of 2nd St. to a pedestrian-friendly transit mall is assumed. This alternative will reduce the number of traffic lanes and on-street parking spaces. Under this plan, at-grade LRT construction activities will reduce the automobile capacity of 2nd St. As a result, traffic is likely to divert to adjacent parallel streets such as 1st St. and 3rd St., but the roadway capacity along these streets will remain unchanged, as with the No Build Alternative. Congestion along these streets will likely increase.

3.2.5 Underground Emphasis LRT Alternative

This alignment begins at the underground 7th St./Metro Center Station and heads north under Flower St., then turns northeast under the Grand Avenue Project development and heads east under the 2nd St. tunnel. It continues east under 2nd St. until it rises to street level on the lot northeast of 2nd St. and Central Ave. and crosses Alameda St. to connect to the Metro Gold Line tracks.

This alignment is 94 percent underground, with a single at-grade crossing at 1st and Alameda Streets. This grade crossing will feature an automobile underpass and pedestrian overpass so as to remove nearly all conflicts between pedestrians, automobiles, and trains at this intersection. The underground stations provide service to the Civic Center, Little Tokyo, Grand Ave., and Financial Districts. Due to the fact that this alignment is predominantly underground, permanent impacts on traffic operations, roadway capacity and mobility along 2nd St. will be minimized. Construction impacts would occur at station sites, portals, and above cut and cover tunnel sections, but would be temporary.

3.2.6 Ridership

For all of the alternatives under consideration, ridership is affected by travel time, fares, length of segments, and choice of alignment and configuration. One major benefit of a project like this is the increase in the overall transit ridership that the new service produces. The change in ridership is estimated for all relevant transit services in the area including buses and rail.

Ridership generated by each alternative, based on year 2030 forecasts, was then compared to that produced by the No Build and TSM Alternatives. Model runs were performed for the No Build, TSM, At-Grade Emphasis LRT, and Underground Emphasis LRT Alternatives.

Table 3-5 shows the projected year 2030 total transit trips for each alternative. The build alternatives would increase ridership on urban rail (Metro Rail) while reducing bus ridership and slightly reducing commuter rail (Metrolink) ridership, which can be explained as a shift from other transit services to rail when the Regional Connector is built. For example, a small share of the riders currently using Metrolink's Cal State LA, Montebello, Commerce, and Norwalk stations may switch to the Metro Gold Line Eastside Extension or the Metro Blue and Green Lines to take advantage of the improved trip times to downtown. The results suggest that fewer than 400 passengers would make this switch.

The Regional Connector would attract riders for crosstown trips that can be taken without transferring between transit lines. Since the number of new rail riders is greater than the reduction in bus riders, the Regional Connector is anticipated to attract more commuters to the transit system.

For urban rail trips, the net increases over the No Build Alternative range from about 12,200 daily trips for the At-Grade Emphasis LRT Alternative Option A and 13,500 for the At-Grade Emphasis LRT Alternative Option B to 16,000 for the Underground Emphasis LRT Alternative. When compared to the TSM Alternative, the added daily trips range from 13,000 for the At-Grade Emphasis LRT Alternative Option A, 14,300 for the At-Grade Emphasis LRT Alternative Option B, to 16,900 for the Underground Emphasis LRT Alternative. Commuter rail would experience only a slight decrease in ridership.

Overall, total transit trips under the build alternatives increase by 0.5 to 0.7 percent, or 7,600 to 10,200 new daily trips, when compared to the No Build and TSM Alternatives, respectively, due to the improved transit connectivity and frequency provided by the Regional Connector. The increase in boarding's on the light rail lines feeding into the Regional Connector will be 7 to 10 percent compared to No Build because more people will be attracted to the system by the faster service. The new reduced transfer light rail service will also eliminate 17,000 to 20,000 daily transfers to and from the Metro Red and Purple Lines.

Of the two build alternatives, the Underground Emphasis LRT Alternative tends to capture the greatest amount of new transit trips, in terms of both urban rail trips and total transit trips, while the At-Grade Emphasis LRT Alternative follows closely behind.

Table 3-5 Year 2030 Daily Transit Trips

	No Build	TSM	At-Grade LRT (Option A)	At-Grade LRT (Option B)	Underground LRT
Local Bus	839,375	839,166	837,009	836,702	836,181
Express Bus	30,787	30,512	30,723	30,716	30,698
Transitway Bus	102,396	101,866	101,655	101,597	101,563
Rapid Bus	211,266	214,022	210,295	210,185	209,886
BRT	7,463	7,463	7,428	7,413	7,458
Bus Subtotal	1,191,287	1,193,029	1,187,110	1,186,613	1,185,786
Urban Rail	248,194	247,377	260,391	261,660	264,242
Commuter Rail	76,337	76,362	75,934	75,934	75,989
Transit Subtotal	1,515,818	1,516,768	1,523,435	1,524,207	1,526,017

When comparing the TSM and No Build Alternatives, the TSM Alternative results in a nominal increase in bus ridership of about 1,700 additional daily trips, which appears to be the effect of increased frequency coupled with the shuttle bus connection between 7th St./Metro Center and Union Station.

Since a high concentration of bus service already exists in the downtown area linking the two stations, the proposed shuttle bus service is unlikely to function as an essential improvement. The difference in total transit ridership between the TSM and No Build Alternatives is only 950, which is not as dramatic as the increases associated with the LRT build alternatives. Accordingly, the proposed build alternative shows much better ridership performance than the No Build and TSM Alternatives, with the Underground Emphasis LRT Alternative expected to produce the highest amount of new ridership.

Urban Rail Boardings

Table 3-6 summarizes the year 2030 forecasted rail line daily boardings for each of the alternatives. Daily boardings represent the total number of boardings in the North-South Line and East-West Line connected by the Regional Connector, including the Metro Gold Line to Pasadena, the Metro Gold Line Eastside Extension, the Metro Blue Line and the Metro Expo Line. New boardings are presented for each alternative as increments over the No Build and TSM alternatives.

Although the TSM Alternative has a total daily ridership higher than the No Build Alternative, it has the fewest urban rail boarding's, resulting from the additional transfers needed when using the new shuttle buses to link 7th St./Metro Center Station and Union Station. The build alternatives will result in significant increases in rail boarding's along the North-South and East-West LRT lines, compared to both the No Build and TSM Alternatives, ranging from about 10,900 to 15,500 daily boarding's.

Table 3-6 Year 2030 Urban Rail Boardings on LRT Lines Joined by the Regional Connector

Alternative	Daily Boardings	Incremental New Urban Rail Boardings Over No Build	Incremental New Urban Rail Boardings Over TSM	Boardings at New Stations
No Build	154,805	N/A	962	N/A
TSM	153,843	N/A	N/A	N/A
At-Grade Emphasis LRT Option A	165,691	10,886	11,848	15,098
At-Grade Emphasis LRT Option B	167,615	12,810	13,772	15,057
Underground Emphasis LRT	169,288	14,483	15,445	12,457

As for total daily ridership on the entire transit system, the Underground Emphasis LRT Alternative is expected to produce the highest number of boardings each day, though it will yield fewer boardings at the new stations than the at-grade alternative.

3.3 Roadway Analysis

This section summarizes traffic volumes and operating conditions at key roadway segments and intersections within the PSA. Existing daily, AM peak and PM peak traffic volume data were obtained from LADOT. An analysis under existing conditions was performed for the key roadway segments using daily traffic volumes and the key intersections using AM and PM peak hour turning movement data.

The roadway segment analysis was performed using a Volume-to-Capacity (V/C) ratio of the average daily traffic (ADT). Existing volumes were obtained from LADOT and the capacity was based on the roadway's General Plan facility type classification.

For intersections, the AM and PM peak hour volumes were analyzed using the Intersection Capacity Utilization (ICU) methodology, which determines a V/C ratio based on the critical intersection approach movements and a corresponding Level of Service (LOS). The LOS is a qualitative measure used to describe traffic flow conditions, ranging from excellent flow (LOS A) to overloaded, stop-and-go conditions (LOS F). Level of service definitions and corresponding V/C ranges are presented in Table 3-7.

Tables 3-8 through 3-10 summarize the existing operating conditions for the key intersections, roadway segments, and freeways in the PSA. All of the key study intersections currently operate at LOS D or better during both the AM and PM peak hours. The only exception is the intersection of Alameda and 1st Streets, which currently operates at LOS F in the AM peak hour.

Table 3-7 Level of Service Definitions		
Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	FREE FLOW. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 - 0.700	REASONABLY FREE FLOW. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	STABLE FLOW. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	APPROACHING UNSTABLE FLOW (acceptable for urban settings). Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	UNSTABLE FLOW (practical capacity). Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FORCED OR BREAKDOWN FLOW. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, Highway Capacity Manual, 2000

Table 3-8 Existing (2007) Intersection Level of Service				
	AM Peak Hour		PM Peak Hour	
Intersection	V/C Ratio	LOS	V/C Ratio	LOS
Hill St. / 1st St.	0.62	B	0.73	C
Broadway / 1st St.	0.63	B	0.56	A
Spring St. / 1st St.	0.54	A	0.45	A
Main St. / 1st St.	0.44	A	0.55	A
Los Angeles St. / 1st St.	0.53	A	0.58	A
Judge John Aiso St. / 1st St.	0.60	A	0.69	B
Alameda St. / 1st St.	1.03	F	0.88	D
Broadway / 2nd St.	0.84	D	0.46	A
Spring St. / 2nd St.	0.48	A	0.40	A
Main St. / 2nd St.	0.30	A	0.62	B
Los Angeles St. / 2nd St.	0.46	A	0.59	B
San Pedro St. / 2nd St.	0.40	A	0.52	A
Central Ave. / 2nd St.	0.39	A	0.54	A
Alameda St. /2nd St.	0.67	B	0.67	B
Broadway / 3rd St.	0.72	C	0.60	A
Spring St. / 3rd St.	0.59	A	0.55	A

Table 3-8 Existing (2007) Intersection Level of Service				
	AM Peak Hour		PM Peak Hour	
Intersection	V/C Ratio	LOS	V/C Ratio	LOS
Main St. / 3rd St.	0.53	A	0.73	C
Los Angeles St. / 3rd St.	0.66	B	0.57	A
San Pedro St. / 3rd St.	0.63	B	0.44	A
Central Ave. / 3rd St.	0.58	A	0.41	A
Alameda St. / 3rd St.	0.78	C	0.57	A
Figueroa St. / 3rd St.	0.65	B	0.84	D
Hope St. / Temple St.	0.75	C	0.82	D
Grand Ave. / Temple St.	0.65	B	0.68	B
Broadway / Temple St.	N/A	N/A	0.76	C
Spring St. / Temple St.	0.58	A	0.42	A
Main St. / Temple St.	0.39	A	0.69	B
Los Angeles St. / Temple St.	0.55	A	0.63	B
Judge John Aiso St. / Temple St.	0.36	A	0.50	A
Alameda St. / Temple St.	0.64	B	0.65	B

Most of the key roadway segments currently operate at LOS D or better except for three locations which operate at LOS E. Two of these locations are on 2nd St. and the third location is on Alameda St.

All of the freeways serving downtown operate at LOS F during peak hours in at least one direction. As evidenced by the previous tables, traffic congestion on the local freeways is worse than on streets in the PSA. This is largely because freeways congregate both downtown-bound traffic and traffic passing through to other areas. On I-10 east of downtown, and on SR-60 and US-101, traffic operates at a speed acceptable for urban settings in the reverse peak direction during peak hours (i.e., away from downtown in the mornings and toward downtown in the evenings). However, I-10 west of downtown and I-110/SR-110 operate at LOS F in both directions during both commute peaks.

Table 3-9 Existing (2007) Roadway Segment Average Daily Traffic (ADT) Analysis							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	4	28,000	11,177	0.399	A
	5th St.	Secondary	6	45,000	19,920	0.443	A
	6th St.	Secondary	4	30,000	17,386	0.580	A
	Wilshire Blvd.	Secondary	4	30,000	19,434	0.648	B
	7th St.	Secondary	4	30,000	18,908	0.630	B
2nd St.	Alameda St.	Secondary	3	21,000	8,176	0.389	A
	Central Ave.	Secondary	2	14,000	10,452	0.747	C
	Los Angeles St.	Secondary	3	21,000	16,244	0.774	C
	Main St.	Secondary	3	21,000	19,630	0.935	E
	San Pedro St.	Secondary	2	14,000	13,371	0.955	E
	Spring St.	Secondary	4	28,000	14,394	0.514	A
Los Angeles St.	1st St.	Secondary	4	28,000	18,559	0.663	B
	2nd St.	Secondary	4	28,000	17,156	0.613	B
	Temple St.	Secondary	5	35,000	22,036	0.630	B
Main St.	1st St. 1-Way	Major Class II	3	25,500	12,079	0.474	A
	2nd St. 1-Way	Major Class II	3	25,500	13,711	0.538	A
	Temple St.	Major Class II	4	34,000	25,626	0.754	C
Temple St.	Judge John Aiso St.	Major Class II	4	32,000	17,114	0.535	A
	Los Angeles St.	Major Class II	4	32,000	16,809	0.525	A
	Main St.	Major Class II	4	32,000	17,032	0.532	A
1st St.	Alameda St.	Secondary	4	28,000	21,538	0.769	C
	Central Ave.	Secondary	4	28,000	23,081	0.824	D
	Los Angeles St.	Secondary	6	42,000	22,099	0.526	A
	Main St.	Secondary	6	42,000	23,908	0.569	A
	Spring St.	Secondary	6	42,000	20,205	0.481	A
3rd St.	Flower St.	Secondary	4	30,000	19,133	0.638	B
	Spring St.	Secondary	3	22,500	17,564	0.781	C
	Los Angeles St.	Secondary	3	22,500	17,965	0.798	C
	Main St.	Secondary	3	22,500	16,151	0.718	C
Alameda St.	1st St.	Major Class II	4	32,000	30,514	0.954	E
	2nd St.	Major Class II	4	32,000	27,881	0.871	D

Table 3-10 Existing (2003) Peak Hour Freeway Traffic and Level of Service										
Freeway	Cross Street	Capacity (VPH)	North/East AM (VPH and LOS)		North/East PM (VPH and LOS)		South/West AM (VPH and LOS)		South/West PM (VPH and LOS)	
I-5	Stadium Way	10,000	9,206	D	12,600	F	13,600	F	10,353	F
I-10	Budlong Ave.	12,500	17,000	F	18,250	F	18,250	F	18,250	F
I-10	East LA City Limits	12,000	6,618	C	12,120	F	11,100	D	8,879	C
SR-60	Indiana St.	12,000	4,989	B	15,120	F	16,320	F	6,317	B
US-101	Vignes St.	10,000 N/B	13,600	F	6,561	C				
US-101	Vignes St.	8,000 S/B					5,228	C	10,880	F
SR-110	US-101	8,000	8,121	F	11,771	F	10,913	F	10,913	F

Source: Metro 2004 Congestion Management Program for Los Angeles County

In order to estimate the impacts of the proposed alternatives on the downtown roadway system, future traffic volumes were projected for the year 2030. The travel demand model was used to identify the annual growth rate at key intersections and roadway segments between the model base year and the 2030 forecast year. At most of the key locations, the model's annual growth rate was found to be around one percent or less. Consequently, a conservative annual growth rate of one percent was used to forecast the existing (2007) traffic volumes over 23 years to the year 2030 horizon. However, at several locations where the model growth rate substantially exceeded one percent, the greater rates from the model were utilized. This occurred along Flower St., where an annual growth rate of 1.4 percent was used, and in the southbound direction on Alameda St., where an annual growth rate of 1.75 percent was used.

Based on the future daily and peak hour traffic volumes that were developed, the future LOS at each key intersection and roadway segment location was calculated for the No Build, TSM and build alternatives. In general, the difference in future traffic volumes between the No Build and TSM Alternatives is minimal; for this AA, it is assumed that they will be the same. For each build alternative, the traffic impacts were compared to the No Build and TSM Alternatives. Vehicular circulation through the downtown area will be affected by the proposed project, but the level of impact will depend on the alternative alignment being evaluated, as noted in the following sections.

At-Grade Emphasis LRT Alternative

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks will typically occupy a 26-foot wide surface right-of-way bordered by mountable curbs. It is expected that this width will increase to 39 feet at center platform station locations. Vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted. Access to existing parking structures, parking lots, loading docks and commercial frontage will be affected by the at-grade LRT facilities. Left-turn parking access and egress is presently allowed at many downtown sites. However,

the at-grade LRT facilities will eliminate uncontrolled mid-block left-turns, and thus modify existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT alignment travels at-grade along 2nd St. and it is assumed that this street would be dedicated as a transit-only roadway between the tunnel and Los Angeles St. This segment of 2nd St. would be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties. As a result of this proposed change in street circulation, through traffic currently using 2nd St. would be diverted to parallel roadways such as 1st and 3rd Streets. East of Los Angeles St., 2nd St. would maintain its current physical features and operating characteristics.

The one-way transit couplet near City Hall along Main and Los Angeles Streets between 2nd and Temple Streets would consist of a single LRT track along each roadway. Both Main and Los Angeles Streets are wide enough to accommodate a single track and maintain acceptable vehicular operations. The curb-to-curb width of Temple St., between Main and Alameda Streets, is 62 to 71 feet, leaving one lane of traffic in each direction with potentially mountable curbs for use by emergency vehicles. Traffic operations along this segment of Temple St. will be affected by the lane reduction.

To minimize conflicts between rail, vehicular, and pedestrian traffic, and to minimize delays at the intersection of Temple and Alameda Streets, a vehicular underpass and a pedestrian overpass are proposed along Alameda St. to route the through traffic beneath the rail tracks and Temple St. Temple St. and the rail tracks would remain at-grade and the existing at-grade segment of Alameda St. would be lowered to pass under Temple St. Through traffic traveling north and south on Alameda St. would operate unimpeded without being stopped or delayed at the intersection. Through traffic traveling east and west on Temple St. would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation. In addition, a one-lane southbound at-grade frontage road would be provided along Alameda St. to maintain access to the businesses and properties on the west side of the street.

Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative alignment does not affect surface traffic except at the intersection of Alameda and 1st Streets, where the LRT alignment operates in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment will continue to operate at current traffic flow patterns.

The future roadway LOS for this alternative will be the same as the No Build and TSM Alternatives except at the intersection of Alameda and 1st Streets. There, a vehicular underpass and pedestrian overpass are proposed to separate the heavy traffic volumes along Alameda St. from rail traffic to minimize delays. The proposed underpass would result in uninterrupted flow along Alameda St. in the north and south directions between 2nd and Temple Streets. Through traffic traveling east and west on 1st St. would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation.

In addition, at-grade frontage roads would be provided along on both sides of Alameda St. south of the intersection, and on the southbound side of the street north of the intersection to maintain access to adjacent businesses and properties. A full northbound frontage road is infeasible because of the location of the rail tracks and the Metro Gold Line Eastside Extension's Little Tokyo/Arts District Station on the east (northbound) side of Alameda St.

The results of the future conditions LOS analysis at the key intersections and roadway segments for the No Build, TSM and build alternatives are presented in Tables 3-11, 3-12, and 3-13. During the AM peak hour, five intersections operate at LOS E or F for the No Build, TSM, and Underground Emphasis LRT Alternatives; this increases to seven intersections for the At-Grade Emphasis LRT Alternative.

Similarly, during the PM peak hour, five intersections operate at LOS E or F for the No Build and TSM Alternatives, versus only four for the Underground Emphasis LRT Alternative and 13 for the At-Grade Emphasis LRT Alternative. The roadway segment analysis provides similar results, with 12 segments operating at LOS E or F for the No Build, TSM and Underground Emphasis LRT Alternatives, and 14 for the At-Grade Emphasis LRT Alternative. It should be noted that the No Build, TSM and Underground Emphasis LRT Alternatives have six of the 12 locations operating at LOS F while the At-Grade Emphasis LRT Alternative has 11 of the 14 locations operating at LOS F.

Table 3-11 Future (2030) Intersection Level of Service AM Peak Hour

Intersection	No Build		TSM		Couplet A		Couplet B		Underground	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Hill St. / 1st St.	0.76	C	0.76	C	0.76	C	0.76	C	0.76	C
Broadway / 1st St.	0.78	C	0.78	C	0.87	D	0.87	D	0.78	C
Spring St. / 1st St.	0.67	B	0.67	B	0.81	D	0.81	D	0.67	B
Main St. / 1st St.	0.54	A	0.54	A	0.69	B	0.69	B	0.54	A
Los Angeles St. / 1st St.	0.66	B	0.66	B	0.71	C	0.71	C	0.66	B
Judge John Aiso St. / 1st St.	0.74	C	0.74	C	0.80	C	0.80	C	0.74	C
Alameda St. / 1st St.	1.36	F	1.36	F	1.36	F	1.36	F	0.96	E
Broadway / 2nd St.	1.05	F	1.05	F	0.82	D	0.82	D	1.05	F
Spring St. / 2nd St.	0.59	A	0.59	A	0.54	A	0.54	A	0.59	A
Main St. / 2nd St.	0.36	A	0.36	A	0.53	A	0.53	A	0.36	A
Los Angeles St. / 2nd St.	0.57	A	0.57	A	0.71	C	0.71	C	0.57	A
San Pedro St. / 2nd St.	0.50	A	0.50	A	0.38	A	0.38	A	0.50	A
Central Ave. / 2nd St.	0.48	A	0.48	A	0.48	A	0.48	A	0.48	A
Alameda St. / 2nd St.	0.91	E	0.91	E	0.91	E	0.91	E	0.91	E
Broadway / 3rd St.	0.90	D	0.90	D	1.20	F	1.20	F	0.90	D
Spring St. / 3rd St.	0.73	C	0.73	C	0.83	D	0.83	D	0.73	C
Main St. / 3rd St.	0.66	B	0.66	B	0.81	D	0.81	D	0.66	B
Los Angeles St. / 3rd St.	0.82	D	0.82	D	0.90	D	0.90	D	0.82	D

Table 3-11 Future (2030) Intersection Level of Service AM Peak Hour										
Intersection	No Build		TSM		Couplet A		Couplet B		Underground	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
San Pedro St. / 3rd St.	0.78	C	0.78	C	0.84	D	0.84	D	0.78	C
Central Ave. / 3rd St.	0.72	C	0.72	C	0.72	C	0.72	C	0.72	C
Alameda St. / 3rd St.	1.04	F	1.04	F	1.04	F	1.04	F	1.04	F
Figueroa St. / 3rd St.	0.80	C	0.80	C	0.80	C	0.80	C	0.80	C
Hope St. / Temple St.	0.98	E	0.98	E	0.98	E	0.98	E	0.98	E
Grand Ave. / Temple St.	0.76	C	0.76	C	0.76	C	0.76	C	0.76	C
Broadway / Temple St.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spring St. / Temple St.	0.67	B	0.67	B	0.67	B	0.67	B	0.67	B
Main St. / Temple St.	0.44	A	0.44	A	0.50	A	0.50	A	0.44	A
Los Angeles St. / Temple St.	0.68	B	0.68	B	1.00	E	1.00	E	0.68	B
Judge John Aiso St. / Temple St.	0.44	A	0.44	A	0.86	D	0.86	D	0.44	A
Alameda St. / Temple St.	0.79	C	0.79	C	1.12	F	1.12	F	0.79	C
No. of LOS E Intersections	**2**		**2**		**3**		**3**		**3**	
No. of LOS F Intersections	**3**		**3**		**4**		**4**		**2**	

Table 3-12 Future (2030) Intersection Level of Service PM Peak Hour										
Intersection	No Build		TSM		Couplet A		Couplet B		Underground	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Hill St. / 1st St.	0.91	E	0.91	E	0.91	E	0.91	E	0.91	E
Broadway / 1st St.	0.70	B	0.70	B	0.78	C	0.78	C	0.70	B
Spring St. / 1st St.	0.56	A	0.56	A	0.62	B	0.62	B	0.56	A
Main St. / 1st St.	0.67	B	0.67	B	0.91	E	0.91	E	0.67	B
Los Angeles St. / 1st St.	0.71	C	0.71	C	0.88	D	0.88	D	0.71	C
Judge John Aiso St. / 1st St.	0.85	D	0.85	D	1.06	F	1.06	F	0.85	D
Alameda St. / 1st St.	1.10	F	1.10	F	1.10	F	1.10	F	0.87	D
Broadway / 2nd St.	0.57	A	0.57	A	0.54	A	0.54	A	0.57	A
Spring St. / 2nd St.	0.49	A	0.49	A	0.44	A	0.44	A	0.49	A
Main St. / 2nd St.	0.77	C	0.77	C	0.85	D	0.85	D	0.77	C
Los Angeles St. / 2nd St.	0.73	C	0.73	C	0.82	D	0.82	D	0.73	C
San Pedro St. / 2nd St.	0.75	C	0.75	C	0.59	A	0.59	A	0.75	C
Central Ave. / 2nd St.	0.67	B	0.67	B	0.67	B	0.67	B	0.67	B
Alameda St. / 2nd St.	0.89	D	0.89	D	0.89	D	0.89	D	0.89	D
Broadway / 3rd St.	0.74	C	0.74	C	0.92	E	0.92	E	0.74	C
Spring St. / 3rd St.	0.67	B	0.67	B	0.82	D	0.82	D	0.67	B
Main St. / 3rd St.	0.90	D	0.90	D	1.04	F	1.04	F	0.90	D

Table 3-12 Future (2030) Intersection Level of Service PM Peak Hour										
Intersection	No Build		TSM		Couplet A		Couplet B		Underground	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Los Angeles St. / 3rd St.	0.70	B	0.70	B	0.74	C	0.74	C	0.70	B
San Pedro St. / 3rd St.	0.54	A	0.54	A	0.62	B	0.62	B	0.54	A
Central Ave. / 3rd St.	0.51	A	0.51	A	0.51	A	0.51	A	0.51	A
Alameda St. / 3rd St.	0.70	B	0.70	B	0.70	B	0.70	B	0.70	B
Figueroa St. / 3rd St.	1.22	F	1.22	F	1.22	F	1.22	F	1.22	F
Hope St. / Temple St.	0.96	E	0.96	E	0.96	E	0.96	E	0.96	E
Grand Ave. / Temple St.	0.87	D	0.87	D	0.87	D	0.87	D	0.87	D
Broadway / Temple St.	0.92	E	0.92	E	0.92	E	0.92	E	0.92	E
Spring St. / Temple St.	0.51	A	0.51	A	0.51	A	0.51	A	0.51	A
Main St. / Temple St.	0.85	D	0.85	D	1.00	E	1.00	E	0.85	D
Los Angeles St. / Temple St.	0.77	C	0.77	C	1.34	F	1.34	F	0.77	C
Judge John Aiso St. / Temple St.	0.61	B	0.61	B	0.93	E	0.93	E	0.61	B
Alameda St. / Temple St.	0.80	C	0.80	C	1.04	F	1.04	F	0.80	C
No. of LOS E Intersections	**3**		**3**		**7**		**7**		**3**	
No. of LOS F Intersections	**2**		**2**		**6**		**6**		**1**	

Table 3-13 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis No Build, TSM and Underground Emphasis LRT Alternative							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	4	28,000	15,389	0.550	A
	5th St.	Secondary	6	45,000	27,426	0.609	B
	6th St.	Secondary	4	30,000	23,938	0.798	C
	Wilshire Blvd.	Secondary	4	30,000	26,757	0.892	D
	7th St.	Secondary	4	30,000	26,033	0.868	D
2nd St.	Alameda St.	Secondary	3	21,000	10,279	0.489	A
	Central Ave.	Secondary	2	14,000	13,140	0.939	E
	Los Angeles St.	Secondary	3	21,000	20,421	0.972	E
	Main St.	Secondary	3	21,000	24,679	1.175	F
	San Pedro St.	Secondary	2	14,000	16,810	1.201	F
	Spring St.	Secondary	4	28,000	18,095	0.646	B
Los Angeles St.	1st St.	Secondary	4	28,000	23,331	0.833	D
	2nd St.	Secondary	4	28,000	21,568	0.770	C
	Temple St.	Secondary	5	35,000	27,703	0.792	C
Main St.	1st St. 1-Way	Major Class II	3	25,500	15,185	0.595	A
	2nd St. 1-Way	Major Class II	3	25,500	17,237	0.676	B
	Temple St.	Major Class II	4	34,000	32,216	0.948	E
Temple St.	Judge John Aiso St.	Major Class II	4	32,000	21,516	0.672	B
	Los Angeles St.	Major Class II	4	32,000	21,132	0.660	B
	Main St.	Major Class II	4	32,000	21,412	0.669	B

Table 3-13 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis No Build, TSM and Underground Emphasis LRT Alternative							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
1st St.	Alameda St.	Secondary	4	28,000	27,077	0.967	E
	Central Ave.	Secondary	4	28,000	29,016	1.036	F
	Los Angeles St.	Secondary	6	42,000	27,783	0.661	B
	Main St.	Secondary	6	42,000	30,056	0.716	C
	Spring St.	Secondary	6	42,000	25,401	0.605	B
3rd St.	Flower St.	Secondary	4	30,000	24,053	0.802	D
	Spring St.	Secondary	3	22,500	22,080	0.981	E
	Los Angeles St.	Secondary	3	22,500	22,585	1.004	F
	Main St.	Secondary	3	22,500	20,304	0.902	E
Alameda St.	1st St.	Major Class II	4	32,000	42,364	1.324	F
	2nd St.	Major Class II	4	32,000	38,338	1.198	F

Roadway Segments with LOS E = 6
Roadway Segments with LOS F = 6
Total of LOS E & F =12

Table 3-14 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis At-Grade Emphasis LRT Alternative							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
Flower St.	3rd St.	Secondary	3	21,000	15,389	0.733	C
	5th St.	Secondary	6	45,000	27,426	0.609	B
	6th St.	Secondary	4	30,000	23,938	0.798	C
	Wilshire Blvd.	Secondary	4	30,000	26,757	0.892	D
	7th St.	Secondary	4	30,000	26,033	0.868	D
2nd St.	Alameda St.	Secondary	3	21,000	10,279	0.489	A
	Central Ave.	Secondary	2	14,000	13,140	0.939	E
	Los Angeles St.	Secondary	1	7,000	4,084	0.583	A
	Main St.	Secondary	1	7,000	4,936	0.705	C
	San Pedro St.	Secondary	2	14,000	16,810	1.201	F
	Spring St.	Secondary	1	7,000	3,619	0.517	A
Los Angeles St.	1st St.	Secondary	3	21,000	23,331	1.111	F
	2nd St.	Secondary	4	28,000	21,568	0.770	C
	Temple St.	Secondary	4	28,000	27,703	0.989	D
Main St.	1st St. 1-Way	Major Class II	3	25,500	15,185	0.595	A
	2nd St. 1-Way	Major Class II	3	25,500	17,237	0.676	B
	Temple St.	Major Class II	3	25,500	32,216	1.263	F
Temple St.	Judge John Aiso St.	Major Class II	2	16,000	21,516	1.345	F
	Los Angeles St.	Major Class II	2	16,000	21,132	1.321	F
	Main St.	Major Class II	3	24,000	21,412	0.892	D
1st St.	Alameda St.	Secondary	4	28,000	27,077	0.967	E
	Central Ave.	Secondary	4	28,000	29,016	1.036	F
	Los Angeles St.	Secondary	6	42,000	35,952	0.856	D
	Main St.	Secondary	6	42,000	39,928	0.951	E
	Spring St.	Secondary	6	42,000	32,639	0.777	C

Table 3-14 Future (2030) Roadway Segment Average Daily Traffic (ADT) Analysis At-Grade Emphasis LRT Alternative							
Primary Street	Cross Street	Facility Type	Number of lanes	Capacity	ADT	V/C Ratio	LOS
3rd St.	Flower St.	Secondary	4	30,000	24,053	0.802	D
	Spring St.	Secondary	3	22,500	29,318	1.303	F
	Los Angeles St.	Secondary	3	22,500	30,754	1.367	F
	Main St.	Secondary	3	22,500	30,176	1.341	F
Alameda St.	1st St.	Major Class II	4	32,000	42,364	1.324	F
	2nd St.	Major Class II	4	32,000	38,338	1.198	F

Roadway Segments with LOS E = 3
Roadway Segments with LOS F = 11
Total of LOS E & F =14

3.3.1 Parking Evaluation

A preliminary parking analysis was performed to assess the number of on-street parking spaces that may be removed for the build alternatives. This section presents the effects that each alternative may have on the curb parking supply. In order to estimate parking losses, a field survey was performed to inventory the number of available on-street parking spaces. The street segments with an at-grade transit alignment were surveyed to collect the number of spaces and parking restriction information.

No Build, TSM, and Underground Emphasis LRT Alternatives

Neither the No Build nor the TSM Alternative would displace any existing parking spaces. The build alternatives will each have different parking impacts. With the proposed alignment almost completely underground, the Underground Emphasis LRT Alternative does not result in any loss of on-street parking spaces along 2nd or Flower Streets. However, the proposed underpass at 1st and Alameda Streets will result in the loss of existing parking spaces along the east side of Alameda St. near the intersection. Approximately 20 on-street spaces would be displaced. Construction of the Underground Emphasis LRT Alternative would temporarily displace parking spaces along the alignment, but they would be restored once work is completed.

At-Grade Emphasis LRT Alternative

The construction of at-grade tracks along 2nd St. and the need for adequate street widths to provide local access lanes will require the elimination of existing on-street parking and loading spaces to accommodate the At-Grade Emphasis LRT Alternative. This loss of parking may result in spill over to adjacent streets if parking on these streets is readily available. As shown in Table 3-15, the total number of parking spaces lost under the At-Grade Emphasis LRT Alternative will total 88, with 35 of the spaces located on 2nd St. between Hill and Los Angeles Streets. All of the lost parking spaces would be in the Civic Center area, and no parking would be displaced in Little Tokyo. In addition, nine spaces may also be lost along the south side of Temple St. west of Alameda St. due to the proposed underpass.

Table 3-15 Number of Existing Parking Spaces on 2nd Street																
Street	Side	Hill to Broadway			Broadway to Spring			Spring to Main			Main to Los Angeles			TOTAL		
		Park	Load	Drive-Way	Park	Load	Drive-way	Park	Load	Drive-way	Park	Load	Drive-way	Park	Load	Drive-way
2nd St	North	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	South	9	1	0	7	0	1	4	4	1	10	0	9	30	5	11
TOTAL		9	1	0	7	0	2	4	4	1	10	0	9	30	5	12

Consequently, it will be necessary to implement mitigation measures, such as off-street parking facilities to replace the lost curb spaces. After the selection of a preferred alternative, Metro would have to work closely with the affected entities to develop plans to minimize the parking losses.

3.4 Summary of Transportation Analysis

In an effort to better inform decisions made on such a significant investment, this section provides a summary of major transportation issues such as ridership, traffic impacts and parking losses related to each alternative based on a comparative evaluation.

No Build Alternative

Implementation of the No Build Alternative will result in the lowest total daily transit ridership of 1.5 million passengers and the second fewest urban rail daily combined boardings of approximately 155,000 for the Metro Blue Line, Pasadena Gold Line, Gold Line Extension, and Expo Line.

For the No Build Alternative, two key intersections operate at LOS E and three operate at LOS F during the AM peak hour. The remaining intersections operate at LOS D or better. The number of intersections operating at LOS E and F is three and two, respectively, during the PM peak hour. In addition, 12 roadway segments operate at LOS E or LOS F.

This alternative will not displace any existing on-street parking or loading spaces or reduce the number of traffic lanes.

TSM Alternative

This alternative has the fewest daily urban rail boardings, about 154,000, for the Metro Blue Line, Pasadena Gold Line, Gold Line Extension, and Expo Line combined, since it consists of shuttle bus service. Although the TSM Alternative results in fewer rail boardings, it will produce approximately 1.5 million total transit trips each day, 950 more daily trips than the No Build Alternative. Thus, the TSM Alternative is expected to slightly improve overall transit service.

Like the No Build Alternative, the TSM Alternative has two key intersections operating at LOS E and three operating at LOS F during the AM peak hour. The remaining intersections operate at LOS D or better. The number of intersections operating at LOS E and F changes to three and two, respectively, during the PM peak hour. In addition, 12 roadway segments will operate at LOS E or LOS F.

Like the No Build Alternative, the TSM Alternative would not require the displacement of any existing on-street parking or loading spaces, or a reduction in traffic lanes.

At-Grade Emphasis LRT Alternative Option A

The At-Grade Emphasis Alternative with Option A ranks lowest with regard to ridership of the build LRT alternatives, with about 1.5 million total daily transit trips. However, it still creates 7,600 more daily trips than the No Build Alternative and 6,700 daily trips over the TSM Alternative. It also results in the fewest daily urban rail boardings of nearly 166,000 compared to Option B and the Underground Emphasis LRT Alternative, but far more than the No Build and TSM Alternatives.

The at-grade operation along 2nd St. will result in the reduction of roadway capacity and the diversion of through traffic to adjacent roadways such as 1st St. to the north and 3rd St. to the south. However, local access will be maintained to serve the adjacent businesses and office buildings. This shift in traffic flow patterns will cause seven key intersections to operate at LOS E or LOS F in the AM peak hour, and 13 during the PM peak hour. A total of 14 roadway segments will operate at LOS E or F, with the majority operating at LOS F.

The operation of at-grade LRT service along 2nd St. will necessitate the removal of 35 on-street parking and loading spaces. In addition, approximately 9 spaces may also be lost along the south side of Temple St. just west of Alameda St.

At-Grade Emphasis LRT Alternative Option B

The At-Grade Emphasis Alternative with Option B ranks second in ridership and urban rail boardings, with 1.5 million total trips and nearly 170,000 boardings each day. A comparison to the No Build and TSM Alternatives reveals that it will produce about 8,400 and 7,500 additional daily transit trips, respectively.

Option B is practically identical to Option A, except it has a longer at-grade section along Flower St. and an at-grade center platform station at the World Trade Center. As noted previously, at-grade operation along 2nd St. will result in the reduction of roadway capacity and the diversion of through traffic to adjacent roadways such as 1st St. to the north and 3rd St. to the south. However, local access will be maintained to serve the adjacent businesses and office buildings. Consequently, seven key intersections will operate at LOS E or LOS F in the AM peak hour, 13 during the PM peak hour. A total of 14 roadway segments will operate at LOS E or F with the majority of these locations operating at LOS F.

The at-grade LRT service along 2nd St. will displace a total of 35 on-street parking and loading spaces. In addition, approximately 9 spaces may be lost along the south side of Temple St. just west of Alameda St.

Underground Emphasis LRT Alternative

The ridership evaluation shows the Underground Emphasis LRT Alternative to be the best performer, producing a total of 1.5 million daily transit trips. This alternative would result in almost 10,200 more daily transit trips than the No Build Alternative, and 9,300 more than the TSM Alternative. It would also yield the most daily urban rail boardings at 170,000.

Due to its mostly underground configuration, this alternative will not compromise existing roadway capacity. Similar to the No Build and TSM Alternatives, five key intersections will operate at LOS E or LOS F during the AM peak period, four during the PM peak hour. The proposed Alameda St. underpass at 1st St. will help improve the operation of the intersection. Like the No Build and TSM Alternatives, a total of 12 roadway segments operate at LOS E or LOS F. Minor diversions of several turn movements at the intersection of Alameda and 1st Streets will occur due to the proposed underpass and associated frontage road configurations.

The proposed underpass along Alameda St. is expected to displace about 20 parking spaces in the northbound direction south of 1st St.

3.5 Conclusions

Each of the alternatives was evaluated in terms of ridership, potential traffic impacts and parking losses. As explored above, the build LRT alternatives will result in significant increases in total transit ridership and urban rail boardings, with the Underground Emphasis LRT Alternative achieving the highest ridership performance.

From a roadway and intersection evaluation perspective, the Underground Emphasis LRT Alternative runs mostly underground, so there will be minimal disruption to traffic operations and flow patterns. The existing downtown roadway capacity will be maintained, and access to businesses and office buildings will not be compromised. In most cases, existing turn movements will be permitted, except at the proposed Alameda St. underpass and frontage roads, where several turn movements will be prohibited and traffic will need to use alternate routes. Overall, the operating conditions at the key intersections and roadway segments will mirror those of the No Build and TSM Alternatives.

On the other hand, the At-Grade Emphasis LRT Alternative will reduce roadway capacity along several segments due to the addition of grade crossings and street-running tracks. The proposed dedication of 2nd St. as a transit roadway will alter traffic flow patterns in the vicinity of the alignment. Local access will be maintained, but through traffic will be diverted to adjacent parallel streets, such as 1st and 3rd Streets. Crossing the rail tracks will be prohibited except at controlled signalized intersections. A vehicular underpass and pedestrian overpass are proposed near the junction with the Metro Gold Line Eastside

Extension tracks at 1st and Alameda Streets to minimize vehicular, pedestrian, and rail conflicts as wells as reduce potential delays along Alameda St. Operating conditions at the key intersections and roadway segments will be worse than the No Build and TSM Alternatives.

With respect to on-street parking and loading spaces, the At-Grade Emphasis LRT Alternative will displace 35 spaces along 2nd St. An additional 9 spaces may be removed along the south side of Temple Street in the block west of Alameda St. to accommodate the underpass. In comparison, the Underground Emphasis LRT Alternative is expected to displace about 20 parking spaces along the east side of Alameda St. south of 1st St. to accommodate the proposed underpass and frontage roads.

Section 4 Affected Environment and Environmental Issues

4.1 Introduction

The alternatives evaluated for the Regional Connector AA would have direct and indirect effects on the physical environment. This section of the AA describes the existing resource environment and analyzes the potential environmental impacts associated with implementation of the promising build alternatives: the At-Grade Emphasis LRT and the Underground Emphasis LRT. At the conclusion of this document – Section 4.20 – is a summary and comparison of the build alternatives with the No Build Alternative and the TSM Alternative.

The specific environmental impact resource areas analyzed in this section include: land use and economic development, displacement and relocation of existing uses, community and neighborhood, visual and aesthetics, air quality, noise and vibration, ecosystems/biological resources, geotechnical (including subsurface and hazardous materials), water resources, energy, historic, archaeological and Paleontological resources, parklands and other community facilities, economic and fiscal, safety and security, construction impacts, growth inducing, environmental justice, and major utilities.

The following analysis discusses the potential environmental impacts from the construction and operation of the alternatives. Construction impacts would be temporary, while operational impacts would be on-going. As appropriate, the potential site-specific impacts are described based on available information and the current planning effort. As subsequent efforts become more detailed, revised and/or further assessments of the potential environmental effects will be prepared, evaluated and described in a future (EIR/EIS) for the project.

4.2 Land Use and Economic Development

This section examines the existing land uses and associated policies within the Regional Connector PSA, and evaluates their compatibility with the build alternatives. The section also identifies areas for potential growth in response to the new transit service, as well as other impacts that the project might have on development within downtown Los Angeles. Refer to Section 4.3, Displacement and Relocation of Existing Uses, and Section 4.4, Community and Neighborhood Impacts, for additional discussion related to land use and economic development.

4.2.1 Affected Environment

4.2.1.1 Regulatory Framework

The following are the land use plans, community plans, and redevelopment plans and projects affecting the PSA, as well as brief assessments of their compatibility with the two build alternatives.

General Plan Framework: The Los Angeles General Plan Framework, adopted in December 1996, is the citywide portion of the City's General Plan, which is intended to guide the City's long-range growth and development. The General Plan Framework anticipates fast-paced population growth and outlines methods for directing growth toward selected high-density areas where infrastructure is readily available, rather than allow all areas of the City to grow in an uncontrolled fashion. The study identifies downtown as one of the key growth areas, and calls for enhancements to the County's rail system, including extensions and additional feeder bus service.

Central City Community Plan: The Land Use Element of the General Plan splits the City into 35 community plan areas, each with detailed programs targeted at local growth and neighborhood improvements. The entire Regional Connector PSA lies within the Central City Community Plan district. This plan calls for creating dense residential neighborhoods with a variety of housing types, improving the functionality of the area's commercial districts, encouraging the development of additional rail transit, retaining the scale and appearance of existing areas, and encouraging job-rich land uses. As shown in Figure 4-1, the Central City Community Plan area is bounded by Cesar Chavez Ave. on the north, the Santa Monica Freeway (I-10) on the south, the Harbor Freeway (SR-110) on the west, and Alameda St. on the east. In response to the recent increase in housing units downtown, the plan seeks to develop neighborhood-supporting businesses and enhance the safety and cleanliness of the area. The plan heavily promotes transit supportive land uses, such as high-density residential developments, regional entertainment and cultural centers, space for small start-up businesses, retail plazas, nighttime entertainment venues, hotels, and dense industrial and wholesale districts. Of particular importance to the Regional Connector, the plan notes that most of the traffic in the area is generated by pass-through travel between areas outside of downtown. As such, the plan expressly recommends providing better connections through downtown from the SR-110 corridor, including a light rail extension from 7th St./Metro Center Station to Union Station via Flower St., Bunker Hill, and Little Tokyo.

Transportation Element: The Transportation Element of the General Plan lists objectives and programs aimed at improving accessibility and long-term mobility within the City of Los Angeles. In the document, the City encourages the development of high capacity transit service along several corridors, including a "Downtown Connector" from either the San Pedro or Washington Stations to Union Station.

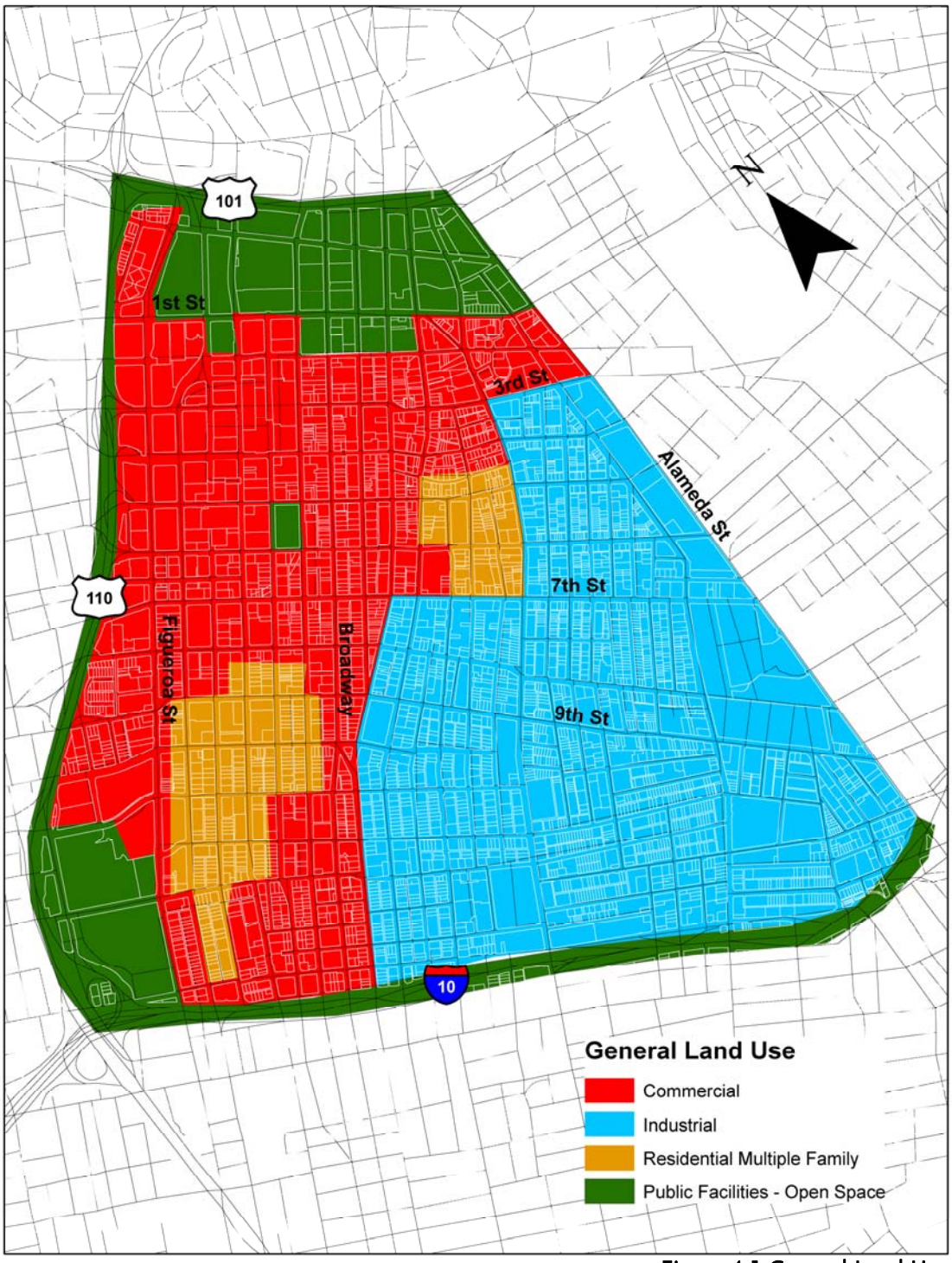


Figure 4-1 General Land Use

Civic Center Shared Facilities and Enhancement Plan: In 1997, the Civic Center Shared Facilities and Enhancement Plan established goals for creating a cohesive concentration of public office buildings linked by visually enhanced streets. The plan outlines a public services and business district which pedestrians could traverse in ten minutes or less. Central to the plan are linkages to other parts of downtown, including Union Station, the Historic Core, and the Music Center.

Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Downtown Area: The Community Redevelopment Agency of the City of Los Angeles (CRA) published the Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Downtown Area in July 2006, which examines their proposal to introduce a historic streetcar line running in a northeast-southwest direction from Chinatown to the Fashion District. The study discusses the usefulness of additional rail transit coverage within downtown, and emphasizes the importance of connectivity with other Metro Rail lines.

Business Improvement Districts (BIDs): The PSA also contains portions of six BIDs: Fashion BID, Downtown Industrial BID, Toytown BID, Historic Downtown BID, Downtown Center BID, and Little Tokyo BID. These organizations are funded by property assessments, and they seek to improve commerce in their areas through the provision of services such as security patrols, street and sidewalk cleaning, and promotional advertising. Stimulating business growth increases the number of jobs and shopping opportunities, which translates to higher volumes of trips to the district. As such, BIDs are generally supportive of better transit connections, since high quality transit service makes it easier for potential customers to travel to the area.

4.2.1.2 Existing Conditions

The PSA contains the financial core of downtown Los Angeles, and is one of the most job-dense areas in the City. In addition to being a major employment center, the PSA encompasses several retail, entertainment, and residential districts. Income levels of the residents vary greatly, from new luxury condominium developments in the western half of the PSA to single room occupancy hotels and homeless shelters in the eastern portion.

The land use patterns in the PSA consist of mostly commercial office buildings in the southwestern portion, public office buildings in the northern portion, and commercial manufacturing buildings in the southeast. There are pockets of residential uses, including adaptive reuse of older non-residential buildings, scattered through the PSA. The highest floor-area ratio, about 5.0, can be found in the Bunker Hill Redevelopment Area, the area roughly bounded by 1st St., Hill St., 7th St., and SR-110.

Just east of Bunker Hill lies an older office district (Historic Downtown) dating from the early part of the 20th century. Nearly all of the buildings contain ground floor retail establishments, making for a busy streetscape. The buildings in this area are substantially shorter than those on Bunker Hill, due to the city's 12-story height limit at the time of their construction.

In the easternmost part of the PSA lies one of the oldest industrial areas in the region. The buildings are short, usually only one to three stories, and vacant lots are more prevalent than in other parts of the PSA. Many of the empty lots are used as storage yards or surface parking lots. Though zoned for industrial manufacturing, some of the buildings have been converted into loft condominiums and rental housing units.

The PSA is already served by two rail lines and numerous bus lines run by ten operators. Transit riders in the PSA can reach most areas of the county on a single vehicle during peak hours.

As part of the redevelopment plans in the PSA, CRA has undertaken the following projects in the PSA, all of which would yield new transit-supportive land uses:

- 2nd St. Connection – This recently completed project connects two previously un-joined segments of Upper 2nd St. between Grand Ave. and Olive St. The connection was financed mostly by Metro and Surface Transportation Program-Local funds.

- Bunker Hill Design for Development – This proposal would amend the 1971 Design for Development (DFD) and increase the maximum floor area ratio in the Bunker Hill Redevelopment Area from 5.0 to 6.0. This would allow 20 percent more square footage that the current DFD. The proposal is currently in the Environmental Impact Report (EIR) phase.

- Grand Avenue Project – This large-scale redevelopment project is scheduled to break ground in Summer 2008 and will be complete by 2016. The project consists of a full-scale redesign of Grand Ave. as well as the addition of a 16-acre park in the Civic Center and 3.9 million square feet of retail, hotel, and office space.

- Parcel Y-1 Development –The existing Angels' Knoll Park would be developed into a third California Plaza office tower, potentially with retail and residential space. The project is currently in the DFD and EIR phase.

- Los Angeles Sports and Entertainment District/L.A. Live! – This project seeks to create a major sports and entertainment destination just south of the financial district, surrounding the existing Convention Center and Staples Center. Additional auditoriums and theaters, as well as retail and office space will be added by 2009. Condominium and rental apartment buildings are presently under construction. This redevelopment project is located one block south of the PSA.

- Colburn School Phase II – The new expansion to the performing arts school was completed in Fall 2007, and consists of a new dormitory, rehearsal hall, 12-story tower, library, teaching space, and performance lab. This project is located on the southeast corner of 2nd St. and Grand Ave.

- Park Fifth – An EIR is currently being prepared for a new high-rise residential building on 5th St. between Hill and Olive Streets. This project will contain market-rate condominium units, a five-star hotel, and ground floor commercial space.

- 8th & Grand Ave. – This is a condominium project with ground floor restaurants and retail located on 8th St. between Grand Ave. and Olive St. This project was approved by the CRA Board and the City Council in 2006.

- Mangrove Site – CRA issued a request for proposals which closed in late 2007 for the parcel adjoining the future Metro Gold Line Little Tokyo/Arts District Station at 1st and Alameda St. CRA hopes to pursue a mixed-use project on the site with market rate and affordable residential units, commercial space, and public parking. The site is located across Alameda St. from the PSA.

- Block 8 Mixed Use – This parcel in Little Tokyo is located between 2nd, 3rd, San Pedro, and Los Angeles Streets. The proposed development will include affordable rental units, market-rate condominium and rental units, commercial space, and open space. The site plan includes a mid-block walkway between San Pedro and Los Angeles Streets.

- Metropolis Project – Located on the southwest corner of 8th and Francisco Streets, this recently-approved development will add 2.8 million square feet of new condominium, office, hotel, and retail space.

- Little Tokyo Central Avenue Art Park – This project involves redeveloping the closed section of Central Ave. between Temple and 1st Streets into a landscaped community park and underground parking facility linking the existing Museum of Contemporary Art to the Japanese American National Museum.

- The Medallion – This project seeks to replace a surface parking lot with market-rate apartments and commercial space on a site located between Main, Los Angeles, 3rd, and 4th Streets. Construction on Phase 1 of the project has begun, and Phase 2 relies on the demolition of the existing Downtown Women's Center (see the following project).

- Downtown Women's Center Relocation/Expansion – This project will remove the existing Downtown Women's Center on San Pedro St. between 4th and 5th Streets in order to make way for the Medallion project. The city will renovate its Renaissance Building as the new Women's Center, and will provide an additional 75 permanent housing units and eight day rest beds for homeless women. CRA is currently reviewing development plans for the relocation/expansion project.

- Residential Hotels Rehabilitation Program – Under this plan, CRA will acquire approximately 30 single-room occupancy hotels, lease them to non-profit housing operators, and preserve the units as low-income housing. CRA cites public ownership as a means of cleaning up crime-ridden slum hotel areas within the PSA.

4.2.2 Evaluation Methodology

The following analysis addresses the compatibility of each build alternative with the existing land use patterns along the alignment, as well as the compatibility with existing land use plans and potential future development projects and trends. The analysis also reviews the transit coverage provided with each alignment and associated economic costs. The existing land use information is based on land use maps and field surveys.

4.2.3 Environmental Issues

Because the build alternatives – At-Grade Emphasis LRT and Underground Emphasis LRT- follow similar routes through downtown, the land use patterns in the areas they pass through do not vary significantly.

The Underground Emphasis LRT Alternative would have fewer negative impacts on the existing land use patterns than the at-grade alternative, since the Underground Emphasis LRT Alternative would not involve reducing the number of lanes available to automobile traffic on any streets or pose conflicts with the autos, as would the At-Grade Emphasis LRT Alternative. Further, reduction of traffic lanes on some streets associated with the At-Grade Emphasis LRT Alternative could create additional congestion (i.e., fewer lanes of travel) and costs associated with traffic management, which in turn could negatively affect downtown developments. However, the costs associated with construction of at-grade light rail would be less significant than costs associated with construction of the underground alignment.

Additionally, the underground alignment would have lower noise levels than an at-grade alternative during the operation phase. The Underground Emphasis LRT Alternative, as such, would be more compatible with existing and potential future residential development, the pace of which has sharply increased in the area over the last several years. However, an at-grade alignment and at-grade stations would still be consistent with the overall existing urban character of the area. Additionally, the at-grade stations on the At-Grade Emphasis LRT Alternative are more visible to potential riders and would impose fewer impediments to pedestrians quickly moving between the sidewalk and the boarding platform than underground stations.

As presented in Section 4.2.1.1, there are various land use plans, community plans, and redevelopment plans and projects affecting the PSA. The plans and projects are all generally supportive of improved transit linkages and mobility. Both of the build alternatives would be compatible with these goals and policies.

Because the station locations of both the at-grade and underground alternatives are proximate to each other, all of the alignments would provide nearly equivalent levels of transit coverage within the downtown area. Between the build alternatives, the station locations vary by only a block, at most. The At-Grade Emphasis LRT Alternative would incur a longer trip time than the Underground Emphasis LRT Alternative, but the connectivity and the potential for single-vehicle service from Pasadena, Long Beach, East Los Angeles, and Culver City would be the same. It is important to note that downtown Los Angeles is already heavily served by transit, and the Regional Connector's primary

purpose is to improve the connection between the light rail lines in the area and reduce the need for transfers, not necessarily to provide access to areas previously un-served by the transit system. In any event, the density of transit service would be increased in the areas around the stations, and this would bring added development, jobs, and mobility.

4.3 Displacement and Relocation of Existing Uses

This section addresses the land ownership and leasing agreements that may change due to the project. Existing conditions and implications for displacement and relocation of existing uses within the PSA will be addressed in this section. Although the build alternatives under consideration are intended to maximize the use of publicly owned rights-of-way, certain features of these alternatives have the potential to impact persons and businesses on private property within the PSA.

4.3.1 Affected Environment

4.3.1.1 Regulatory Framework

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides for uniform and equitable treatment of persons displaced from their homes and businesses and establishes uniform and equitable land acquisition policies.

Owners of private property have federal constitutional guarantees that their property will not be taken or damaged for public use unless they first receive just compensation. Just compensation is measured by the "fair market value" of the property taken, where "fair market value" is considered to be the:

> "highest price on the date of valuation that would be agreed to by a seller, being willing to sell, but under no particular or urgent necessity for so doing, nor obliged to sell; and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with the full knowledge of all the uses and purposed for which the property is reasonably adaptable and available." (Code of Civil Procedure Section 1263.320a)

The provisions of the California Relocation Act (California Act), applies in the absence of federal funds and/or involvement if a public entity undertakes a project and consequently must provide relocation assistance and benefits. The California Act, which is consistent with the intent and guidelines of the Uniform Act seeks to, (1) ensure the consistent and fair treatment of owners of real property, (2) encourage and expedite acquisition by agreement to avoid litigation and relieve congestion in the courts, and (3) promote confidence in the public land acquisitions. As stated above under federal regulations, owners of private property have similar State constitutional guarantees regarding property takes, damages, and just compensation.

4.3.1.2 Existing Conditions

Section 4.2 describes the existing land uses within the PSA. In addition, Section 4.4, Community and Neighborhood Impacts, describes the neighborhoods within the PSA.

4.3.2 Evaluation Methodology

Table 4-1 shows typical sources and causes of land acquisition and displacement that could potentially occur with the PSA. When an acquisition occurs, it typically results in either a full or partial take of a parcel. A partial taking would occur if the project did not require the acquisition of the entire parcel, but just enough of the parcel to accommodate the proposed project. This would occur if, for example, a portion of a commercial parking lot fronting the alignment is required, but not the adjacent commercial building located away from the alignment. Partial takings may result from the widening of a street or intersections due to inadequate right-of-way widths, limited cross-sections, and vertical circulation needs adjacent to subway stations. The widening of intersections are often required for the addition of left-turn lanes that have been relocated due to the installation of at-grade station platforms within the street median, adjacent to the transit tracks. Street widening may be necessary when the existing horizontal alignment contains insufficient right-of-way. Vertical circulation is needed near underground stations as additional land is needed to bring passengers to the surface.

Table 4-1 Sources and Causes of Displacement

Source	Type of Acquisition	Cause/Process
Horizontal alignment	Full/Partial	Not enough right-of-way for alignment
Vertical circulation above subway station	Partial	Additional area needed adjacent to subway station to bring passengers to surface
Street widening	Partial	Aerial structures requiring columns
Illegal encroachment	Full	Unauthorized use of private property
Access to a businesses (driveway or road)	Full	Damages resulting from reduced or restricted access
Storage Yards	Full	Additional area required to perform maintenance
Widening of intersections	Partial	Additional area to maintain traffic volumes, turn lanes, or platforms
Tunneling easement	Easement	Subway travels off public right-of-way

Source: Terry A. Hayes & Associates, 2008

A full taking would occur under two circumstances: (1) when the majority of the property is required for the horizontal alignment because of insufficient public right-of-way or the need to construct storage or maintenance facilities, and (2) when the damage caused to the property (e.g., driveway access to a property is eliminated or reduced due to the construction of transit that travels down the side of a street, as opposed to the median) is so great that the owner is deprived of all beneficial use. Damages to a property would typically result from restricted access or demolition of improvements.

Metro would need to obtain easements instead of acquiring or displacing the uses on those parcels under which the underground segments would travel.

The analysis below assesses the potential need for acquisition along each alignment.

4.3.3 Environmental Issues

The project would typically use existing rights-of-way when developing the proposed alternatives. However, where the proposed alignments transition from underground to at-grade, as well as at stations, there is the potential to displace properties. Although the Underground Alternative avoids most surface conflicts, property acquisition may be needed for portals and station entrances. Acquisitions for station entrances could occur at underground stations for each alternative. Other potential displacement includes the following:

At-Grade Emphasis LRT Alternative

- Potential right-of-way acquisitions may be necessary at Flower and 3rd Streets. (Option A) or Flower and 5th Streets (Option B) for the tracks to transition from underground to at-grade. Additionally, there are potential right-of-way acquisitions on 2nd St. According to preliminary station and alignment design the stations will need an area approximately five feet deep along the street frontage for the length of the station for construction.

- Potential for parking displacement exists along 2nd, Main, Los Angeles and Temple Streets associated with the At-Grade Emphasis LRT Alternative.

Underground Emphasis LRT Alternative

- Potential acquisition of the entire block bounded by Central Ave., Alameda St., 1st St., and 2nd St. may be necessary for the portal to transition from underground to at-grade to connect to Metro's Gold Line Extension. There are no residences in this block, but it is across the street from the Japanese American National Museum and from residences on Alameda St. Although no displacement is anticipated on the east side of Alameda St. (Arts District), removal of commercial businesses could indirectly impact the residents in the area.

- Parking displacement along areas adjacent to the portal at Little Tokyo may potentially impact businesses and residents of Little Tokyo and the Arts Districts, as well as visitors to the museums, shops, and restaurants located in Little Tokyo.

- As identified in the Initial Screening Report, given the need for acquisitions for underground station entrances, the Underground Emphasis LRT Alternative would require a greater amount of property acquisition than the At-Grade Emphasis LRT Alternative.

- Any potential acquisition or displacement as a result of the project would occur in compliance with the Uniform Act and/or California Act, as applicable.

4.4 Community and Neighborhood Impacts

This section discusses the effects of the build alternatives on the neighborhoods within the PSA. Particular attention is paid to demographic characteristics, community division, and mobility.

4.4.1 Affected Environment

As mentioned earlier, the PSA is an extremely built out area with unique neighborhood characteristics among all the districts. Although the PSA is composed of the central core of downtown, the area of influence includes surrounding communities and the region as a whole, which will benefit from the Regional Connector. Also, the recent resurgence and development, such as the Arts District and the LA Live Development, greatly influence and affect the patterns of development and the characteristics that are introduced into these neighborhoods.

In the same way, the Regional Connector will introduce new elements, not only of physical design, but of mobility and travel characteristics and patterns that may affect the way people interact in these spaces. The proceeding sections provide a detailed description of the districts which make up the Regional Connector PSA as well as the current travel and housing characteristics in each.

4.4.1.1 Existing Conditions

Community and Neighborhoods

The following neighborhoods comprise the PSA:

Bunker Hill

The Bunker Hill District is located generally between 1st St. on the north, Hill St. on the east, 3rd St. on the south, and Figueroa St. on the west. Major downtown destinations located within Bunker Hill include the Walt Disney Concert Hall, Museum of Contemporary Art (MOCA), several high-rise office towers, senior and market rate housing, hotels, and commercial/retail centers. Bunker Hill has over 3,200 residential units, mainly in mid- and high-rise buildings. Large development projects planned for this area include Civic Park and the Grand Avenue Development Project, which will transform this area into a regional arts, entertainment, and residential destination. The Grand Avenue Development is a $3 billion project that includes 3.6 million square feet of development with 449,000 square feet of retail. It is currently planned for 2,600 housing units, almost doubling the existing number of units in the area.

Civic Center

Bordering Bunker Hill to the northeast is Civic Center, which serves as a hub for city, county, state, and federal government offices and services, with the second largest concentration of civic buildings in the country. The Cathedral of Our Lady of the Angels, completed in 2002, the Ahmanson Theater, Mark Taper Forum, and the Dorothy Chandler Pavilion are other major destinations in this district. Civic Center is undergoing active redevelopment as the new headquarters for the state Department of Transportation

(Caltrans) District 7 has recently been completed, development of the new Los Angeles Police Department Headquarters is underway, and construction of a U.S. Federal Courthouse is soon to begin.

Little Tokyo

East of Civic Center is Little Tokyo, which is the center of the largest Japanese-American community in the continental United States. The Japanese American National Museum and Geffen Museum of Contemporary Art are located here, along with a lively shopping district. There is active residential development underway within Little Tokyo, with recently completed and current projects adding more than 2,000 residential units. Significant developments in the early planning stages include a 4.5-acre site adjacent to the Gold Line's future Little Tokyo Arts District Station. Early concepts from developers identified high-density combination of office and housing with a strong connection to the Metro Gold Line.

Toy District

The Toy District is a 12-block shopping area with over 500 retail businesses located south of Little Tokyo and north of Central City East. Development here is primarily comprised of mixed-use projects. The proposed Medallion project will provide 192 residential lofts and over 200,000 square feet of retail space.

Financial Core

The Financial Core District is located south of Bunker Hill and is dominated by high-rise office buildings. The Central Library is located here, and has been recently restored and expanded. Other landmarks in this district include the Millennium Biltmore Hotel and Pershing Square. The proposed 2.7 million square foot Metropolis mixed-use development is located in the southwestern end of the Financial District. Phase I of this project, scheduled to begin construction in 2008, will provide 360 residential units. Park Fifth is another major planned 76-story high-rise development across from Pershing Square and will include over 700 condominiums and a 200 room hotel.

Historic Core

To the east of the Financial Core is the Historic Core District, containing a large concentration of historic and architecturally significant buildings, including the Bradbury Building. The Grand Central Market and the Broadway Historic Theater District are destinations in this district. Development here is focused on conversion of old neglected buildings into lofts and apartments.

Jewelry District

The largest Jewelry District in the U.S. and second largest in the world is located southwest of the Historic Core, comprised of 5,000 businesses with billions of dollars in revenue. Development in this area includes the proposed construction of 875 condominium units at 8th and Grand Streets.

Central City East

Central City East is located south of the Toy District and consists primarily of commercial uses, including wholesale buildings and warehouses. The Flower Market, produce, fish and food processing industries, and import/export businesses employ nearly 20,000 people in this area. Housing in this district consists mainly of the 6,500 single room occupancy hotel units. This area also has social services, including alcohol treatment, mental health services, and job training.

4.4.1.2 Transit-Relevant Demographic Characteristics

The PSA makes up 1.6 square miles, or 0.03 percent of the 4,752 square miles of Los Angeles County. As shown in Table 4-2, in 2005, the total population of the PSA was 17,795, which comprised 0.18 percent of the total Los Angeles County population of over ten million. Despite its small size, the PSA sustained 3.62 percent of the County's employment, or 168,328 jobs, in 2005. The average population density within the PSA was 11,685 people per square mile, significantly higher than the 2,107 people per square mile population density found in Los Angeles County in 2005. Employment density in the PSA was 110,529 employees per square mile, which was also significantly higher than the county's overall employment density of 977 employees per square mile.

Table 4-2 Population and Employment in the Project Study Area

Demographics	PSA	L.A. County	Percent of County
Population	17,795	10,010,315	0.18
Population Density	11,685	2107	NA
Total Employment	168,328	4,644,010	3.62
Employment Density	110,529	977	NA

Source: Southern California Association of Governments (SCAG), 2005

Residences in the area have been categorized as single-family homes, multi-family homes, or group quarter residences, which include military barracks, dormitories, and institutional housing. Data for the number of low, medium, and high-income households in the PSA were available for single-family and multi-family residences only, of which there were 9,673 households in 2005 with a median household income of approximately $45,000. Group quarters added an additional 5,466 residences. As shown in Table 4-3, based on these 2005 data, the PSA is primarily composed of low-income households, with a moderate medium-income household population. As mentioned above, recent development of the PSA continue to bring about demographic changes that may not be reflected in data from 2005.

Table 4-3 Income Status within the Project Study Area		
Demographics	PSA	Percent of PSA
Total Residences	15,136	N/A
Total Households	9,673	100
Low Income Households	7,244	75
Medium Income Households	2,009	21
High Income Households	417	4

Source: SCAG, 2005

In 2005, only 5.5 percent of the young people in Los Angeles County lived within the PSA. Comparatively, 29.4 percent of the population of Los Angeles County in 2005 was age 18 and under. As downtown resurgence attracts those seeking an urban lifestyle, a rise in the number of young people living downtown will likely occur.

As shown in Table 4-4, the PSA also demonstrates a higher percentage of elderly residents (19.7 percent) when compared to Los Angeles County (9.7 percent). The young and the elderly have a higher propensity for using public transportation since these groups are less likely to have drivers' licenses or access to private automobiles. The Regional Connector is expected to improve transit connectivity and accessibility for members of these groups living outside the PSA who would wish to commute into it.

Table 4-4 Population Age				
AGE	PSA	Percent	L.A. County	Percent
18 and under	976	5.5	2,798,604	29.4
65 and over	3,497	19.7	926,670	9.7

Many of the households in the PSA, approximately 69 percent, have no car and rely on public transit for commuting needs. Additionally, there is a high volume of transit ridership in the PSA, including 23 percent of employed residents age 16 and over, as well as a large number of commuters from outside the PSA who utilize transit to get to employment and other opportunities within the project study area. When comparing vehicle accessibility and public ridership patterns in the PSA, the trends suggest that even households in the PSA with one or more cars have a higher propensity to use public transportation than similar households elsewhere in Los Angeles County.

Table 4-5 presents demographic information for the PSA as compared to the County as a whole.

Table 4-5 Transit Dependent Demographic Information			
	PSA	LA County	PSA % of LA County
Population	17,795	10,010,315	0.18
Under 18 years	976	2,798,604	0.03
Over 65 years	3,497	926,670	0.38
Households	9673	3,298,210	0.29
No vehicle households	8,586	671,214	1.28
Use public transportation	1,025	254,091	0.40
Low income households	7,244	1,481,896	0.49
Total employment	168,328	4,644,010	3.62

Source: SCAG, 2005 data and 2030 projections

4.4.2 Evaluation Methodology

The following analysis considers the potential impacts of the project on demographic characteristics, community division, and mobility within the PSA to assess whether the Project would disrupt, divide, or isolate existing communities or land uses.

4.4.3 Environment Issues

Depending on which alternative is selected, the neighborhoods within the PSA will incur varying levels of potential environmental impacts, particularly along the streets under consideration for rail alignments. Because both alternatives follow similar routes, their impact on transit ridership, employment, residential population, and mobility would be nearly identical.

As discussed in detail in Section 4.16, Construction Impacts, temporary impacts are primarily associated with the construction of the at-grade alignment and underground and at-grade stations, which would last for approximately three to four years. These temporary impacts include significant noise and vibration during business hours, dust, and traffic congestion due to closed streets and the movement of construction vehicles. However, some of these impacts may be less intrusive downtown as they might be in other parts of the City, since there is already a high level of activity and traffic noise throughout the PSA. Also, the temporary environmental impacts would be similar for both the at-grade and the underground alignments, since both would require heavy construction activity.

The impacts of the operation of the project will vary based on whether the at-grade or underground alignment is chosen. The At-Grade Emphasis LRT Alternative involves placing tracks in either the center lanes of the street or the curb lanes, as well as erecting 25-foot tall catenary poles above the street level and placing traction power substations every mile alongside the tracks. High-platform stations with canopies would be located in the roadway medians or curb lanes, and would stretch across the majority of the city block. As such, there would be a visual change to the neighborhoods through which the tracks pass, as well as potential mobility impacts for pedestrians who may lose the ability to use existing crosswalks. Given the placement of tracks along 2nd, Main, and Los Angeles Streets outlined for the At-Grade Emphasis LRT Alternative, it is conceivable that pedestrian mobility from the Civic Center to Little Tokyo and the Historic Core could be

reduced. Also, removing traffic lanes from these streets may also add to auto congestion and bus trip times. Current operating hours for the Metro Rail system are 4 a.m. to 1 a.m. daily, and it is expected that trains will generate noise (bells, horns, public address announcements, and rail squealing) along the project right-of-way during these hours.

The Underground Emphasis LRT Alternative on the other hand, is entirely underground except for a short portion of the tracks, just southwest of the Metros Gold Line's Little Tokyo station at 1st and Alameda Streets. As such, there will be no prominent surface impacts, aside from station portals along the sidewalks or in plazas adjacent to the street. The operational noises discussed above may still emanate from the ventilation shafts embedded in the roadway or sidewalk as well as the portal at 1st and Alameda Streets, but the levels would be minor compared to an at-grade alignment. Overall, the Underground Emphasis LRT Alternative would cause little change in community division and pedestrian mobility within the neighborhood.

4.5 Visual and Aesthetic Impacts

Transportation infrastructure has the potential to enhance pedestrian activity, create pedestrian-friendly environments, enliven streetscape through architecture, signage, lighting, and landscaping and help in the support for revitalizing areas in need of rejuvenation. However, transportation infrastructure also has the potential to negatively alter the visual landscape when a proposed project is out of scale with its immediate surroundings, and results in development of unwanted infrastructure such as overhead wires or structures that may detract from the visual setting or block views of existing scenic vistas, historical structures, or other visual resources.

4.5.1 Affected Environment

4.5.1.1 Regulatory Framework

As discussed in Section 4.2.1.1, the PSA is within the Central City Community Plan of the General Plan's Land Use Element. The Central Community Plan includes an Urban Design chapter that contains objectives and policies support the development and re-enforcement of a pedestrian-friendly environment and streetscape.

4.5.1.2 Existing Conditions

The alternative alignments are located in a highly urbanized setting surrounded by a variety of land uses. The primary visual features in the area are historical buildings, contemporary buildings with notable architecture, and street trees. The street characteristics of the PSA, although concentrated in the dense downtown setting, differ from district to district, from the modern high rise architecture of the financial district to the Art Deco City Hall and the period characteristics of the historic core.

The following section summarizes the characteristics of both alignments and their potential impacts on surrounding environments.

4.5.1.3 Potential Impacts

The development of the At-Grade Emphasis LRT Alternative or the Underground Emphasis LRT Alternative has the potential to affect the immediate surroundings by adding new features to the visual landscape, including the introduction of catenary poles and wires, at-grade track, station platforms, and/or off-street portals leading to underground stations. Roadway modifications to accommodate at-grade track would also change the existing visual landscape.

Aboveground stations and portals to underground stations would also introduce a new source of nighttime lighting.

At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would run mostly at the same elevation as the surrounding road network and would include tracks located in a dedicated right-of-way or an arterial street median, with catenary wires located above the tracks. Catenary poles would be approximately 25-feet tall above the street level, and traction power substations would be located every mile along the tracks. With the At-Grade Emphasis LRT Alternative Option A, approximately 64 percent of the alignment would operate at-grade and the remaining 34 percent would be underground. With Option B, approximately 79 percent of the alignment would operate at-grade, with the remaining 21 percent located underground.

The At-Grade Emphasis LRT Alternative is located within one-quarter mile of two National Historic Landmarks, five National Register Districts, 75 individual National Register properties/resources, 98 California Register designations, and 37 local landmarks. The total number of potentially impacted notable architectural resources is 217. Of these resources, the greatest potential visual impacts would be on the resources located adjacent to an alignment and in the vicinity of the stations.

The Initial Screening Report describes Option A as being located within one-quarter mile of 13 buildings with notable architecture, and Option B as being located within one-quarter mile of 11 buildings with notable architecture. Of these sites, 11 are located directly adjacent to both of the At-Grade Emphasis LRT Alternative alignment options. The 11 sites are listed below and the relationship to the alignment is briefly described. Any differences between Option A and Option B are noted. For additional information on historical resources, see Section 4.12, Historic, Archeological, and Paleontological Resources.

- Edward R. Roybal Federal Building - located northeast corner of the Temple St. and Los Angeles St. intersection. The alignment would be at-grade to the south of the site along Temple St.
- Fletcher Bowron Square – Los Angeles Mall - located in the 300 block of Main St. between Temple St. and Aiso St. The alignment would be at-grade to the south of the site along Temple St.

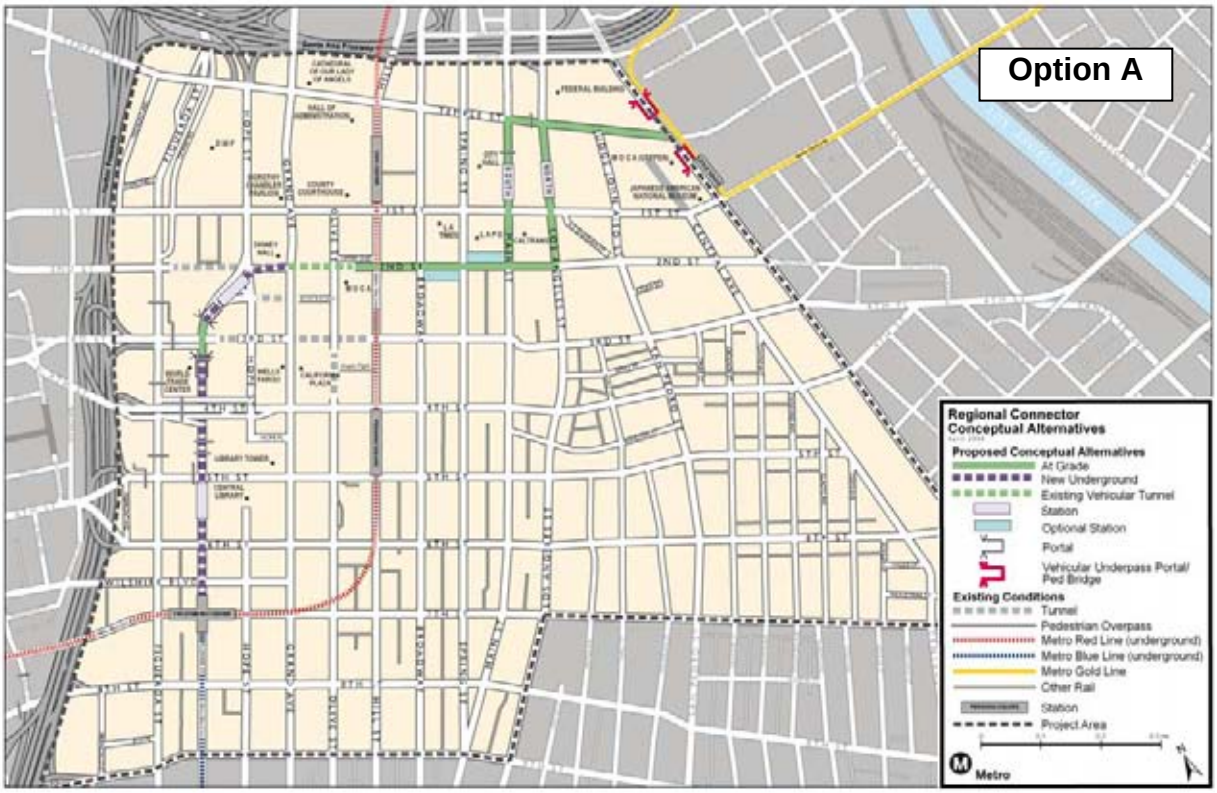


Figure 4-2 At-Grade Emphasis LRT Alternative

- Caltrans Building - located at the north side of 2nd St. between Main St. and Los Angeles St. The alignment would be at grade to the east, west, and south of the site.

- Los Angeles Civic Center - generally located north of 1st St. and south of Aiso St. or Temple St. between Figueroa St. and Alameda St. The alignment would run at-grade through the Civic Center on Main St., Los Angeles St., and Temple St. east of Main St.

- Los Angeles City Hall – located at northwest corner of 1st St. and Main St., within the Los Angeles Civic Center. The alignment would run at-grade to the east of City Hall on Main St.

- Higgins Building – located at the southwest corner of the 2nd St. and Main St. intersection. The alignment would be at-grade to the north of the site along 2nd St. The optional eastbound Spring St. Station platform would be on the north side of 2nd St., opposite the site.

- (Former) Saint Vibiana's Cathedral – located on Main St. south of 2nd St. The alignment would be at-grade to the north of the site along 2nd St. The optional eastbound Spring St. station platform would be on the north side of 2nd St. to the west of the site.

- Disney Concert Hall – located on 2nd St. between Grand Ave. and Hope St. The alignment would be below-grade to the south of the site, and would transition to at-grade at Grand Ave. to the east. A station would be located to the southwest.

- Westin Bonaventure Hotel – located on Flower St. between 4th St. and 5th St. The alignment would run below-grade (Option A) or would transition from at-grade to below-grade (Option B) to the east of the site on Flower St. A below-ground station would be located to the south (Option A) or an aboveground station would be located to the north (Option B) along Flower St.

- Los Angeles Central Library Building and Grounds – located on 5th St. to the east of Flower St. The alignment would run below-grade to the west of the site on Flower St. A station would be located to the west of the library site (Option A).

- California Club Building – located on Flower St. north of 6th St. The alignment runs below-grade to the west of the site on Flower St. A station is located to the north along Flower St. (Option A only).

- Additionally, there are numerous outdoor public works of art, such as sculptures, murals, and fountains, associated with development located along the alignments such as the Civic Center, Central Library, Fletcher Brown Square, and museums. Some of the art works are visible from the adjacent streets and sidewalks.

With the At-Grade Emphasis LRT Alternative, roadway modifications would be necessary to accommodate the at-grade track, including the reduction of lane widths, altering of existing lane configurations, and removal or displacement of left-turn pocket lanes. As Option B has a greater percentage of at-grade service versus underground service, it would require a greater number of roadway modifications.

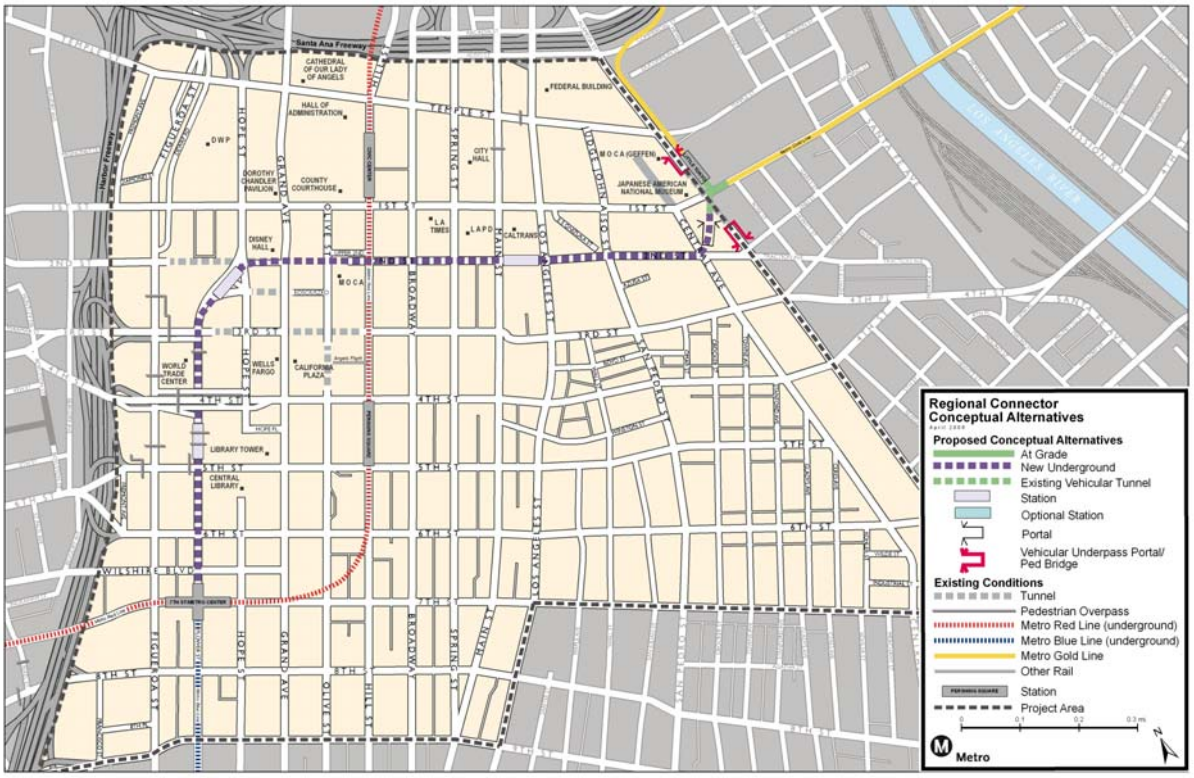


Figure 4-3 Underground Emphasis LRT Alternative

Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative is primarily underground (approximately 91 percent) with a small portion operating at-grade (9 percent). Therefore, along most of the alignment, trains and track would not be visible. Furthermore, given the limited portion of track located at-grade, roadway modifications would be minimal. The Underground Emphasis LRT Alternative has three underground stations, all of which would have at-grade portals.

The Underground Emphasis LRT Alternative would be within one-quarter mile of two National Historic Landmarks, four National Register Districts, 78 individual National Register properties/resources, 88 California Register designations, and 31 local landmarks. The total number of notable architectural resources is 203.

The Underground Emphasis LRT Alternative would be located within one-quarter mile of nine buildings with notable architecture. Ten sites with notable architecture are located adjacent to the alignment. The sites are listed below and the relationship to the alignment is briefly described. Unless noted, the alignment is below-ground. For additional information on historical resources, see Section 4.12, Historic, Archeological, and Paleontological Resources.

Japanese American National Museum – located at the northwest corner of 1st and Alameda Streets. The alignment transitions from below-ground to above-ground south of the site and connects to the proposed Little Tokyo/Arts District Station to the east (transfer station to the Gold Line) and proposed maintenance and operations facility. The proposed station would require existing Alameda St. to be constructed below-grade under the Alameda St. and 1st St. intersection where an LRT junction and pedestrian bridges are proposed to be built.

- Little Tokyo Historic District – generally located north of 2nd St. between San Pedro St. and South Central Ave. The alignment would run to the south of the District.
- The Geffen Contemporary at MOCA - located on Alameda St. north of the Japanese American Museum on 1st St. The alignment would end at the proposed Little Tokyo/Arts District Station and maintenance and operations facility on Alameda Ave., to the east of the site. The station and alignment would be at-grade.
- Caltrans Building - located at the north side of 2nd St. between Main and Los Angeles Streets. At least one portal would be located adjacent to the Caltrans building along 2nd St.
- Higgins Building – located at the southwest corner of the 2nd St. and Main St. intersection. The alignment would be to the north of the site along 2nd St. A station would be located to the west of the site.
- (Former) Saint Vibiana's Cathedral – located on Main St. south of 2nd St. The alignment and station would be located to the north of the site along 2nd St. One possible portal location would be on the Saint Vibiana site.
- Disney Concert Hall – located on 2nd St. between Grand Ave. and Hope St. The alignment would be south of the site on 2nd St. A station would be located to the southwest.
- Westin Bonaventure Hotel – located on Flower St. between 4th and 5th Streets. The alignment and a station would be located to the east of the site. An at-grade portal may be located on or near the Westin Bonaventure Hotel site.
- Los Angeles Central Library Building and Grounds – located on 5th St. to the east of Flower St. The alignment would be to the west of the site on Flower St. A station would be located to the north of the library site.

- California Club Building – located on Flower St. north of 6th St. The alignment is to the west of the site on Flower St.

4.5.2 Evaluation Methodology

The evaluation of potential aesthetic impacts involves determining if changes would occur to the aesthetic character of the area surrounding the alignments. This entails reviewing the above-ground infrastructure associated with each alternative and analyzing if it would affect the overall character of the area and result in the obstruction of views or removal of any visual resources along the alignment, and to what degree. Obstruction of important views or introduction of elements inconsistent with the existing visual character would result in visual impacts.

To determine the notable architectural resources within one-quarter mile of each alignment, information was gathered from the City of Los Angeles, Department of City Planning's Historic-Cultural Monument Report for the Central City Community Plan Area, Metro's Angels Walk L.A. Program (a walking trail that links Los Angeles' landmarks with transit), the Los Angeles Convention Center's list of landmarks to visit while in Los Angeles, and a field survey conducted on February 1, 2008.

4.5.3 Environmental Issues

Both alignments would involve some changes to the existing visual landscape; however, the degree to which this would occur varies between the alternatives. Notably, the at-grade alignment has a greater potential for visual impacts as it involves substantially more above-ground infrastructure than the underground alternative. However, given that the existing setting is highly urbanized, the introduction of new infrastructure and roadway modifications associated with any of the alternative would not be out of character with the existing setting. Therefore, substantial degradation of the existing visual quality or impairment of the quality of the pedestrian environment is anticipated. Further, none of the alternatives would result in removal of notable architectural resources. However, potential impacts related to visual resources could involve impeding line of sight of notable architectural resources and removal of street trees. These potential impacts are discussed further below as related to the specific alternatives.

At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative has the potential to impact views through the introduction of new aboveground infrastructure such as train track, catenary wires and poles, and station platforms. Station portals and associated signage would be required for underground stations along the alignment. Catenary poles for the proposed project may in some cases replace existing utility poles. However, given catenary wires and support requirements, the wires and poles could increase visual clutter, particularly at curves and corners. Thus, the catenary wires and poles may obstruct views of notable architectural resources, as well as modifying the visual character of the area.

The At-Grade Emphasis LRT Alternative would also require substantial roadway modifications to accommodate the track and related infrastructure associated with the at-grade segments of the alignment. While roadway modifications and construction would result in visual disruption during the construction period, this new infrastructure would be consistent in character with the existing urban setting.

Views of the individual architectural resources listed in Section 4.5.1 may be interrupted by station platforms, portals to underground stations, and catenary wires and poles. However, the wires, portals, and platforms would not fully impede views. Views may be completely blocked when a train is stopped at a platform when located between an on-looker and the notable structure, but this would occur on a temporary basis. Once a train had departed a station, limited views of the structure would be available. The new infrastructure would be consistent with the overall urban streetscape along the alignments. While it would partially block some views of notable architecture when the infrastructure is between the viewer and the visual resource, views would only be fully impeded temporarily at select locations near station platforms.

Views of public art work from streets and sidewalks on opposite sides of the street could potentially be obscured by at-grade infrastructure associated with the alternative. It is anticipated that public art work would still be accessible for viewing from the sidewalks immediately adjacent to the art work and from within the public sites. However, potential visual obstruction of notable public artwork would require further evaluation.

The At-Grade Emphasis LRT Alternative calls for the construction of an automobile underpass and a pedestrian overpass at the intersection of Temple and Alameda Streets. The pedestrian overpass in particular would impose some visual impacts for onlookers in all directions, though these effects would be limited due to the visual impacts of the existing Metro Gold Line Eastside Extension overpass located immediately northeast of the intersection. Also, pedestrians using the overpass would have a new vantage point for viewing the Little Tokyo and Civic Center areas.

The At-Grade Emphasis LRT Alternative could result in the loss of existing street trees. Mitigation or adoption of project design features to preserve or replace street trees as feasible may be required to ensure that this is not a significant visual impact.

At-grade stations could incorporate urban design elements consistent with surrounding structures and become destination points integrated into the surrounding urban streetscape. The stations would thereby contribute to a pedestrian-friendly environment.

Given the amount of existing lighting sources within the PSA, new lighting associated with the proposed alternatives is not anticipated to result in a noticeable change in the overall lighting levels.

Of the two At-Grade Emphasis LRT Alternative options, a larger percentage of the Option B is located above-ground (79 percent) than Option A (64 percent), and therefore Option B has a greater potential for visual impacts.

Underground Emphasis LRT Alternative

Although the Underground Emphasis LRT Alternative is almost entirely underground, it would have portals and signage directing transit riders to underground stations that would be visible above-ground, and thereby cause some alteration of the existing streetscape. Portals to underground stations would typically be located either on the sidewalk or pedestrian plaza, where passengers enter the station via escalators, elevators, or stairs away from at-grade views. Compared with at-grade stations, portals leading to underground stations would be less visually intrusive and may actually improve the streetscape through the use of lighting, landscaping, plazas, kiosks, public art, and other elements. Further, while portals would alter the existing views, they would be consistent with the urban character of the surroundings and would not be of sufficient size and height to fully block views of the surrounding architecture. Therefore, potential effects on notable architecture are anticipated to be minimal. However, specific portal locations near buildings with notable architecture (i.e., former Saint Vibiana's Cathedral and Caltrans buildings) would need to be further evaluated. In addition, evaluation would also be required to determine if any of the portals would obscure views of notable public art work from streets or sidewalks.

The Underground Emphasis LRT Alternative also calls for an automobile underpass and pedestrian overpass at the intersection of 1st and Alameda Streets. Pedestrians using the overpass would have a new, elevated structure from which to view the Little Tokyo area, but the line of sight between the 1st St. bridge and the historic Little Tokyo retail strip on East 1st St. would be obstructed.

Construction of an underground alignment could have a potentially greater visual impact than at-grade construction due to the longevity of construction and work necessary to create underground tunnels. However, visual disturbance resulting from construction activities would be temporary.

Therefore, while temporary construction impacts may be more visually disruptive under the Underground Emphasis LRT Alternative, the operational impacts would be substantially less with the Underground Emphasis LRT Alternative versus the At-Grade Emphasis LRT Alternative. The Underground Emphasis LRT Alternative entails substantially less aboveground infrastructure, thereby resulting in fewer alterations to the existing visual setting.

4.6 Air Quality Impacts

In response to concerns about air pollution, Federal, State, and local authorities have adopted various rules and regulations requiring evaluation of air quality impacts of projects and appropriate mitigation for air pollutant emissions. The following discussion focuses on ambient air quality standards, the existing setting of the PSA, and potential impacts.

4.6.1 Affected Environment

4.6.1.1 Regulatory Framework

Federal Clean Air Act: Air quality in the United States is governed by the Federal Clean Air Act (CAA) and is administered by the U.S. Environmental Protection Agency (EPA). Under the authority granted by the CAA, EPA has established national ambient air quality standards (NAAQS) for the following criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2). Table 4-6 presents the NAAQS that are currently in effect for criteria air pollutants. O_3 is a secondary pollutant, meaning that it is formed from reactions of "precursor" compounds under certain conditions. The primary precursor compounds that can lead to the formation of O_3 include volatile organic compounds (VOC) and oxides of nitrogen (NO_x).

Table 4-6 South Coast Air Basin Attainment Status /a/

Pollutant	National Standards	California Standards
Ozone (O3)	Non-attainment – Severe 17	Non-attainment
Carbon monoxide (CO)	Attainment – Maintenance /b/	Non-attainment – Transitional /c/
Nitrogen dioxide (NO2)	Attainment – Maintenance	Attainment
Sulfur dioxide (SO2)	Attainment	Attainment
Respirable particulate matter (PM10)	Non-attainment – Serious	Non-attainment
Fine particulate matter (PM2.5)	Non-attainment	Non-attainment
Lead (Pb)	Attainment	Attainment

/a/ Status as of June 15, 2007.
/b/ The EPA redesignated the SCAB as attainment for the CO NAAQS in 2007 (72 FR 26718).
/c/ The Los Angeles County portion of the SCAB was redesignated by CARB as attainment for the CO CAAQS, awaiting final State administrative process to officially change designation.
Source: CDM 2007

The CAA also specifies future dates for achieving compliance with the NAAQS and mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The City of Los Angles is included in the South Coast Air Basin (SCAB), which is designated as a federal non-attainment area for O3, PM10, and PM2.5.

California Clean Air Act: In addition to being subject to the requirements of the Federal CAA, air quality in California is also governed by the more stringent regulations under the California CAA. The California CAA is administered statewide by the California Air Resources Board (CARB). CARB oversees the functions of local air pollution control districts and air quality management districts, who in turn administer air quality activities at the regional, or air district, level. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS are at least as stringent, and often more stringent than the NAAQS. The currently applicable CAAQS are presented with the NAAQS in Table 4-6 for each pollutant.

CARB has been granted jurisdiction over several air pollutant emission sources that operate in the State. Specifically, CARB has the authority to develop emission standards for on-road motor vehicles, as well as for stationary sources and some off-road mobile sources. In turn, CARB has granted authority to the regional air pollution control and air quality management districts to develop stationary source emission standards, issue air quality permits, and enforce permit conditions.

Assembly Bill 32: The California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, requires CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas (GHG) emissions and to monitor and enforce compliance with the program. In general, the bill requires CARB to reduce statewide GHG emissions to the equivalent of those in 1990 by 2020. CARB was required to adopt regulations for mandatory GHG emissions reporting by January 1, 2008 and to adopt a plan indicating how emission reductions will be achieved by January 1, 2009. Major rulemakings for reducing GHGs must be developed by January 1, 2011, while the rules and market mechanisms adopted by CARB do not take effect until January 1, 2012. Since CARB is still in the rulemaking process for AB 32, information about project compliance at the state-level is currently not available.

An individual project, even a very large one, does not generate enough greenhouse gas emissions on its own to significantly influence global climate change; therefore, the issue of global climate change is, by definition, a cumulative environmental impact.

Air Quality Management Plan: At the local level, the South Coast Air Quality Management District (SCAQMD) has jurisdiction over a 10,743 square mile area consisting of Orange County, the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin. SCAB is a sub region of the SCAQMD's jurisdiction, which covers an area of 6,745 square miles and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. While air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

The SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources; control programs for area sources and indirect sources; a permitting system designed to ensure no net increase in emissions from any new or modified permitted sources of emissions; transportation control measures; sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for reactive organic compounds (ROC), NOx, CO, and PM10; and demonstration of compliance with CARB's established reporting periods for compliance with air quality goals1. On June 1, 2007, the SCAQMD adopted a comprehensive update, the 2007 AQMP for the Basin. The 2007 AQMP

[1] Reactive organic compounds (ROC) and volatile organic compounds (VOC) are designations made by CARB and USEPA, respectively, for organic compounds that react with NOx in the presence of sunlight to form O_3. Slight variations exist between the two designations; for example, the CARB definition of ROC includes ethane while the USEPA definition of VOC does not.

outlines the air pollution control measures needed to meet the federal PM2.5 standard by 2015 and the federal eight-hour ozone standard by 2024.

The SCAQMD also adopts rules to implement portions of the AQMP. Several of these rules may apply to construction or operation of the project. For example, Rule 403 requires the implementation of best available fugitive dust control measures during active operations capable of generating fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads. In addition, Regulation XI from the SCAQMD contains source-specific standards for different operations that may be completed under the jurisdiction of the SCAQMD. Rule 1166 contains requirements related to VOC emissions from decontamination of soil. The rule sets requirements to control the emission of VOC from excavating, grading, handling, and treating VOC-contaminated soil.

4.6.1.2 Existing Conditions

Table 4-7 below provides air quality data for 2006 (the most recent available air quality data available from the SCAQMD), for the Central Los Angeles monitoring location (Station Number 087), the closest monitoring station to the proposed project site.

Table 4-7 South Coast Air Quality Management District - Air Quality Data
Central Los Angeles Station (Station Number 087) – 2006

		Maximum Concentration (ppm)	Days of AAQS Exceeded	
			Federal	State
Ozone	1-hour	0.11	0	8
	8-hour	0.079	0	4
NO2	1-hour	0.11		
	24-hour	0.06		
	Annual Average	0.0288		
SO2	1-hour	0.03		
	24-hour	0.006		
	Annual Average	0.0019		
		Maximum Concentration (ug/m3)	Days of AAQS Exceeded	
			Federal	State
PM10	24-hour	59	0	3
	Annual Average	30.3		
PM2.5	24-hour	56.2	11	
	Annual Average	15.6		

In addition to the criteria pollutants traditionally considered, GHG emissions need to be evaluated. Different from criteria pollutants, GHG considerations are not based on maintaining or achieving an ambient air quality standard, but instead focus on achieving reductions, regardless of increases in population or operations. While there are currently no specific regulatory requirements for GHG beyond mandatory reporting requirements per the guidelines developed in response to AB 32, the SCAQMD is currently in the process of developing thresholds of significance that would require all projects to provide a minimum reduction over the existing conditions. As the project is further evaluated, it will be important to estimate existing levels of GHG emissions versus the change in GHG emissions resulting from implementation of the alternatives.

4.6.2 Evaluation Methodology

This air quality evaluation is qualitative, based on experience with emissions associated with construction activities and transit systems' operational air quality emissions. A more comprehensive quantitative air quality and greenhouse gas emissions assessment will be required once additional specific analysis is performed during the EIS/EIR phase.

The subsequent analysis will evaluate the alternatives regarding criteria pollutants in accordance with SCAQMD CEQA guidelines and GHG in accordance with draft guidance as available by SCAQMD. Emissions under the current year and existing conditions will be provided as a baseline point of comparison. Criteria pollutants, specifically NOx, CO, PM2.5, and PM10, will be evaluated using SCAQMD's localized significance thresholds (LST) methodology as detailed in the Final LST Methodology document, dated June 2003. It is assumed that dispersion modeling for operational emissions will not be required as part of this evaluation, with the potential exception of localized CO impacts resulting from changes in intersection configurations and congestion resulting from any of the alternatives. If deemed necessary due to potential future decreases in level of service, localized CO impacts may be evaluated using the Cal3HQC roadway CO dispersion model.

While CEQA guidance does not currently exist detailing a methodology for estimating construction or operational GHG emissions, GHG CEQA thresholds of significance are currently being considered and drafted for the SCAQMD. Assuming a finalized, official SCAQMD methodology may not be available during this evaluation, current CARB AB 32 reporting requirements, methodologies, and emission factors will be utilized to estimate GHG emissions for all years and scenarios. Where CARB methodologies or emission factors are not available for specific sources, available EPA factors will be reviewed for use in the analysis.

4.6.3 Environmental Issues

Based on at-grade versus tunnel construction, it is anticipated that construction emissions and impacts associated with the Underground Emphasis LRT Alternative would be greater than those associated with the At-Grade Emphasis LRT Alternative. Underground construction requires excavation and disposal or reuse of greater amounts of dirt than at-grade construction. The moving of this dirt generates fugitive dust emissions as well as engine emissions from the equipment needed to dig the hole,

remove the dirt, and place it elsewhere. At-Grade construction does require moving dirt; however the quantity is significantly less.

Annual regional vehicle miles traveled (VMT) is expected to decrease under both the At-Grade Emphasis LRT and Underground Emphasis LRT Alternatives, and therefore, emissions related to vehicle exhaust (CO, CO2, and NOx) are expected to also decrease as compared to existing conditions and the No Build Alternative. As a result, none of the project alternatives are predicted to exceed operational conformity or CEQA operational thresholds.

Localized impacts, specifically localized CO concentrations at specific intersections, may occur for various alternatives due to changes in intersection configurations and levels of service (LOS). These localized impacts may result in CO hot spots. If the future traffic analysis indicates that specific intersections may suffer a decrease in the LOS, those intersections will be evaluated further for localized CO impacts in the EIS/EIR.

4.7 Noise and Vibration

This section addresses the potential impacts of the project on noise within the PSA. The analysis describes the regulatory setting and the existing setting as it relates to noise. The potential impacts that could result to surrounding land uses from noise from construction and operation of each of the components are also addressed.

4.7.1 Affected Environment

4.7.1.1 Regulatory Framework

A number of federal agencies maintain noise regulations and guidelines. These agencies include EPA, the U.S. Department of Housing and Urban Development (HUD), the Federal Highway Administration (FHWA), the Federal Aviation Administration (FAA), and the Federal Transit Administration (FTA), among others. The applicability of noise regulations depends on the nature of the agency. EPA regulations, for instance, generally apply to interstate rail, interstate commercial mobile vehicles, or to certification procedures for "low-noise emissions products." HUD noise regulations apply to HUD-assisted projects and actions, while FHWA noise regulations pertain to federally aided highway projects. Federal regulations are not applicable to the project because it does not involve interstate activities, is not assisted by HUD, and does not involve construction of highways.

The California Office of Noise Control has developed guidelines showing a range of noise standards for various land use categories. Cities within the state have incorporated these guidelines into their General Plan noise elements. These guidelines are meant to maintain acceptable noise levels in a community setting based on the type of land use. Noise compatibility by different types of land uses is a range from "Normally Acceptable" to "Clearly Unacceptable" levels. The guidelines are used by cities within the state to help determine the appropriate land uses that could be located within an existing or anticipated ambient noise level, and are primarily considered in general plans.

The project has the potential to affect noise levels within the City of Los Angeles. Noise within the City is regulated by noise ordinances, which are found in the Los Angeles Municipal Code (LAMC). These noise ordinances limit intrusive noise and establish sound measurements and criteria; minimum ambient noise levels for different land use zoning classifications; sound emission levels for specific uses (such as radio, television, vehicle repairs, and amplified equipment); hours of operation for certain activities (such as construction and trash collection); standards for determining noise deemed a disturbance of the peace; and legal remedies for violations. The noise ordinance for the City of Los Angeles can be found in Chapter XI of the LAMC. In addition, the General Plan Noise Element for the City of Los Angeles provides noise management goals, objectives, policies, and programs to achieve. The City has incorporated the California Office of Noise Control noise compatibility guidelines into their Noise Element.

4.7.1.2 Existing Conditions

Sound is defined as any pressure variation detected by the human ear. Noise is defined as any unwanted sound. The degree to which noise can affect the human environment range from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise; the amount of background noise present before the intruding noise; and the nature of work or human activity that is exposed to the noise source. The preferred unit for measuring sound is the decibel (dB). The dB expresses the logarithmic ratio of the amount of energy radiating from a source in the form of an acoustic wave. The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. Sound intensity is measured in decibels that are A-weighted (dBA) to correct for the relative frequency response of the human ear. The range of human hearing extends from approximately three to 140 dBA.

The following describes the existing (baseline) environmental noise setting information presented for the At-Grade Emphasis LRT and Underground Emphasis LRT Alternatives.

The existing noise and vibration environment of an area (without the project) is generally established by the type and intensity of the existing land use and related transportation system activity. The PSA, and specifically the area of potential effect located immediately adjacent to or above the alternative alignments, is best described as an intensely developed urban core. The structure type is predominately steel and concrete high-rise buildings, attached and detached parking structures, plus a limited number of masonry low-rise multi-story buildings. There is also a small number of street-level pedestrian plazas. The land uses are office/commercial, institutional, and government plus some hotels and mixed commercial/retail with upper floor residential apartments/condominiums.

The PSA transportation network is essentially a grid pattern of street-level roads plus a few elevated ramps and below surface traffic tunnels. Both the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative are located between one and two blocks from major freeways, the I-101 (below-grade) and I-110 (western edge). Because of the characteristics of the downtown fabric and the existing buildings located in between the alignments and the freeways, very little additional noise would be expected for either alternative. One key note is the underpass element which is introduced in the Underground Emphasis LRT and the option for the At-Grade Emphasis LRT. The underpass would direct through north-south traffic on Alameda St. (the only truck-heavy street in the PSA) underground, thus minimizing traffic noise impacts even more. The estimated average ambient noise level is a Day Night Average Noise Level (Ldn) of approximately mid/upper 60's to low 70's, dBA.

The two build alternatives and proximate land use categories are shown on Figure 4-1.

4.7.2 Evaluation Methodology

This noise and vibration evaluation is qualitative, based on substantial experience with ambient and transit systems' environmental noise plus a "windshield" survey of the alternative alignments conducted during April 2008. A more comprehensive quantitative noise and vibration impact assessment will be required once additional specific analysis is performed during the EIS/EIR phase. The subsequent analysis will follow the Federal Transit Administration (FTA) guidelines contained in Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06), issued as a Final Report May 2006.

4.7.3 Environmental Issues

Noise and vibration associated with the two build alternatives would be generated by a LRT system with associated stations and ancillary structures (e.g., discharge vent for tunnel ventilation of underground alternative). The main noise sources of the LRT vehicle are the wheel/track interface, vehicle brakes, and the propulsion system of the trainset. For stations, the primary noise sources are mechanical HVAC plus station platform paging. An additional noise source for subway systems is the tunnel ventilation system. Additional noise sources for street-level operations are grade-crossing warning bells and track horns. In general, the noise from trainsets operating at street level (with concomitantly low relative speeds compared to subway operation) would be about the same as a medium truck or a bus operating at similar speeds. The noise emission from a trainset operating in a tunnel section could be slightly louder because of a higher allowable travel speed, but the noise escaping to street level and higher, including noise from tunnel vents, would be minimal and likely inaudible compared to the existing urban ambient noise. With the exception of grade-crossing bells, noise emission from either sub-grade or street level stations would likely blend into the existing ambient noise currently generated by traffic and the myriad of high-rise buildings in the PSA. Vibration generated by the operating trainsets is expected to be low for the slower speed street-level alternatives. Vibration and resulting ground-borne noise from subway operation might be of interest in the vicinity of the Disney Concert Hall but is likely to be insignificant.

Table 4-8 Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use	Noise Metric	Description of Land Use Category
1	Outdoor Leq(h)*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.
2	Outdoor dn(h)*	Residences and buildings where people normally sleep. This category includes homes, hospitals and hotels where a nighttime sensitivity to noise is assumed to be utmost importance.
3	Outdoor Leq(h)*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters, and churches where it is important to avoid interferences with such activities as speech, meditation or study associated with cemeteries, monuments, museums, campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.

***Leq for the noisiest hour of transit-related activity during hours of noise sensitivity.**
Source: Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06), Chapter 3, issued as a Final Report May 2006.

At-Grade Emphasis LRT Alternative

For purposes of noise and vibration impact analysis, the potential impacts associated with Options A and B are the same. As discussed above, LRT vehicles generate more potentially audible noise when running at street level. The normal trainset noise is similar in nature and sound level to the existing street traffic traversing the area. However, "wheel squeal", train platform paging systems and any at-grade crossing bells would add noise of a different character to the existing ambient noise. When the hustle and bustle of daytime street traffic and activity subsides, the operation of a street-level LRT system could become more audible. The phenomenon of wheel squeal occurs when a steel-wheeled LRT vehicle traverses a tight-radius steel track curve and high-pitched vibration and noise emission occurs. Wheel squeal can be avoided or minimized during design by considering the radius of necessary curved track sections. This may be difficult in a densely developed urban environment. For a given track layout with tight curves, the squeal can usually be mitigated at extra expense and maintenance costs but can be a stubborn problem. Based on this, the At-Grade Emphasis LRT Alternative has a slightly higher potential for noise impacts than the Underground Emphasis LRT Alternative.

Underground Emphasis LRT Alternative

As discussed above, subway LRT noise is generally not of concern to noise-sensitive street-level land use because the noise from the train and below-grade stations/platforms is well contained within the tunnel structure and at-grade crossing bells would not be necessary. One exception is the 1st and Alameda St. intersection. This at-grade intersection may experience higher levels of noise and vibration due to the volume of trains passing through. In addition, the trains will be surfacing in a portal located in the 'Office Depot' parcel and this may affect surrounding businesses and/or residences due to vibration.

The potential noise emissions from tunnel ventilation structures is readily attenuated by application of established design principles and the common practice of locating the vent shafts such that their exits are in or adjacent to parking structures or building service areas. Because of potentially higher train speeds and closer proximity to the foundations of ground-born-noise-sensitive structures, the potential concern for these issues should be evaluated when more project details become available. In general, the Underground Emphasis LRT Alternative has a low potential for noise impacts and a slightly higher potential for vibration/ground-born noise impacts at critical receptors than the At-Grade Emphasis LRT Alternative.

4.8 Ecosystems/Biological Resources

The PSA traverses the highly developed downtown area. As such, biological resources are limited to landscaped areas where mature trees or other vegetation could support wildlife species that are adapted to the urban environment. This section discusses potential issues associated with biological resource impacts in the PSA.

4.8.1 Affected Environment

4.8.1.1 Regulatory Framework

Endangered Species Act: The Endangered Species Act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the Endangered Species Act requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. At the federal level, the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration are responsible for administration of the Endangered Species Act.

Migratory Bird Treaty Act: The Migratory Bird Treaty Act decrees that all migratory birds and their parts (including eggs, nests and feathers) are fully protected. Nearly all native North American bird species are protected by the act. Under the act, taking, killing, or possessing migratory birds is unlawful. Activities that would require such a permit would include destruction of migratory bird nesting habitat during the nesting season when eggs or young are likely to be present.

California Endangered Species Act: The California Department of Fish and Game is responsible for administration of the California Endangered Species Act. Unlike the federal Endangered Species Act, there are no state agency consultation procedures under the California Endangered Species Act. For projects that affect both a state and federal listed species, compliance with the federal Endangered Species Act will satisfy the California Endangered Species Act if the California Department of Fish and Game determines that the federal incidental take authorization is "consistent" with the California Endangered Species Act. Projects that result in a take of a state only listed species require a take permit under the California Endangered Species Act.

California Fish and Game Code Sections 3500 - 3705, Migratory Bird Protection: Sections 3500 through 3705 of the California Fish and Game Code regulate the taking of migratory birds and their nests. These codes prohibit the taking of nesting birds, their nests, eggs, or any portion thereof during the nesting season. Typically, the breeding/nesting season is from March 1 through August 30. Depending on each year's seasonal factors, the breeding season can start earlier and/or end later.

Los Angeles County General Plan: The Los Angeles County General Plan identifies Significant Ecological Areas containing biological resources and sets forth the goal of conserving these areas. While development within a Significant Ecological Area (SEA) is not prohibited, the general plan does require development to be limited and controlled in order to avoid impacting valuable biological resources.

City of Los Angeles Native Tree Protection Ordinance: The City of Los Angeles enacted an oak tree protection ordinance in 1982 to protect oak trees in the City. Although the ordinance slowed the oak tree decline, the oak population, as well as other native tree species, continued to decline. In an effort to further slow the decline of native tree habitat, the City passed an amended Native Tree Protection Ordinance (Ordinance No. 177,404), which became law on April 23, 2006. The Native Tree Protection Ordinance protects all native oak tree species (Quercus spp), California Sycamore (Platanus racemosa), California Bay (Umbellularia californica), and California Black Walnut (Juglans californica); applies to protected trees four inches or greater in diameter at 4.5 feet above ground (multiple trunk trees are calculated by cumulative diameter); applies to protected trees on private lots; and requires that a protected tree report be submitted by a registered consulting arborist, landscape architect, or pest control advisor who is also a certified arborist.

Protected tree removal requires a removal permit by the Board of Public Works. Any act that may cause the failure or death of a protected tree requires inspection by the City's Urban Forestry Division. Although the law does not require a permit for the pruning of protected trees, the City recommends consultation with a certified arborist to ensure that the pruning of protected trees is performed carefully.

4.8.1.2 Existing Conditions

Due to its densely developed and urbanized nature, the PSA provides little opportunity for wildlife species or other biological resources to exist. There are no Habitat Conservation Plans for this area, and no SEAs located within one-quarter mile of either side of the At-Grade Emphasis LRT or Underground Emphasis LRT Alternatives. There are no wildlife corridors within this area to support movement of wildlife species. There are no wetlands, oak woodlands, or coastal sage scrub habitat within the PSA. Due to the lack of habitat, sensitive species are not known to occur here. The Los Angeles River, which is contained within a concrete channel through the downtown area, is located more than one-quarter mile away from the build alternatives.

In general, biological resources within the PSA are limited to a few green spaces consisting of landscaped vegetation where highly-adaptive urban wildlife species may exist. Native plant species are mainly limited to those few that are maintained in these small green spaces. A small number of large mature trees located within the PSA may provide potential roosting and nesting sites for birds, including raptors.

4.8.2 Evaluation Methodology

To evaluate potential impacts related to the project construction and operation, the possible plant species that could occur in the PSA were reviewed, and their respective value as protected species or habitat that supports a protected species was evaluated.

4.8.3 Environmental Issues

Because of the general lack of biological resources in the PSA, as described above under Section 4.8.1.2, there are few environmental issues to consider in this regard. However, trees that may provide potential roosting and nesting sites for birds may exist within one-quarter mile of the two build alternatives. If construction of the project would require removal of these trees during nesting season, focused surveys for nesting birds would be required. Compliance with the City of Los Angeles Native Tree Ordinance would also be required. For these reasons, the Underground Emphasis LRT Alternative could be preferable to the At-Grade Emphasis LRT Alternative if it would avoid disturbance or destruction of protected trees and nesting birds. In addition, design elements would be incorporated that could add more trees and vegetation than currently exist in either alternative.

4.9 Geotechnical: Subsurface and Hazardous Materials

This section discusses potential issues associated with geology and subsurface conditions and hazardous materials within the PSA.

4.9.1 Affected Environment

4.9.1.1 Geology and Subsurface Conditions Geologic Features and Soils

The PSA is located in the northern portion of the Los Angeles Basin. This basin is a major elongated northwest-trending structural depression that has been filled with sediments up to 13,000 feet thick since middle Miocene time. On a regional scale, the PSA lies within the northernmost portion of the Peninsular Ranges geomorphic provinces near its boundary with the Transverse Ranges geomorphic provinces. The Peninsular Ranges province is characterized by elongate northwest-trending mountain ridges separated by sub-parallel, sediment-filled valleys. This province is bounded by the San Jacinto fault zone on the east, the Pacific Ocean coastline on the west, and the Transverse Ranges geomorphic province on the north. In contrast, the adjacent Transverse Ranges are characterized by east-west trending geologic structures and mountain ranges that include the Santa Ynez, San Gabriel, San Bernardino, and Santa Monica Mountains, and associated valleys. The Transverse Ranges province is a composite structural block bounded by the Big Pine fault on the north, the San Andreas fault zone on the east, the Pacific Ocean on the west, and the Malibu Coast, Santa Monica,

Hollywood, Raymond, Sierra Madre, and Cucamonga faults on the south. The regional geology in the site vicinity is shown on Figure 4-4, Regional Geology.

On a local geologic setting, the proposed alignments would traverse the southeastern end of the Elysian Park Hills and the ancient floodplain of the Los Angeles River. The Elysian Hills comprise the low-lying hills west of the Los Angeles River and southeast of the eastern end of the Santa Monica Mountains. The Hollywood fault separates the northern end of the Elysian Hills from the Santa Monica Mountains. The Elysian Hills are comprised largely of Miocene age sedimentary rocks with Pliocene age rocks flanking the southeastern edge of the hills. Previous geologic mapping identified several major geologic structures within the Elysian Hills, including the Elysian Park anticline and northwest trending faults. The proposed project located on the southwestern flank of the northwest trending Elysian Park anticline. The southerly limb of the anticlinorium contains apparent secondary folds of relatively shorter wavelength and lesser continuity of fold axes. In the vicinity of the project alignment, bedding within the Fernando and Puente formations strike approximately east-west to slightly north of east and dips moderately to steeply to the south.

The geomorphology along the proposed alignments ranges from gently sloping alluvial floodplain surfaces to hill-side slopes of moderate relief and grade. The steepest slopes along the alignment surface are between 3rd St. (at Flower St.) and Olive St. (at 2nd St.). Review of the historical U.S. Geological Survey topographic map of the Hollywood Quadrangle shows a relatively narrow alluvial valley follows Flower St. from 6th St. up-gradient to 3rd St., then diverges to the northwest toward Glendale Blvd. (west of the 110- Harbor Freeway). This alluvial valley appears to be a tributary drainage course to an ancestral course of the Los Angeles River (i.e., prior to channelization of the modern Los Angeles River). The Los Angeles River floodplain covers the broad, gently sloping, alluvial terrain east of the Bunker Hill area. Artificial fill of variable thickness underlies the alignment in the near surface. The fill consists of mixtures of sand, silt, clay, with variable amounts of construction debris. Deep areas of fill to depths of approximately 25 feet below ground surface are locally present at abandoned tunnels (5th St.) and storm drain excavations that have been backfilled.

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (CGS - previously the California Division of Mines and Geology) for the Alquist-Priolo Earthquake Fault Zoning Program. By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault is a fault that has demonstrated surface displacement of Quaternary age deposits (last 1.6 million years). Inactive faults have not moved in the last 1.6 million years.

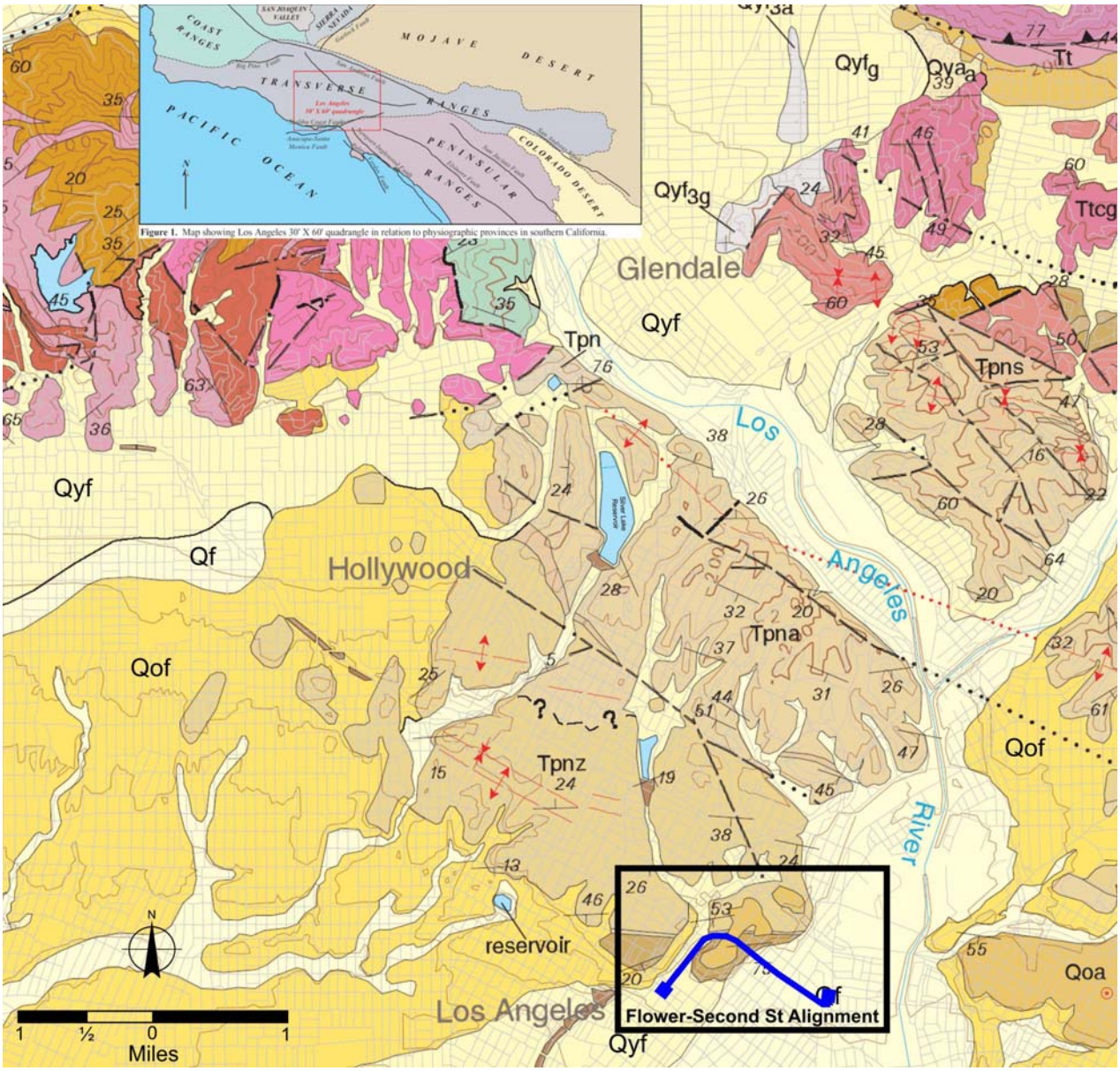


Figure 4-4 Regional Geology

Active and potentially active faults that are located within ten miles of the alignment are discussed below with respect to their known recency of displacement and location relative to the proposed alignments along Flower St. to 2nd St. Based on review of the available data, no known Holocene Active or Latest Pleistocene Active faults trend through the PSA. The PSA is not located within a currently established Alquist-Priolo earthquake fault zone for surface fault rupture. The faults in the vicinity of the site are shown in Figure 4-5, Regional Faults and Seismicity.

Active Faults

The Holocene active fault with surface expression closest to the PSA is the Hollywood fault, located approximately 3.9 miles to the northwest. Active blind thrust faults in vicinity of the site are discussed separately below. Holocene Active faults within ten miles of the planned alignment include the Raymond fault, the Newport-Inglewood fault zone, Verdugo fault and the Santa Monica fault. These faults, respectively, are located the following approximate distances from the proposed alignment; 5.9 miles southeast, 7.8 miles west-northwest, 8.4 miles north-northeast, and 9.6 miles west. The active Hollywood fault trends east-west along the base of the Santa Monica Mountains from the West Beverly Hills Lineament in the West Hollywood-Beverly Hills area to the Los Feliz area of Los Angeles. The fault is a groundwater barrier within Holocene sediments. Studies by several investigators have indicated that the fault is active based on geomorphic evidence, stratigraphic correlation between exploratory borings, and fault trenching studies. Although the Hollywood fault is considered active by the State Geologist, an Alquist-Priolo Earthquake Fault Zone has not yet been established for the Hollywood fault due to the poorly defined location along its length. The City of Los Angeles considers the Hollywood fault active for planning purposes and the CGS includes the fault in its database of seismic sources.

Potentially Active Faults

The inferred trace of the MacArthur Park fault is located approximately 0.5 miles southeast of the proposed alignment. The fault has not been definitively proven to exist. It is inferred west of downtown Los Angeles and has been located based on south-facing scarps, truncated drainages, and other geomorphic features. The Eagle Rock fault, a latest Pleistocene active fault is located approximately eight miles to the northeast.

Blind Thrust Fault Zones

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than three kilometers. These faults do not present a potential surface fault rupture hazard, however, they are considered active and potential sources for future earthquakes. The nearest thrust is the Elysian Park Thrust. The Elysian Park Thrust, previously defined as the Elysian Park Fold and Thrust Belt, was postulated to extend northwesterly from the Santa Ana Mountains to the Santa Monica Mountains, extending westerly and paralleling the Santa Monica-Hollywood and Malibu Coast faults. The Elysian Park Thrust is now believed to be smaller in size, only underlying the central Los Angeles Basin. The Elysian Park Thrust underlies the PSA at depth (approximately six to nine miles below ground surface). Like other blind thrust faults in the Los Angeles area, the Elysian Park Thrust is not exposed at the surface and does not present a potential surface rupture hazard; however, the Elysian Park Thrust should be considered an active feature capable of generating future earthquakes with associated significant ground shaking and possible deformation of the near surface materials.

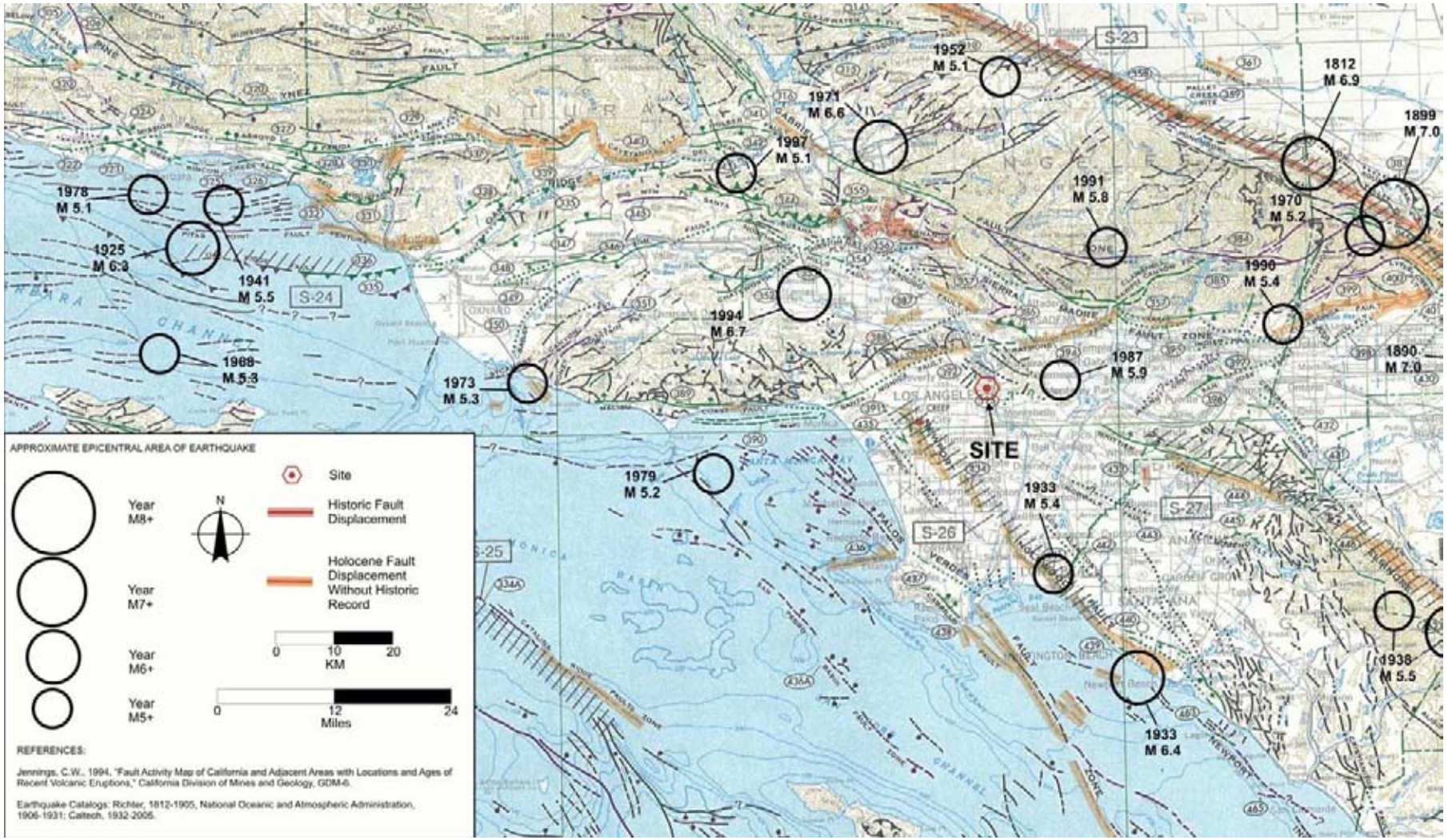


Figure 4-5 Regional Faults and Seismicity

In addition, the Elysian Park fault is a blind thrust fault located northeast of and at a shallower depth than the Elysian Park Thrust. The up-dip edge of the blind thrust fault tip is located about 0.6 miles north of downtown Los Angeles. The estimated, average recurrence-interval for events of the Elysian Park fault ranges from 500 to 1,300 years, with an estimated moment magnitude of up to 6.7. Evidence to define the activity of the Elysian Park fault is lacking; however, given the history of seismic events on blind thrust faults in the greater Los Angeles area (i.e., Whittier Narrows and Northridge earthquakes) and proximity to the PSA of this newly defined fault, the Elysian Park fault is considered active for planning and design of the project.

Coyote Pass Escarpment

The Coyote Pass Escarpment is a gentle south-facing, east-west trending topographic lineament that forms the southern flank of the Repetto Hills, from the Los Angeles River channel eastward to the Monterey Park area. The escarpment is an area of young, near-surface monoclinal folding, believed to be a result of fault rupture on the Elysian Park Thrust and/or the shallower Elysian Park fault. Although the trend of the escarpment beneath the floodplain west of the Los Angeles River has not been well defined, it has been inferred that the escarpment may align in the subsurface with the MacArthur Park escarpment, located west of the Harbor Freeway. The results of recent investigations of the Coyote Pass Escarpment indicate that the Elysian Park fault is active. Future fault rupture at depth along the Elysian Park fault and/or the Elysian Park Thrust could result in near-surface folding of the alluvial sediments and underlying bedrock in the area of the escarpment. Thus, no ground rupture is anticipated along the Coyote Pass Escarpment, but there is a potential for ground deformation (active folding) of the bedrock and the overlying alluvial sediments along the mapped location of the escarpment.

Landslides

Landslides occur in the City of Los Angeles and slope failures were instrumental in Los Angeles being one of the first municipalities in the nation to adopt hillside-grading ordinances. Rapid uplift of the mountainous areas of Los Angeles from past and ongoing tectonic movements gives rise to a geologic setting conducive to mass wasting. The variable nature of sediments and rocks exposed throughout Los Angeles, and the slope conditions created by uncontrolled grading, have led to frequent landslides of a variety of types. The hillside areas of Los Angeles, especially the central and eastern Santa Monica Mountains, have geologic and topographic conditions that are conducive to the development of surficial and gross landslides. The City of Los Angeles Department of Building and Safety regulates construction and development in hillside areas of Los Angeles. As part of the City of Los Angeles Building Code, and review process, the City has established a Hillside Ordinance, which specifies that a geologic report is required for proposed construction within hillside areas. The northwest portion of the PSA (area east of the 101/110 interchange) is within the Hillside Ordinance area.

Liquefaction

Liquefaction-induced ground failure has historically been a major cause of earthquake damage in Southern California. Significant damage to roads, utilities, pipelines, and buildings that occurred during the 1971 San Fernando and 1994 Northridge earthquakes was caused by liquefaction-induced ground displacement. Localities most susceptible to liquefaction-induced ground displacement are underlain by loose, water-saturated granular sediment within 50 feet of the ground surface. Liquefaction susceptibility generally decreases as the percentage of clay size particles in the soil increases and / or the coarse sand and gravel content increases.

In areas within the PSA, sediments susceptible to liquefaction comprise the young (Holocene to late Holocene age) alluvial fan deposits and young (Holocene) alluvial floodplain sediments. The older alluvial deposits are generally medium dense to dense and are considered by the CGS (1998, 2001) to have a low liquefaction susceptibility. The CGS has prepared seismic hazard maps for the Los Angeles Basin. The maps delineate liquefaction zones which have been defined by the CGS as areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacement such that mitigation (as defined in the Public Resources Code) would be required. The CGS uses criteria developed by the Seismic Hazard Mapping Act Advisory Committee in delineating liquefaction zones on the seismic hazard maps. In areas of limited or no geotechnical data, susceptibility zones are evaluated using a combination of geologic considerations.

The CGS has rated the liquefaction susceptibility for the Holocene age sediments in the PSA as high if saturated within 40 feet of the ground surface and, if not saturated, the susceptibility is rated as low. In contrast, the liquefaction susceptibility of older alluvial sediments (terrace deposits) is rated as low or not likely irrespective of ground-water levels. In this framework, the CGS has identified the Holocene sediments along Flower St. between Wilshire Blvd. and 2nd St. to be within a potential liquefaction zone. Likewise, the CGS has identified the Holocene sediments along 2nd St. between Hill St. and San Pedro St. to be within a potential liquefaction zone. The young (Holocene) age deposits along the alignment, where present, are on the order of five to 35 feet thick. Preliminary alignment profiles show the tunnel crown elevations appear to be below the young alluvial deposits that are rated as highly susceptible to liquefaction. For station locations with shallow groundwater and younger alluvial deposits, station walls may have to be designed for greater than usual lateral earth pressures to account for liquefaction potential. Settlement beneath the planned stations due to liquefaction is considered remote due to the depth of the Fernando formation beneath the Holocene alluvium at preliminary station depths.

4.9.1.2 Hazardous Materials

The PSA is located in a highly developed area with a long history of commercial and industrial land use. As such, there is potential for the presence of hazardous materials in soil and groundwater within one-quarter mile of the build alternatives. Contaminated soil and groundwater could be found at former and current gas stations, dry cleaners, or

manufacturing facilities, and may include, but are not limited to, petroleum hydrocarbons, volatile and semi-volatile organic compounds, and metals.

Naturally-occurring hazardous materials may also exist within the PSA from known oil and gas fields and geologic formations. These may include petroleum hydrocarbons, methane, and hydrogen sulfide, as well as other hazardous materials associated with historic or current production operations.

Soil contamination can result from spills at industrial facilities or leaks from underground storage tanks. Initially, soil contamination would be primarily located at the point of release, which typically would not be within existing streets. However, depending on the amount of the release, the type of contamination, the soil type, and location of groundwater, contaminants can move vertically and laterally and become located within right-of-ways where the project would be constructed.

A regulatory database search was conducted to identify potential or existing conditions, including soil and/or groundwater contamination that would present environmental health and safety concerns within one-quarter mile of the two build alternatives. Table 4-9 below provides the regulatory databases included in the search.

Results of the search indicate there are approximately 500 regulatory database listings in the PSA. Many sites are listed on more than one regulatory database. The listings include all past and present generators, transporters, treaters, storers, and disposers of hazardous waste. In addition, properties where contamination has been remediated and is no longer present in soil and/or groundwater are listed.

The PSA would potentially cross the Union Station Oil Field (along 2nd St. east of Central Ave.). In addition, there are seven oil wells located between 1st and 2nd Streets on the west side of Garey St. and west of Vignes St. Six of these wells were abandoned in June 2005 and the seventh well was abandoned prior to 2005. The Union Station Oil Field has been delineated as a Methane Zone by the City of Los Angeles Department of Public Works, Bureau of Engineering. Due to the proximity to the oil field, the potential for methane gas exists along the proposed alignments. The proposed alignments would cross this buffer zone north of 3rd St. and west of Grand Ave.

4.9.2 Evaluation Methodology

Geologic-related issues include subsurface geology and soils, seismicity, landslides, and liquefaction. All available data was reviewed in identifying potential geologic impacts within the PSA. As detailed above, a regulatory database search was conducted to identify potential or existing conditions, including soil and/or groundwater contamination that would present environmental health and safety concerns within one-quarter mile of the build alternatives.

Table 4-9 Regulatory Database Search Results		
Database		# of sites identified1
Federal Records		
NPL	National Priority List	0
Proposed NPL	Proposed National Priority List Sites	0
Delisted NPL	National Priority List Deletions	0
NPL LIENS	Federal Superfund Liens	0
CERCLIS	The Comprehensive Environmental Response, Compensation and Liability Information System	1
CERC-NFRAP	Archived sites removed from the CERCLIS inventory	1
LIENS 2	CERCLA Lien Information	0
CORRACTS	Corrective Action Report	0
RCRA-LQG	RCRA- Large Quantity Generator	2
RCRA-SQG	RCRA- Small Quantity Generator	65
RCRA-NonGen	RCRA-Sites which do not presently generate hazardous waste	9
RCRA-TSDF	RCRA - Transporters, Storage and Disposal	0
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator	0
ERNS	Emergency Response Notification System	3
FTTS	FIFRA/TSCA Tracking System	2
HIST-FTTS	Historical FIFRA/TSCA Tracking System	2
US ENG CONTROLS	Engineering Controls Sites List	0
US INST CONTROL	Sites with Institutional Controls	0
HMIRS	Hazardous Materials Information Reporting System	0
DOT OPS	Incident and Accident Data	0
US CDL	Clandestine Drug Labs	0
US BROWNFIELDS	A Listing of Brownfields Sites	0
DOD	Department of Defense Sites	0
FINDS	Facility Index System	16
FUDS	Formerly Used Defense Sites	0
LUCIS	Land Use Control Information System	0
CONSENT	Superfund (CERCLA) Consent Decrees	0
ROD	Records Of Decision	0
UMTRA	Uranium Mill Tailings Sites	0
ODI	Open Dump Inventory	0
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	0
MINES	Mines Master Index File	0
TRIS	Toxic Chemical Release Inventory System	0
TSCA	Toxic Substances Control Act	0
SSTS	Section 7 Tracking Systems	0
ICIS	Integrated Compliance Information System	0
PADS	PCB Activity Database System	0
MLTS	Material Licensing Tracking System	0
RADINFO	Radiation Information Database	0
RAATS	RCRA Administrative Action Tracking System	0

Table 4-9 Regulatory Database Search Results		
Database		# of sites identified1
State and Local Records		
AIRS	Toxics and Criteria Pollutant Emissions Data	16
HIST-Cal-Sites	Replaced with Envirostor	1
CA BOND EXP. PLAN	Bond Expenditure Plan	0
CA WDS	California Water Resources Control Board- Waste Discharge System	6
CA FID UST	Active and Inactive Underground Storage Tank Locations	79
CHMIRS	California Hazardous Material Incident Report System	2
Cortese	No longer updated	35
DRYCLEANERS	Registered Drycleaner Related Facilities	3
ENVIROSTOR	DTSC Site Mitigation and Brownfields Reuse Database	20
LUST	Leaking Underground Storage Tank Incident Reports	34
HAZNET	DTSC Hazardous Waste Manifest Records	66
RESPONSE	DTSC Involved in Remediation	1
SCH	School Property Evaluation Program	0
SWRCY	Recycling Facility Sites	1
Toxic Pits	Toxic Pits Cleanup Act Sites	0
SWF/LF	Solid Waste Information System	0
SLIC	Spills, Leaks, Investigation and Cleanup Sites	7
SWEEPS UST	Statewide Environmental Evaluation and Planning System	84
UST	Underground Storage Tank Database	39
HIST UST	Historical Underground Storage Tank Database	30
AST	Aboveground Storage Tank Database	1
WMUDS/SWAT	Waste Management Unit Database	0
L.A. CO SML	Los Angeles County Site Mitigation Log	1
L.A. CO HMS	Los Angeles County Industrial Waste and Underground Storage	4
AOCONCERN	San Gabriel Valley Areas of Concern	0
LIENS	Environmental Liens Listing	0
Notify 65	Proposition 65 Records	0
DEED	Deed Restriction Listing	0
VCP	Voluntary Cleanup Program Properties	0
WIP	Well Investigation Program Case List	0
CDL	Clandestine Drug Labs	0
HAULERS	Registered Waste Tire Haulers Listing	0
Tribal Records		
INDIAN RESERV	Indian Reservations	0
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	0
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land	0
INDIAN UST	Underground Storage Tanks on Indian Land	0
EDR Proprietary Records		
Manufactured Gas Plants		5

4.9.3 Environmental Issues

4.9.3.1 Geology and Subsurface Conditions

As part of standard practice and the predesign process, a geotechnical study would be prepared to identify geotechnical conditions and design features (such as foundation requirements and the maximum credible design earthquake) that would have to be included as part of the project design. The seismicity of Southern California is dominated by movements on the intersecting northwest-southeast trending San Andreas fault system and the east-west trending faults of the Transverse Ranges fault system. The Los Angeles Basin is located south of the intersection of these two systems. Both of the build alternatives would be potentially impacted by the fault systems. Both the At-Grade Emphasis LRT Alternative and Underground Emphasis LRT Alternative would be designed and constructed in accordance with all applicable earthquake standards to ensure the greatest protection from earthquakes. With respect to landslides, if the most western portion of the At-Grade Emphasis LRT Alternative is within the Hillside Ordinance area, then design and construction would be in accordance to all applicable standards and ordinances. Where liquefaction concerns are present, final engineering specifications would determine the proper footings and/or foundations along the alignment, as well as at the station locations.

Neither the construction nor the operation of the project would be expected to cause, accelerate, or exacerbate geologic hazards that would result in substantial damage to structures or infrastructure, or that would expose people to increased risk of hazards. Construction and operation would not cause or accelerate instability from erosion, expansion or settlement or offsite sediment runoff.

4.9.3.2 Hazardous Materials

A large number of sites where hazardous materials may be present are located within one-quarter mile of the two build alternatives, indicating that localized areas of contaminated soils and groundwater could be encountered during the construction of the project.

The At-Grade Emphasis LRT Alternative may offer an advantage over the Underground Emphasis LRT Alternative in avoidance of soil contamination from sources such as underground storage tanks. In addition, naturally-occurring hazardous materials such as petroleum hydrocarbons, methane (portions of the PSA are within a methane zone), and hydrogen sulfide would be less of a concern with the At-Grade Emphasis LRT Alternative. However, hazardous materials in surface soils and potentially shallow groundwater would be a potential concern with construction of any of the promising alternatives.

4.10 Water Resources

This section provides an overview of water resources within the PSA, regulatory requirements, and the potential environmental issues associated with each alternative. Water resources include surface water hydrology, flood hazards, tsunamis, inundation, seiches, and groundwater.

4.10.1 Affected Environment

4.10.1.1 Regulatory Framework

Clean Water Act: The EPA regulates water quality under the Clean Water Act (CWA) also known as the Federal Water Pollution Control Act. Enacted by the EPA in 1972, the CWA is designed to restore and maintain the chemical, physical, and biological integrity of waters of the United States. The CWA provides the legal framework for several water quality regulations including National Pollution Discharge Elimination System (NPDES) Permits, effluent limitations, water quality standards, pretreatment standards, antidegradation policy, non-point source discharge regulation, and wetlands protection. EPA has delegated the responsibility of portions of the CWA to state and regional agencies, including the State of California; therefore the primary regulations resulting from the CWA are discussed in the state and local regulation descriptions that follow.

National Flood Insurance Act: The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. NFIP is based on the minimal requirements for flood plain management and is designed to minimize flood damage within Special Flood Hazard Areas. Flood Insurance Rate Maps are developed by FEMA to determine if a particular parcel lies in a designated Special Flood Hazard Zone.

Porter-Cologne Water Quality Control Act: The Porter-Cologne Water Quality Control Act (embodied in the California Water Code [CWC]) established the principal California legal and regulatory framework for water quality control. The CWC authorizes the State Water Resources Control Board (SWRCB) and Regional Boards to implement the provisions of the federal CWA. The alternative alignments are located in Region 4, also known as the Los Angeles Regional and governed by the Los Angeles Regional Water Quality Control Board (LARWQCB).

NPDES Permit Program: The NPDES program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. In California the permits are issued by the SWRCB or Regional Boards. The applicable permits include:

- NPDES General Permit for Storm Water Discharges Associated with Construction Activities issued by the SWRCB. The General Permit includes measure to eliminate or reduce pollutant discharges through a Stormwater Pollution Prevention Plan (SWPPP), which describes the implementation and maintenance of Best Management Practices (BMPs) to control stormwater and other runoff during and after construction.

- NPDES Los Angeles County Municipal Storm Water Discharge Permit issued by the LARWQCB. Under the MS4 Permit, the County and City are required to implement development planning guidance and control measures that control and mitigate stormwater quality and quantity impacts to receiving waters as a result of new development and redevelopment. The MS4 Permit requires permittees to implement a Standard Urban Stormwater Management Plan (SUSMP) that designates BMPs that must be used in specified categories of development and redevelopment projects to

infiltrate, filter, or treat stormwater runoff, control peak flow discharges, and reduce the post-project discharge of pollutants from stormwater conveyance systems.

Basin Plan: As required by the CWC, the Regional Board adopts and periodically updates a plan entitled "Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties" (Basin Plan). The Basin Plan designates beneficial uses for bodies of water, sets numerical (quantitative) and narrative (qualitative) water quality objectives applicable to inland surface waters and enclosed bays and estuaries, and includes implementation provisions, programs, and policies to protect all waters in the Los Angeles region.

California Toxics Rule: The EPA has established water quality criteria for certain toxic substances via the California Toxics Rule (CTR). The CTR established acute (i.e. short term) and chronic (i.e. long term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWCB as having beneficial uses protective of aquatic life or human health, such as the Los Angeles River.

California Impaired Water Bodies: Under Section 303(d) of the CWA, the SWRCB identifies impaired bodies of water that do not meet water quality standards and together with the Regional Boards prioritizes and schedules them for development of Total Maximum Daily Loads (TMDLs).

California Nonpoint Source Pollution Control Program: The State Board and the California Coastal Commission (CCC) developed the Nonpoint Source Pollution Control Program in California, which contains management measures for categories of land use/development. Under the Nonpoint Source Program Strategy and Implementation Plan 1998-2013, a three-tier system of BMPs is used as a means of implementing nonpoint source water quality management measures and strategies.

State Antidegradation Policy: In accordance with the federal Antidegradation Policy discussed above, the State Board adopted Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California (more commonly referred to as the State Antidegradation Policy) which restricts the degradation of surface waters of the state and protects bodies of water where the existing water quality is higher than necessary for the protection of present and anticipated designated beneficial uses. The State Antidegradation Policy is implemented by the Regional Board.

Flood Control: Drainage and flood control structures and improvements in the City of Los Angeles are subject to review and approval by the City of Los Angeles Bureau of Engineering. The City utilizes a 50-year design storm for flood control design purposes, which is a predicted storm event estimated using the City's methodology and assumption, which are considered to be conservative.

4.10.1.2 Existing Conditions

The two build alternatives are in the general vicinity of each other when viewed from a water resources perspective. For purposes of this section, the environmental setting is discussed for the general vicinity and not for the individual alternatives, except where differences in the alternatives may result in potential environmental issues.

Surface Water Hydrology

Hydrologic conditions in the area, natural and man-made, cause runoff within the watershed to drain to a receiving water body. For purposes of the municipal NPDES Stormwater Permit, the LARWQCB has defined Watershed Management Areas (WMA). The alternatives are located in the Los Angeles River WMA.

The alternative alignments are located in the downtown portion of the City of Los Angeles. This area is characterized as highly urban with no or limited pervious surfaces. Surface runoff is characterized as either dry weather or wet weather flows. Water quality of the runoff is determined by the quality of water of the water discharged and by the materials runoff collects on its way to a waterbody. The Los Angeles River watershed and many of its tributaries are on the CWA Section 303(d) list of impaired uses for not meeting water quality standards.

Flood Hazards

The City of Los Angeles, in coordination with Los Angeles County, state, and federal agencies has an extensive system for providing protection against flood hazards. The system drains wet and dry weather runoff from impervious surface areas, such as streets, and routes flows into underground pipes and drains discharging to various inland streams and channels. According to FEMA, there are no 500- or 100-year flood zones within the general vicinity of the alternatives.

Tsunami, Inundation, Seiche

Tsunamis are large ocean waves generated by major displacement of the ocean, such as earthquakes, volcanic eruptions, and submarine landslides. Low lying coastal areas of the City of Los Angeles are potentially at risk from tsunamis. A seiche is a standing wave in an enclosed or partially enclosed body of water, including water storage facilities. Seiches have multiple causes, including earthquakes and wind. Inundation is flooding related to a tsunami, seiche or other event. The alternatives are located more than 15 miles from the ocean and are not within a tsunami inundation area as determined in the City of Los Angeles Safety Element. Two small lakes, Hollenbeck Lake and Echo Park Lake, are the closest enclosed bodies of water and are located more than one mile from the vicinity of the alignments. The Los Angeles River is located at a distance greater than 2,000 feet to the east of the PSA.

Multiple flood control facilities are located upgradient of the PSA in the San Fernando Valley portion of the Los Angeles River watershed. According to the City of Los Angeles Safety Element Exhibit G, failure of upgradient flood control basins could potentially cause inundation in the vicinity of the alignments. Both build alternatives are at the edge of an inundation area where the alignments cross (as an underpass) Alameda St. under Temple St. (At-Grade) and under 1st St. (Underground).

Groundwater

The Coastal Plain of Los Angeles Basin underlies the PSA. This groundwater basin is divided into four subbasins, with the Central Subbasin directly underlying the PSA. The Central Subbasin has a surface area of approximately 277 square miles with an estimated storage capacity of 13,800,000 acre-feet. Potable water production occurs throughout the majority of the basin via approximately 497 wells. Most groundwater production occurs in deep aquifers of the San Pedro Formation. No production wells are located in the vicinity of the PSA. In addition, aquifer recharge, which flows mainly in the permeable sediments at the ground surface, is not an issue for the PSA as the closest recharge area is located in the northern portion of the subbasin where the Los Angeles River enters the subbasin at the Los Angeles Narrows.

Groundwater levels vary across the subbasin. According to the EDR report, depth to groundwater in the project vicinity is approximately 37 feet and groundwater flows in a southeast direction. Exploratory borings drilled for many building sites adjacent to Flower St. between 7th and 2nd Streets encountered seepage at relatively shallow depths ranging from approximately 15 to 35 feet below ground surface. Groundwater, probably perched, has been reported in borings at depths between approximately 18 to 27 feet below ground surface adjacent to Flower St. in the area between 2nd and 5th Streets. In the portion of the proposed alignment along 2nd St., groundwater seepage water has been reported in borings at depths between approximately 14 to 36 feet below ground surface in the area between Hill St. and Alameda St. The seepage water encountered in the borings appears to be groundwater that is perched on the underlying Fernando formation bedrock. It should be noted that shallow groundwater levels are influenced by seasonal rainfall and infiltration in addition to possible nearby groundwater extraction.

Water quality in the main production zones is generally good with localized areas of poor water quality. Constituents of concern present in localized areas are total dissolved solids, volatile organic compounds (tetrachloroethylene and trichloroethylene), perchlorate, nitrate, iron and manganese, and chromium. According to the EDR report, there are localized areas that have experienced groundwater contamination in the vicinity of the PSA.

4.10.2 Evaluation Methodology

To determine potential environmental issues associated with water resources in relation to the alternatives, regulatory requirements and laws were reviewed at the federal, state, and local level.

4.10.3 Environmental Issues

Potential environmental issues related to water resources are discussed for the PSA and where applicable for specific alternatives.

Surface Water Hydrology

As stated above, the general vicinity of the PSA is highly impervious with limited or no pervious areas. The alternatives are not expected to increase imperviousness or increase runoff volumes within the Los Angeles River WMA. The alternatives are not expected to alter existing flow patterns.

Construction and operation of the alternatives are not expected to significantly impact surface water quality. Construction of any of the alternatives will require filing a Notice of Intent, preparation of a SWPPP, and compliance with the NPDES General Construction Permit and SUSMP requirements. BMPs will be identified to provide for temporary stormwater management during construction preventing the construction process from exposing people or property to water related hazards and keeping pollutants from being discharged to receiving water. Any dewatering discharges to the storm drain system and/or sewer system associated with tunneling will be required to meet minimum discharge requirements to not adversely impact surface waters. Construction and operation of the alternatives is not expected to adversely impact any designated beneficial uses of the Los Angeles River.

Flood Hazards

The alternative alignments are not located in a 100- or 500-year flood zone as determined by FEMA. Construction and operation of the alignments would not alter any existing flood zones.

Tsunami, Inundation, Seiche

The build alternatives are not located within a tsunami inundation zone as the alternatives are not in vicinity of the coast as discussed above.

The alternatives are partially located within the outlying edges of the inundation zone established for the unlikely failure of an upgradient flood control facility. The area between the intersection of 1st and Alameda Streets and Temple and Alameda Streets is at the edge of the inundation zone. Mitigation during engineering would include appropriate design features to alleviate any hazards associated with the inundation zone.

Inundation from a seiche is not a potential hazard, as the nearest enclosed or partially enclosed bodies of water are greater than one mile from the alternative alignments and the size of the waterbodies is limited.

Groundwater

The exact depths to groundwater in the PSA are not currently known. If groundwater is encountered, any dewatering activities are not anticipated to adversely affect groundwater flow, recharge, or production. Dewatering activities would not affect management of the subbasin. As discussed above, no groundwater production occurs in the PSA. Recharge in the area is restricted due to the lack of pervious surfaces.

If any groundwater is encountered all groundwater will be discharged, and treated if necessary, prior to disposal, in accordance with all applicable regulations. Dewatered groundwater requires treatment prior to discharge to comply with an NPDES permit issued by the LARWQCB or pretreatment requirements for discharge to the sewer system.

Localized groundwater contamination occurs on a limited basis in multiple areas in the downtown vicinity. Local contamination sources in the vicinity of the alignments include underground storage tanks and former manufactured gas sites. Contaminants may include gasoline, diesel fuel, and waste oil among other pollutants. Therefore, there is the potential that if groundwater is encountered and dewatering is required water could be contaminated and may need to be treated prior to discharge. During construction any tunneling could potentially serve as a preferential pathway for contaminated groundwater if it is encountered, thereby spreading groundwater contamination at higher rates than would normally occur. This can be mitigated during the engineering process with specifications for impermeable concrete-based grouting materials to fill the gap between the tunnel and surrounding earth. The permeability of the grouting materials would be lower than the surrounding soil types reducing the possibility that the tunnel would serve as a preferential pathway for contamination migration.

At-Grade Emphasis LRT Alternative

This alternative is at-grade for the majority of the proposed alignments and would have a low probability of encountering groundwater during construction. The portions of the alignments for the At-Grade Emphasis LRT Alternative that are below-grade traverse the same proposed alignment as the Underground Emphasis LRT Alternative. Engineering and design specifications would mitigate any previously discussed potential issues associated with groundwater dewatering.

Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative is below-grade for the entire alignment except for a limited portion at-grade at the connection point with the Metro Gold Line. Construction of the Underground Emphasis LRT Alternative would result in a higher probability of encountering groundwater during construction. Engineering and design specifications would mitigate any previously discussed potential issues associated with groundwater dewatering.

4.11 Energy

The transportation sector is responsible for approximately half of the energy consumed in the State of California[2]. Transportation energy consumption estimates consider:

- Annual vehicle miles traveled (VMT) for automobiles, trucks, buses and heavy rail vehicles and
- Variation of fuel consumption rates by vehicle type.

Fuel consumption has grown approximately 50 percent over the last 20 years, and is projected to continue to increase over the next 20 years. The proposed alternatives are anticipated to reduce energy consumption by providing an alternative to dependence on personal automobiles, thereby reducing VMT.

4.11.1 Affected Environment

Each alternative would require the installation of an overhead catenary system (OCS), suspended above the track-way to supply electricity to the trains. Traction power substations would be situated approximately every mile along the corridor to transmit and distribute electricity. Signaling and communication systems would also be required. Energy consumption would also be associated with operation of stations, stations and transit service maintenance, and construction activities to provide the required infrastructure.

Within the PSA, the Los Angeles Department of Water and Power (LADWP) provides electricity services. Electrical services are readily available to the PSA, with existing lines located along each of the proposed alignments.

4.11.2 Evaluation Methodology

To determine potential environmental issues associated with energy, a general review of energy requirements associated with operation and construction of the new alignments was conducted. The energy needs were considered in conjunction with the potential benefits associated with a diversion of automobile traffic to transit.

4.11.3 Environmental Issues

While construction and operation of all proposed alignments would have electrical energy expenditures associated with construction and operation, a new transit alignment is anticipated to decrease vehicle miles traveled and thereby decrease the consumption of fossil fuels.

Depending on the number of rail cars and frequency of operations, propulsion of each alternative would have similar energy consumption needs. The at-grade open air platforms associated with the At-Grade Emphasis LRT Alternative would have less energy needs than the underground stations, which would have escalators, elevators, and heating

[2] The California Energy Commission, Consumer Energy Center website. Accessed on June 23, 2008. http://www.consumerenergycenter.org/transportation/index.html.

and cooling systems. The Underground Emphasis LRT Alternative would require more energy resources during construction when compared to the At-Grade Emphasis LRT Alternative associated with the use of earthmoving equipment for excavating tunnels. Also, the extensive amount of haul trucks and haul truck travel of excavated earthwork would require additional energy consumption.

To maximize potential benefits associated with a reduction in vehicle miles traveled for each alternative, coordination between other Metro commuter rail lines, LRT, and bus transit is needed in order to optimize efficiency and convenience to minimize energy consumption.

A further consideration is projected ridership for each alternative. The greatest potential benefit associated with a reduction in VMT would be associated with any alternative that achieves a higher ridership level, thereby achieving the greatest reduction in the use of personal automobiles.

4.12 Historic, Archaeological & Paleontological Resources

This section addresses archaeological and built environment resources located in the PSA that qualify as "historic properties" as defined in Section 106 of the National Historic Preservation Act of 1966 (as amended) and "historical resources" as identified in CEQA. The definitions for both historic properties and historical resources include archaeological as well as built resources. In addition, the section discusses paleontological resources located in the PSA.

4.12.1 Affected Environment

4.12.1.1 Regulatory Framework

Historical Resources

- **National Historic Preservation Act**: The National Historic Preservation Act (NHPA) of 1966 (16 United States Code, USC 470-470), as amended, created the Advisory Council on Historic Preservation (Advisory Council) to advise the President and Congress on historic preservation. This Act also expanded the National Register of Historic Places (National Register) to include sites not only of national, but of state and local significance. The NHPA is a national policy to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology, and culture, and it mandates (under Section 106) that federal agencies take into account the effect of an undertaking on properties that are listed in, or determined eligible for inclusion in the National Register of Historic Places.

- **Section 106**: Section 106 of the NHPA requires that Federal agencies take into account the effects an action is expected to have on historic properties. It requires that the Advisory Council be afforded a reasonable opportunity to comment on such actions, when they are expected to result in effects on historic properties.

- **National Register of Historic Places**: The National Register is the nation's official list of districts, sites, buildings, structures, and objects worthy of preservation. Currently, the National Register includes approximately 80,000 listings, including icons of American architecture, engineering, culture, and history. Overseen by the National Park Service (NPS), under the Department of the Interior, the National Register was authorized under the NHPA, as amended. National Register guidelines for the evaluation of significance were developed to be flexible and to recognize accomplishments of all who have made significant contributions to the history and heritage of the nation. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the National Register.

- **National Historic Landmarks**: National Historic Landmarks (NHL) are cultural properties designated by the Secretary of the Interior as having national significance. They are acknowledged as being among the most significant historic places, and these buildings, sites, districts, structures, and objects possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archaeology, engineering, and culture. NHL designation is an official recognition by the federal government of the significance of historic properties. By definition, the properties designated as National Historic Landmarks are the most significant places in American history.

- **United States Department of Transportation Act of 1966 – Section 4(f)**: Historic properties are also governed under Section 4 (f) of the United States Department of Transportation Act of 1966 (recodified as amended at 49 USC Section 303), which regulates the "use" of land from historic properties. In 49 USC 303 Section 771.135, Section 4(f) asserts:

  (a) (i) The Administration may not approve the use of land from a significant publicly owned public park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that:

  (i) There is no feasible and prudent alternative to the use of land from the property; and

  (ii) The action includes all possible planning to minimize harm to the property resulting from such use.

- **California Code of Regulations**: As defined by state law in Title 14 *California Code of Regulations* Section 4850, the term "historical resource" means "any object, building, structure, site, area, place, record, or manuscript, which is historically or archaeologically significant, or which is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural history of California. Historical resources include archaeological sites as well as the built environment.

- **California Register of Historical Resources**: Under PRC §5024.1, the California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources. In order for a property to be considered eligible for listing in the California Register, resources must retain "substantial" integrity to identified periods of significance, and it must be found by the State Historical Resources Commission to be significant under at least one of the below-listed criteria.

    - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

    - Is associated with the lives of persons important in our past.

    - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.

    - Has yielded, or may be likely to yield, information important in prehistory or history.

There are two principal categories of local designation for historically significant properties in the City of Los Angeles. Properties may be designated as Historic-Cultural Monuments and/or may be contributors to designated local historic districts, known as Historic Preservation Overlay Zones (HPOZs). The HPOZ designation applies to specific bounded areas of historic or cultural significance and generally includes both properties which contribute to the significance of the district and non-contributing properties. Non-contributing properties are those which do not contribute to the significance of the HPOZ because they have undergone alterations, were built outside the period of significance, or do not share the unifying characteristics of the district.

Historic-Cultural Monuments: In the City of Los Angeles, the Historic-Cultural Monument (HCM) designation is equivalent to local landmarks in other communities and is reserved for individually significant properties. Listing as an HCM is subject to review and recommended approval by the Cultural Heritage Commission, review by an additional committee of City Council, and final approval by the City Council.

Historic Preservation Overlay Zones: The Historic Preservation Overlay Zone Ordinance was adopted by the City of Los Angeles in 1979, and revised in 1997. As defined in the Cultural Heritage Master Plan (adopted by City Council in 2000), the HPOZ designation is "a planning tool which recognizes the special qualities of areas of historic, cultural, or architectural significance. An HPOZ does not change the underlying zoning, rather it lays an added level of protection over a zone through local board oversight." There are currently 22 designated HPOZs in Los Angeles, incorporating more than 5,000 separate properties. Many more are currently proposed in various stages of development. Because HPOZs have "special character or special historical, cultural, architectural, archeological, community or aesthetic value," they are presumed to be historically or culturally significant and are therefore listed in the California Register.

Paleontological Resources

Federal protection for scientifically significant paleontological resources applies to projects if any construction or other related project impacts occur on federally owned or managed lands, involve the crossing of state lines, or are federally funded. The following federal protections may apply to paleontological resources within the proposed PSA:

- **American Antiquities Act of 1906**: The American Antiquities Act of 1906 (6 USC 431 433) establishes a penalty for disturbing or excavating any historic or prehistoric ruin or monument or object of antiquity on federal lands as a maximum fine of $500 or 90 days in jail.

- **National Historic Preservation Act of 1966**: The National Historic Preservation Act of 1966 (Pub. L. 89 665; 80 Stat. 915, 16 U.S.C. 470 et seq.) provides for the survey, recovery, and preservation of significant paleontological data when such data may be destroyed or lost due to a federal, federally licensed, or federally funded project.

- **Federal Land Management and Policy Act of 1976**: The Federal Land Management and Policy Act of 1976 (43 U.S.C. 1712[c], 1732[b]); sec. 2, and 30 U.S.C. 611; Subpart 3631.0 et seq.) defines significant fossils as: unique, rare or particularly well-preserved; an unusual assemblage of common fossils; being of high scientific interest; or providing important new data concerning [1] evolutionary trends, [2] development of biological communities, [3] interaction between or among organisms, [4] unusual or spectacular circumstances in the history of life, or [5] anatomical structure.

- **Public Resources Code (Chapter 1.7), §5097.5 and §30244:** These statutes prohibit the removal of any paleontological site or feature on public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state) lands.

City of Los Angeles General Plan: The Conservation Element of the City of Los Angeles General Plan (adopted September 2001) specifically addresses paleontological resources in Section 3 of Chapter 2. The Plan's paleontological objective is to "protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes." The Plan's policy is to "continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities."

4.12.1.2 Existing Conditions

Historical Resources

Historically, the PSA falls within the Gabrieliño/Tongva (also known as the Tongva) tribal boundaries. The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. The fundamental economy of the Tongva was one of subsistence gathering and hunting. The ethnographic and historic literature indicates that the Native American village of Yangna is located in the general

vicinity of the PSA. It is assumed to be on the west bank of the Los Angeles River, just south of the Pueblo of Los Angeles.

Settlement of the Los Angeles region continued in the early American Period (1848–Present). On April 4, 1850, only two years after the Mexican-American War and five months prior to California achieving statehood, the City of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American Period and the transition of many former rancho lands to agriculture, as well as the development of citriculture in the late 1800s, further strengthened this status. These factors combined with the expansion of port facilities and railroads throughout the region contributed to the impact of the real estate boom of the 1880s on the City of Los Angeles. Los Angeles continued to grow in the twentieth century in part due to the discovery of oil in the area and its strategic location as a wartime port. The County's mild climate and successful economy continued to draw new residents in the late 1900s, with much of the County transformed from ranches and farms into residential subdivisions surrounding commercial and industrial centers. Hollywood's development into the entertainment capitol of the world and southern California's booming aerospace industry were key factors in the County's growth in the twentieth century.

The PSA is located entirely within the downtown area of the City of Los Angeles. The development of downtown Los Angeles occurred sequentially from north to south. In the *Los Angeles Architectural Guide*, there are three principal downtown commercial building periods: 1900-1917, early 1920s through 1931, and from the late 1960s through the present. The first two major periods of activity were characterized principally by classical *Beaux Arts* style, based on great buildings of Western Europe and most of those efforts were focused on Broadway and Spring St. The 1920s and 1930s brought development patterns west on 7th St. and included the geometrical-based Art Deco and sweeping Streamline Moderne styles. Finally, high rises constructed from the early 1960s until the present have been a variety of Contemporary styles, encompassing approaches from glass curtain wall Corporate Modern to Post Modern styles.

The first Sanborn Fire Insurance Company maps prepared for Los Angeles in 1888 portrayed north-south streets in the below-listed west-to-east order: Pearl St. (now Figueroa St.), Flower St., Hope St., Bunker Hill Ave. (not applicable to current street name), Grand Ave., Olive Ave., Hill St., Fort St. (now Broadway), Spring St., Main St. and Los Angeles St.

For the purposes of discussion, the PSA was divided into four segments, arranged from south to north, and then east, and are described below.

Flower St., between 4th and 7th Streets

In 1888, the streets in the southern portion of the PSA were located on the outskirts of town. Figueroa St. was one of a handful of great boulevards of Los Angeles that was expanded in the 1920s. An early alignment of Figueroa St. was part of the famed U.S. Route 66, and is currently a component of the Pasadena Freeway (Interstate 110). The notable Figueroa St. tunnels near Chinatown were built in 1931 and were once a part of Figueroa St. as well. Figueroa St. is said to be one of the longest avenues in the United

States, with a length of more than 30 miles, stretching between Eagle Rock to the Los Angeles Harbor. The 2nd St. tunnel, which extends from Figueroa St. on the west side to Hill St. in the east, was completed in 1925.

Among the ambitious 1920s building projects in downtown that announced Los Angeles as a major city, the Los Angeles Central Library (630 West 5th St., Bertram Goodhue with Carleton Winslow) was completed in 1926. The "light of learning" architectural theme was a remarkable architectural collaboration and remains one of the largest library systems in the nation.

The Harbor Freeway (Interstate 110) on the western side of downtown was completed in 1952, and coined "downtown's new Main St." Construction of that freeway, along with repeal of the limiting building height ordinance, created a significant new concentration of high- and mid-rise buildings concentrated on Figueroa and 7th Streets.

Flower St., between 4th St., and 2nd St. East to Hill St.

By the end of the second World War, as suburbs became increasingly desirable as residential and commercial hubs, downtown Los Angeles lost some of its *caché* as a business and retail destination. The CRA was established in 1948, in part to cure economic "blight" by funding and overseeing redevelopment. Like the rest of downtown, Bunker Hill, which had been one of the more exclusive residential neighborhoods at the turn of the twentieth century, fell into disrepair and out of fashion by the 1960s. Although the action was controversial, Victorian era buildings on Bunker Hill were cleared in the 1960s by CRA, the streets were reconfigured and high-rises have been constructed over time in their places.

2nd and Temple Streets between Hill and San Pedro Streets

As Los Angeles developed from an agrarian settlement to a more diverse economy, single-family homes were typically built without regard to their surroundings in the area now identified as downtown. By the early 1900s, those residences stood side-by-side with commercial blocks, and residential use eventually diminished. Broadway evolved as a main retail thoroughfare, served by Pacific Electric (PE) interurban rail lines. Many of the PE's routes terminated at 4th St. and Broadway. Public use of the PE peaked in 1924 and its configuration made the intersection and corridor valuable commercial property, concentrated in one confined area. Broadway was developed with commercial uses, specifically retail and theater buildings between the 1910s and the 1940s and was the center of retail commerce in the growing City of Los Angeles. After the end of World War II, the decentralization of the community, coupled with demise of the interurban railroad, caused major stores and small shops to relocate to 7th St., later disbursing to outlying suburbs. As of the millennium, Broadway continues to be a busy retail center, although patronage changed since the early nineteenth century from American-born to Latino. The customer base of the area is primarily Mexican-American and South American. The Broadway Theater & Commercial District comprised of office, retail and theater buildings, was listed in the National Register in 1979 and includes portions of the PSA.

Adopted in 1947, the plan for the Civic Center included buildings of contemporary design flanked by multi-acre parking lots. The Civic Center replaced business blocks of the late nineteenth century and has encroached westward upon Bunker Hill. The resulting Civic Center has an east-west axis and is roughly bounded on the north by Aiso St., on the south by 2nd St., on the west by Grand Ave., and on the east by Alameda St.

2nd and Temple Streets between San Pedro and Alameda Streets

The City's oldest areas, just east of Main St. exhibit the imperfect platting that dates before 1848. The 33 degree "skewed" grid orientation of downtown Los Angeles characterizes the north-south streets east of Hoover Ave. and west of Indian St. When Los Angeles converted from a Mexican pueblo to an American town, public authority rather than private enterprise became the influence behind development. As enumerated in *California: A Land of Contrast*, "few vestiges of the original community remain; the much-altered plaza is a tiny park with adjacent Olvera St. 'restored' as a tourist attraction." The original Chinatown was replaced in the 1938 by the Union Passenger Terminal (now Union Station), relocated and reconstructed in a stylized Chinese theme. The construction of Union Station also alleviated the need for multiple passenger railroad stations in downtown Los Angeles. The first Japanese-American resident came to Los Angeles in 1886 and started a restaurant on East 1st St. By the end of the nineteenth century, the area known as Little Tokyo was home to more than 2,000 Japanese-Americans, and a thriving community had been established. Many of those residents moved to the area to lay track for the Pacific Electric interurban streetcar system. During World War II, Executive Order 9066 gave the Army authority to relocate more than 110,000 Japanese Americans on the west coast to internment camps in isolated and barren areas. This action eradicated Japanese settlements until after the end of the war and caused interned families to start their lives over once they were released. Little Tokyo Historic District was listed in the National Register of Historic Places, and became a National Historic Landmark district in 1995.

In summary, the development of downtown Los Angeles, which began with the City's founding in the 18th century, continues to evolve in diverse ways over time. Early downtown Los Angeles was primarily residential and commercial in nature. In the 20th century, uses in the "core" grew to be retail with a large amount of office use in upper floors of large buildings. In the latter part of the 1900s, aside from the few skyscrapers built, office, retail and entertainment uses dwindled and the popularity of downtown waned. As economic forces became more obviously cyclical (including recession and strong influence of interest rates), commercial development in downtown was replaced in large part by public investment. Since the last decades of the 20th century, tax incentives, with changes in federal legislation, state regulations and local ordinances have made reuse of long-vacant office buildings and their conversion to apartments and condominium use possible. The result of those factors has been a rebirth in downtown of a significant residential population, spurred by renewed interest in urban lifestyles and "loft-style" living.

Known Historical Resources within One-Quarter Mile of the Project

A search of the California Historical Resources Information System (CHRIS) was conducted for the PSA. In addition, a literature and archival records search for previously recorded historical resources and investigations within a one-quarter mile radius was performed. Tables 4-10 and 4-11 indicate the existence of at least two National Historic Landmarks, four National Register Districts, at least 76 to 78 separate National Register properties, 89 to 99 California Register properties, and 34 to 37 locally designated properties previously identified within the preferred project alternatives.

As indicated in Table 4-10, 21 known archaeological resources of unknown historical significance are located within one quarter-mile of the PSA proposed build alternatives. Twenty-one archaeological resources have been previously recorded within one-quarter mile of the At-Grade Emphasis LRT Alternative. Eleven of these sites are also within one-quarter mile of Underground Emphasis LRT Alternative (Table 4-10). A majority of the archaeological sites were identified by archaeological monitoring of construction activities related to recent construction projects. Most of these sites that have been encountered during ground disturbances contain historic period building or structure foundations or construction materials, and/or historic refuse deposits. One isolated prehistoric burial was encountered at considerable depth during trenching. The burial was found eleven feet below the ground surface, consisting of nine feet of overburden and 2 feet of natural stratigraphy. No archaeological properties listed in the National Register, Archaeological Determinations of Eligibility, or Historic Property Data File are located within one-quarter mile of the PSA.

A Native American cemetery (CA-LAN-1575/H) was encountered during construction-related ground disturbances on Alameda St. next to Union Station in the immediate vicinity of the Pueblo of Los Angeles. In addition, a single Native American burial was recorded near the intersection of Temple and Hill Streets during construction-related ground disturbances.

A review of historic literature indicates that the City's original water system, built in 1781 during the Spanish Period, crosses the PSA. The original water system consisted of the main ditch, the Zanja Madre, and several branch ditches that flowed south and southwest into the city and beyond. A circa 1880 map of the Zanja system indicates that the Zanja Madre, and Zanja Numbers three, four, five, and nine cross the northeastern portion of the PSA. In addition, the Woolen Mill Ditch and the West Branch Zanja Number 8R, cross the two build alternative alignments in the southwestern portion of the PSA.

The results of the records search and literature review indicate that the build alternatives are located in areas that are highly sensitive for buried archaeological resources from both prehistoric and historic time periods.

While specific conclusions regarding project-related effects to these historic properties and identification of all previously unevaluated properties cannot be made at this level of project development, it must be noted that future project development should be coordinated with a consulting, qualified architectural historian and qualified archaeologist, in order to identify all previously unevaluated properties and evaluate project effects.

Detailed plans of the project will be necessary to conduct the next environmental review steps (e.g., identification and analysis of impacts). Table 4-12 through Table 4-14 present preliminary identification of archaeological resources in the PSA.

Paleontological Resources

The PSA is situated in the southwestern block of the Los Angeles basin. The Los Angeles basin is one of many basins comprising the Neogene continental borderland of southern California. It extends from the Santa Ana Mountains in the north to the San Joaquin Hills to the south, and includes the southern foothills of the San Gabriel Mountains, the Puente Hills, and the Palos Verdes Hills. The Los Angeles basin is a structural depression that has been the site of discontinuous deposition since the Late Cretaceous and of continuous subsidence and primarily marine deposition since the middle Miocene. This and other sedimentary basins formed during Miocene and Pliocene as a result of an early San Andreas-type phase of transform motion along the western margin of North America. According to geologic mapping and museum collections records, the PSA is immediately underlain by the following geologic units, from oldest to youngest: (1) Miocene Puente Formation, (2) Pliocene Fernando Formation, and (3) Quaternary alluvium. These geologic units, and their paleontological resource potential, are discussed in more detail below.

Puente Formation

The Puente Formation is middle to late Miocene (14 to 5 million years ago [Ma]) in age. The Puente Formation is known to produce significant paleontological resources including fossilized remains of sharks, fish, marine and terrestrial mammals, as well as some of the most complete collections of marine algae and terrestrial flora. It has been assigned a high paleontological resource sensitivity for its proven potential to yield scientifically significant fossil resources.

Table 4-10 Known Historic Properties/Historical Resources within One-Quarter Mile of the At-Grade Emphasis LRT Alternative

	TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
Known historic properties and/or historical resources within one-quarter mile of proposed alignments	**2** National Historic Landmarks 4 National Register Districts **76** separate National Register **99** California Register **37** local landmarks **highly sensitive** archaeological resources3	National Historic Landmarks 1. Little Tokyo Historic District, north side of 200-300 E 1st St. 2. Bradbury Building, 300-310 S Broadway National Register Districts 1. Southern California Gas Company Complex, 800-830 S Flower St. 2. Los Angeles Plaza-Los Angeles State Historic Park, Spring, Alameda, Macy and Sunset 3. Little Tokyo Historic District, north side of 200-300 E 1st St. 4. Spring Street Financial District, 354-704 S Spring St. <u>Separate</u> 1. Figer 8 Bar, 746 S Figueroa 2. Louis Brownstein Building, 751 S Figueroa 3. So. Calif Gas Co Building, 830 S Flower St. 4. So. Calif. Gas Co Building, 820 S Flower St. 5. So. Calif. Gas Co Building, 810 S Flower St. 6. So Calif. Gas Co Building, 800 S Flower St. 7. 816 S Grand Ave. Bldg. 8. Engine Co No 28, 644 S Figueroa 9. Fine Arts Building, 807-811 W 7th St. 10. Roosevelt Building, 727 W 7th St. 11. Barker Brothers Building, 800-818 W 7th St. 12. Los Angeles Central Library, 630 W 5th St.	1. 218 Main St. Bldg 2. 275 W 1st St. Building 3. 5th St. Retaining Wall betw...(near L.A. Central Library) 4. 811 Wilshire Bl. Bldg 5. Pantages/Warner Brothers Theatre, 401 W 7th St. 6. 816 S Grand Ave. Bldg 7. Angel's Flight Railway, 300 block S Hill St. 8. AP Giannini - Bank of America, 505 W 7th St./649 S Olive 9. Associated Realty Building, 510 W 6th St. 10. AT & T Telecommunications Facility, 420 S Grand 11. Baker Detweiler Bldg, 412 W 6th St. 12. Barker Brothers Building, 800-898 W 7th St./709-711 S Flower St. 13. Bible Institute, 550 S Hope 14. Biltmore Bldg, 515 S Olive 15. Biltmore Hotel, 503-539 S Olive St./ 512 W 5th St./ 514-530 S Grand Ave. 16. Boston Dry Goods Store, 237 S Broadway 17. Boston Stores - J.W. Robinson Co., 600-632 W 7th St. 18. Brack Shops, 527 W 7th St. 19. Bradbury Building, 300 S Broadway 20. Brock Jewelers - Clifton's, 513-515 W 7th St. 21. California Club Building, 532-538 S Flower St. 22. Commercial Exchange Bldg., 416 W 8th St. 23. Coulter Dry Goods Co, 500 W 7th St.	1. Nuestra Senora de Los Angeles-Plaza Church, 100-110 Cesar Chavez Av/535 N Main St. 2. First Cemetery of Los Angeles, 521 N Main St. 3. Los Angeles Plaza Park, Cesar Chavez Av 4. Los Angeles City Hall, 200 N Spring St. 5. Bradbury Building, 300-310 S Broadway 6. St. Vibiana's Cathedral, 110 E 2nd St. 7. California Club Building, 532-538 S Flower St. 8. Los Angeles Central Library Building and Grounds, 630 W 5th St. 9. Biltmore Hotel, 503-539 S Olive St./ 512 W 5th St./ 514-530 S Grand Ave. 10. Philharmonic Auditorium (site of), 421-433 W 5th St. 11. Saint Paul's Cathedral (site of) (901-915 Wilshire Bvd.) 12. Los Angeles Athletic Club Building, 425-437 W 7th St. 13. Fine Arts Building (Global Marine House), 807-815 W 7th St. 14. Subway Terminal Building, 416-424 S Olive St. 15. James Oviatt Building, 615-617 S Olive St. 16. Original Pantry, 811 W 9th St. 17. Mayflower Hotel 531-535 S Grand Ave. 18. Embassy Auditorium and Hotel, 501 W 9th St./ 839-861 S Grand Ave. 19. One Bunker Hill Building, 455 S Grand Ave. 20. AP Giannini - Bank of America, 505 W

[3] Archaeological resources have not necessarily been evaluated for National or California register significance.

Table 4-10 Known Historic Properties/Historical Resources within One-Quarter Mile of the At-Grade Emphasis LRT Alternative

TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	13. Jonathan Club Building, 545 S Figueroa St. 14. General Petroleum Building, 612 S Flower 15. Superior Oil Co Building/Bank of California, 550 S Flower St. 16. Biltmore Bldg, 515 S Olive 17. Oviatt Building, 617 S Olive 18. Subway Terminal Building, 417 S Hill St. 19. AP Giannini - Bank of America, 649 S Olive 20. Ville de Paris Store, 712 S Olive 21. So. Calif. Telegraph Co, 716 S Olive 22. AT & T Telecommunications Facility, 420 S Grand 23. Mayflower Hotel, 533 S Grand 24. Pacific Mutual Garage & Annex, 540 S Grand 25. Edwards Widney Bldg., 609 S Grand 26. New York Cloak & Suit House/Brockman Bldg/Brooks Bros., 708 S Grand Ave./, 520 W 7th St. 27. 816 S Grand Ave. Bldg. 28. Embassy Auditorium, 843 S Grand 29. Embassy Hotel Auditorium, 851 S Grand 30. Woodward/Bristol Hotel, 423 W 4th St. 31. Title Guarantee Bldg, 401 W 5th St. 32. Wells Fargo Bank, 415 W 5th St. 33. Philharmonic Auditorium, 427 W 5th St. 34. Edison Bldg, 601 W 5th St. 35. Los Angeles Central Library, 630 W 5th St. 36. "5th St. Retaining Wall betw..." (near Central Library) 37. Baker Detweiler Bldg, 412 W 6th St. 38. Warner Theatre, 460 W 6th St. 39. Associated Realty Building, 510 W 6th St. 40. Pacific Mutual Bldg, 523 W 6th St.	24. Edison Bldg, 601 W 5th St. 25. Edwards-Wildey Bldg.- National Oil Bldg, 600-609 S Grand Ave., 600 W 6th St. 26. Edwards-Wildey Bldg Addition, 612 W 6th St. 27. Embassy Auditorium and Hotel, 501 W 9th St./ 839-861 S Grand Ave. 28. Embassy Auditorium, 843 S Grand Ave. 29. Embassy Hotel Auditorium, 851 S Grand Ave. 30. Engine Co No 28, 644 S Figueroa 31. Figer 8 Bar, 746 S Figueroa 32. Fine Arts Building (Global Marine House), 807-815 W 7th St. 33. Fire Department HQ, 219 S Hill St.. 34. First Baptist Church of San Pedro (Facade & Stained Glass Window), 555 W 7th St. 35. First Cemetery of Los Angeles, 521 N Main St. 36. Fort Moore Pioneer Memorial, 400 block N Broadway 37. Garnier Block, 419 N Main St. 38. General Petroleum Building, 612 S Flower St. 39. Grand Central Market, 315 S Broadway 40. Higgins Building, 108 W 2nd St. 41. Home Telephone, 246 S Hill St. 42. Homer Laughlin Bldg. , 317 S Broadway 43. Irvine Block-Byrne Bldg, 249 S Broadway/301 W 3rd St. 44. Italian Hall, 650 N Main St.. 45. James Oviatt Building, 615-617 S Olive St. 46. Jonathan Club Building, 545 S Figueroa St. 47. Joyeria Esmerelda Jewelry, 332 S Hill St.	7th St. 21. Roosevelt Building, 727 W 7th St. 22. Barker Brothers Building, 800-898 W 7th St./709-711 S Flower St. 23. Boston Stores - J.W. Robinson's, 600-632 W 7th St. 24. Brock Jewelers - Clifton's, 513-515 W 7th St. 25. Title Insurance & Trust Company Building and Annex, 433 S Spring St. 26. Pacific Mutual Building, 523 W 5th St. 27. First Baptist Church of San Pedro (Facade & Stained Glass Window), 555 W 7th St. 28. Spanish - American War Memorial (Pershing Square), 5th, 6th Olive & Hill 29. Angel's Flight, 300 block of S Hill St. 30. Irvine-Byrne Building, 249-259 S Broadway/ 301 W 3rd St. 31. Superior Oil Company Building, 550 S Flower St. 32. South Park Loft Building, 816 S Grand Ave. 33. State Theater Building, 300-314 W 7th St. 34. Edwards-Widney Building, 609 S Grand Ave. 35. General Petroleum Building, 612 S Flower St. 36. Southern California Gas Company complex, 800-830 S Flower St. 37. Higgins Building, 108 W 2nd St.

Table 4-10 Known Historic Properties/Historical Resources within One-Quarter Mile of the At-Grade Emphasis LRT Alternative

TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	41. Edwards-Wildey/National Oil Bldg, 600 W 6th St. 42. Edwards-Wildey Bldg Addition, 612 W 6th St. 43. Kerckhoff Annex, address unknown 44. 811 Wilshire Bl Bldg Pantages/Warner Brothers Theatre, 401 W 7th St. 45. Los Angeles Athletic Club, 431 W 7th St. 46. Coulter Dry Goods Co, 500 W 7th St. 47. Brock & Co. Jewelry Store/Clifton's Cafeteria, 513 W 7th St. 48. Brack Shops, 527 W 7th St. Quinby Bldg., 529 W 7th St. 49. San Pedro 1st. Baptist Church, 543 W 7th St. 50. Boston Stores/J.W. Robinson Co., 600 W 7th St. 51. Union Oil Bldg, 617 W 7th St. 52. Commercial Exchange Bldg., 416 W 8th St. 53. Lindy Hotel, 419 W 8th St. 54. Bible Institute, 550 S Hope St. 55. Los Angeles 3rd Church of Christ, 734 S. Hope St. 56. Angel's Flight Railway, 300 block of Hill St. 57. Los Angeles City Hall, 200 N Spring St. 58. US Courthouse and Post Office, 312 N Spring St. 59. Garnier Block, 419 N Main St. 60. Plaza Park, 500 N Main St. 61. Nuestra Senora de la Reina de Los Angeles, 535 N Main St. 62. Italian Hall, 650 N Main St. 63. Temple Mishkon Tephillo, 206 Main St. 64. 218 Main St. Bldg. 65. Plaza Substation, 10 Olvera St.	48. Kerckhoff Annex, address unknown 49. King Edward Hotel, 121 E 1st St. 50. LA Soap Co. 617 E 1st St. 51. Lindy Hotel, 419 W 8th St. 52. Los Angeles 3rd Church of Christ., 734 S Hope St. 53. Los Angeles Athletic Club Building, 425-437 W 7th St. 54. Los Angeles Central Library Building and Grounds, 630 W 5th St. 55. Los Angeles City Hall, 200 N Spring St. 56. Los Angeles Plaza Park, Cesar Chavez Av. 57. Los Angeles Times Building, 202 W 1st St. Los Angeles Union Passenger Terminal, 800 N. Alameda 58. Louis Brownstein Building, 751 S. Figueroa 59. Mayflower Hotel 531-535 S Grand Ave. 60. Million Dollar Theater, 301 S Broadway 61. Temple Mishkon Tephillo, 206 Main St. 62. New York Cloak & Suit House-Brockman Bldg-Brooks Bros., 708 S Grand Ave./520 W 7th St. 63. Newark Brothers-Uyeda Building, 312 E 1st St. 64. Nuestra Senora de Los Angeles-Plaza Church, 100-110 Cesar Chavez Av/535 N Main St. 65. One Bunker Hill Building, 455 S Grand Ave. 66. Original Pantry, 811 W 9th St. 67. Oviatt Building, 617 S Olive 68. Pacific Mutual Bldg, 523 W 5th St. 69. Pacific Mutual Garage & Annex, 540 S Grand Ave. 70. Philharmonic Auditorium (site of), 421-	

Table 4-10 Known Historic Properties/Historical Resources within One-Quarter Mile of the At-Grade Emphasis LRT Alternative

TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	66. Los Angeles Times Building, 202 W 1st St. 67. 275 W 1st St. Building 68. King Edward Hotel, 121 E 1st St. 69. Newark Brothers/Uyeda Building, 312 E 1st St. 70. Progressive Theatre, 320 E 1st St.. 71. LA Soap Co. 617 E 1st St. 72. St. Vibiana's Cathedral, 110 E 2nd St. 73. Pío Pico House, 424-430 N. Main St. 74. Terminal Annex, 900 Alameda 75. Los Angeles Union Passenger Terminal, 800 N. Alameda 76. US Post Office- Los Angeles Terminal Annex, 900 Alameda St.	433 W 5th St. 71. Pío Pico House, 424 N Main St. 72. Plaza Park, 500 N Main St. 73. Plaza Substation, 10 Olvera St. 74. Progressive Theatre, 320 E 1st St. 75. Quinby Bldg., 529 W 7th St. 76. Roosevelt Building, 727 W 7th St. 77. So. Calif Gas Co Bldg, 800 S Flower St. 78. So. Calif Gas Co Bldg, 810 S Flower St. 79. So. Calif Gas Co Bldg, 820 S Flower St. 80. So. Calif Gas Co Bldg, 830 S Flower St. 81. So. Calif Gas Co complex, 800-830 S Flower St. 82. S Calif Telegraph Co, 716 S Olive 83. Saint Paul's Cathedral (site of), address unknown (possibly 901-915 Wilshire Blvd.) 84. San Pedro 1st Baptist. Church, 543 W 7th St. 85. South Park Loft Building, 816 S Grand Ave. 86. Spanish - American War Memorial (Pershing Square), 5th, 6th Olive & Hill 87. St. Vibiana's Cathedral, 110 E 2nd St. 88. State Theater Building, 300-314 W 7th St. 89. Subway Terminal Building, 416-424 S Olive St./417 S Hill St. 90. Superior Oil Co Building-Bank of California, 550 S Flower St. 91. The Aldine/Myrick Hotel, 324 or 342 S Hill St. 92. The Whipple/ Markham Hotel, 326 S Hill St. 93. Title Guarantee Bldg, 401 W 5th St. 94. Union Oil Bldg, 617 W 7th St. 95. US Courthouse and Post Office, 312 N Spring St.	

Table 4-10 Known Historic Properties/Historical Resources within One-Quarter Mile of the At-Grade Emphasis LRT Alternative			
TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
		96. Ville de Paris Store, 712 S Olive St. 97. Warner Theatre, 460 W 6th St. 98. Wells Fargo Bank, 415 W 5th St. 99. Woodward/Bristol Hotel, 423 W 4th St. 100. US Post Office- Los Angeles Terminal Annex, 900 Alameda St.	

Source: SWCA Environmental Consultants, 2008

Table 4-11 Known Historic Properties/Resources Within One-Quarter Mile of Underground Emphasis LRT Alternative				
	TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
Known historic properties and/or historical resources within one-quarter mile of proposed alignment	**2** National Historic Landmarks **4** National Register Districts **78** separate National Register **89** California Register **34** local landmarks **Highly sensitive** archaeological resources4	National Historic Landmarks 1. Little Tokyo Historic District, 200-300 E 1st St. 2. Bradbury Building, 300-310 S Broadway National Register Districts 1. Broadway Theater & Commercial District, 242-947 S Broadway 2. Spring Street Financial District, 354-704 S Spring St. 3. Southern California Gas Company Complex, 800-830 S Flower St. 4. Little Tokyo Historic District, 200-300 E 1st St. Separate 1. Figer 8 Bar, 746 S Figueroa Av. 2. Louis Brownstein Building, 751 S Figueroa Av. 3. So. Calif. Gas Co Building, 830 S Flower St. 4. So. Calif. Gas Co. Building, 820 S Flower St. 5. So. Calif. Gas Co. Building, 810 S Flower St. 6. So. Calif. Gas Co. Building, 800 S Flower St. 7. 816 S Grand Ave Bldg. 8. Engine Co No 28, 644 S Figueroa Av. 9. Fine Arts Building, 807-811 W 7th St. 10. Roosevelt Building, 727 W 7th St. 11. Barker Brothers Building, 800-818 W 7th St. 12. Los Angeles Central Library, 630 W 5th St. 13. Jonathan Club Building, 545 S Figueroa	1. 275 W 1st St. Building 2. 5th St. Retaining Wall (near L.A. Central Library) 3. 811 Wilshire Bl Bldg 4. Pantages/Warner Brothers Theatre, 401 W 7th St. 5. 816 S Grand Ave. Bldg. 6. AP Giannini - Bank of America, 505 W 7th St./649 S Olive St. 7. Angel's Flight Railway, 300 block S Hill St. 8. Associated Realty Building, 510 W 6th St. 9. AT & T Telecommunications Facility, 420 S Grand Ave. 10. Baker Detweiler Bldg, 412 W 6th St. 11. Barker Brothers Building, 800-898 W 7th St./709-711 S Flower St. 12. Bible Institute, 550 S Hope St. 13. Biltmore Bldg, 515 S Olive St. 14. Biltmore Hotel, 503-539 S Olive St./ 512 W 5th St/ 514-530 S Grand Ave. 15. Boston Dry Goods Store, 237 S Broadway 16. Boston Stores - J.W. Robinson Co., 600-632 W 7th St. 17. Brack Shops, 527 W 7th St. 18. Bradbury Building, 300 S Broadway 19. Brock Jewelers - Clifton's, 513-515 W 7th St. 20. California Club Building, 532-538 S Flower St. 21. Commercial Exchange Bldg., 416 W 8th St. 22. Coulter Dry Goods Co, 500 W 7th St. 23. Edison Bldg, 601 W 5th St. 24. Edwards Wildey Bldg.- National Oil	1. Bradbury Building, 300-310 S Broadway 2. St Vibiana's Cathedral, 110 E 2nd St. 3. Los Angeles City Hall, 200 N Spring St. 4. California Club Building, 532-538 S Flower St. 5. Los Angeles Central Library Building and Grounds, 630 W 5th St. 6. Biltmore Hotel, 503-539 S Olive St./ 512 W 5th St./ 514-530 S Grand Ave. 7. Philharmonic Auditorium (site of), 421-433 W 5th St. 8. Saint Paul's Cathedral (site of) 9. Los Angeles Athletic Club Building, 425-437 W 7th St. 10. Fine Arts Building (Global Marine House), 807-815 W 7th St. 11. Subway Terminal Building, 416-424 S Olive St. 12. James Oviatt Building, 615-617 S Olive St 13. Original Pantry, 811 W 9th St. 14. Mayflower Hotel 531-535 S Grand Ave. 15. Embassy Auditorium and Hotel, 501 W 9th St/ 839-861 S Grand Ave. 16. One Bunker Hill Building, 455 S Grand Ave. 17. AP Giannini - Bank of America, 505 W 7th St. 18. Roosevelt Building, 727 W 7th St. 19. Barker Brothers Building, 800-898 W 7th St/709-711 S Flower St. Boston Stores - J.W. Robinson's, 600-632 W 7th St.

[4] Archaeological resources have not necessarily been evaluated for National or California register significance.

Table 4-11 Known Historic Properties/Resources Within One-Quarter Mile of Underground Emphasis LRT Alternative

TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	St. 14. General Petroleum Building, 612 S Flower 15. Superior Oil Co Building/Bank of California, 550 S Flower St. 16. Biltmore Bldg, 515 S Olive 17. Oviatt Building, 617 S Olive 18. Subway Terminal Building, 417 S Hill St. 19. AP Giannini - Bank of America, 649 S Olive 20. Ville de Paris Store, 712 S Olive 21. So. Calif. Telegraph Co, 716 S Olive 22. AT & T Telecommunications Facility, 420 S Grand 23. Mayflower Hotel, 533 S Grand 24. Pacific Mutual Garage & Annex, 540 S Grand 25. Edwards Widney Bldg., 609 S Grand 26. New York Cloak & Suit House/Brockman Bldg/Brooks Bros., 708 S Grand Ave./, 520 W 7th St. 27. 816 S Grand Ave Bldg 28. Embassy Auditorium, 843 S Grand 29. Embassy Hotel Auditorium, 851 S Grand 30. Woodward/Bristol Hotel, 423 W 4th St. 31. Title Guarantee Bldg, 401 W 5th St. 32. Wells Fargo Bank, 415 W 5th St. 33. Philharmonic Auditorium, 427 W 5th St. 34. Edison Bldg, 601 W 5th St. 35. Los Angeles Central Library, 630 W 5th St 36. "5th St. Retaining Wall betw..."(near L.A. Central Library) 37. Baker Detweiler Bldg, 412 W 6th St. 38. Warner Theatre, 460 W 6th St.	Bldg, 600-609 S Grand Ave., 600 W 6th St. 25. Edwards-Widney Bldg Addition, 612 W 6th St 26. Embassy Auditorium and Hotel, 501 W 9th St/ 839-861 S Grand Ave. 27. Embassy Auditorium, 843 S Grand Ave. 28. Embassy Hotel Auditorium, 851 S Grand Ave. 29. Engine Co No 28, 644 S Figueroa 30. Figer 8 Bar, 746 S Figueroa 31. Fine Arts Building (Global Marine House), 807-815 W 7th St. 32. Fire Department HQ, 219 S Hill St. 33. First Baptist Church of San Pedro (Facade & Stained Glass Window), 555 W 7th St. 34. General Petroleum Building, 612 S Flower St. 35. Grand Central Market, 315 S Broadway 36. Higgins Building, 108 W 2nd St. 37. Home Telephone, 246 S Hill St. 38. Homer Laughlin Bldg. , 317 S Broadway 39. Irvine Block-Byrne Bldg, 249 S Broadway/301 W 3rd St. 40. James Oviatt Building, 615-617 S Olive St. 41. Jonathan Club Building, 545 S Figueroa St. 42. Joyeria Esmerelda Jewelry, 332 S Hill St. 43. Kerckhoff Annex, address unknown 44. King Edward Hotel, 121 E 1st St. 45. LA Soap Co. 617 E 1st St. 46. Lindy Hotel, 419 W 8th St. 47. Los Angeles 3rd Church of Christ, 734 S. Hope 48. Los Angeles Athletic Club Building, 425-	Brock Jewelers - Clifton's, 513-515 W 7th St. Title Insurance & Trust Company Building and Annex, 433 S Spring St. Pacific Mutual Building, 523 W 5th St. First Baptist Church of San Pedro (Facade & Stained Glass Window), 555 W 7th St. Spanish - American War Memorial (Pershing Square), 5th, 6th Olive & Hill Angel's Flight, 300 block of S Hill St. Irvine-Byrne Building, 249-259 S Broadway/ 301 W. 3rd St. Superior Oil Company Building, 550 S Flower St. South Park Loft Building, 816 S Grand Ave. State Theater Building, 300-314 W 7th St. Edwards-Wildey Building, 609 S Grand Ave. General Petroleum Building, 612 S Flower St. Southern California Gas Company complex, 800-830 S Flower St. Higgins Building, 108 W 2nd St.

Table 4-11 Known Historic Properties/Resources Within One-Quarter Mile of Underground Emphasis LRT Alternative

TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	39. Associated Realty Building, 510 W 6th St. 40. Pacific Mutual Bldg, 523 W 6th St. 41. Edwards-Wildey/ National Oil Bldg, 600 W 6th St. 42. Edwards-Wildey Bldg Addition, 612 W 6th St. 43. 811 Wilshire Bl Bldg Pantages 44. Warner Brothers Theatre, 401 W 7th St. 45. Los Angeles Athletic Club, 431 W 7th St. 46. Coulter Dry Goods Co, 500 W 7th St 47. Brock & Co. Jewelry Store/Clifton's Cafeteria, 513 W 7th St. 48. Brack Shops, 527 W 7th St. 49. Quinby Bldg., 529 W 7th St. 50. San Pedro 1st Baptist Church, 543 W 7th St. 51. Boston Store/JW Robinson Co., 600 W 7th St. 52. Union Oil Bldg, 617 W 7th St 53. Commercial Exchange Bldg., 416 W 8th St 54. Lindy Hotel, 419 W 8th St 55. Fire Department HQ, 219 S Hill 56. Home Telephone, 246 S Hill 57. The Aldine/Myrick Hotel, 324 or 342 S. Hill St. 58. The Whipple/ Markham Hotel, 326 S Hill 59. Angel's Flight Railway, 300 block of S Hill St. 60. Joyeria Esmerelda Jewelry, 332 S Hill St. 61. Bible Institute, 550 S. Hope St. 62. Los Angeles 3rd Church of Christ, 734 S. Hope St. 63. Boston Dry Goods Store, 237 S Broadway	437 W 7th St 49. Los Angeles Central Library Building and Grounds, 630 W 5th St. 50. Los Angeles City Hall, 200 N Spring St. 51. Los Angeles Times Building, 202 W 1st St. 52. Louis Brownstein Building, 751 S Figueroa 53. Mayflower Hotel 531-535 S Grand Ave. 54. Million Dollar Theater, 301 S Broadway 55. New York Cloak & Suit House-Brockman Bldg-Brooks Bros., 708 S Grand Ave./520 W 7th St. 56. Newark Brothers-Uyeda Building, 312 E 1st St. 57. One Bunker Hill Building, 455 S Grand Ave. 58. Original Pantry, 811 W 9th St 59. Oviatt Building, 617 S Olive 60. Pacific Mutual Bldg, 523 W 5th St 61. Pacific Mutual Garage & Annex, 540 S Grand 62. Philharmonic Auditorium (site of), 421-433 W 5th St 63. Produce Exchange Building, 333 S Central 64. Progressive Theatre, 320 E 1st St. 65. Quinby Bldg., 529 W 7th St 66. Roosevelt Building, 727 W 7th St 67. St Vibiana's Cathedral, 110 E 2nd St 68. Saint Paul's Cathedral (site of), address unknown 69. So. Calif. Gas Co. Bldg, 800 S Flower St 70. So. Calif. Gas Co. Bldg, 810 S Flower St 71. So. Calif. Gas Co. Bldg, 820 S Flower St 72. So. Calif. Gas Co. Bldg, 830 S Flower St 73. So. Calif. Gas Co. complex, 800-830 S	

Table 4-11 Known Historic Properties/Resources Within One-Quarter Mile of Underground Emphasis LRT Alternative			
TOTALS	National Register of Historic Places	California Register of Historic Places	City of Los Angeles Historic-Cultural Monuments
	64. Irvine Block-Byrne Bldg, 249 S Broadway 65. Bradbury Building, 300 S Broadway 66. Million Dollar Theater, 301 S Broadway 67. Bradbury Building, 300-310 S Broadway 68. Grand Central Market, 315 S Broadway 69. Homer Laughlin Building , 317 S Broadway 70. Los Angeles City Hall, 200 N Spring St. 71. US Courthouse and Post Office, 312 N Spring St. 72. Produce Exchange Building, 333 S Central 73. Los Angeles Times Building, 202 W 1st St. 74. 275 W 1st St. Building 75. King Edward Hotel, 121 E 1st St. 76. Newark Brothers/Uyeda Building, 312 E 1st St. 77. Progressive Theatre, 320 E 1st St. 78. LA Soap Co. 617 E 1st St. 79. St Vibiana's Cathedral, 110 E 2nd St.	Flower St. 74. San Pedro 1st Baptist Church, 543 W 7th St. 75. S Calif. Telegraph Co, 716 S Olive 76. South Park Loft Building, 816 S Grand Ave. 77. Spanish - American War Memorial (Pershing Square), 5th, 6th Olive & Hill 78. State Theater Building, 300-314 W 7th St. 79. Subway Terminal Building, 416-424 S Olive St/417 S Hill St 80. Superior Oil Co Building-Bank of California, 550 S Flower St. 81. The Aldine/Myrick Hotel, 324 or 342 S Hill Av. 82. The Whipple/ Markham Hotel, 326 S Hill Av. 83. Title Guarantee Bldg, 401 W 5th St 84. Title Insurance & Trust Company Bldg and Annex, 433 S Spring St 85. Union Oil Bldg, 617 W 7th St. 86. Ville de Paris Store, 712 S Olive St. 87. Warner Theatre, 460 W 6th St. 88. Wells Fargo Bank, 415 W 5th St. 89. Woodward/Bristol Hotel, 423 W 4th St.	

Source: SWCA Environmental Consultants, 2008

Fernando Formation

The Pliocene (5–1.8 Ma) age Fernando Formation is present in the eastern Puente Hills and much of the northeastern Los Angeles basin. In addition to numerous invertebrate fossils collected from the Fernando Formation, some marine vertebrate material has also been documented, including fossilized specimens of great white shark, dolphin, herring, hake, lanternfish, mackerel, swordfish, flounder, and whale. The presence of these fossils within this geologic unit, as well as it's proven potential to yield vertebrate remains in the vicinity of the PSA, has resulted in the designation of the Fernando Formation as having a high paleontological sensitivity.

Quaternary Alluvium

Quaternary alluvium of Holocene (10,000 years before present [BP] to Recent) age underlies much of the eastern portion of the PSA from approximately the intersection of 2nd and Hill Streets and eastward. Holocene-age deposits contain the remains of modern organisms and are generally too young to contain fossils. Fossil localities in older Quaternary alluvium deposits throughout southern California have yielded terrestrial vertebrates such as mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, horses, camels, and bison. Fossilized invertebrates and plant remains have also been collected from this unit. Younger alluvium is determined to have a low potential for paleontological resources but is often underlain by older alluvium, which is determined to have a high potential for paleontological resources.

4.12.2 Evaluation Methodology

Information in this section is based primarily on the record searches and a reconnaissance-level field survey of the Area of Potential Effects[5] (APE) which included the area in the immediate vicinity of the PSA. Both historic and archaeological resources were considered during the survey. For the proposed alternatives, a paleontological collections records search was conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). A detailed review of museum collections records was performed in order to identify any known vertebrate fossil localities within one mile of the proposed alternatives and to identify the geologic units within the PSA. In addition, published geologic maps were consulted.

[5] The study area, called Area Potential Effects (APE) in this report is a blanket one quarter-mile buffer from the proposed project alignments. The APE was not established in coordination with the California State Historic Preservation or in accordance with 36 *Code of Federal Regulations* (*CFR*) Part 800.16 (d). 36 *CFR* defines an APE as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." Once project plans are developed to an appropriate level of detail, a project-specific APE will be developed for SHPO review and concurrence.

Table 4-12 Known Archaeological Resources within One-Quarter Mile of the PSA					
Primary Number	Trinomial	Other Designation	Resource Description	Recorded by/Date	Alignment(s)
19-000007	CA-LAN-7H	—	Los Angeles Chinatown dump area, mid 19th century	Meighan 1951	At-Grade & Underground
19-000887	CA-LAN-887H	Las Placitas	1880s Zanja Madre and structural remains from Spanish occupation through early 1900s	Costello 1978	At-Grade
19-001112	CA-LAN-1112H		Structural remains adjacent to Old Plaza Church dating to early 1800s	NARC 1981	At-Grade
19-001575	CA-LAN-1575/H		1860s-1930s Chinatown, Native American features and cemetery	Foster 1989, Horne 2000, Warren 2005	At-Grade
19-002791	CA-LAN-2791H	Pico-Garnier Block, El Pueblo de Los Angeles	Historic archaeological deposits present within the basement of the Merced Theater and the Garnier Building and beneath Sanchez Alley	Foster 1999	At-Grade
19-002928	CA-LAN-2928H	Brunswig Drug Co.	Historic gas tank, portions of a brick structure, miscellaneous iron pipes, the Brunswig Warehouse reinforced concrete foundations, and a small trash deposit	Hale 2001	At-Grade
19-003097*	CA-LAN-3097H		Mid to late 19th century privies and structural foundations	Warren 2003	At-Grade & Underground
19-003129	CA-LAN-3129H		Four historic refuse concentrations that date to the late 19th and early 20th centuries, may have been associated with the Modjeska Building that once occupied the area	Turner 2003	At-Grade & Underground
19-003169	CA-LAN-3169H		Two segments of the AT&SF railroad, turn of the century to early 20th century	Harris 2003	At-Grade
19-003337	CA-LAN-3337H		Oyster shell lens and historic glass, brick and stoneware fragments	Humphries 2000	At-Grade & Underground
19-003338	CA-LAN-3338H		Dense charcoal lens with associated historic artifacts	Humphries 2000	At-Grade & Underground
19-003339	CA-LAN-3339H		Historic trash lens with oyster shell, animal bones, glass, bricks, and stoneware, age unknown	Humphries 2000	At-Grade & Underground
19-003352	CA-LAN-3352H		Historic features including a segment of the Zanja No. 6-1, an artifact scatter, and a concrete foundation, dating to c. 1900	Foster 2005	At-Grade & Underground
19-003353	CA-LAN-3353H		Trash deposit with glass and ceramics, turn of the 20th century	Foster 2005	At-Grade & Underground

Table 4-12 Known Archaeological Resources within One-Quarter Mile of the PSA					
Primary Number	Trinomial	Other Designation	Resource Description	Recorded by/Date	Alignment(s)
19-003549	CA-LAN-3549H	El Pueblo de Los Angeles Winery	Adobe structure remnants and cistern filled with bottles, turn of the 20th century	Cordner 2006	At-Grade
19-003588	CA-LAN-3588H		Brick foundations and a historical artifact deposit	Foster 2006	At-Grade & Underground
19-003660	CA-LAN-3660H		Fragmented household refuse and building material debris associated with the occupation of a number of no longer extant buildings that existed from the 1890s onward	Hogan, Tan and Smallwood 2007	At-Grade & Underground
19-100301			Isolated black glass bottle fragment, dating to the late 19th Century	Michalsky 1998	At-Grade & Underground
19-100515		Republic Street Isolate	Historic artifact concentration with bricks, animal bone, metal, glass, ceramics, dating to 19th century	Slawson 2005	At-Grade
19-120014		Merced Theater	Pit feature containing historic artifacts	Eisentraut 1996	At-Grade
19-120015			Prehistoric human remains, no artifacts	Wlodarski 1978	At-Grade

4.12.3 Environmental Issues

Historical Resources

Significant built and archaeological resources have the potential to be impacted by both build alternatives to approximately the same extent. The following discussion of potential project-related environmental impacts provides an example of some issues that may apply to the proposed alternatives.

4.12.3.1 Construction

For any rail segments that require tunneling or cut-and-cover construction, an equation will be established to determine what the expected "settlement trough" for the proposed project will be. That settlement trough will show the distance from the proposed area of direct ground disturbance that additional project-related land deformation can be expected to occur. The establishment of a settlement trough is an important component of the effects analysis, which will be among the many factors taken into consideration in evaluating the proposed project. Effects from tunneling near historic buildings can include cracks and other damage resulting from differential settlement, tunnel-induced displacement and construction as well as operational vibration. A particularly challenging aspect of tunneling activities is that full effects of differential settlement on fragile buildings and other features may not be realized for years after construction activities have been completed.

For most elements of the project's construction phase, significant effects to historic properties are anticipated. Typical construction effects for this type of project are temporary loss of access and effects of vibration caused by use of heavy equipment and multiple equipment types simultaneously, as well as uneven earth movement (differential settlement) and uncontrolled dust that can damage buildings or other features, such as curbs, sidewalks and retaining walls. Standard construction control methods are recommended to control traffic, reduce noise, vibration and dust resulting from construction activities that will be associated with the proposed project. Vibration may be caused by use of tunneling and grading equipment, jackhammers and other heavy equipment, and by vehicle movement. It is recommended that vibration be monitored in areas of historic properties to limit its effects to below the Federal Transit Administration threshold for damage to fragile historic buildings. In addition, detailed pre-construction surveys of interiors and exteriors of each historic property should be conducted by qualified historical architects or engineers with specialized training and demonstrated experience in historic building reuse.

Although project plans have not been completed to sufficient detail to analyze these effects, it is expected that no historic properties would be demolished, relocated or acquired for the proposed project.

4.12.3.2 Operation

Visual impacts may result if the project introduced elements that were inconsistent with the visual character of the PSA, or if a project component, such as a station, were to obstruct important views or connections between buildings and features in settings or an historic district. Placement of catenary poles used to support at-grade train cross spans and catenary wires present the possibility for effects on historic properties. It is recommended that all catenary poles be placed immediately next to street curbs (within the public right of way), and that existing utility poles be replaced where feasible. Placement of catenary poles has yet to be determined and should be reviewed by cultural resources specialists to reduce effects. No proposed project catenary poles should be located within the boundaries of historic properties or historic districts. As discussed in Section 4.3.1.5,, catenary poles for the proposed project should in some cases replace existing utility poles. This type of replacement may reduce visual clutter in the vicinity of historic resources near the proposed project. Because of support requirements of catenary wires, particularly at curves and corners, there is the potential for an overhead "spider web effect" to result, where numerous wires and stays result in increased visual clutter.

For this project, obstruction or impeded views (toward or from the resources), and their respective settings may result from the placement of catenary poles and wires. A project option may involve using cross span wires that would be anchored to the street facades of buildings to support catenary wires, particularly at street corners. This "eyelet" method was a common technique used to support wires for historic trolley systems. There is a possibility that such eyelets would be proposed to be affixed to historic buildings, which could have a potential significant impact on historic resources.

Both of the build alternatives call for a vehicular underpass and pedestrian overpass to be constructed on Alameda St., either at Temple St. (At-Grade Emphasis LRT Alternative) or 1st St. (Underground Emphasis LRT Alternative). The overpass/underpass structure will interrupt lines of sight along both streets at the intersection where constructed and may conflict with the historic appearance of the neighborhood, especially on 1st St.

Additional project-related effects on historical resources include potential impacts from excavation-induced ground settlement and other ground-movement-related building damage. Each of these could affect fragile historic properties, resulting in adverse effects. Additionally, effects of new station construction and the introduction of catenary wires and poles in historic districts or adjacent to historic properties could each result in changes in settings, and thus in adverse effects.

4.12.3.3 Paleontological Resources

According to geologic mapping and museum collection records, the build alternatives are underlain by the paleontologically sensitive Puente Formation, Fernando Formation, and Quaternary older alluvium. Museum collections records maintained by the Natural History Museum of Los Angeles County (LACM) were searched and four previously recorded vertebrate fossil localities were discovered either along the proposed alternative routes or within a one-mile radius (Table 4-13). In addition, the records search revealed

that at least eleven vertebrate fossil localities have been previously documented in the general vicinity of the PSA and were discovered within the same geologic units that are present within the proposed alternative alignments (Table 4-14).

The potential for adverse impacts to paleontological resources would be greater during the construction of the Underground Emphasis LRT Alternative, as this alternative would require substantial excavations into paleontologically sensitive geologic units. Digging for the automobile underpass on Alameda St. at either Temple St. or 1st St. will have similar effects. However, both build alternatives traverse paleontologically sensitive units and have the potential to impact paleontological resources. Implementation of proper mitigation measures can, however, reduce the impacts to paleontological resources to a less than significant level.

Table 4-13 Paleontological Localities Located within a One-Mile Radius of the Build Alternatives

LACM Locality Number (s) and Approximate Location	Geologic Formation	Age	Taxa
LACM 6971; 6th and Flower Streets; LACM 4726; 4th and Hill Streets	Fernando Formation	Pliocene	Myliobatis (eagle ray), Carcharodon carcharias (white shark), Isurus oxyrinchus (bonito shark), Carcharhinus (requiem shark), Semicossyphus (sheepshead)
LACM 5961; 1st and Hill Streets	Puente Formation	Late Miocene	Cyclothone (bristlemouth fish)
LACM 3868; Wilshire Blvd. and Lucas Ave.	Fernando Formation	Pliocene	Carcharodon sulcidens (white shark)

Table 4-14 Paleontological Localities Located in the Vicinity of the Build Alternatives

LACM Locality Number (s) and Approximate Location	Geologic Formation	Age	Taxa
LACM 6198- 6203; Wilshire Blvd. from intersection of Alvarado St. west to past Vermont Ave.	Puente Formation	Late Miocene	Osteichthyes (bony fish), Cetacea (whale)
LACM 3250; east of Vermont Ave. near Madison Ave. and Middlebury St.	Quaternary alluvium	Pleistocene	Mammuthus (fossil mammoth)
LACM 5845; Western Ave. and Beverly Blvd.	Quaternary alluvium	Pleistocene	Mammutidae (fossil mastodon)

4.13 Parklands and Other Community Facilities

Public transit service increases the accessibility of parklands and community facilities within the area, thereby providing a benefit to the community. However, the establishment of a new transit system has the potential for adverse direct impacts resulting from the need for physical acquisition, displacement or relocation of parkland or a community facility. Adverse indirect impacts may involve changes to roadways and public right-of-ways that reduce pedestrian or vehicular access to facilities.

Other potential indirect or secondary impacts on parklands and community facilities such as impacts to pedestrian safety, air quality, and noise are discussed in Sections 4-15, 4-6 and 4-7, respectively.

4.13.1 Affected Environment

4.13.1.1 Regulatory Framework

Public parklands, significant cultural resources, and natural wildlife refuges are given protection under Section 4(f) of the U.S. Department of Transportation Act of 1966. Direct use (i.e. encroachment or acquisition) of Section 4(f) lands by federally funded transportation projects is prohibited unless it can be demonstrated that no prudent alternatives are available. If no prudent alternatives exist, the effects must be reduced through project design and mitigation measures. Indirect effects to Section4(f) lands may involve obstruction or alteration of access, introduction of significant noise or vibration sources, casting of shadows, or other substantive changes to the visual setting.

4.13.1.2 Existing Conditions

There are currently four emergency facilities (three fire stations and one police station) located within one-quarter mile of both alignment alternatives. Additional community facilities (museums, performing arts centers, religious facilities, and schools) within one-quarter mile of both alignments include:

- California Academy for Liberal Studies Early College High School (700 Wilshire Blvd., 4th Floor)
- Los Angeles Downtown Public Library (630 W. 5th St.)
- Los Angeles Downtown Public Library Park (630 W. 5th St.)
- Pershing Square (532 South Olive St.)
- MOCA Museum of Contemporary Art (MOCA) - Grand Ave.
- The Colburn School of Music and Performing Arts (200 S Grand Ave.)
- The Disney Concert Hall
- The Dorothy Chandler Pavilion

- City Hall Park (200 N Spring St.)
- Fletcher Bowron Square (300 block of N. Main St.)
- Union Center for the Arts (120 North San Pedro St.)
- Little Tokyo Library (203 S Los Angeles St.)
- Japanese American National Museum (369 East 1st St.)
- James Irvine Garden (244 S. San Pedro St.)
- Japanese American Cultural and Community Center (244 S. San Pedro St.)
- The Geffen Contemporary at MOCA (152 North Central Ave.)
- El Pueblo de Los Angeles State Historical Monument (500 block of N. Main St.)
- Higashi Honganji Buddhist Temple (505 East 3rd St.)
- Koyasan Buddhist Temple (342 East 1st St.)
- Union Church of Los Angeles (401 East 3rd St.)

Of these resources within one-quarter mile from the alignment, the greatest potential direct or indirect impacts would be to the resources located adjacent to an alignment and in the vicinity of the stations.

Parklands and community facilities adjacent to the At-Grade Emphasis LRT Alternative alignment are listed below. Any differences between Options A and B are noted.

- Los Angeles Central Library Building and Park – located on 5th St. to the east of Flower St. The alignment runs below-grade to the west of the site on Flower St. A station is located to the west of the library site (Option A).
- MOCA Museum of Contemporary Art (MOCA) – located near the southeast corner of 2nd St. and Grand Ave. The alignment runs at-grade along 2nd St. to the north.
- The Colburn School of Music and Performing Arts - located at the southeast corner of 2nd St. and Grand Ave. The alignment is below-grade to the north of the site, and transitions to at-grade at Main St. to the east.
- Disney Concert Hall – located on 2nd St. between Grand Ave. and Hope St. The alignment is below-grade to the south of the site, and transitions to at-grade at Grand Ave. to the east. A station is located to the southwest.
- City Hall Park – located on the City Hall grounds at the northwest corner of 1st and Main Streets. The northbound alignment runs at-grade along Main St. to the east.

There is a station at this location on Main St. The station would be a side platform located on the east side of the street, opposite the park.

- Fletcher Brown Square – Los Angeles Mall - located in the 300 block of Main St. between Temple and Aiso Streets. The alignment is at-grade to the south of the site along Temple St. A pedestrian overcrossing spans 2nd St., linking Fletcher Brown Square to the Civic Center.

- Little Tokyo Library – located at the southwest corner of 2nd and Los Angeles Streets. The alignment runs at-grade along 2nd St. and turns north onto Los Angeles St. There is an optional station located to the northwest of the site.

- The Geffen Contemporary at MOCA – located near the southwest corner of Temple and Alameda Streets. The alignment runs along Temple St. to the north and turns south on Alameda St. where in connects to the Gold Line. The Little Tokyo/Arts District Station is located on Alameda St. immediately to the east of the site.

Parklands and community facilities potentially impacted by the Underground Emphasis LRT Alternative alignment and station locations are listed below. Unless otherwise noted, the alignment and stations are below-grade:

- Los Angeles Central Library Building and Park – located on 5th St. to the east of Flower St. The alignment runs to the west of the site on Flower St. A station is located to the north of the library site.

- MOCA Museum of Contemporary Art (MOCA) – located near the southeast corner of 2nd St. and Grand Ave. The alignment runs at-grade along 2nd St. to the north.

- The Colburn School of Music and Performing Arts - located at the southeast corner of 2nd St. and Grand Ave. The alignment is to the north of the site.

- Disney Concert Hall – located on 2nd St. between Grand Ave. and Hope St. The alignment is to the south of the site. A station is located to the southwest.

- Little Tokyo Library – located at the southwest corner of 2nd and Los Angeles Streets. The alignment runs along 2nd St. to the north. A station is located adjacent to the site.

- Japanese American National Museum – located near the northwest corner of 1st and Alameda Streets. The alignment transitions from below-grade to at-grade to the south of the site and extends at-grade to the east along Alameda St., where it connects to the Little Tokyo/Arts District Station.

- The Geffen Contemporary at MOCA – located near the southwest corner of Temple and Alameda Streets, to the north of the Japanese American Nation Museum. The alignment terminates immediately to the south of the site at Little Tokyo/Arts District Station.

4.13.2 Evaluation Methodology

The evaluation of potential impacts on parklands and community facilities involves determining what facilities are located near the proposed alignments and if the alignments would directly impact any of the facilities through encroachment or acquisition, or indirectly impact the facilities by limiting access.

The information regarding parklands and community facilities was found through Navigate LA, a City of Los Angeles Bureau of Engineering web-based mapping application which identifies all types of community facilities within City boundaries.

4.13.3 Environmental Issues

Public transit serves to increase the accessibility to parklands and community facilities within the PSA. Potential direct impacts on parklands and other community facilities would arise from the need for physical acquisition, displacement or relocation of parkland or a community facility. Indirect impacts involve changes to pedestrian or vehicular access. Direct impacts would only occur at facilities located adjacent to the alignments and stations. Similarly, indirect impacts would be most likely to occur at facilities adjacent to or in closest proximity to the alignments.

Construction of either build alternative would primarily occur within existing streets and public rights-of-way, and/or underground which would limit the needs for direct acquisition of parkland or other community facilities. However, some direct acquisition would be required for at-grade alignments when street widths are narrow or where additional width is needed to accommodate turns and curves. Acquisition is also required for underground alignments at underground station locations to accommodate station access portals. As such, the At-Grade Emphasis LRT Alternative would require less property acquisition than the Underground Emphasis LRT Alternative. However, both the At-Grade Emphasis LRT Alternative, Option A and the Underground Emphasis LRT Alternative have potential property acquisition associated with providing portal locations in the vicinity of the Central Library. The Underground Emphasis LRT Alternative may also require acquisition for portals in the vicinity of the Little Tokyo Branch Library and the Japanese American National Museum. Further evaluation would be needed to determine potential direct impacts associated with property acquisitions.

Reduction in vehicle or pedestrian access to parkland and community facilities, or an unacceptable reduction in emergency services response time related to roadway modifications would be potential adverse impacts. While each alternative could reduce access during the construction period, the operation of the At-Grade Emphasis LRT Alternative would have greater potential impact on access than the Underground Emphasis LRT Alternative. Roadway modifications associated with the At-Grade Emphasis LRT Alternative may include reductions in the number of traffic lanes, removal or modification of existing left turn pockets, and impacts on existing driveways. Reductions in roadway capacity and changes in traffic configuration could reduce access to parkland or communities facilities in the immediate vicinity. Conflicts related to emergency service access could also result. Adequate review will need to be conducted in order to assure the maintenance of acceptable levels of ingress/egress and emergency

response access for police and fire stations and adequate public access to parklands and community facilities.

Access to parklands and community facilities could be further impacted by loss of currently available street parking. The At-Grade Emphasis LRT Alternative would result in the loss of approximately 88 on-street parking spaces, as compared to approximately 20 spaces for the Underground Emphasis LRT Alternative. Further evaluation would be required to determine if this loss of parking would adversely affect the public's ability to access parklands and community facilities, and if so, if alternative parking could be provide elsewhere.

Reduction in pedestrian access to parklands and community facilities would also be a potentially adverse impact.

The Underground Emphasis LRT Alternative would have greater potential direct impacts on parklands and community facilities related to the need for direct acquisition for portals to underground stations. The At-Grade Emphasis LRT Alternative would have greater potential indirect impacts on parklands and communities facilities as a result of needed roadway modifications to accommodate the alignment, which could potentially reduce parking for and access to parklands and community facilities.

Both alternatives would reduce access to parklands and communities facilities during the construction phase. Given the intensity of construction associated with underground transit development, construction impacts related to the Underground Emphasis LRT Alternative may be greater than with the At-Grade Emphasis LRT Alternative.

4.14 Economic & Fiscal Impacts

The PSA is at the heart of the downtown Los Angeles resurgence. With more than 12,000 households and close to 200,000 employment opportunities projected for the year 2030, a more comprehensive transportation system is becoming an economic necessity. While there is the potential for the project to impact the current environment, it is important to consider the positive impacts construction would have on the local and regional economy including employment, construction spending, and indirect spending as well. This section will survey the economic and fiscal impacts of the Regional Connector on the regional economy, including the following:

- Tax revenue impacts
- Construction-Related Economic Impacts
- Construction-Related Employment
- Construction Spending on the Regional Economy

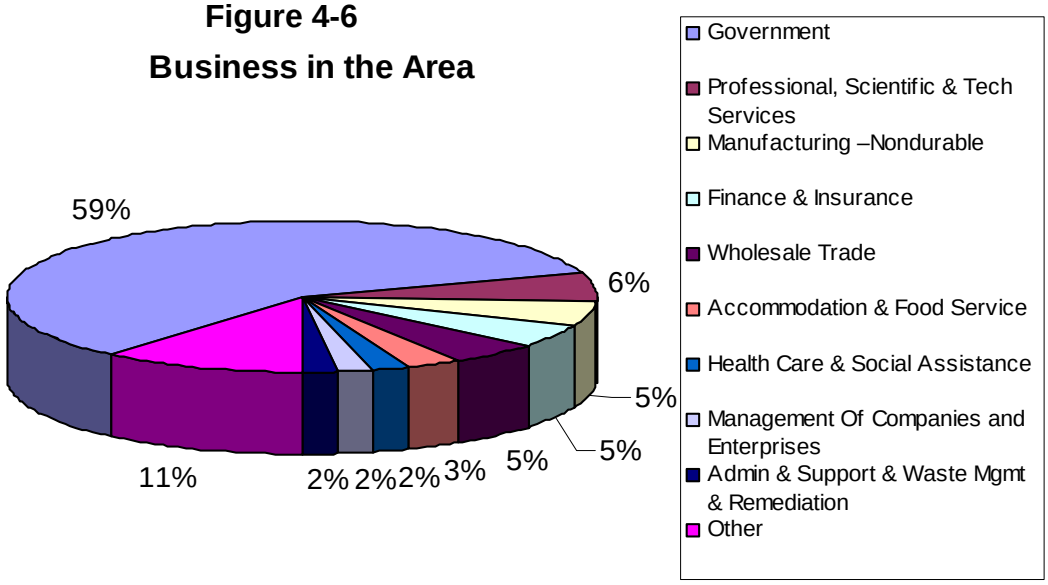
4.14.1 Affected Environment

4.14.1.1 Existing Conditions

The PSA, located within the Central City region, consists primarily of high-density commercial and industrial uses. Within this region, many of the traditional commercial areas are being transformed into medium to high density multi-family residential units and mixed use developments.

Figure 4-6

Business in the Area



A mixture of light and heavy industrial land uses exists along the eastern half of the Central City, east of Main St., and adjacent to the Alameda District. The remaining land uses within the downtown area are designated for public facilities and open space. Figure 4-6 gives a more detailed breakdown of the type of businesses in the PSA.

The PSA makes up approximately 0.03 percent of the 4,752 square miles of Los Angeles County. Although small in size, the PSA is a densely populated employment center comprised of mostly government jobs. The two build alternatives travel through the Civic Center and along Temple St., providing access to the majority of these employment opportunities. There were approximately 168,000 employees in the PSA in 2005, which is expected to increase to over 188,000 in 2030. Current projected employment within the PSA is between three and four percent of total Los Angeles County employment. Employment density in the PSA was 110,529 employees per square mile, which was significantly higher than the employment density of 977 for the County as a whole. The tax revenue base in the PSA is approximately $85.9 million[6].

In 2005 the total population of the PSA was 17,795 people, which was only 0.18 percent of the Los Angeles County population of over ten million. PSA population is expected to grow to 21,000 people in 2030.

[6] 2000 Census Data; Los Angeles County Assessor

There were 9,673 households in the PSA in 2005 with a median household income of approximately $45,000. Group quarters added an additional 5,466 residences. Total households are projected to increase 26.1 percent from about 9,700 in 2005 to 12,200 in 2030, which is higher than the 24.8 percent projected growth for Los Angeles County as a whole.

4.14.2 Evaluation Methodology

General assumptions are based upon available existing data from various sources, and verified by windshield survey. Information sources include the SCAG, American Public Transit Association, County Assessors Records, and Damar.

For the purposes of this evaluation, tax revenue losses were estimated using available information from the Los Angeles County Assessor's Office. The Assessor's Parcel Number, land value, improvement value, square footage, 2007 tax payments, and owner's information were identified for all affected parcels of land. Using this information, the per square foot land value and the corresponding 2007 land tax payment made on each square foot were estimated. These estimates were used together to determine loss in tax revenue due strictly to land acquisition.

Potential construction-related impacts were determined using conceptual site maps and station design plans. This information was used to identify potentially affected businesses in the area.

4.14.3 Environmental Issues

4.14.3.1 Tax Revenue Impacts

The two build alternatives effectively use the public right of way for track construction and station sites, minimizing the need for land acquisition. However, as discussed below, some acquisition is required for each alternative.

At-Grade Emphasis LRT Alternative

According to preliminary station and alignment design, the stations will need an area approximately five feet deep along the street frontage for the length of the station for construction. Total tax revenue loss due to land acquisition for these alternatives is estimated at $71,802.61 (see Table 4-15). This is approximately 0.084 percent of the $85,929,841.00 tax revenue base of the PSA. As such, tax revenue loss is not anticipated to be a significant impact for this alternative.

Underground Emphasis LRT Alternative

Since the station sites and design for the Underground Emphasis LRT Alternative have not been finalized, the land acquisition requirements for this alternative considered herein are limited to the proposed construction staging area near Alameda St. Total tax revenue loss due to land acquisition for this alternative is estimated at $163,130.29 (see Table 4-16). As this is approximately 0.190 percent of the $85,929,841.00 tax revenue base of the PSA, tax revenue loss is not anticipated to be a significant impact for this alternative.

Table 4-15 Estimated Loss of Tax Revenue Due to Land Acquisition
At-Grade Emphasis LRT Alternative

Assessor's Parcel #	Address	Property Type	Land Sq.Ft	Land Value	Sq. Ft.	Improvement Value	2007 Tax Payment	Ownership	TAX REVENUE LOSS
South of LA Times									
5149-008-032	201 S. Spring St. LA, CA 90012	Commercial/Industrial	25898	$1,927,273	195	$5,735.00	$35,709.70	LA Times Communications LLC	$1,847.55
5149-008-031	200 S. Broadway LA, CA 90012	Commercial/Industrial	5419	$401,513	5400	$5,735.00	$7,706.52	LA Times Communications LLC	$961.62
Behind LAPD									
5161-026-023	200 S Main St.	Other	7607	$435,929		$5,735.00	$6,398.84	Old Cathedral LLC	$1,135.59
5161-026-024	114 E 2nd	Other	6325	$326,946	17333	$200,756.00	9471.36	Old Cathedral LLC	$540.47
5161-026-033		Commercial/Industrial	5480	$203,163	5480	$1,123.00	3840.58	Old Cathedral LLC	$473.06
Landscaped Property to the Northeast of 3rd and Flower									
5151-014-033		Vacant Land		$3,959,546			$66,744.32	Fiveplants Associates and central plants inc	$66,744.32

Table 4-16 Estimated Loss in Tax Revenue Due to Land Acquisition
Underground Emphasis LRT Alternative

Assessor's Parcel #	Address	Property Type	Land Sq.Ft.	Land Value	ImprovementSq. Ft.	Improvement Value	2007 Tax Payment	Ownership	TAX REVENUE LOSS
Block Bounded By Central Ave., 1st St., Alameda, and 2nd St.									
5161-018-002	402 E. 1st St. LA,CA 90012	Commercial/Industrial	13673	$221,415	13320	$4,186	$3,369.60	Volk, Robert D TR	$3,369.60
5161-018-001	416 E. 1st St. LA, CA 90012	Commercial/Industrial	4792	$79,032	3921	$16,084	$1,489.34	Volk, Robert D TR	$1,489.34
5161-018-021		Vacant Land		$221,451	7256	$62,536	$4,477.40	Volk, Robert D TR	$4,477.40
5161-018-008	105 S. Alameda St. LA, CA 90012	Vacant Land	3829	$27,918			$453.06	Volk, Robert D TR	$453.06
5161-018-009		Commercial/Industrial	2496	$15,504	2115	$5,497	$311.98	Volk, Robert D TR	$311.98
5161-018-010		Commercial/Industrial	3223	$20,157	2735	$7,395	$404.92	Volk, Robert D TR	$404.92
5161-018-020		Commercial/Industrial		$2,106,233	26444	$2,496,078	$57,320.62	401 E 2nd St LLC	$57,320.62
5161-018-007	401 E. 2nd St. LA, CA 90012	Commercial/Industrial	17424	$740,114	17400	$17,971	$9,951.36	401 E 2nd St LLC	$9,951.36
5161-018-011	437 E. 2nd St. LA, CA 90012	Commercial/Industrial	33610	$1,427,786	33600	$35,749	$18,617.68	401 E 2nd St LLC	$18,617.68
Landscaped Property to the Northeast of 3rd and Flower									
5151-014-033		Vacant Land			$3,959,546.00		$66,744.32	Fiveplants Associates and central plants inc	$66,744.32

4.14.3.2 Construction-Related Economic Impacts

- Construction-related impacts are likely to occur throughout the PSA, and will increase in severity near the proposed station sites, as construction activity would be concentration at these locations. Further, closure of sidewalks would impede circulation in the area immediately surrounding construction areas and impact access to adjacent land uses. Although the alignment is located mainly within the public right-of-way, the nature of the proposed project and the land use characteristics of the PSA will inherently lead to adverse affects for businesses, inhabitants and industry within close proximity. The businesses that will be most directly affected by construction are at-grade store fronts that cater to pedestrian foot traffic.

- The following are some of the potential PSA construction impacts:

  - Traffic disruption
  - Increased noise, vibration and dust
  - Modified vehicular and pedestrian traffic patterns
  - Modified parking areas
  - Utility disruptions
  - Reduction in business access/visibility of signs and businesses
  - General disinterest in area businesses due to construction

At this time it is assumed that the project will be fully implemented by 2018. Depending on the phasing schedule, the PSA will be affected by construction at different intervals throughout the ten year period.

For this analysis, the PSA was divided into four distinct sections.

A. Civic Center:

Downtown Los Angeles is predominately occupied by government offices and government employees. The majority of these employment opportunities are concentrated within the Civic Center area. For the purposes of this analysis the Civic Center area is considered Temple St. between Main St. and Alameda St., and Los Angeles St. and Main St. between Temple St. and 2nd St. Within these boundaries, City Hall, City Hall East, the Caltrans Building, VA Hospital, Los Angeles Police Department Headquarters, Federal building, and Courthouse are located.

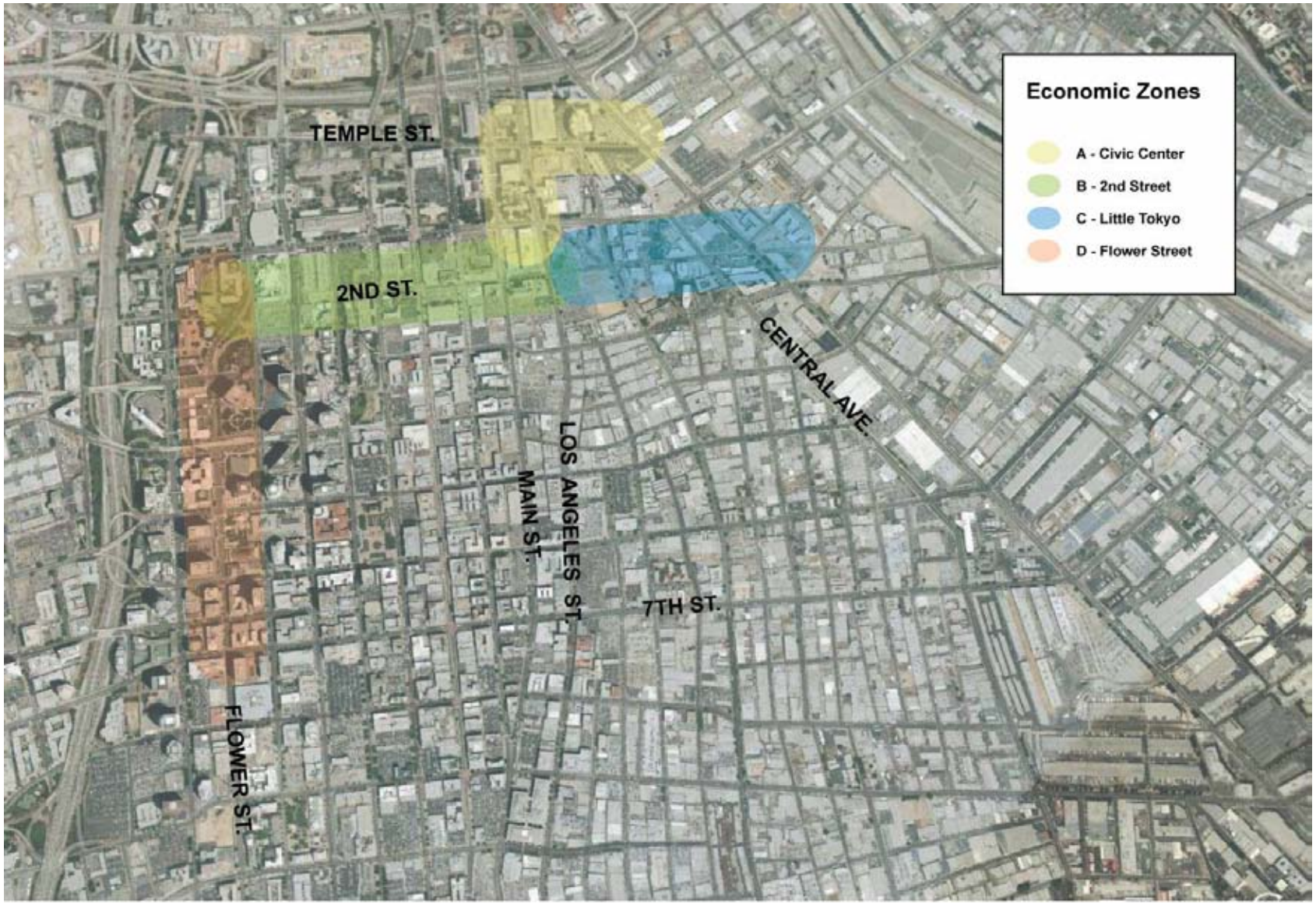


Figure 4-7 Economic Zone Map

B. 2nd St:

The land uses in the area 2nd St. between Los Angeles and Flower Streets is comprised of commercial space, including retail and office buildings, as well as minimal high-density residential. 2nd St. between Broadway and Figueroa Ave. goes through a tunnel that runs underneath Bunker Hill. The segment of 2nd St. through the tunnel is two lanes in each direction.

C. Little Tokyo:

2nd St. between Los Angeles and Alameda Streets runs through the heart of Little Tokyo. The street is lined with ethnic eateries, Japanese markets, and retail stores.

D. Flower St:

Flower St. between 3rd St. and Wilshire Blvd. runs through the heart of downtown. The street is lined with hotels, street level retail space, and medium to high density multi-family residential units.

The following sections will analyze the potential construction-related effects of the two build alternatives and identify the specific businesses impacted. Options A and B of the At-Grade Emphasis LRT Alternative use the same alignment in the majority of the PSA, therefore their analysis will be combined in regards to the Civic Center, 2nd St., and Little Tokyo economic zones. The differences between the two will be made clear in the discussion of the Flower St. economic zone.

At-Grade Emphasis LRT Alternative

A. Civic Center

In this segment of the PSA, Option A provides for at-grade track construction with a dual track configuration for the majority of the section, and single track configuration on Main St. and Los Angeles St. between 2nd and Temple Streets. The alternative also proposes two stations in the Civic Center area: 1) a southbound station on Los Angeles St. between Temple and 1st Streets, and 2) a northbound station on Main St.

The LRT track is located primarily within the public right-of-way, thereby limiting land acquisition and the need for pedestrian walkway closures during construction. Depending on final design, technology, and construction techniques employed, there will need to be phased street closure to complete the track construction. Traffic disruption will decrease access to the businesses in the area; however, the government entities located within the Civic Center do not depend on pedestrian or automobile traffic to generate revenue, decreasing the severity of the economic impacts. As traffic disruption will make it difficult for employees to access their offices, mitigating measures will be implemented to alleviate these impacts.

The proposed at-grade stations will require pedestrian walk-way closures, causing more severe construction impacts within the proximity of proposed station locations. The proposed station sites are on Main St. and Los Angeles St. between 1st and Temple Streets. There will also be pedestrian and roadway detours at the intersection of Temple St. and Alameda St. for the construction of the automobile underpass and pedestrian

overpass. As mentioned above, the businesses in the area predominantly engage in government activity and do not rely on traffic to generate customers. Table 4-17 below gives a detailed breakdown of the businesses in the area that will be temporarily affected by the construction of the station sites.

Table 4-17 Businesses Potentially Affected During Period of LRT Track Construction

Civic Center	
Geffen Contemporary	The main parking area for the museum is located on Temple St. Construction would cause decreased use of the parking lot and loss of parking revenue. It would also lead to parking difficulties for Geffen Contemporary patrons, which in-turn could reduce patronage. The main entrance for the museum is located on 1st St., which would receive less noise, dust and vibration effects from construction than the parking area.
LA Mall Entrance	The LA Mall located on the Corner of Temple St. and Los Angeles St. would be affected by track construction. The entrance located on Main St. is within the proximity of the proposed northbound station in this area. The construction impacts will decrease access to the mall adversely affecting the businesses located in the Mall.
New Otani Hotel	The New Otani Hotel located on Los Angeles St. between 1st and 2nd Streets would be affected by at-grade construction of the LRT track on Los Angeles St. and 2nd St. As the main rntrance to the hotel lobby as well as the parking structure are located on Los Angeles St., construction effects would be potentially significant. The decreased access to the hotel, noise and vibration, decreased visibility of signs, and a general disinterest in the area due to construction would have adverse effects on the hotel's business.
Starbucks	Starbucks Coffee located at the corner of 1st and Los Angeles Streets would be affected by at-grade construction of the LRT track on Los Angeles St. The decreased access to Starbucks, noise and vibration, decreased visibility of signs, and a general disinterest in the area due to construction could adversely affect Starbucks. However, the coffee shop can be accessed from 1st St., reducing the effects.
Azalea Restaurant	Azalea Restaurant located at the corner of 1st and Los Angeles Streets would be affected by construction. The decreased access to the restaurant, noise and vibration, decreased visibility of signs, and a general disinterest in the area due to construction will adversely affect the Azalea Restaurant.

B. 2nd St.

This segment of the alignment is a continuation of the at-grade track construction. The alternative does not currently call for stations on 2nd St. in this area. Once station locations have been finalized, further analysis will be required.

Within the boundaries of the PSA, a portion of 2nd St. runs through a tunnel underneath Bunker Hill. The tunnel will likely be shut down during track construction, causing traffic disturbances on 2nd St. and the overall PSA. However, running the tracks through the tunnel lessens direct impacts to businesses during construction.

Construction will directly impact the businesses that are located on 2nd St. between Los Angeles and Hill Streets. The new LAPD headquarters and the south side of the Los Angeles Times office buildings are located along 2nd St. Construction impacts will be more of an issue in this area only because the retail businesses along 2nd St., including Pitfire Pizza, China Bistro, and the Kawada Hotel, depend on traffic for revenue generation. Table 4-18 provides a list of businesses in the area that will potentially be affected by the at-grade track and station construction.

C. Little Tokyo

The At-Grade Emphasis LRT Alternative bypasses the Little Tokyo district, protecting the cultural center from the construction impacts of at-grade track and station construction.

D. Flower Street

The At-Grade Emphasis LRT Alternative uses a combination of at-grade and underground double track configuration to reach the 7th St./Metro Center Station and connect to the existing Metro Blue Line. In the rest of the PSA the Option A and Option B routes are identical, but in the Flower St. segment they have slight differences, as explained below.

Option A

The track would be located underground from the 2nd St. tunnel to Flower St., making a brief appearance above-ground before 3rd St. and then returning back underground after 3rd St. all the way to the 7th St./Metro Center Station. The alternative also calls for two underground stations, between Hope and Flower Streets and on Flower St. between 5th and 6th Streets.

Option B

The track would be located at-grade until it crosses 3rd St. before going back underground, with an at-grade station between 3rd and 4th Streets.

Unlike the at-grade track construction, the underground segment of the alternatives would result in fewer economic impacts. During construction, phased street closure will likely be implemented; however, depending on the tunneling technique used and location of exhaust vents there will be less traffic disruptions. Construction effects that would disrupt business activities, including noise, vibration, dust, decreased view of signage and overall disinterest in the area, will be limited strictly to station sites, which would employ cut and cover construction. This type of construction will cause sidewalk and street closures in the station locations, creating more severe impacts for businesses located within close proximity. See Table 4-19 for a detailed breakdown of the affected businesses.

Underground Emphasis LRT Alternative

The construction of the Underground Emphasis LRT Alternative will cause minimal adverse economic impacts in the PSA. Depending on the tunneling and construction techniques used to construct the tunnel, there may be a need for phased street closure, however the effects will not be as severe as at-grade track construction. Boring of the tunnel might also cause noise and vibration, but it will not be severe enough to impact business and inhabitants in the area.

Table 4-18 Businesses Potentially Affected During Period of LRT Track Construction	
2nd Street	
Pitfire Pizza	Located at the corner of 2nd St. and Main St., Pitfire Pizza will be affected by construction of the track and possible at-grade station. According to the preliminary design and land acquisition studies, a portion of the pedestrian walkway will be impeded to construct the station, eliminating pedestrian access to the restaurant from 2nd St. for the duration of the track and station construction. The main entrance to the restaurant is located at the corner of 2nd St. and Main St. allowing access to the restaurant from 3rd St. and alleviating some of the access issues. The at-grade station will require a more intensive construction effort than the track, and potentially cause increased noise, vibration, particulate matter, decreased view of the signage, and a general disinterest in the area due to construction.
China Bistro	Located at the corner of 2nd St. and Main St., China Bistro will be affected by construction of the track and at-grade station. According to the preliminary design and land acquisition studies, a portion of the pedestrian walkway will be impeded to construct the station, eliminating pedestrian access to the restaurant from 2nd St. for the duration of the track and station construction. The at-grade station will require a more intensive construction effort than the track, potentially causing increased noise, vibration, particulate matter, decreased view of the signage, and a general disinterest in the area due to construction.
Edison Bar	Located at the corner of 2nd St. and Main St., Edison Bar will be affected by construction of the LRT track and at-grade station. According to the preliminary design and land acquisition studies, a portion of the pedestrian walkway will be impeded to construct the station, eliminating pedestrian access to the restaurant from 2nd St. for the duration of the track and station construction. The main entrance to the bar is located in an alley between 2nd St. and 3rd St., alleviating some of the access issues on 2nd St. The at-grade station will require a more intensive construction effort than the track, causing increased noise, vibration, particulate matter, decreased view of the signage, and a general disinterest in the area due to construction.
Ground Worx Coffee	Located on Main St. between 2nd St. and 3rd St., Ground Worx Coffee will be affected by construction of the LRT track and at-grade station on 2nd St. According to the preliminary design and land acquisition studies, a portion of the pedestrian walkway on 2nd St. will be impeded to construct the station, eliminating pedestrian access to the coffee shop from 2nd St. for the duration of the track and station construction. Access to the coffee shop will be limited to 3rd St. The at-grade station will require a more intensive construction effort than the track, causing increased noise, vibration, particulate matter, decreased view of the signage, and a general disinterest in the area due to construction.
Cigars	Located at the corner of 2nd St. and Spring St., Cigars will be affected by construction of the LRT track and at-grade station. According to the preliminary design and land acquisition studies, a portion of the pedestrian walkway will be impeded to construct the station eliminating pedestrian access to the shop from 2nd St. for the duration of the track and station construction. The at-grade station will require a more intensive construction effort than the track, causing increased noise, vibration, particulate matter, decreased view of the signage, and a general disinterest in the area due to construction.
Kawada Hotel	Located at the corner of 2nd St. and Broadway, the Kawada hotel will be affected by track construction on 2nd St. Decreased access, noise, vibration, and dust will decrease the overall attractiveness of the hotel, making increased vacancy rates a likelihood.

Table 4-18 Businesses Potentially Affected During Period of Track Construction	
Flower Street	
World Trade Center Parking	The World Trade Center parking lot, located near the corner of 3rd St. and Flower Streets, will have decreased access due to construction and possible street closure. The parking lot does have alternate access on Figueroa St., alleviating some of the impact.
Bank of America Plaza Parking	The Bank of America Plaza parking lot located near the corner of 3rd St. and Flower St. will experience decreased access due to construction and possible street closure. The parking lot does have alternate access from Bunker Hill, alleviating some of the impact.
400 S. Flower Parking	The parking lot located at 400 S. Flower St. will experience decreased access due to construction and possible street closure.
City National Plaza Parking	The City National Plaza parking lot located near the corner of 4th St. and Flower St. will experience decreased access due to construction and possible street closure.
Westin Bonaventure	The entrance to the Westin Bonaventure is located on Flower St. at the corner of 4th St. and Flower St. The track construction would decrease access to the hotel from Flower St., and construction impacts could decrease overall appeal of the hotel entrance from Flower St. The Hotel does have an entrance from Figueroa St., alleviating the severity of this impact.
Miseki Restaurant	The entrance to Miseki Restaurant is located on Flower St. near the corner of 4th St. and Flower St. The track construction would decrease access to restaurant from Flower St., and construction impacts could decrease overall appeal of the restaurant. The restaurant does have access from the Westin Bonaventure Hotel, alleviating the severity of this impact.
Suede	The entrance to Suede Restaurant is located on Flower St. near the corner of 4th St. and Flower St. The track construction would decrease access to the restaurant from Flower St., and construction impacts could decrease overall appeal of the restaurant. The restaurant does have access from the Westin Bonaventure Hotel, alleviating the severity of this impact.
City National Plaza Parking	The City National Plaza parking lot located near the corner of 4th St. and Flower St. will experience decreased access due to construction and possible street closure.
Westin Parking Entrance	The Westin Hotel parking lot located at the corner of 5th St. and Flower St. will experience decreased access due to construction and possible street closure. The parking lot does have alternate access on Figueroa St., alleviating some of the impact.
Standard Hotel Parking Entrance	The Standard Hotel parking lot located near the corner of 6th St. and Flower St. will experience decreased access due to construction and possible street closure.
Standard Hotel Entrance	The Standard Hotel Entrance located on Flower St. will be affected by the construction impacts; however the main entrance to the hotel is on 6th St.
Floyd's Barbershop	Floyd's Barbershop located on the ground floor of the Standard Hotel has an entrance on Flower St., which will be affected by construction; however, the barber shop can also be accessed from the hotel.
Pegasus	The Pegasus Apartments will be affected by street closures and construction in the area. Traffic disruptions and construction impacts would cause difficulties for the tenants of this building and could impact leasing activities.
Daily Grill	The entrance to the Daily Grill is located at the corner of Flower St. and 7th St. Street closure in this area would make accessing the restaurant difficult from Flower St.; however, patrons will be able to access the restaurant from 7th St.
Roosevelt Lofts	Access to the Roosevelt Lofts will be difficult due to street closure on Flower St. but the development can be accessed from Hope St. Depending on the technique used to construct the tunnel for the underground segment of the track in this area, the tenants of the Roosevelt could be impacted by increased noise, vibration, and dust. This could impact vacancy rates in the high-density residential development.
City National Plaza Valet Entrance	Access to the City National Plaza valet entrance will be limited during construction due to possible street closure.
City National Plaza	The proposed underground station location for this alternative will be located at the City National Bank branch on the ground floor of the City National Plaza building.
800 W. 6th Parking	Access to the 800 W. 6th St. parking lot will be limited during construction due to possible street closure.
Cathay Bank	Access to the Bank will be limited during construction due to possible street closure.

Table 4-18 Businesses Potentially Affected During Period of Track Construction	
Flower Street	
Vieta Café	Access to the cafe will be limited during construction due to possible street closure.
Maria's Italian Kitchen	Access to the restaurant will be limited during construction due to possible street closure.
ABC Printing	Access to ABC printing will be limited during construction due to possible street closure.
Mail Box Etc.	Access to Mail Box Etc. will be limited during construction due to possible street closure.
PCS Select	Access to PCS Select will be limited during construction due to possible street closure.
Big Mamma's Pizza	Access to Big Mamma's Pizza will be limited during construction due to possible street closure.
Coffee Bean	Access to the Coffee Bean will be limited during construction due to possible street closure.
Wockano	Access to the Wockano restaurant will be limited during construction due to possible street closure.
800 Wilshire Parking	Access to the parking lot will be limited during construction due to possible street closure.
Pacific Res. Credit Union	Access to the credit union will be limited during construction due to possible street closure.

The economic impacts caused by the Underground Emphasis LRT Alternative will be limited to the station sites. For this evaluation it is assumed that a cut-and-cover technique will be used to construct the stations. This technique will generate temporary inconveniences such as increased noise, vibration, dust and particulate matter, decreased view of signage, limited or no access to business within close proximity of the station area and a general disinterest in the area when constructing the stations. Like the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative calls for the construction of a pedestrian overpass and automobile underpass, but the location would be at 1st and Alameda Streets. Construction of the overpass and underpass would necessitate additional pedestrian and roadway detours nearby. Although severe, these effects will be limited in duration and limited to the station sites, decreasing the overall effects of construction of this alternative.

If street closure is necessary to complete tunnel construction, all of the businesses mentioned in the previous section, except those located within the Civic Center area, will be negatively affected by decreased access. Table 4-19 below gives a detailed breakdown of the businesses within close proximity of the station sites.

4.14.3.3 Construction-Related Employment

Investment in transportation, including direct investment in the form of capital construction costs and operations cost, provides economic benefits in several basic ways, including the creation of jobs and investment or spending by suppliers whose goods and services are used in the project.

Table 4-19 Businesses within Close Proximity to Proposed Station Sites	
	2nd Street
New Otani Hotel	The New Otani Hotel would be affected by station construction at the corner of 2nd St. and Los Angeles St. Although the hotel is not in the direct station construction area, the main entrance to the hotel lobby as well as the parking structure is located on Los Angeles St. and the noise, dust, and vibration, in the area due to construction could potentially impact the hotel's business.
Starbucks	The Starbucks would be affected by station construction at the corner of 2nd St. and Los Angeles St. Although the coffee shop is not in the direct station construction area, the entrance of the Starbucks is located on Los Angeles St. and the noise, dust, and vibration, in the area due to construction will impact business.
Azalea Restaurant	The Azalea Restaurant would be affected by station construction at the corner of 2nd St. and Los Angeles St. Although the restaurant is not in the direct station construction area, the entrance is located on Los Angeles St. and the noise, dust, and vibration, in the area due to construction will impact business.
	Flower Street
Westin Bonaventure	The entrance to the Westin Bonaventure is located on Flower St. at the corner of 4th St. and Flower St. Station construction would decrease access to the hotel from Flower St., and construction impacts could decrease overall appeal of the hotel entrance from Flower St. The hotel does have an entrance from Figueroa St., alleviating the severity of this impact.
Miseki Restaurant	The entrance to Miseki Restaurant is located on Flower St. near the corner of 4th St. and Flower St. Station construction would decrease access to restaurant from Flower St., and construction impacts could decrease overall appeal of the restaurant. The restaurant does have access from the Westin Bonaventure Hotel, alleviating the severity of this impact.
Suede	The entrance to Suede restaurant is located on Flower St. near the corner of 4th St. and Flower St. Station construction would decrease access to the restaurant from Flower St., and construction impacts could decrease overall appeal of the restaurant. The restaurant does have access from the Westin Bonaventure Hotel, alleviating the severity of this impact.
Citi Parking Entrance	The entrance to the Citi parking lot located near the corner of 5th St. and Flower St. will have decreased access due to construction and possible street closure.
Starbucks	Starbucks, located on the ground floor of the CitiBank Center, will be affected by both the track construction on Flower St. as well as the proposed underground station between 4th St. and 5th St. Starbucks is located within the station construction area, and will be affected by noise, vibration, and dust.
Citibank	The Citibank branch located on the ground floor of the CitiBank Center will be affected by both the track construction on Flower St. as well as the proposed underground station between 4th St. and 5th St. The bank is located within the station construction area and will be affected by noise, vibration, and dust.
Uptown Drug Store	Uptown Drug Store, located on the ground floor of the CitiBank Center, will be affected by the proposed underground station between 4th St. and 5th St. Uptown Drug Store is located within the station construction area and will be affected by noise, vibration, and dust.
California Computer Center	The California Computer Center, located on the ground floor of the CitiBank Center will be affected by the track construction on Flower St. as well as the proposed underground station between 4th St. and 5th St. Although the Computer Center is not located within the station construction area, it is in close proximity and might be affected by noise, vibration, and dust.

To quantify these effects, the American Public Transportation Association commissioned the *Public Transportation and The Nation's Economy* report in the year 2000. Using the multipliers identified in this report and the construction cost estimates for the proposed alternatives, the effects of the project on the regional economy were estimated. Table 4-20 summarizes the results of this analysis.

Table 4-20 Economic Effects of the Regional Connector on the Regional Economy

Economic Affects	At-Grade (Option A)	At-Grade (Option B)	Underground
Capital Cost/Job Creation	22,190 jobs	20,086 jobs	20,194 jobs
Operations Cost/Job Creation	969 jobs	969 jobs	114 jobs
Capital Cost/Sales (x 1,000)	$2,120.04	$1,919.04	$1,929.35
Operations Cost/Sales (x 1,000)	$54.40	$54.40	$6.40

The At-Grade Emphasis LRT Alternative Option A creates the greatest number of new jobs and generates the largest amount of sales due to construction within the PSA, approximately 10.4 percent more than Option B and 9.8 percent more than the Underground Emphasis LRT Alternative. Considering job creation and increase in sales due to operations costs, the impact of the At-Grade Emphasis Alternative is 7.5 times larger than that of the Underground Emphasis LRT Alternative. The true impact of these alternatives can be seen by combining the effects of both the Capital Cost and Operations Cost. The At-Grade Emphasis LRT Alternative Option A creates 23,159 jobs and 2.17 billion dollars in sales, approximately ten percent more than Option B, and 14 percent more than the Underground Emphasis LRT Alternative.

4.14.3.4 Construction Spending on the Regional Economy

Direct investment in capital construction costs also leads to investment from businesses in the area looking to take advantage of the increase in employment activity, and purchase of supplies and equipment. This investment is considered indirect investment. Both direct investment and indirect investment streams provide businesses revenue and personal income, and income spent throughout the economy supports other jobs and related spending referred to as induced impacts. Table 4-21 displays the effects of the Regional Connector on these forms of indirect investment.

Using the SCAG regional multiplier for transportation construction and capital construction costs for the project, the indirect economic impacts of the project were identified. The results of this analysis are summarized in Table 4-21.

As previously described, the direct investment made in Option A generates the largest indirect and induced investment and income in the PSA. The total impact of Option A is $520.1 million in investment and $277.5 million in income, 10.4 percent greater than Option B and 9.9 percent greater than the Underground Emphasis LRT Alternative.

Table 4-21 Indirect Effects of Regional Connector Direct Investment (in thousands of dollars)			
Alternatives	At-Grade (Option A)	At-Grade (Option B)	Underground
Indirect Investment	$213.42	$193.19	$194.23
Indirect Jobs	1193.78	1080.60	1086.40
Income from Indirect Investment	$95.18	$86.16	$86.62
Induced Investment	$307.09	$277.97	$279.47
Induced Jobs	2513.22	2274.94	2287.17
Induced Income	$182.32	$165.04	$165.92

4.15 Safety and Security

The purpose of this section is to characterize existing and future safety and security issues for passengers, pedestrians, motorists, and the surrounding community. This section will identify any potentially significant safety and security impacts that could occur due to transit improvements related to the project. Of concern is the potential for pedestrian and vehicular conflicts. Another aspect of this study is security, particularly whether the proposed alignment alternatives and related transit center would compromise the security of transit patrons or surrounding communities making them more susceptible to criminal activity.

4.15.1 Affected Environment

In this study, two potential routes – the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative - are analyzed for safety and security impacts. The PSA encompasses approximately two square miles of downtown Los Angeles and includes the communities of Little Tokyo, the Arts District, the Historic Core, the Toy District, Bunker Hill, the Financial District, the Jewelry District, and Civic Center. It extends from the Metro Blue Line terminus at 7th St. and Wilshire Blvd. in downtown Los Angeles to the vicinity of the Metro Gold Line Eastside Extension station at 1st and Alameda Streets.

The At-Grade Emphasis LRT Alternative assumes street running operations, which allows the operators of light rail vehicles to operate under existing traffic signals. Typically, crossing gates and railroad warning bells and lights are not warranted for street-running operations due to the low operating speeds of light rail vehicles and vehicular traffic. This aspect of the project has not been determined. The current concept is to extend dual track service from the Metro Gold Line at Temple St. using a "Y" track configuration across Alameda St. Auto traffic would be routed into a new underpass underneath the tracks, and pedestrians would use a new overpass to traverse the intersection. The tracks would extend to the west across Alameda St. and run along the south side of Temple St.

As trains continue west on Temple St. in a dual track configuration, the trackway will return to the center of Temple St. As the trackway arrives at Los Angeles St., the alignment splits into two single track alignments. One trackway would continue west to Main St. while the other trackway continues south on Los Angeles St. The alignments would run on the eastern side of both streets and a split station would be planned for each alignment just north of 1st St. The alignment then would continue south across 1st St. At 2nd St., the alignment on Los Angeles St. heads west where it then reconnects with the alignment on Main St. Both alignments would return to a dual track configuration and be located on the northern side of 2nd St., heading west until Spring St. At Spring St., the train would move to the southern side of 2nd St. as it continues west.

As the alignment continues west past Hill St., the tracks would run along the southern side of 2nd St. and enter into the existing 2nd St. tunnel. This alignment would then reduce the 2nd St. tunnel from four travel lanes to about two travel lanes. About half-way through the 2nd St. tunnel, the alignments would veer to the south punching through the tunnel wall. This would place the alignment in close proximity to Grand Ave. and a potential second station would be located in this vicinity.

Using the natural grade of the hillside, the alignment would then resurface just north of 3rd St. It would cross 3rd St. at-grade and continue south on Flower St. A third station is contemplated either at-grade or underground south of 3rd St. to just south of 5th St. Station opportunities at 3rd St. are at-grade (Option B) while stations just south of 5th St. (Option A) will need to be underground. The alignment then directly connects to the 7th St./Metro Center Station under Flower St. The Option A configuration will be 46 percent underground and 54 percent at-grade. The Option B configuration will be 38 percent underground and 62 percent at-grade.

The Underground Emphasis LRT Alternative would run entirely underground under Flower St. and 2nd St. until just beyond Central Ave., emerging to the surface before crossing Alameda St. and 1st St. at-grade and connecting to the existing station. Auto traffic would use a new underpass below the tracks at 1st St. and Alameda St. and pedestrians would cross the intersection using a new overpass. The Underground Emphasis LRT Alternative would be 94 percent underground and six percent at-grade with three underground stations.

4.15.1.1 Existing Conditions

The PSA is located in Los Angeles' dense central business district. As such, it routinely experiences high volumes of pedestrian, automobile, and track traffic. Traffic volumes in downtown Los Angeles vary considerably from block to block, and tend to be highest on streets that provide direct access to one of the nearby freeways. The busiest streets in the area include 3rd, Spring, Alameda, and Figueroa Streets. Single direction traffic volumes along some blocks are in excess of 30,000 cars per day and 3,000 during the peak hour, as is the case on much of Figueroa St. One-way configuration on some streets provides some additional capacity and signal timing efficiency, but not enough to eliminate congestion during peak hours. Truck traffic frequently uses the streets in the eastern portion of the PSA to access the industrial and warehouse districts in that area. The

trucks often have difficulty navigating the narrow streets in the area, especially when turning movements are necessary, thus creating additional traffic hazards.

Emergency vehicles frequently traverse the PSA, creating a need for streets to be clear and accessible for emergency vehicle movements. Emergency vehicle trips typically originate from one of the fire or police stations in the area. The PSA contains one fire station, at 1st and Figueroa Streets, and there is another near the PSA just southwest of 7th and San Pedro Streets. There are also two police stations in the PSA: one near 6th and Los Angeles Streets, and the central police headquarters at Parker Center, just north of 1st St. between Main and Los Angeles Streets. It should be noted that the Parker Center facility will be demolished and the police headquarters relocated to 1st and Main Streets once the new building is completed. Given the density of activities and floor space in the PSA, and the concentration of emergency facilities in the Civic Center and industrial district, Regional Connector stations and right-of-way will be designed to maintain emergency vehicle response times and not impede access to stations or the surrounding streets.

4.15.2 Evaluation Methodology

Safety relates to 1) protection of people from accidental occurrences that could injure or harm them and 2) protection of property from such accidents. For this study it includes safety of motorists and pedestrians in locations where they would cross the light rail vehicles rights-of-way, enter the stations, or encounter other transit facilities.

Security relates to 1) protection of people from intentional acts that could injure or harm them and 2) protection of property from such deliberate acts. Topics discussed include crime prevention, law enforcement, and protection against terrorism.

Pedestrian and motorist safety along the alternatives are evaluated on a qualitative level based on the experience of similar LRT systems with similar alignment types such as the Metro Blue Line, Portland MAX Line, and Hudson-Bergen Weehawken Line. For the purpose of this study it is considered that a significant safety or security impact would occur if:

- Operation of the project would result in motor vehicle accident rates that would be greater than current motor vehicle accident rates;
- Operation of the project would introduce a new hazard without adequate safety measures designed into the project to prevent accidents;
- Operation of the project would introduce a hazardous situation that would encourage people to take unsafe actions, such as providing a circuitous route for pedestrians, thereby encouraging them to jaywalk, or violate traffic signals and controls;
- The project would create a condition that facilitates criminal activity; or
- The project would create an opportunity for terrorism with a moderate to high likelihood that such an act would be perpetrated.

4.15.3 Environmental Issues

4.15.3.1 Pedestrian Safety

The introduction of a new LRT alignment will have various safety impacts. Pedestrian traffic is at a relatively high level in the PSA. For the most part, pedestrian density is most concentrated in the vicinity of the commercial and governmental facilities in the downtown segment.

At-Grade Emphasis LRT Alternative

For the at-grade alignment the following potential significant safety hazards are present:

- Passenger safety at station locations: The at-grade location of stations may introduce a new safety hazard for pedestrians if the stations do not adequately account for pedestrian traffic and movement. This hazard would be present irrespective of the frequency of occurrence. The occurrence of this hazard may be attributed to the inherent purpose of a station, where large numbers of people congregate and cross the trackway to access or depart. Pedestrian traffic stations could thus create a potential hazard of collision between pedestrians and light rail vehicles (LRVs). Anticipated passenger loads and pedestrian counts will be used to determine the most appropriate pedestrian treatments to control and channel pedestrian/passenger movements. Additionally, stations will be appropriately sized to accommodate the anticipated number of passengers.

- Pedestrian safety near the trackway: The addition of the LRV themselves would be the primary new safety hazard for pedestrian traffic. The speed of the vehicles would be similar to or slower than the adjacent automobile traffic. The LRV would be electrically powered and, therefore, would be quieter than most of the automobile traffic and may not be easily heard. This hazard includes crossings at intersections where pedestrians cross over the light rail tracks and intrusion on the right-of-way (trespassing). Channelization techniques would be used to direct pedestrians to designated pedestrians crossings and to minimize trespass. Pedestrian conflicts with trains would be minimized at the intersection of Temple St. and Alameda St. due to the construction of a new pedestrian overpass. LRVs are equipped with audible warning bells and horns which will be used, as appropriate, to alert pedestrians of the approach of a train.

- Pedestrian safety at designated grade crossings: Pedestrian safety at designated grade crossings is a key factor to be considered in the design of LRT alignments. A number of designated pedestrian grade crossings would result from the Regional Connector. A vast majority, if not all, of these pedestrian crossings would be located at motorist crossings of the tracks. A potential safety hazard would exist if pedestrians attempt to cross the tracks at locations other than designated pedestrian crossings because of the distance between designated grade crossings. In addition, potential riders who see a train approaching may cross streets and the tracks illegally in order to avoid missing the train in much the same way as these violations occur at existing bus stops and LRT stations. Also, departing passengers may be tempted to take shortcuts from station

areas to access nearby destinations instead of crossing at the designated crossings. Pedestrian traffic control and channelization techniques would be used to control pedestrian movements at intersections and encourage the use of pedestrian crossings.

Underground Emphasis LRT Alternative

There is no significant pedestrian safety issue for the Underground Emphasis LRT Alternative. This alignment would be 94 percent underground with all underground stations and only six percent of the alignment at-grade. The only at-grade crossing, at 1st St. and Alameda St., will have a pedestrian overpass that eliminates pedestrian-train conflicts. However, station designs that do not adequately account for passenger loads may cause overcrowding. Awaiting passengers may be injured by an approaching train if they do not heed warnings to stand clear of the platform edge as the train enters the station.

4.15.3.2 Motorist Safety

At-Grade Emphasis LRT Alternative

In the downtown area, the LRV would operate within the existing streets at street level. The at-grade right-of-way will be semi-exclusive as auto traffic will be generally prohibited from entering the LRT right-of-way; in general, the rail traffic would be separated from automobile traffic by curbs or other raised delineators. The only place that automobile traffic would be permitted in the right-of-way would be at street crossings. The LRV would be required to observe all traffic laws just as a car or bus would, including stopping for red lights. The LRV would also be required to yield to emergency vehicles at intersections.

Because the LRV would share the same right-of-way with automobiles and because it would be possible for automobiles to stray into the semi-exclusive rail right-of-way in other locations (by going over the curb), accidents between the LRV and motor vehicles would be possible. However, studies have shown that LRV collisions with motor vehicles at non-intersection locations are extremely rare.

At intersections, the single most frequent cause for motor vehicle/light rail accidents is when motorists turn left in front of a light rail vehicle (with the light rail vehicle traveling in the same direction). In order to reduce this risk it is assumed that a left turn from the 2nd St. or from the side streets to 2nd St. would not be permitted when LRVs are approaching the intersection from either direction.

Other accidents between LRVs and motorists stem from motorists disobeying red light signals. The LRV operators would have audible warning devices available to alert unwary drivers to the risk of accidents. Additionally, active “Train Approaching” signs may be used to further alert drivers of the approach of a train. Although all such accidents may not be totally prevented, studies have found active “Train Approaching” signs to greatly reduce the likelihood of a collision. Traffic signal phasing (all-red phase and lagging left turns) has also proven to be effective in reducing LRV and motor vehicle collisions. Train and automobile traffic would be grade-separated at the intersection of Temple and

Alameda Streets, thus providing increased safety. Furthermore the low operating speeds of the LRV and motor vehicles reduces the possibility of serious injury or damage.

Underground Emphasis LRT Alternative

There would be fewer adverse motorist safety issues for the Underground Emphasis LRT Alternative, and they would be concentrated around one intersection: 1st and Alameda Streets. This is the only grade crossing on the alignment, which would have all of its stations and 94 percent of its tracks underground. In order to reduce conflicts between train movement, automobile traffic, and pedestrian crossings at 1st and Alameda Streets, a new overhead pedestrian bridge would be constructed and automobile traffic on Alameda St. would be routed into a new underpass.

4.15.3.3 Security

This evaluation was conducted by using available crime statistics for the City of Los Angeles and reviewing other transit systems in the United States that are similar to these alternatives.

A Threat and Vulnerability Analysis (TVA), recommended by the Federal Transit Administration, will be conducted for whichever alternative is selected. This process will give a more refined and detailed study/analysis of the security environment, identifying domestic and international security threats, potential vulnerabilities/shortcomings in the transit system, and then making recommendations to reduce these vulnerabilities to acceptable levels.

The process for determining vulnerabilities begins with the identification and grouping of transit agency assets based on the criticality to transit operations, their attractiveness as targets for security breaches or terrorist attack, and their vulnerability to the impacts of a successful breach or act of terrorism. Critical assets are defined as the specific assets most critical to the Metro's ability to provide transit services and to protect people. Threat types are then identified using existing crime statistics for the area as well as threat information received from local state and federal law enforcement sources. Each critical asset is then assessed for its vulnerability of each potential threat, coupled with the frequency probability of each threat actually occurring. Severity of consequences for each threat is then given a rating from catastrophic to negligible. This information is then put into a criticality matrix which organizes the resulting consequences into categories of high, serious, and low. The matrix helps to prioritize consequences and to focus available resources on the most serious threats requiring resolution while effectively managing the available resources.

The affected environment is the security on the rail system, both at the stations and in the light rail vehicles. Passengers, transit employees, vendors, contractors and the general public who come in contact with the system, as well as the transit property and equipment, would be susceptible to the same crimes as experienced in the surrounding neighborhood, by both build alternatives.

The Underground Emphasis LRT Alternative; however, does present a different set of conditions than the At-Grade Emphasis LRT Alternative.

- Activity in the underground station and tunnel would be out of the general public view, and less observable by routine neighborhood security/police patrols in the general area, as compared to being at grade level.
- Tunnels offer non-domiciled persons refuge from the elements.
- Staircases and passageways may create opportunities for criminal activity.
- Tunnels offer a greater consequence to train service should trespassers enter; clearance and concealment issues may arise.

Employing closed-circuit television cameras, intrusion detection systems and/or dedicated security patrols mitigates these potential vulnerabilities. Additionally, the presence of transit workers in underground stations further dissuades persons from committing offenses. Several underground systems in the United States have successfully employed security technology and patrol methods to mitigate crime conditions in below-grade systems, resulting in fewer offenses committed in the transit system than in the adjacent neighborhoods they traverse.

The Underground Emphasis LRT Alternative offers a few unique security advantages not present with grade level systems:

- One distinct advantage is service operations during civil unrest, demonstrations and other public events that may occur, and historically have occurred, in the specific area for this project. Major public events, whether they are legal or unauthorized, will have a much greater impact on grade level light rail operations than on the alternative below-grade. Protesters, demonstrators and other unauthorized gatherings occur on street level, and can easily impede service, many times intentionally, for the added media exposure to their cause. This condition is highly improbable for below-grade service, as experienced in many cities with tunnel operations. Additionally, civil unrest or legal demonstrations and parades pose little risk of damage to underground systems and equipment as compared to the light rail equipment and station facilities at grade level.

Another distinct security advantage the Underground Emphasis LRT Alternative has over the At-Grade Emphasis LRT Alternative is the ability of closing and maintaining control of the system. All activity is easily controlled when there are limited access points to a system.

4.16 Construction Impacts

This section describes the expected construction methods and existing construction conditions. The conditions described in this section would only occur during construction and would be temporary and short-term.

4.16.1 Affected Environment

4.16.1.1 Construction Methods

Construction of either of the two build alternatives would employ conventional construction techniques and equipment typically used in the Southern California region for LRT projects. Major project elements include construction of guideway and trackwork, underground stations and tunnels, at-grade station platforms, installation of specialty system work, such as traction power, communications, and signaling and an underground guideway. The equipment that would be used during construction would include rail-mounted equipment, graders, dozers, cranes, cement-mixers, flat-bed trucks, and dump trucks to haul dirt and spoil materials, and tunnel boring machines.

Construction of either of the two build alternatives would be accomplished in approximately three to four years. The various work activities to be performed over the estimated construction period would include the following facility and system items:

- Demolition of roadways along alignment
- Demolition of existing buildings (if necessary)
- Construction of retaining walls for approaches to portal structures and shallow trenches
- Construction of tunnels, portal structures, cut and cover tunnel sections, and underground stations
- Relocation, modification, or protection in place of utilities in conflict or impacted by excavations for street-level trackwork, tunnels, bridge, and station construction
- Construction of at-grade station platforms using typical construction methods
- Construction of underground duct banks for electrical power feeds and for signaling/communications systems
- Construction of surface drainage systems and sub-drainage
- Construction of traction power substations with electrical power feeds
- Construction of overhead catenary pole foundations or alternative power distribution support systems and street lighting
- Installation of traffic signals and train control improvements
- Installation of overhead catenary wires, support brackets, feeder cables, and other components or alternative power distribution systems

- Installation of trackwork, including preparation of track bed and slab, rail, fasteners, and infill concrete in street-level area, and with direct fixation fasteners on the aerial guideways
- Construction of station finishes, such as canopies, fare vending equipment, station furniture, ramps, landscaping, public art, and all other amenities necessary for a functional station
- Conduction of subsystem and system testing
- Conduction of simulated operation test runs and final commissioning of the system
- Removal of all equipment, landscaping and structures along the alignment
- Relocation of any structures or landscaping from the right-of-way as required by Metro

4.16.1.2 General Construction Scenario

Surface streets in the downtown Los Angeles area would be impacted for a period ranging from 12 to 36 months. Construction would begin simultaneously at several locations along the alignment to accommodate activities requiring lengthy constructions times, such as the tunnels and underground stations, and to complete the various segments simultaneously.

Many contractors specializing in various methods of construction would be working on the proposed project for the overall length of the construction period. The physical construction would involve the application of the most suitable method for each segment of the proposed project. A representative sequence of construction is shown in Table 4-22. Many of the project elements would be constructed simultaneously for an overall duration of three years.

4.16.1.3 Regulatory Framework

Construction of the project would follow all applicable local, state and federal laws for building and safety. The Metro Fire Life Safety Committee, composed of members from the City and County of Los Angeles Fire Departments and Metro specialists, would approve all construction methods. Working hours would be varied to meet special circumstances. Standard construction methods would be used for traffic, noise, vibration and dust control, consistent with all applicable laws, and as described in the following paragraphs. For several months before passenger service begins, pre-revenue operations would be conducted to familiarize train operators with the new alignments and emergency operating procedures.

4.16.1.4 Existing Conditions

The proposed project would be constructed in several segments and would involve concurrent construction at each end. Each segment of the proposed project has its own set of construction constraints. The following subsections address the existing setting and some of the existing construction constraints.

Table 4-22 Typical Sequence of Construction Activities		
Activity	Tasks	Average Time Required (months)*
Site Survey	Locate utilities, establish right-of-way and project control points and centerlines, and relocate survey monuments	4 to 6
Site Preparation	Relocate utilities and clear and grub right-of-way (demolition), widen streets, establish detours and haul routes, erect safety devices and mobilize special construction equipment, prepare construction equipment yards and stockpile materials	12 to 18
Heavy Construction	Construct tunnels, street guideways including trackbed, subway stations and portals, trenches, piles, and disposal of excess material. Refinish roadways and sidewalks.	24 to 30
Medium Construction	Lay track, construct surface stations, drainage, backfill and pave streets.	12 to 24
Light Construction	Finish work, install all systems elements (electrical, signals, and communication), street lighting where applicable, landscaping, signing and striping, close detours, clean-up and test system.	4 to 6
Pre-Revenue Service	Test communications, signaling, and ventilation systems, train operators and maintenance personnel	3 to 6

* Some of these activities would be completed simultaneously.
Source: TAHA, 2007

7th St./Metro Center Station Area (Southern Terminus)

The southern terminus of the proposed project would be located at the existing 7th St./Metro Center Station that is currently served by the Metro Blue, Red, and Purple Lines and, by project build-out, would also be serviced by the Metro Expo Line. The proposed project would be built on the first underground level, where the Metro Blue Line currently operates. The proposed project would be an extension of the tracks currently in use by the Metro Blue Line and the tracks under construction for the Metro Expo Line. For the proposed project, the tracks would utilize the same Metro Blue Line alignment underneath Flower St. The Metro Red and Metro Purple Lines operate on a level below and perpendicular to the Metro Blue Line alignment.

Flower St. to 3rd St.

Flower St. is a three- to four-lane, 80- to 100-foot-wide roadway running north-south in downtown Los Angeles. From 7th to 3rd Streets, Flower St. is one-way in the southern direction with a Bus-Only lane in the opposite direction from 4th St. to 3rd St. Flower St. is a fully urbanized street with little to no building setbacks. Fourth St. is grade-separated from Flower St. There are mainly commercial sites along Flower St., including the Bonaventure Hotel, the Central Library, Wells Fargo Plaza, and National Bank Plaza.

3rd St. to 2nd St. Tunnel

From Flower St., the proposed alignments would travel in or beneath the existing 2nd St. tunnel. The area around 3rd and 2nd Streets from Flower St. to Hill St. (where the 2nd St. tunnel daylights) is comprised mainly of residential towers, with cultural venues, such as the Disney Hall and the Music Center, in the vicinity. The 2nd St. tunnel is bi-directional, connecting Hill and Figueroa Streets.

2nd St. to Little Tokyo/Arts District Station

2nd St. from Hill to Alameda Streets is a two-way street with one traveling lane in each direction, approximately 60 to 65 feet wide. Parking is permitted on one or both sides of 2nd St., depending on the neighborhood. There are several commercial, residential, and civic properties along 2nd St. The Los Angeles Police Department (LAPD) headquarters currently under construction and the California Department of Transportation (Caltrans) building are located adjacent to 2nd St. 2nd St. is the main street crossing Little Tokyo village, which is a cluster of restaurants and retail shops that is a visitor destination. From Central Ave. to Alameda St., 2nd St. is characterized by a commercial center and parking lots.

Main St. and Los Angeles St. to Temple St.

Main St. from 2nd to Temple Streets is characterized mainly by civic buildings, including the LAPD headquarters currently under construction, the Caltrans building, City Hall and City Hall East, court buildings, and the Los Angeles Mall. Main St. is a one-way street in the northern direction, approximately 80 feet wide. Los Angeles St. is characterized by commercial properties. Los Angeles St. is a two-way street with two to three lanes in each direction, approximately 80 feet wide. Parking is allowed on either side of the street.

Temple St. to Little Tokyo/Arts District Station

Temple St. from Main to Alameda Streets is a two-way street with two traveling lanes in each direction, approximately 80 feet wide. Temple St. terminates at Alameda St and is characterized by parking lots, large skyscrapers on the northern side, civic buildings and museums (Japanese American National Museum, The Geffen Contemporary at the Museum of Contemporary Art [MOCA]).

4.16.2 Evaluation Methodology

The construction of the proposed project would employ conventional construction methods, techniques, and equipment and would conform to accepted industry specifications and standards. Major elements of the proposed project include the construction of guideways and trackwork, underground stations and tunnels, at-grade station platforms, and below-grade separations. The analyses in this section evaluates how construction of the proposed project would affect traffic, parking, equity and environmental justice considerations, land use/neighborhoods, land acquisition/ displacement and relocation, visual quality, air quality, noise and vibration, geology, soils, and seismicity, water resources, biological resources, energy resources, safety and security, community facilities, hazards, and cultural resources.

4.16.3 Environmental Issues

This section discusses the primary environmental issues related to construction for all the environmental topics to be covered in the EIR/EIS. Each topic will be covered in more detail within specific sections of the EIR/EIS.

At-Grade Emphasis LRT and Underground Emphasis LRT Alternatives

- Construction Staging: The location of storage of construction materials and equipment, and spoils staging associated with the construction of the proposed project, at-grade or underground, can in itself be a significant impact when space is limited. Downtown Los Angeles is a fully urbanized, mostly built out area that offers very few locations for construction staging and debris relocation for any significant period of time. Impacts associated with construction staging include impacts to traffic and existing transit circulation either by the location of the staging areas or by trucks and equipment accessing these areas, proximity to sensitive receptors, both in the daytime and nighttime, amount of storage materials and/or equipment, and length of use of staging area.

- Air Quality: Construction air quality impacts tend to be short-term and are associated mainly with fugitive dust. The alignment and construction staging areas could concentrate particulate matter during the construction period and have potential impacts.

- Transportation and Traffic: Traffic and transportation impacts could be short-term (haul routes, traffic detours, street closures) or permanent (parking displacement, transit re-routing). Construction vehicles could temporarily impede traffic mobility in areas of construction. Traffic detours and truck routes would be required during construction.

- Emergency Response Times/Fire and Police Services. Potential impacts to response times or access pathways for emergency vehicles could result from street closures, detours, or from the presence of construction trucks and other equipment in the downtown area.

Underground Emphasis LRT Alternative

- Vibration: The use of boring equipment or other equipment to shore-up the tunnel and associated structures could produce vibration impacts not associated with at-grade construction.

- Soil Stability and Subsidence: Tunneling technology has improved over time and new innovations are making this type of work safer. However, the proposed project would be tunneling under a heavily urbanized area with many historic and iconic buildings in downtown Los Angeles that tend to have basements outside their parcel boundaries (i.e. basements extending under adjacent sidewalks).

- Safety and Emergency Response. Although tunneling has improved over the years, potential impairment of emergency services remains a significant issue.

- Historic Resources. Construction could impact historic or iconic structures in downtown Los Angeles, such as the Central Library, the Bonaventure Hotel, and National Bank Plaza. Additionally, there is a possibility of encountering archaeological and paleontological resources, as well as human remains.

4.17 Growth-Inducing Impacts

The following sections describe current conditions and possible growth-inducing impacts that the Regional Connector may have, not only to the PSA, but the region as a whole.

4.17.1 Affected Environment

4.17.1.1 Regulatory Framework

Guidance for the preparation of growth-inducing impacts comes from both federal and State regulations. The regulations established by the Council on Environmental Quality (CEQ), regarding the implementation of the National Environmental Policy Act (NEPA), require the evaluation of all potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine the indirect consequences, or secondary impacts, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 CFR 1508.8). Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. CEQA Guidelines Section 15126.2(d) require that environmental documents "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Growth-inducing impacts also include removing obstacles to growth and may potentially include changes in the amount and distribution of growth.

Regional Growth Management Plans: The primary regional growth management plans are developed by the Southern California Association of Governments (SCAG), including the 2008 SCAG Regional Comprehensive Plan and Guide (RCPG). The RCPG describes an action plan for the implementation of short-term strategies and strategic, long-term initiatives and guiding principles for sustaining a livable region. The RCPG focuses on specific areas of planning or resource management, including land use and housing, open space and habitat, water, energy, air quality, solid waste, transportation, security and emergency preparedness, and the economy. The Growth Management chapter of the RCPG addresses issues related to growth and land use in the SCAG region and describes guiding principles for development that support the overall goals of the RCPG.

Compass Growth Vision Principles for Sustaining a Livable Region: SCAG initiated a comprehensive growth visioning process called the Southern California Compass. The Compass process seeks to accommodate growth while maintaining mobility, livability, prosperity, and sustainability goals for residents in the SCAG region.

4.17.1.2 Existing Conditions

The PSA is located in the downtown area of the City of Los Angeles and includes several communities within the City of Los Angeles, including the Financial District, Bunker Hill, Civic Center, Little Tokyo, Fashion District, Toy District, Historic Core, Jewelry District, and Central City East. SCAG is the federally designated Metropolitan Planning Organization

(MPO) for six counties in Southern California (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). SCAG's mission is to develop long-range regional plans and strategies that provide for efficient movement of people, goods, and information; enhance economic growth and international trade; and improve the quality of life for the Southern California region. SCAG is divided into 14 subregions. The PSA is in the City of Los Angeles Council of Governments (CLACG) subregion, which in addition to the City of Los Angeles also includes the City of San Fernando and portions of the unincorporated areas of Los Angeles County.

Regional Population and Housing

As illustrated in Table 4-23, the SCAG region has an existing population of approximately 18.9 million people. For the 1990 to 2008 time period, Los Angeles County contributed the largest share of total growth for the region, at 37 percent, with the addition of 1,588,570 residents. However, in terms of the relative growth rate, Los Angeles County was the slowest growing county in the SCAG region, with an annual average growth rate of approximately one percent.

Table 4-24 demonstrates that Los Angeles County has the largest number of households (3,299,573 households) in the six-county SCAG region. The total households in Los Angeles County alone comprise 56 percent of the total SCAG region.

Table 4-23 Regional Population Growth, 1990 – 2008

County	1990 Total Population	2000 Total Population	2008 Population	1990-2008 Population Change	1990-2008 Annual Average % Change
Los Angeles	8,863,164	9,519,338	10,451,734	1,588,570	0.99%
Imperial	109,303	142,361	187,001	77,698	3.90%
Orange	2,410,556	2,846,289	3,212,949	802,393	1.85%
Riverside	1,170,413	1,545,387	2,118,178	947,765	4.50%
San Bernardino	1,418,380	1,709,434	2,097,756	679,376	2.66%
Ventura	669,016	753,197	841,985	172,969	1.44%
SCAG Region	14,640,832	16,516,006	18,909,603	4,268,771	1.62%

Source: Southern California Association of Governments, 2008 population growth estimates

Regional Employment

As demonstrated in Table 4-25, total employment in the SCAG region, including self-employment, is estimated to have increased by nearly 1.3 million jobs between 2000 and 2008.

4.17.1.3 Regional Growth Projections

As shown in Table 4-26, the SCAG region is expected to have a population of approximately 23 million people and approximately 10.5 million jobs by 2030. Along with the population and job growth, the region is expected to experience an increase from approximately 4.1 to 7.6 million households.

Table 4-24 Households in the SCAG Region, 2008	
County	**Number of Households**
Los Angeles	3,299,573
Imperial	52,323
Orange	1,015,906
Riverside	677,256
San Bernardino	612,859
Ventura	269,066
SCAG Region	5,926,983

Source: Southern California Association of Governments, 2008 Household estimates

Table 4-25 Regional Employment Growth, 2000-2008				
County	2000 Total Employment	2008 Employment	2000-2008 Employment Change	2000-2008 Annual Average % Change
Los Angeles	4,079,800	4,490,248	410,448	1.26%
Imperial	50,400	67,130	16,730	4.15%
Orange	1,396,500	1,699,475	302,975	2.71%
Riverside/San Bernardino	1,010,100	1,498,958	488,858	6.05%
Ventura	294,300	362,209	67,909	2.88%
SCAG Region	6,831,100	8,118,020	1,286,920	2.35%

Source: State of California, Employment Development Department, Labor Market Information Division, Industry Employment and Labor Force by Annual Average, March 2006 Benchmark, May 18, 2007; SCAG, 2008 Population Growth Estimates

Table 4-26 Regional Population, Households, and Employment, 2030			
County	Population	Households	Employment
Los Angeles	12,221,799	4,120,270	5,660,992
Imperial	269,874	83,735	111,072
Orange	3,552,742	1,098,474	1,921,806
Riverside	3,143,468	1,127,780	1,188,976
San Bernardino	2,713,149	897,739	1,178,890
Ventura	989,765	332,109	465,466
SCAG Region	22,890,797	7,660,107	10,527,202

Source: Southern California Association of Governments, 2004 RTP

4.17.1.4 PSA Growth Projections

Table 4-27 shows the population, housing, and employment projections that are estimated for the PSA, the City of Los Angeles, and the CLACG subregion. For population, between 2005 and 2030, the City of Los Angeles and the CLACG subregion are expected to have a slightly higher annual average population growth rates (0.4 percent) than the PSA (0.3 percent). However, for housing, during the same time period, the PSA is expected to have a higher average annual growth in the number of households (1.2 percent) compared to the City of Los Angeles and the CLACG subregions (both 1.0 percent).

Table 4-27 Population, Housing, and Employment Growth for the Project Study Area, City of Los Angeles and CLACG Subregion, 2005-2030

Element	2005	2030	2005-2030 Population Change	2005-2030 Annual Average % Change
Population				
PSA /a/	77,823	83,492	5,669	0.3%
City of Los Angeles	3,950,347	4,309,625	359,278	0.4%
CLACG subregion	4,032,474	4,413,425	380,951	0.4%
Housing				
PSA/a/	24,049	31,244	7,195	1.2%
City of Los Angeles	1,311,134	1,637,475	326,341	1.0%
CLACG subregion	1,330,724	1,663,002	332,278	1.0%
Employment				
PSA /a/	288,990	314,936	25,946	0.4%
City of Los Angeles	1,800,766	2,223,338	422,572	0.9%
CLACG subregion	1,833,577	2,265,209	431,632	0.9%

/a/ Project Study Area is comprised of the following Census block groups: 1976, 2060.20, 2060.30, 2060.40, 2060.50, 2062, 2063, 2071, 2073, 2074, 2075, 2077.10, 2079, 2080, 2083, 2092, 2093, 2100.10, 2260
Source: SCAG 2004 Regional Transportation Plan

Table 4-27 shows projected employment growth for the PSA, the City of Los Angeles, and CLAGC subregion. It is estimated that 25,946 new jobs would be created in the PSA from 2005 to 2030, with an annual average growth rate of 0.4 percent. This rate is lower than the average annual rate for the City of Los Angeles and the CLAGC subregion over the same time period (both 0.9 percent).

4.17.2 Evaluation Methodology

Federal Transit Administration (FTA) guidelines require that regional growth projections be created by the MPO, assuming future year conditions. As mentioned in Section 4.17.1.2, SCAG is the MPO for the PSA. In order to evaluate growth-inducing impacts, the SCAG 2004 Regional Transportation Plan will be used. The RTP examines current and future transportation plans, population and employment growth, and land use data for the SCAG region to develop projections through the year 2030. The 2004 SCAG RTP serves as the basis for this analysis of growth-inducing impacts.

4.17.3 Environmental Issues

Population and Housing Growth

Fundamentally, mass transit projects do not tend to induce growth directly, except at the station level where there is opportunity for transit-oriented development (TOD). The PSA serves as a hub for most Metro buses, Metro Rail, and for bus and rail services provided by other entities, such as the Foothill Transportation Authority, the Orange County Transportation Authority, and the Montebello Bus Line. Also, the downtown Los Angeles area has recently experienced a significant rise in high-density residential development and, consequently, an increase in the number of residents in the area. Therefore, due to the high amount of transit and the high density, both residential and commercial, downtown Los Angeles already functions as a TOD. Implementation of the Regional Connector would not directly induce growth in the downtown Los Angeles area. However, it would facilitate certain developments, such as the Bunker Hill Design for Development and the Grand Avenue Project, reach their goals of more transit-oriented development.

At a regional level, the increased connectivity between the San Gabriel Valley and the Westside or Long Beach areas would not potentially induce population or housing growth. Most of these areas are already fully urbanized so it is unlikely that the increased regional connectivity would induce housing construction.

Employment Growth

The PSA is already a center of employment for the Los Angeles region. The implementation of the Regional Connector would create employment opportunities in the downtown Los Angeles area, particularly in the construction phase. However, these construction jobs would be temporary. Similar to population and housing growth, the proposed project would not directly induce employment growth, but it could serve to facilitate the movement of employees anticipated by projects that are already planned, such as the Grand Avenue Project in Bunker Hill.

The proposed project would increase connectivity by reducing the need to make several transfers from one destination to another. While this alone could change some of the perceived employment opportunities for some individuals, it is unlikely that employment growth at any of the termini would occur.

4.18 Environmental Justice

This section describes the existing conditions related to environmental justice indicators within the PSA. A discussion of the Federal and State environmental justice regulations is provided along with a demographic profile of the PSA and proposed stations areas. Ultimately, the potential impacts on minority and low-income communities will be assessed to determine if there are potential impacts that would be disproportionately borne by minority or low-income communities.

4.18.1 Affected Environment

4.18.1.1 Regulatory Framework

On February 4, 1994, Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was signed into law. Executive Order 12898 requires federal agencies to achieve environmental justice by "identifying and addressing social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States."7 As Executive Order 12898 applies to the United States Environmental Protection Agency (EPA), environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or policies. Meaningful involvement means that (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants will be considered in the decision making process; and (4) the decision makers shall seek out and facilitate the involvement of those potentially affected.

In response to Executive Order 12898, the U.S. Department of Transportation (USDOT) issued an Order to Address Environmental Justice in Minority Populations and Low-Income Populations. This order, issued in April 1995, sets guidelines to ensure that all federally-funded transportation-related programs, policies, or activities that have the potential to adversely affect human health or the environment involve a planning and programming process that explicitly considers the effects on minority populations and low-income populations.

Following the lead of the environmental justice movement at the federal level, a series of laws beginning in 1999 have been enacted in California to implement environmental justice. The Governor's Office of Planning and Research (OPR) has been designated the "coordinating agency in state government for environmental justice programs." As part of its new environmental justice coordinator role, OPR must now incorporate environmental justice considerations into local government planning decisions. California law requires OPR to coordinate with federal agencies regarding environmental justice based on Executive Order 12898.

[7] Federal Highway Administration, http://fhwa.dot.gov, accessed February 1, 2008.

4.18.1.2 Existing Conditions - Socioeconomic Characteristics

Los Angeles County

As of the 2000 U.S. Census, 9,519,338 persons lived in Los Angeles County. Approximately 69 percent of the Los Angeles County population is characterized as minority. The largest minority population is Hispanic, making up approximately 45 percent of the total population. According to the 2000 U.S. Census, approximately 18 percent of Los Angeles County is characterized as low-income.

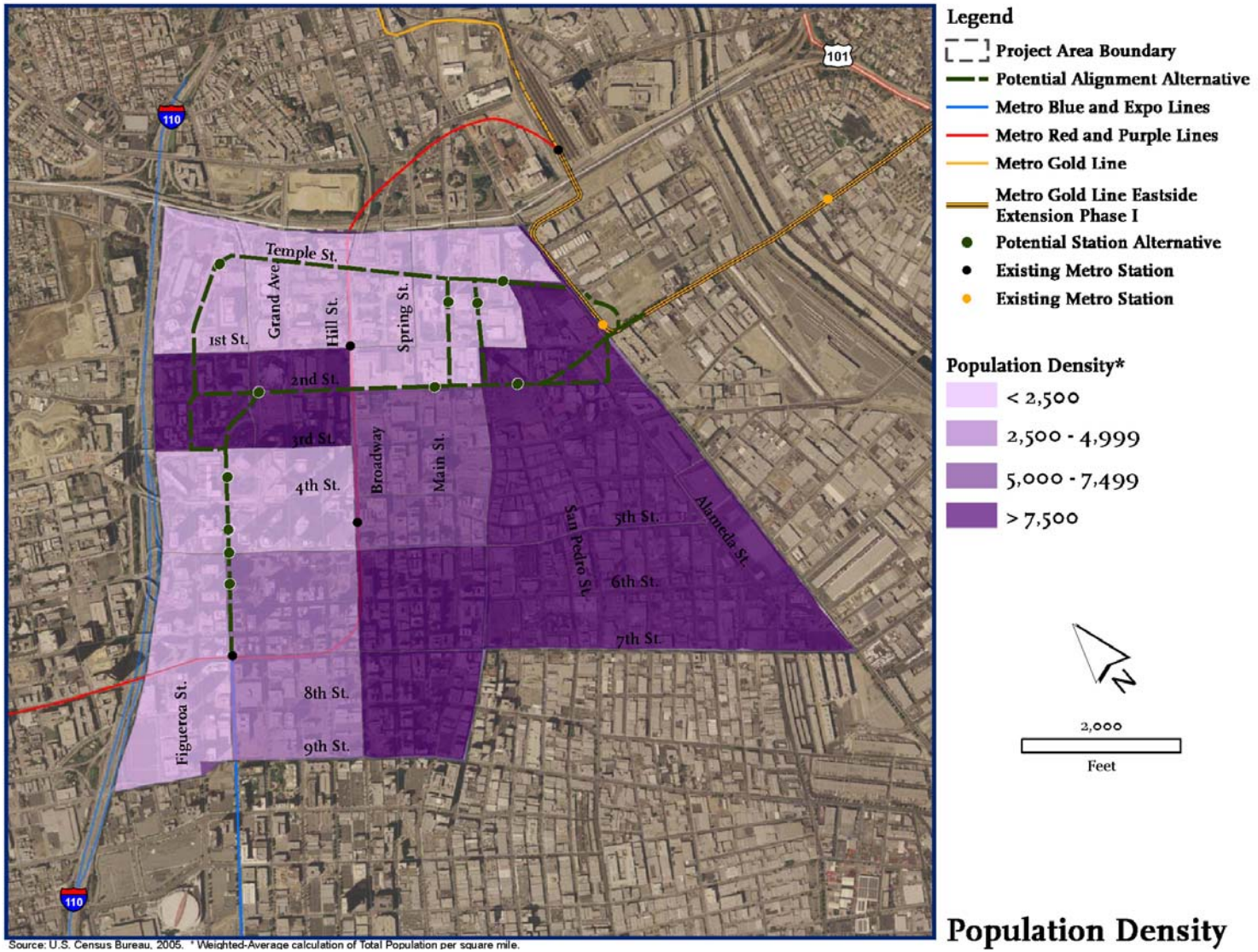
Project Study Area

The PSA is located entirely within the City of Los Angeles and includes several districts within the City of Los Angeles, including the Financial District, Bunker Hill, Civic Center, Little Tokyo, Fashion District, Toy District, Historic Core, Jewelry District, and Central City East. Little Tokyo is the only one of these communities that has been identified as an ethnic enclave, and where disproportionate impacts could occur. As shown in Table 4-28, as of the 2000 U.S. Census, there are 18,202 persons residing within the PSA. Based on the 2000 U.S. Census data, most of the PSA has a population density of less than 250 persons per acre (Figure 4-28). In addition, there are 9,150 households and approximately 300,000 jobs[8] within the PSA. The resident unemployment rate for the PSA is 35 percent, compared to the overall Los Angeles County unemployment rate of five percent.

Approximately 80 percent of the PSA population belongs to a minority group, as shown in Table 4-28. The minority group with the largest representation in the Regional Connector PSA is African-American (29.4 percent). The second and third largest minority groups in the Regional Connector PSA are Asian (24.5 percent) and Hispanics/Latinos (21.9 percent), respectively. The Regional Connector PSA is composed of less than ten percent of the following races: American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, or other race. Of the total population, 3.2 percent identify themselves as belonging to more than one race. Additionally, the percentage of White, Non-Hispanic for the PSA is approximately 20 percent. The demographic density for the PSA is shown in Figure 4-9.

The median household income in the PSA was $10,295 according to the 2000 U.S. Census. Of the various income levels shown in Table 4-28, the highest percentage of the working population (15 percent) earned less than $10,000 per year. In the 2000 U.S. Census, which is the latest census information, 92 percent of the PSA's population (16,722 persons) was evaluated for poverty status. Poverty status computations are derived by the U.S. Census using the Health and Human Services poverty thresholds (Table 4-29). As shown in the Table 4-28, 46.8 percent of the population in the PSA is living below the poverty threshold.

[8] Southern California Association of Governments (SCAG) 2004 Regional Transportation Plan.



Source: U.S. Census Bureau, 2005. * Weighted-Average calculation of Total Population per square mile.

Population Density

Figure 4-8 Population Density

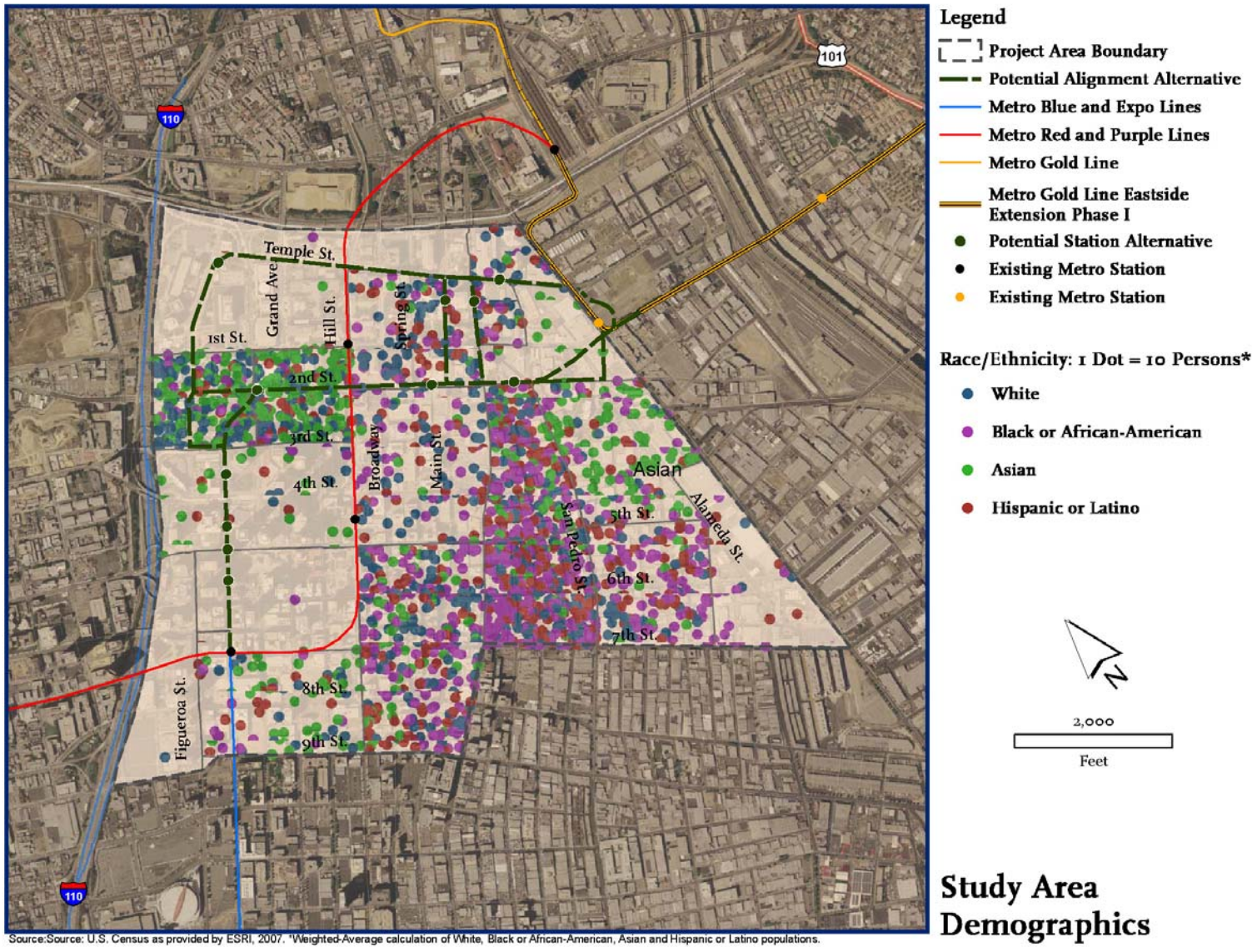


Figure 4-9 PSA Demographics

Table 4-28 Project Study Area Demographic Data		
General		
Total Persons	18,202	
Total Households	9,150	
Race	Persons	% of Total Population
White	3,615	19.9%
Black or African American	5,354	29.5%
American Indian or Native Alaskan	122	0.7%
Asian	4,455	24.4%
Native Hawaiian and Other Pacific Islander	9	0.1%
Some Other Race	65	0.4%
Two or more Races	588	3.2%
Hispanic or Latino	3,994	21.9%
Total Minority Population	14,587	80.1%
Annual Income	Total	% of Total Working Population /a/
Less than $10,000	2,625	15%
Between $10,000 and $14,999	940	5.4%
Between $15,000 and $19,999	711	4.1%
Between $20,000 and $24,999	543	3.1%
Between $25,000 and $29,999	466	2.7%
Between $30,000 and $39,999	355	2%
Between $40,000 and $54,999	475	2.7%
Between $55,000 and $99,999	741	4.2%
Over $100,000	529	3%
Median Household Income	$10,295	
Poverty Levels	Total	% of Total Population /b/
Population below Poverty Threshold	7,853	46.8%
Population above Poverty Threshold	8,919	53.2%

/a/ The total working population is 17,447 persons.
/b/ Percentage of total population evaluated for poverty status is 16,772 persons, which is 92 percent of the total population.

Table 4-29 2000 U.S. Census Poverty Thresholds	
Household Size	Income Threshold
One-Person	$8,794.00
Two-Person	$11,239.00
Three-Person	$13,738.00
Four-Person	$17,603.00
Five-Person	$20,819.00
Six-Person	$23,528.00
Seven-Person	$26,754.00
Eight-Person	$29,701.00
Nine-Person	$35,060.00

Source: U.S. Census Bureau, Housing and Household Economic Statistics Division, 2000

Limited English Proficiency

Executive Order 13166 requires federally assisted programs to identify any need for services to those persons with limited English proficiency (LEP) and develop and implement a system to provide those services so LEP persons can have meaningful access to them. The 2000 U.S. Census data indicates that approximately 21 percent of the population in the PSA was linguistically isolated (i.e., all household members over age five have limited English proficiency [not well to not at all]). Approximately 63 percent of this linguistically-isolated population (1,872 persons, or 14 percent of total population over five years of age) spoke an Asian or Pacific Island language and 35.44 percent (1,059 persons or 10.4 percent of total population over five years of age) spoke Spanish (Figure 4-9). The geographic distribution of linguistically isolated Asian or Pacific Island language-speaking households corresponds with the distribution of the Asian population in the area around Little Tokyo (Figure 4-9).

Elderly Population

According to the 2000 U.S. Census, approximately 19 percent of the PSA population is elderly (approximately 3,500 persons). As shown in Figure 4-11, the distribution of the elderly population corresponds with the geographic distribution of LEP residents in Little Tokyo (Figure 4-10).

The Homeless and Single Room Occupants

In downtown Los Angeles, a major low-income group primarily consists of the homeless. However, the 2000 U.S. Census does not include the homeless in their calculations. In 2007, the Los Angeles Homeless Services Authority released the 2007 Greater Los Angeles Homeless Count, which is a report on a physical counting effort conducted to better estimate the number of homeless in the City of Los Angeles. The count found approximately 68,600 homeless persons at any one time in the City of Los Angeles. In the area where the PSA is located, there are approximately 22,030 homeless persons, which account for 32 percent of the total homeless population of the City of Los Angeles. As approximately one-third of the total estimated homeless population of the City is in the PSA, many services and shelters that serve this population are present as well. There are approximately four shelters, some year-round, 15 to 16 single-room occupancy establishments (SROs), and approximately nine homeless service providers within one-quarter mile of the proposed alignments. Resources for the homeless population within the PSA are listed in Table 4-30.

Alignment Areas

The total alignment is approximately 1.7 miles. Since the proposed stations would be in close proximity to each other, over the short distance of the two build alternatives, any analysis at the station level would be repetitious. Therefore, an analysis of the entire alignment was conducted for socioeconomic impacts. Census block groups within a one-quarter mile radius of the alignment locations were evaluated. The results are summarized in Table 4-31.

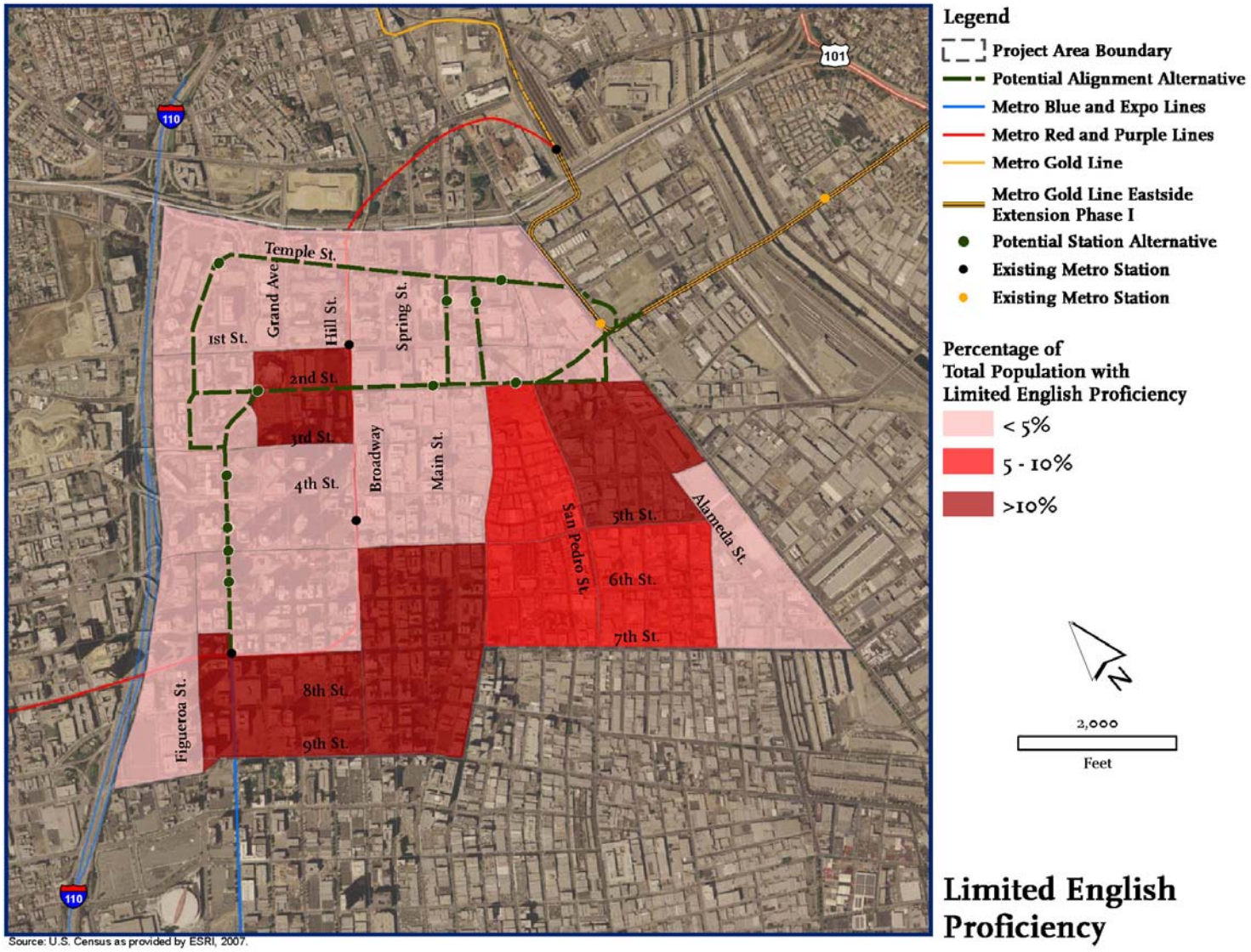
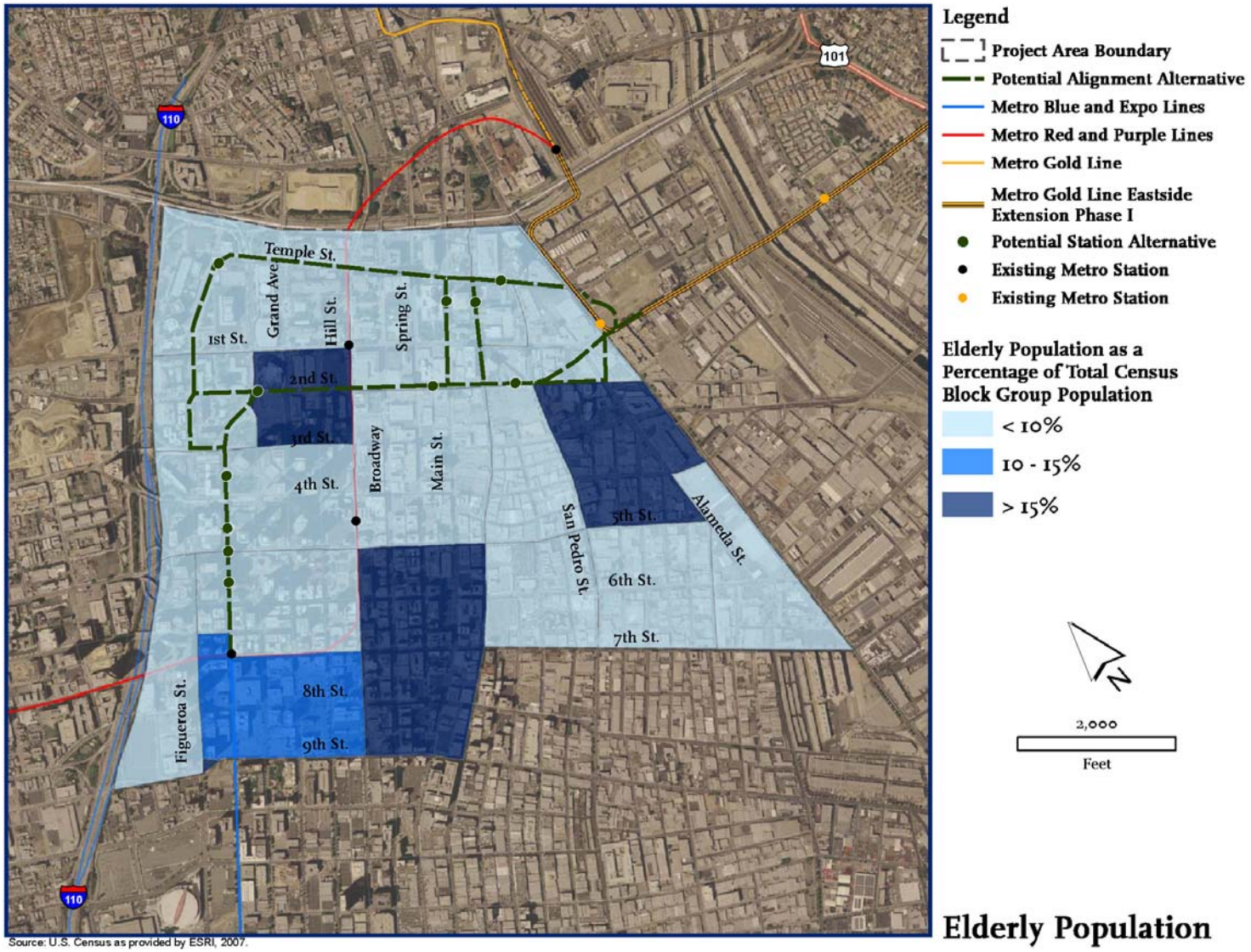


Figure 4-10 Limited English Proficiency



Elderly Population

Figure 4-11 Elderly Population

Table 4-30 Alignment Areas Homeless Shelters, SROs, and Service Providers				
Name	Address	Affected Alignments*	No. of Units/ Beds	Availability
Shelters				
Emmanuel Baptist Mission - Bible Program In-House Residency	530 E. 5th St.	A,B, U	N/A	Emergency
Los Angeles Mission - Anne Douglas Center of the Los Angeles Mission	310 Winston St.	A,B, U	N/A	Transitional
Los Angeles Mission - Overnight Beds for Men	303 E. 5th St.	A,B, U	N/A	Emergency
Year Round Overnight Emergency Shelter	1208 Pleasant Ave.	A,B, U	N/A	Emergency
SROs				
Year Round Overnight Emergency Shelter	832 W. James M. Wood Blvd.	A,B, U	6	Emergency
La Posada - Emergency Shelter	1320 Pleasant Ave.	A,B, U	10	Emergency
Proyecto Pastoral	171 S. Gless St.	U	45	Emergency
Zahn New Emergency Housing Program	832 W. James M. Wood Blvd.	A,B, U	64	Emergency
Year Round Overnight Emergency Shelter	403 E. 5th St.	A,B, U	100	Emergency
Panama Hotel	403 E. 5th St.	A,B, U	221	Emergency
LTSC - Far East Building	347 E. 1st St.	A,B, U	16	Permanent
Brownstone	425 E. 5th St.	A,B, U	48	Permanent
Southern	412 E. 5th St.	A,B, U	55	Permanent
Harold Hotel	323 E. 5th St.	A,B, U	58	Permanent
Florence Hotel	310 E. 5th St.	A,B, U	61	Permanent
Leonide Hotel	512-516 S. Main St.	A,B, U	66	Permanent
Fred Jordan Missions - Men's Christian Discipleship	445 S. Towne Ave.	A,B, U	36	Transitional
JWCH Institute	515 6th St.	A,B, U	45	Transitional
Golden West Transitional Housing	417 E. 5th St.	A,B, U	61	Transitional
Casa Olivares	1208 Pleasant Ave.	A,B, U	150	Transitional
Service Providers				
Assistance for Skid Row Families	207 S. Broadway	A,B, U	N/A	Year-Round
Day Labor Program	516 S. Main St.	A,B, U	N/A	Year-Round
Downtown Women's Center	325 S. Los Angeles St.	A,B, U	N/A	Year-Round
Employment Program	516 S. Main St.	A,B, U	N/A	Year-Round
Family Transition Program	207 S. Broadway	A,B, U	N/A	Year-Round
Golden West Hotel Life Skills Program	417 E. 5th St.	A,B, U	N/A	Year-Round
LTSC Emergency Care Givers	231 E. 3rd St.	A,B, U	N/A	Year-Round
Street Works	516 S. Main St.	A,B, U	N/A	Year-Round
Weingart Access Center	506 S. Main St.	A,B, U	N/A	Year-Round

Source: Community Redevelopment Agency of Los Angeles, 2008.

* At-Grade Alternative - Option A (A)
At-Grade Alternative - Option A (B)
Underground Alternative (U)

As shown in Table 4-31, there are 11,369 persons and 5,482 households within one-quarter mile of the At-Grade Emphasis LRT Alternative. The unemployment rate for the area within one-quarter-mile of the At-Grade Emphasis LRT Alternative is 24.1 percent compared to the overall Los Angeles County unemployment rate of five percent.

Approximately 80 percent of the population in the area within one-quarter mile of the At-Grade Emphasis LRT Alternative belongs to a minority group, as shown in Table 4-31. The minority group with the largest representation for the At-Grade Emphasis LRT Alternative is Asian (33.3 percent). The second and third largest minority groups are Hispanic/Latino (24.2 percent) and African American (19.1 percent), respectively. The area within one-quarter mile of the At-Grade Emphasis LRT Alternative is composed of less than ten percent of the following races: American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, or other race. Of the total population, 2.2 percent identify themselves as belonging to more than one race. Additionally, the percentage of White, non-Hispanic population for the area within one-quarter mile of the At-Grade Emphasis LRT Alternative is approximately 20 percent.

The median household income in the area within one-quarter mile of the At-Grade Emphasis LRT Alternative was $14,753 according to the 2000 U.S. Census. Of the various income levels shown in Table 4-31, the highest percentage of the working population (31.7 percent) earned less than $10,000 per year. In the 2000 U.S. Census, 90.3 percent of the PSA's population (10,275 persons) was evaluated for poverty status. Poverty status computations are derived by the U.S. Census using the Health and Human Services poverty thresholds (Table 4-29). As shown in the Table 4-31, 36.6 percent of the population in the area within one-quarter mile of the At-Grade Emphasis LRT Alternative is living below poverty.

For the Underground Emphasis LRT Alternative, as shown in Table 4-31, there are 11,496 persons and 5,677 households within one-quarter mile. The unemployment rate for the area within one-quarter mile of the Underground Emphasis LRT Alternative is approximately 23.3 percent compared to the overall Los Angeles County unemployment rate of five percent.

Approximately 79 percent of the population in the area within one-quarter mile of the Underground Emphasis LRT Alternative belongs to a minority group, as shown in Table 4-31. The minority group with the largest representation for the Underground Emphasis LRT Alternative is Asian (33.6 percent). The second and third largest minority groups are Hispanics/Latinos (23.5 percent) and African-Americans (18.8 percent), respectively. The area within one-quarter mile of the Underground Emphasis LRT Alternative is composed of less than ten percent of the following races: American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, or other race. Of the total population, 2.4 percent identify themselves as belonging to more than one race. Additionally, the percentage of White, Non-Hispanic for the area within one-quarter mile of the Underground Emphasis LRT Alternative is approximately 20 percent.

Table 4-31 Alignment Areas Demographic Data				
Socioeconomic Characteristic	At-Grade Alternative		Underground Alternative	
General				
Total Persons	11,369		11,496	
Total Households	5,482		5,677	
Race	Persons	% of Total Population	Persons	% of Total Population
White	2,272	20.0%	2,364	20.6%
Black or African American	2,167	19.1%	2,158	18.8%
American Indian or Native Alaskan	74	0.7%	74	0.6%
Asian	3,784	33.3%	3,861	33.6%
Native Hawaiian and Other Pacific Islander	23	0.2%	23	0.2%
Some Other Race	42	0.4%	42	0.4%
Two or more Races	255	2.2%	277	2.4%
Hispanic or Latino	2,752	24.2%	2,697	23.5%
Total Minority Population	9,097	80.0%	9,132	79.4%
Annual Income	Total	% of Total Working Population /a/	Total	% of Total Working Population /b/
Less than $10,000	1,571	30.0%	1,515	27.8%
Between $10,000 and $14,999	590	11.3%	601	11.0%
Between $15,000 and $19,999	488	9.3%	527	9.7%
Between $20,000 and $24,999	344	6.6%	351	6.4%
Between $25,000 and $29,999	362	6.9%	381	7.0%
Between $30,000 and $39,999	322	6.1%	411	7.5%
Between $40,000 and $54,999	411	7.8%	468	8.6%
Between $55,000 and $99,999	643	12.3%	686	12.6%
Over $100,000	509	9.7%	509	9.3%
Median Household Income	$14,753		$18,776	
Poverty Levels	Total	% of Total Population /c/	Total	% of Total Population /d/
Population below Threshold	3,758	36.6%	3,620	34.8%
Population above Threshold	6,517	63.4%	6,782	65.2%

/a/ The total working population for the At-Grade Alternative is 10,765 persons.
/b/ The total working population for the Underground Alternative is 10,892 persons.
/c/ Percentage of total population evaluated for poverty status for the At-Grade Alternative is 10,275 persons, which is 90.3 percent of the total population.
/d/Percentage of total population evaluated for poverty status for the Underground Alternative is 10,402 persons, which is 90.5 percent of the total population.
Source: 2000 U.S. Census

The median household income in the area within one-quarter mile of the Underground Emphasis LRT Alternative is $18,776 according to the 2000 U.S. Census. Of the various income levels shown in Table 4-31, the highest percentage of the working population (13.9 percent) earned less than $10,000 per year. In the 2000 U.S. Census, 90.5 percent of the PSA's population (11,496 persons) was evaluated for poverty status. Poverty status computations are derived by the U.S. Census using the Health and Human Services poverty thresholds (Table 4-29). As shown in the Table 4-31, 34.8 percent of the population in the area within one-quarter mile of the Underground Emphasis LRT Alternative is living below the poverty threshold.

4.18.1.3 Public Participation

To ensure opportunities for public participation during the project development process, Metro held four public project scoping meetings, two in the early planning process and two after the alternatives screening process. The first early scoping meeting was held on November 6, 2007, at the City of Los Angeles Central Library in downtown Los Angeles, and the second on November 7, 2007, at the Japanese American National Museum in Little Tokyo. A total of 117 people attended the two meetings to provide comments on the alignment alternatives for the proposed project. Two additional meetings to provide a progress update of the alternatives screening were held at the Japanese American National Museum and at the City of Los Angeles Central Library on February 26, 2008.

The format of the scoping meetings included an open house element where attendees had the opportunity to review the project information prior to the start of the presentation and the comment period. Project team members were present at the display boards to address questions related to the project. Spanish and Japanese translators were made available, as appropriate. Following the open house period, a PowerPoint presentation was made to provide attendees with information regarding the purpose of the scoping meeting and the proposed project. Emphasis was placed on the importance of the community's participation in providing comments in person at the scoping meetings, or by telephone, fax, postal mail, or e-mail. Following the presentation, the public was given the opportunity to make verbal comments, which were recorded by a transcriber. The deadline for receiving comments was November 30, 2007. A total of 88 comments were received by Metro from public agencies, community organizations, elected officials, and the general public.

Of the 88 comments received by Metro, 16 were directly related to the topic of environmental justice. Three of these 16 comments were regarding Americans with Disabilities Act (ADA) compliance and access, and regarding community impacts. There was much coordination with numerous downtown community committees, including the Little Tokyo Subcommittee and other groups. Several presentations were conducted, including those after the second round of public meetings held in October 2008, in order to keep community members informed of project updates and public participation.

Table 4-32 Public Meetings			
Type of Meeting	Date	Location	Number of Attendees
Early Scoping Meeting	November 6, 2007	Central Library	68
Early Scoping Meeting	November 7, 2007	Japanese American National Museum	49
Community Update Meeting Series #1	February 26, 2008	Japanese American National Museum	59
Community Update Meeting Series #1	February 28, 2008	Central Library	55
Community Update Meeting Series #2	October 16, 2008	Central Library	109 Combined
Community Update Meeting Series #2	October 21, 2008	Japanese American National Museum	

4.18.1.4 Project Alignment Alternatives Screening Process

As part of the required screening process, segments of several proposed alignments were eliminated from consideration in the PSA. As part of the public outreach effort, 33 alternatives were presented at the early scoping meetings in November 2007. At each of the two public meetings, each alternative was presented in various ways, from poster boards to PowerPoint slides; which were accessible as well by internet through the Metro page www.metro.net. After the public input was incorporated into the screening process, eight alternatives remained and were identified for further screening. With a thorough screening process as described in the Alternative Screening Report, six of the eight alternatives were eliminated from further consideration for environmental evaluation. The two remaining alternatives were presented at the May 2008 public meetings.

4.18.2 Evaluation Methodology

In assessing compliance of the proposed project with the intent of Executive Order 12898 regarding environmental justice, there are three major considerations:

- Whether the project provides transit service equity;
- Whether any potential adverse impacts would be disproportionately borne by low-income and minority communities; and
- Whether low-income and minority communities have had opportunities to actively participate in the planning of the project.

The analysis of impacts also considers:

- Adverse impacts to human health;
- Adverse environmental impacts to natural resources;
- Impacts that would adversely affect the stability and economic and social functioning of a community or neighborhood; and

- Adverse impacts related to noise and vibration, displacement and relocation, and pedestrian safety and security in low-income and minority communities.

As mentioned in Section 4.18.1.2, Little Tokyo is the only established ethnic community in the PSA. For this analysis, disproportionate impacts to Little Tokyo will be evaluated.

4.18.3 Environmental Issues

The following are potential environmental justice impacts associated with the proposed project.

At-Grade Emphasis LRT Alternative

- Transit Service Equity Impacts. The At-Grade Emphasis LRT Alternative would bypass and place stations outside the only established minority community in the PSA, Little Tokyo, but would keep the current location of the Little Tokyo/Arts District station along Alameda St. Additionally, as shown in Figure 4-11, Little Tokyo contains a high concentration of elderly, which are often transit dependent. Routing the alignment and locating a proposed station outside Little Tokyo can be perceived as a potential environmental justice impact because it can be interpreted as a lack of transit infrastructure investment in an under-represented community. However, the close proximity of the Little Tokyo/Arts District Station (one-quarter mile away), which is part of the Metro Eastside Extension, minimizes the potential of these justice impacts.

- Displacement Impacts. Pertaining to the homeless, changes in sidewalk widths may potentially have direct impact on homeless encampments.

Underground Emphasis LRT Alternative

- Transit Service Equity Impacts. The alignment for the Underground Emphasis LRT Alternative would traverse Little Tokyo underground and surface at a proposed portal at 1st and Alameda Streets. The Underground Emphasis LRT Alternative would introduce a station on 2nd St. between Los Angeles and Main Streets. Although the station is not within Little Tokyo, it is located next to the Little Tokyo branch library as well as the future location of the Block 8 development which is a significant Japanese inspired condominium and rental housing property scheduled to be opened in the Spring of 2009.

- Noise Impacts. The proposed project has potential to have noise impacts related to the proposed portal location at 1st and Alameda Streets. There are sensitive receptors around the portal area (museums and residences). This could be considered disproportionate because the portal would be located in the only minority community in the PSA.

- Construction Impacts. Bored tunnel construction impacts would be largely concentrated at portal areas where equipment is inserted for underground use or where debris from tunnel mining is removed. Portals will be concentration points of construction activity, including workers, stationary equipment, and truck activity. Construction in the portal area within the Little Tokyo community may be particularly disruptive to residences and businesses in this minority community.

4.19 Major Utilities

As part of the evaluation of existing conditions along the different alignment alternatives, major utilities are identified in order to assess potential impacts to the infrastructure. This process allows for identification of potential conflicts and resolution to these issues in the early stages of design and development of alternatives.

4.19.1 Affected Environment

There are several items that control the utility work design, including gravity lines, sanitary sewers, storm drains, telephone cables, and other power lines such as water and gas. The physical dimensions of these utilities vary from one to the next and various elements affect the placement and relocation of each. Gravity lines are usually the deepest utility which eventually controls the top of the station structure; sanitary, sewer, and storm drains are in this category. For sanitary sewers, polyvinylchloride (PVC) is utilized temporarily during underground station construction. Permanent vitrified clap pipe (VCP) is then installed during the restoration phase. For storm drains, temporary lines are installed during underground station construction. Permanent reinforced concrete pipe (RCP) is then constructed during the restoration phase.

Generally, it is preferable to save telephone cables. During underground and at-grade station construction support, the existing telephone duct bank remains in place. If the telephone duct bank is shallow, then breaking the existing ducts is required and lower supports are needed in order to clear the decking structure. During restoration phase, the telephone duct is encased in concrete.

Overhead power lines impacted by construction are to be relocated or new underground cables are installed as needed. For an underground configuration, during station construction, electrical ducts should be supported in place. If the electrical duct bank is shallow, then it requires lowering and supporting to clear the decking structure. Existing water lines are usually cast iron, which means they tend to have weak joints. During underground construction, new steel water lines will be constructed above the excavation, to be supported from the decking structure. The use of ductile iron pipes is restricted to lengths up to 20 feet. Also, for underground structures, new steel gas lines are to be installed above the excavation and to be supported from the decking structure.

The identification of all the above utilities is essential in order to understanding the existing conditions in the PSA as well as to understand potential design restrictions which must be considered.

4.19.2 Evaluation Methodology

The main source used for utility locations is the City of Los Angeles' Electronic Vault. This resource, which is part of the Bureau of Engineering division, provides detailed data history and utility characteristics which aid in assessing the impacts of construction.

For assessing the impact of construction, the existing utility data and information was incorporated and superimposed on LADOT Traffic Geometric plans, along with all the potential alternative alignments. One of the crucial issues for drawing existing utilities from as-built maps to the various alternative corridors was to locate the exact location of the current right-of-way. The mapping and discussions related to utilities were directed at street segments where a number of conflicts and/or issues may arise. Existing utility data were first obtained at intersections along the alignment, including Alameda St., 2nd St. and Flower St. Other key locations are intersections along 2nd St, including Central Ave, San Pedro St., Los Angeles St., and Main St., and the Flower St. segment with intersections at 3rd, 4th, 5th and 6th Streets.

4.19.3 Environmental Issues

Implementation of the Underground Alternative would result in potential impacts to underground utility lines that would be avoided with the At-Grade Emphasis LRT Alternative. The following describes the utility issues along the alignment for the Underground Emphasis LRT Alternative and the impacts they may present.

At-Grade/Underground Affects on Flower St. and Intersections at 6th, 5th, 4th, and 3rd Streets

Between 3rd and 4th Streets there is a 33-inch storm drain line. There is a large gravity line, 72-inch to 84-inch reinforced concrete pipe (RCP) which turns from 4th St. onto Flower St. and continues south to 6th St. At 5th St., the 84-inch pipe changes temporarily to an eight-feet six-inch by 36-inch concrete box to allow a sanitary sewer line to cross underneath. At 6th St., the 72-inch RCP discharges into a 48-inch line and a 36-inch line. At the intersection of Flower and 6th Streets, the pipes are approximately 15-feet deep. There are also two storm drain manholes within this intersection.

Heading south on Flower St. from the potential station at Grand Ave., the alignment heads underground. The large gravity lines in this area will impact the location of the underground structures such as the tunnel, cut and cover, and stations. Identification of these lines in plan and cross sections are being studied at the present time.

A 15-inch concrete sanitary sewer crosses 7th St. 12 feet below grade. A 21-inch sanitary sewer crosses Wilshire Blvd. 14 feet below grade. A 20-inch sanitary sewer crosses 5th and 6th Streets 12-feet below-grade. A 30-inch storm drain crosses 4th St., one to 15 feet below-grade and an 18-inch sanitary sewer crosses 3rd St. 27 feet below-grade.

One of the noticeable things about the sanitary sewer pipes is the change in sizes throughout various segments of the pipeline. This may indicate merging pipe through deep man holes or junction structures. These would impact the underground structures.

At-Grade/Underground Affects on 2nd St. between Hill St. and Spring St.

An information gap for the section of 2nd St. between Hill St. and Spring St. exists in data files, and further research is being conducted in order to correctly identify all utility types and locations. Currently, relieving pressure system discharges storm water over the 2nd St. tunnel, directing 12-inch to 24-inch diameter drain lines located at both sides of the tunnel adjacent to the sidewalks. More investigation is needed to identify the causes of this occurrence. A storm drain is also located on the north side of 2nd St., east of the 2nd St. tunnel.

At-Grade/Underground Affects on 2nd St. between Main St. and Los Angeles St.

Currently, there is a large storm drain gravity line, nine-feet six-inch by 11-feet six-inch reinforced concrete box. There is also a 14-inch storm drain line running on the northern side of the 2nd St., approximately 13 feet away from the northern property line and about four feet underground. There are two sanitary sewer lines located on each side of the nine-feet six-inch by 11-feet six-inch storm drain, with an 18 inch distance from the center line to the face of the larger pipe. One of the lines is a 14-inch diameter pipe with 17.5 feet distance from the northern line of the property, located 16 feet underground. The second line is an eight-inch diameter pipe with 23-feet distance from the southern line of the property, located 16 feet underground.

Other utilities in this area are telephone, cable, and power lines with three-inch to 22-inch diameter conduits located approximately four feet underground. Water and gas lines are also located four feet underground and between two inches to six inches in diameter. Two gas lines are abandoned and one line of gas and the water line are active lines.

One of the options for the Underground Emphasis LRT Alternative is the location of a potential station somewhere in between these streets on 2nd St. Although the location of this station has not been determined, existing utility lines may impact the station wall footings and catenary pole footings.

At-Grade/Underground Affects on 2nd St. between Los Angeles St. and Central Ave.

Between Los Angeles St. and Central Ave. there is a large storm drain gravity line and an 11-feet six-inch by 13-feet reinforced concrete box. There is also a 44-inch storm drain line running on the north side of 2nd St., 16 feet away from the northern property line and about six feet underground. There are two sanitary sewer lines located on both sides of the large storm drain 18 inches or more in distance away from the storm drain line's outside face. The first line is an eight-inch sanitary sewer line, 23 feet away from the northern property line, located 16 feet underground. The second line is an eight-inch sanitary sewer line, 18 feet away from the southern property line, located 16 feet underground.

Other utilities in this area are telephone, cable, and power lines with four-inch to 25-inch diameter conduits located approximately four feet underground. Water and gas lines are also located four feet underground, with the water line at eight inches and the gas line at six inches in diameter.

Potential impacts may occur in the area where the alignment curves off Alameda St. to enter southwest through private properties toward 2nd St. This area has a higher than average level of congested utility lines and would need to be further studied and evaluated.

At-Grade/Underground Affects on 2nd St. between Main St. and Spring St.

Between Main and Spring Streets there is a large storm drain gravity line and a 9.5-feet by 11.5-feet reinforced concrete box. There is also a 14-inch storm drain line running on the north side of the street approximately 15 feet away from the northern property line, about six feet underground. There are two sanitary sewer lines located along this segment. One of the lines is an eight-inch sanitary sewer line located above the large storm drain pipe, located ten feet underground. The second line is an eight-inch sanitary sewer line located on the north side of the large storm drain pipe, located ten feet underground and approximately 25.5 feet away from the northern property line.

Other utilities in this area are telephone, cable, and power lines with diameters ranging from 12-inch to 29-inch located at a maximum of six feet underground. Water and gas lines are also located four feet underground, and range from four inches to six inches in diameter. Two gas lines and one water line are abandoned.

At-Grade/Underground Affects on 2nd St. between Spring St. and Broadway

Between Spring St. and Broadway there is a large storm drain gravity line, and a 9.5-feet by 11.5-feet reinforced concrete box. There is a 14-inch line running on the north side of the street, approximately 15 feet in distance from the northern property line and six feet underground.

There are two sanitary sewer lines located along this segment. One of the lines is an eight-inch sanitary sewer line located above the large storm drain, approximately ten feet underground. The second line is also an eight-inch sanitary sewer line located north, off the large storm drain line, approximately ten feet underground, and 25.5 feet away from the northern property line.

Other utilities in this area are telephone, cable, and power lines with 12-inch to 29-inch diameter conduits located approximately six feet underground. Water and gas lines ranging from four inches to six inches in diameter are located at a maximum of four feet underground. Two gas lines and one water line are abandoned.

At-Grade/Underground Affects on 2nd St. between Broadway and Hill St.

Between Broadway and Hill St. there is a storm drain large gravity line, ten-inch diameter reinforce concrete pipe (RCP) approximately 22 feet underground. This line alignment moves north approximately 15 feet after passing the Hill St. intersection. There are also two eight-inch storm drain lines running on the north and south sides of the street, approximately three feet underground.

An eight-inch sanitary sewer line is located north of the large sanitary sewer approximately 18 feet underground.

Other utilities in this area are telephone, cable, and power lines with 22-inch to 41-inch diameter conduits located at a maximum of six feet underground. This particular location, however, also has a deeper line at 16 feet underground. Water and gas lines ranging from four inches to eight inches in diameter are located at a maximum of four feet underground. There is an eight-inch gas line that is abandoned.

Affects on Alameda St. at Temple St. (At-Grade), 1st St., and 2nd St. (Underground)

In the PSA, Alameda St. is a very heavily trafficked corridor that is used by both automobiles and large freight trucks. The land uses around the Alameda St., 1st St., and 2nd St. intersections has experienced a change from low scale industrial to residential/commercial in the past years. Because a grade separation is being proposed as a solution for possible congestion issues, utilities in and around the area must be identified thoroughly in order to design the station and tunnel to appropriate standards.

Currently, there is a 12-inch water line located approximately in the center of Alameda St. and another 36 inch water line located on the west side of the street. A 14-inch sanitary sewer is located on the eastern side of Alameda St. A 75-inch storm drain is also located on the eastern side of Alameda St. as well as 14-inch lines that run along the length of the street. There also exist electrical boxes with two and three conduits, telephone lines, and a six-inch abandoned gas line. This area is critical because a grade separation (underpass) built along Alameda St. from approximately north of Temple St. to south of 2nd St. will mean the removal and relocation of these utility lines.

For this particular scenario, it is advised that the 75-inch storm drain cannot be located under the northbound bus deck because there would not be enough room. Instead, two possibilities are suggested: 1) change the storm drain pipe such that it runs under the southbound bus deck (west of Alameda St.) or 2) relocate the project alignment east of the Metro Eastside Extension LRT tracks where there is a passage. With the first option,, the storm drain pipe would be relocated to pass the grade separation (north of Temple St.) and meet its original alignment south of 2nd St. This option would be preferred over altering the project alignment, as that would require significant additional analyses and public input. Once the large storm drain is relocated, the smaller pipes can be moved under the bus deckway. The crossing utility lines can be supported from the beam bridge decks at Temple and 1st Streets.

4.20 Summary of Environmental Issues

Table 4-33 Comparison of Alternatives				
Environmental Resource Area	No Build	TSM	At-Grade	Underground
Land-Use and Development	0	+	+	+
Displacement and Relocation of Existing Uses	0	+	-	-
Community and Neighborhood Impact	0	+	-	-
Visual and Aesthetic Impacts				
Air Quality Impacts	0	+	+	+
Noise and Vibration	0	-	-	-
Ecosystems/Biological Resources	0	-	-	0
Geotechnical/Subsurface/Seismic and Hazardous Materials Impacts	0	0	-	-
Water Resources	0	0	0	0
Energy				
Historic, Archeological and Paleontological Impacts	0	0	-	-
Parklands and Other Community Facilities	-	+	-	-
Economic and Fiscal Impacts	-	-	-	-
Safety and Security	-	-	-	-
Construction Impacts	-	-	-	-
Growth Inducing Impacts	+	+	+	+
Environmental Justice				
Major Utilities				
Total				

Section 5 Financial Analysis

5.1 Introduction

This section provides a comparison of the capital and operating and maintenance costs and revenues associated with the promising alternatives under consideration for the project. These alternatives consist of a No Build, TSM and two build alternatives. The build alternatives are comprised of an at-grade and cut-and-cover alternative (At-Grade Emphasis LRT Alternative) that includes two configuration options (Option A and Option B) and a twin-bore tunnel alternative (Underground Emphasis LRT Alternative). It is important to note that this financial analysis was conducted prior to the recent national economic crisis. As the impacts of this crisis are still working their way through the private and public sectors, including transit systems, the cost and revenue assumptions described in the following sections should be considered preliminary and will likely need to be refined. As the Regional Connector continues through the project implementation process, cost, funding and financing projections will be revised to reflect the best available information.

Section 5.2 focuses on the capital costs of the alternatives. Costs are presented in both base year and Year of Expenditure (YOE) dollars using annual inflation rates and a preliminary implementation schedule developed for the project. In order to understand the financial impact of actual funds that would need to be expended in the actual year of expenditure and the relative effects of inflation on costs and revenues, an inflation rate is used to project from base year dollars to YOE dollars. More specifically, YOE dollar values are computed by multiplying base year dollar values by the compounded escalation factor for the year in which funds would be expended. For example, in YOE dollars, $1.00 in 2008 is equivalent to $1.04 in 2009, using an inflation rate of 4.0 percent.

Additionally, the capital costs are presented using FTA's Standard Cost Categories (SCC). FTA implemented the SCC to establish a consistent format for the reporting, estimating and managing of capital costs for projects proceeding through the New Starts major capital project development process.

Following the discussion of capital costs, Section 5.3 describes the potential federal, state, and local capital revenue sources and funding strategies that could be used for the Regional Connector project. For purposes of this analysis, the Regional Connector build alternatives are assumed to be funded with a combination of federal and non-federal funds, including 50 percent in FTA New Starts (Section 5309) funding and 50 percent in local funding from a combination of state and local sources. The proposed funding sources are described first, followed by a discussion of other potential state and local sources. Funding strategies considered include the potential for changes to Metro's policy regarding bonding capacity. Also considered is the potential to work with FTA to include the Regional Connector project as part of a multi-corridor program of projects, to be funded through the FTA New Starts program, similar to the process being used in Salt Lake City and Houston.

Section 5.4 compares projected operating and maintenance (O&M) costs of the alternatives and projected farebox revenues assuming average fares consistent with Metro services. This section also identifies potential system-wide operating savings that could be realized due to improved efficiency of service associated with the selected alternatives. An estimate is also provided of the potential level of operating support required.

Section 5.5 summarizes the key findings of the preliminary financial analysis. As the alternatives selection process moves forward, future iterations of the financial analysis will be conducted, with increasing levels of detail and refinement. The refined financial analysis will include a detailed cash flow analysis in YOE dollars through the project horizon year of 2030.

5.1.1 Background

The Regional Connector project is proposed to create a connection in downtown Los Angeles that will link the Metro Blue and Expo Lines termini at 7th St./Metro Center Station (7th and Flower Streets) to the Metro Gold Line Pasadena and Eastside links at the Little Tokyo/Arts District Station at 1st and Alameda Streets. This connection will provide through service between the Metro Blue Line to Long Beach, the Metro Gold Line to Pasadena and East Los Angeles, and the Metro Expo Line to Culver City. With the implementation of the Regional Connector, these four lines will share tracks and stations in downtown Los Angeles. The result of this connection will be enhanced regional connectivity without the need to transfer thus making it easier for potential riders to get to and from downtown Los Angeles.

5.1.2 Status of the Regional Connector Transit Corridor in Existing Long Range Financial Plans

The Regional Connector Transit Corridor is included in both of the existing long range financial planning documents for the region: Metro's 2008 Long Range Transportation Plan (LRTP) and the Southern California Association of Governments Regional Transportation Plan (SCAG RTP). Within the LRTP, the Regional Connector Transit Corridor is the highest priority project within the Strategic Unfunded component of the plan and is one of 12 "Tier 1" projects that are "currently under planning study or environmentally cleared/route refinement study." Projects in the Strategic Unfunded component of the plan could be implemented if additional funding were made available from new sources. With regard to the SCAG RTP, the Regional Connector is included as a funded project (project identification number 1TR0404) at an estimated cost of $4.24 billion and is assumed to be completed by 2035.

5.1.3 Description of the Alternatives

The following provides a brief overview of the alternatives under consideration in order to reflect assumptions used for the cost estimates. See section 2 for maps of alternatives for consideration.

No Build Alternative

The No Build alternative includes all existing transportation facilities as well as all committed transportation projects outlined in the Metro LRTP (2001) and the SCAG Regional Transportation Plan (2004). This includes the Metro Gold Line Eastside Extension (Phase 1) scheduled to open in 2009, the first and second phase of the Metro Exposition Line scheduled to open in 2010, and the second phase of the Metro Rapid Bus expansion plan scheduled to be completed in 2008. An update to Metro's LRTP was released for public review in March 2008 and is anticipated to be finalized and approved during the winter of 2008. This final AA study will reflect the 2001 LRTP commitments but acknowledge the potential inclusion of additional projects pending the approval of the updated plan. The No Build Alternative would preserve existing service levels, as well as the projects listed in the LRTP and Regional Transportation Plan. It may also call for improving service frequency in some areas, but will largely leave the present transit coverage unchanged.

TSM Alternative

The TSM Alternative would assume no build and would imitate the proposed light rail link between 7th St./Metro Center Station and Union Station using two shuttle bus routes. Shuttle buses operated by Metro would run frequently, perhaps just a few minutes apart during peak hours, and routes would be designed to move passengers between the two stations as quickly as possible. The shuttle buses would use mixed-flow arterial street lanes or existing bus only lanes and attempt to avoid major conflicts with existing bus routes. Peak-hour parking restrictions would facilitate the movement of the shuttle buses along the routes. Intermediate stops would provide additional transit coverage of Bunker Hill, Little Tokyo, and the Civic Center. A variety of bus sizes could be used to tailor capacity to demand, ranging from 30-foot shuttle buses to 60-foot articulated buses.

In addition to frequent headways, Regional Connector shuttle buses could employ a Transit Priority System (TPS) system similar to the ones currently used on Metro Rapid lines within the City of Los Angeles. Transponders mounted to the undersides of the buses would trigger detector loops embedded in the pavement in advance of each signalized intersection along the route. Upon detecting the bus, the City's central Automated Traffic Surveillance and Control (ATSAC) system would trigger the signal controller to grant additional green phase time to the oncoming bus (usually 10-15 percent of the total cycle time), up to once per cycle. Metro Rapid lines have shown TPS to keep buses moving quickly, reduce trip times, and increase passenger throughput.

Build Alternatives

Based on the results of a detailed screening process, two build alternatives are being recommended to be carried forward for further evaluation: a combined at-grade/underground alternative that includes one-way couplets on Main St. and Los Angeles St. (At-Grade Emphasis LRT Alternative) and an alternative that is almost entirely underground (Underground Emphasis LRT Alternative). The At-Grade Emphasis LRT Alternative includes two alignment options that are still under consideration. A description of the alternatives is provided below.

At-Grade Emphasis LRT Alternative Option A

The At-Grade Emphasis LRT Alternative Option A is 1.8 miles long with approximately 71 percent of the alignment at grade and 29 percent of the alignment underground. The underground portions of the alignment are proposed to use the cut and cover construction technique. The estimated capital cost of the At-Grade Emphasis LRT Alternative – Option A is $795.7 million in FY2008 constant dollars, or $1.019 billion in Year of Expenditure throughout (YOE) dollars, inclusive of inflation.

The At-Grade Emphasis LRT Alternative Option A has a total of three station locations, of which two are underground and one is at-grade. The underground stations are at Flower St. between 5th and 6th Streets, and adjacent to the Grand Avenue Project development, south of 2nd St. The third station is a split station (two platforms) located at grade with one on Main St. and one on Los Angeles St.

As shown in Figure 5-1, the alignment for the At-Grade Emphasis LRT Alternative – Option A, from west to east, begins/ends at the existing underground 7th St./Metro Center station and heads north under Flower St. resurfacing to an at grade alignment via a portal located north of 4th St. The alignment continues across 3rd St. in a northeasterly direction where it then enters the existing hillside and 'punches' into the existing 2nd St. tunnel.

The alignment then uses the existing 2nd St. tunnel to run east, at-grade in a dual track configuration until it reaches Main St. The alignment splits into a couplet configuration at grade, with one track continuing north on Main St. and the other track continuing east on 2nd St. to north on Los Angeles St.

Both tracks then head east on Temple St. realigning into a dual track configuration at Los Angeles and Temple Streets. The alignment then heads east until the connection with the Metro Gold Line at Temple and Alameda Streets. In this alignment, 2nd St. between Los Angeles St. and Hill St. is transformed into a transit mall.

At-Grade Emphasis LRT Alternative Option B

The At-Grade Emphasis LRT Alternative Option B is 1.79 miles long with approximately 79 percent of the alignment at grade and 21 percent of the alignment underground. The underground portions of the alignment are proposed to use the cut and cover construction technique. The estimated capital cost of this option is $709.3 million in FY2008 constant dollars, or $909.1 million in YOE dollars, inclusive of inflation.

The At-Grade Emphasis LRT Alternative Option B has a total of three stations locations, of which one is underground and two are at-grade. One at-grade station is on Flower St. between 3rd and 4th St. A second station is located adjacent to the Grand Avenue Project development, and a third station is a split station (two platforms) located at-grade with one on Main St. and one on Los Angeles St.

As shown in Figure 5-2, the alignment for the At-Grade Emphasis LRT Alternative – Option B, from west to east, begins/ends at the existing underground 7th St./Metro Center Station and heads north under Flower St., resurfacing to an at-grade alignment from a portal located north of 5th St. The alignment continues on Flower St. at-grade and then across 3rd St. in a northeasterly direction where it then enters the existing hillside and 'punches' into the existing 2nd St. tunnel. The alignment then uses the existing 2nd St. tunnel to run east, at-grade in a dual track configuration until it reaches Main St. The alignment splits into a couplet configuration at-grade, with one track continuing north on Main St. and the other track continuing east on 2nd St. then north on Los Angeles St. Both tracks then head east on Temple St., realigning into a dual track configuration at Los Angeles and Temple Streets. The alignment then heads east until the connection with the Metro Gold Line at Temple and Alameda Streets. In this alignment, 2nd St. between Los Angeles St. and Hill St. is transformed into a transit mall.

Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative is 1.58 miles long and is proposed to use a bore tunneling construction technique. The estimated capital cost of this alternative is $910.4 million in FY2008 constant dollars, or $1.167 billion in YOE dollars, inclusive of inflation.

The Underground Emphasis LRT Alternative has a total of three stations, all underground. One station is under Flower St. between 4th and 5th Streets. A second station is located underneath the Grand Avenue Project development, and a third station is under 2nd St. between Main and Los Angeles Streets.

As shown in Figure 5-3, the alignment for the Underground Emphasis LRT Alternative begins at the existing underground 7th St./Metro Center Station and heads north under Flower St. It then turns northeast under the Grand Avenue Project development and heads east beneath the 2nd St. tunnel. The alignment continues east under 2nd St. until Central Ave., then it turns northeast under private property and rises through a new portal to the surface. The alignment then crosses the intersection of 1st St. and Alameda St. at grade to join the Metro Gold Line Eastside Extension tracks.

Based on the above descriptions, Table 5-1 summarizes the key alignment characteristics of the build alternatives. As shown in the table, the Underground Emphasis LRT Alternative is approximately 1,000 feet shorter than the At-Grade Emphasis LRT Alternative, with all of its alignment in bored tunnel underground. While the two At-Grade Emphasis LRT Alternative options are similar in length, Option A has a larger share its alignment in cut-and-cover underground and one more station underground compared to Option B.

Table 5-1 Key Alignment Characteristics of the Build Alternatives						
	At-Grade Emphasis LRT Alternative – Option A		At-Grade Emphasis LRT Alternative – Option B		Underground Emphasis LRT Alternative	
Alignment	Feet	%	Feet	%	Feet	%
At-Grade	4,830	51%	5,520	58%	-	0%
Couplet	1,900	20%	1,900	20%	-	0%
Underground	2,790	29%	2,030	21%	8,342	100%
Total Feet	9,520		9,450		8,342	
Miles	1.8		1.79		1.58	
Stations						
At-Grade	1		2		0	
Underground	2		1		3	

5.2 Capital Costs

5.2.1 Capital Costs of the Alternatives

This section describes the capital costs of the alternatives. As shown in Table 5-2, capital costs are presented in 2008 constant dollars and in Year of Expenditure dollars inclusive of inflation. The capital costs of the alternatives range from $62.7 million ($73.5 million in YOE dollars) for the TSM Alternative to $910.4 million ($1,166.9 million in YOE dollars) for the Underground Emphasis LRT Alternative. At this stage of project development, a conceptual implementation plan has been assumed for the build alternatives, whereby all cost categories are assumed to be incurred over a ten-year implementation period. In future iterations of the financial analysis, the costs and implementation schedule will be refined.

Table 5-2 Capital Costs in 2008 Dollars and YOE Dollars ($ millions)		
Alternative	2008 Dollars	YOE Dollars
TSM	$62.74	$73.51
At-Grade Emphasis LRT Alternative Option A	$795.67	$1,019.91
At-Grade Emphasis LRT Alternative Option B	$709.30	$909.17
Underground Emphasis LRT Alternative	$910.36	$1,166.91

Table 5-3 and Figure 5-4 present the capital costs of the alternatives using the FTA's Standard Cost Categories. FTA requires submission of capital costs in the SCC format at key milestones in the major capital project development process, including the application to enter Preliminary Engineering which follows the AA. The ten main cost categories are:

- 10 Guideway and Track Elements
- 20 Stations, Stops, Terminals, Intermodal
- 30 Support Facilities: Yards, Shops, Administration Buildings
- 40 Sitework and Special Conditions (removal of structures or existing trackwork, utility relocations, roadway modifications, and environmental mitigation)
- 50 Systems (overhead catenaries and communication infrastructure)
- 60 Row, Land, Existing Improvements
- 70 Vehicles
- 80 Professional Services
- 90 Unallocated Contingency
- 100 Finance Charges

Cost categories 10 through 60 are the construction and right-of-way elements associated with each alternative. Category 70 is the cost of vehicles and includes buses (TSM Alternative) and/or light rail vehicles (build alternatives). Categories 80 through 100 represent "soft costs." These costs include allowances for professional services (Category 80) such as engineering and design, construction management, agency program management, project management oversight, project implementation, and training/start-up/testing. The allowances are computed by applying a percentage to the total construction cost estimated for each cost category (Categories 10 through 50). Unallocated contingency (Category 90) is an overall project contingency which is typically higher during the early stage of project development and decreases as more detailed planning and engineering is completed. Finally, finance charges are estimated if the financial plan for the project includes the issuance of bonds. No financing charges have been assumed at this time.

Costs for each alternative are shown in Table 5-3 and Figure 5-1, and explained below.

Table 5-3 Capital Costs of the Alternatives, by FTA Standard Cost Category (2008 $, in millions)

FTA Standard Cost Categories	TSM	Build Alternatives: At-Grade Emphasis LRT Alternative-Option A	Build Alternatives: At-Grade Emphasis LRT Alternative-Option B	Build Alternatives: Underground Emphasis LRT Alternative
10 Guideway and Track Elements		$215.59	$204.64	$231.02
20 Stations, Stops, Terminals, Etc.		$82.75	$44.75	$116.27
30 Support Facilities	$21.00	$15.60	$15.60	$5.20
40 Sitework and Special Conditions		$154.87	$144.87	$184.91
50 Systems		$32.61	$32.52	$30.92
60 ROW, Land, Existing		$3.78	$3.78	$54.18
70 Vehicles	$29.11	$52.67	$52.67	$17.56
80 Professional Services	$6.93	$165.47	$145.99	$187.54
90 Unallocated Contingency	$5.70	$72.33	$64.48	$82.76
100 Finance Charges				
Total	**$62.74**	**$795.67**	**$709.30**	**$910.36**

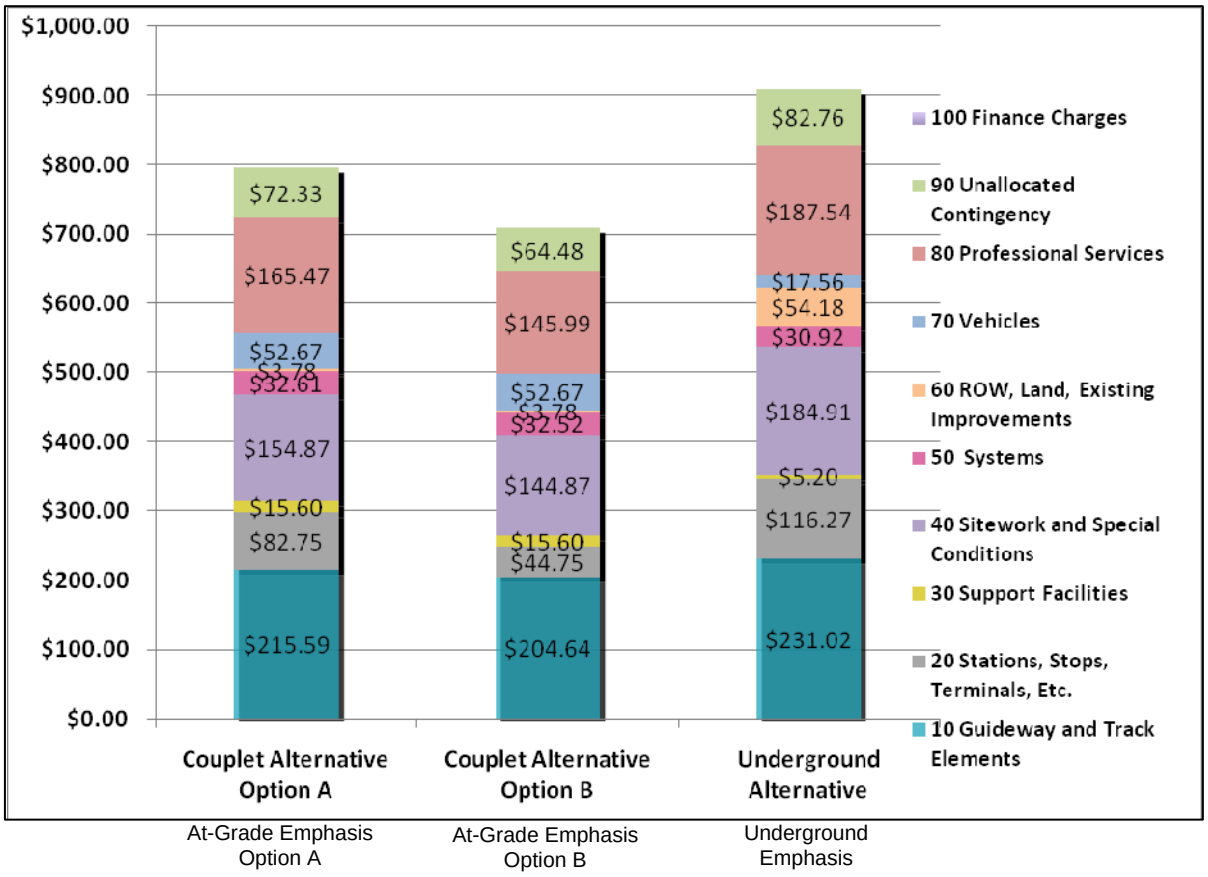


Figure 5-1 Capital Costs of the Alternatives, by Standard Cost Category(2008 $, in millions)

TSM Alternative

Of the $62.7 million cost of this alternative, approximately $50.1 million (80 percent) is for support facilities (33 percent) and vehicles (46 percent). This reflects the need for a new maintenance facility and a total of 42 new buses for this alternative. Professional services account for approximately $6.9 million (11 percent), with $5.7 million (9 percent) for unallocated contingencies.

At-Grade Emphasis LRT Alternative Option A

Of the $795.7 million cost of this alternative, approximately $501.5 million (63 percent) is related to the construction elements of the FTA SCC, with guideway and track (27 percent), sitework and special conditions (19 percent) and stations (10 percent) accounting for the majority of the construction costs. Twelve light rail vehicles would be required for this alternative which is $52.7 million (7 percent) of the total costs. Professional services account for $165.5 million (21 percent), with $72.3 million (9 percent) for unallocated contingencies.

At-Grade Emphasis LRT Alternative Option B

Similar to Option A, of the $709,3 million cost of this alternative, approximately $442.4 million (62 percent) is related to the construction elements of the FTA SCC, with guideway and track (29 percent), sitework and special conditions (20 percent) and stations (6 percent) accounting for the majority of the construction costs. Station costs are lower with Option B since only one station is underground compared to two in Option A. Similar to Option A, 12 light rail vehicles would be required for this alternative at a cost of $52.7 million (7 percent of the total costs). Professional services account for $146.0 million (21 percent), with $64.5 million (9 percent) for unallocated contingencies.

Underground Emphasis LRT Alternative

Of the $910.4 million cost of this alternative, $568.3 million (62 percent) is related to the construction elements of the FTA SCC, with guideway and track (25 percent), sitework and special conditions (20 percent) and stations (13 percent) accounting for the majority of the construction costs. Compared to the At-Grade Emphasis LRT Alternative, only four light rail vehicles would be required for this alternative which is $17.6 million (2 percent of total costs). Professional services account for $187.5 (21 percent), with $82.8 million (9 percent) for unallocated contingencies.

5.2.2 Year of Expenditure Cost Analysis

For the YOE cost analysis, capital costs were escalated from 2008 dollars using annual growth rates and a preliminary implementation plan developed by other team members. The annual and compound growth rates are shown in Table 5-4. In addition to these escalation rates, the percentage of project completion by year (cost curve) shown in Table 5-5 was used to estimate the annual costs for the TSM and the build alternatives.

Table 5-4 Year of Expenditure Dollar Escalation Rates		
Capital Costs	Growth Rate	Compound Annual Growth Rate
2009	1.04	1.04
2010	1.04	1.08
2011	1.04	1.12
2012	1.04	1.17
2013	1.04	1.22
2014	1.04	1.27
2015	1.03	1.30
2016	1.03	1.34
2017	1.03	1.38
2018	1.03	1.42

Table 5-5 Cost Curve Assumptions		
	Assumed Cost Curves	
Year	TSM Alternative	Build Alternatives
2009	14.3%	1.6%
2010	14.3%	2.4%
2011	14.3%	3.2%
2012	14.3%	12.0%
2013	14.3%	13.6%
2014	14.3%	14.4%
2015	14.3%	15.2%
2016		15.2%
2017		14.4%
2018		8.0%

Table 5-2, shown previously, compares the total costs for each build alternative in 2008 dollars and in YOE dollars. Table 5-6 and Figure 5-2 provide a comparison of the alternatives with respect to costs incurred per year in YOE dollars. As shown in the tables and figure, the major expenditures for the build alternatives are assumed to occur in years 4 through 9 of the 10-year project implementation period, while the costs of the TSM Alternative are assumed to be incurred over the first 7 years.

Table 5-6 Comparison of Annual Capital Costs (YOE$, in millions)				
Year	TSM Alternative	Couplet Alternative-Option A	Couplet Alternative-Option B	Underground Alternative
2009	$9,321	$13,240	$11,803	$15,148
2010	$9,694	$20,654	$18,412	$23,631
2011	$10,082	$28,641	$25,532	$32,769
2012	$10,485	$111,699	$99,574	$127,799
2013	$10,905	$131,656	$117,365	$150,632
2014	$11,341	$144,977	$129,239	$165,872
2015	$11,681	$157,622	$140,512	$180,340
2016	$0	$162,350	$144,727	$185,750
2017	$0	$158,420	$141,223	$181,253
2018	$0	$90,651	$80,811	$103,717
Total	**$73,510**	**$1,019,910**	**$909,197**	**$1,166,911**

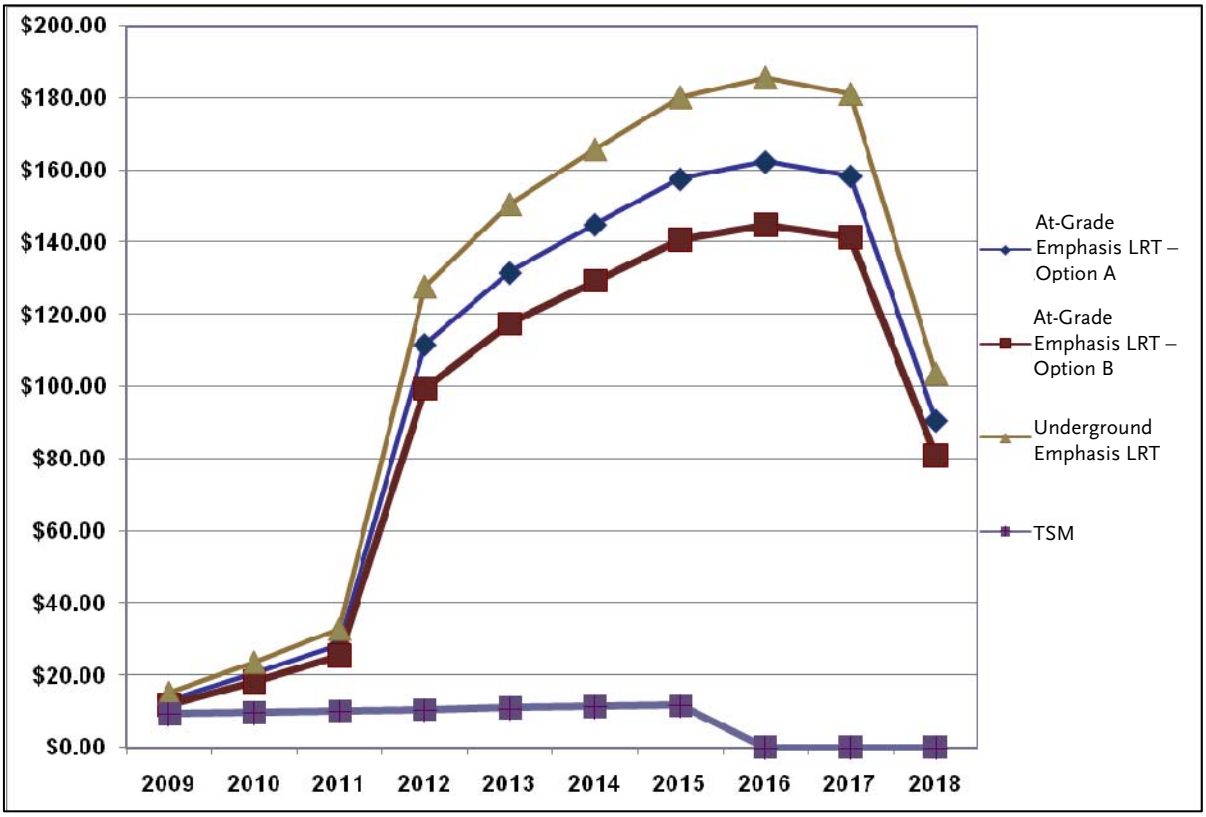


Figure 5-2 Annual Capital Costs by Alternative (YOE dollars, in millions)

5.3 Potential Capital Revenue Sources

This analysis identifies potential funding sources and financing strategies to fund the capital costs of the TSM and build alternatives. As shown in Table 5-7, the preliminary assumption is that the TSM and build alternatives would be funded 50 percent from federal sources and 50 percent from local sources. However, as the project development process continues and a locally preferred alternative is selected, these funding split assumptions may change, as may the funding sources proposed.

Table 5-7 Preliminary Funding Assumptions

Funding Source	TSM Alternative	Build Alternatives
Federal	50%	50%
State	0%	0%
Local	50%	50%

The subsequent sections provide a description of the conceptually proposed federal and local funding sources identified at this stage of project development. This is followed by descriptions of other potential state and local funding sources that could be examined in greater detail in future iterations of the financial analysis.

5.3.1 Conceptually Proposed Funding Sources

The federal and local/state funding sources conceptually proposed for the TSM and build alternatives are:

Federal:

- FTA Section 5309 New Starts (for the build alternatives);
- FTA Section 5309 Bus Discretionary (for the TSM Alternative); and
- Congestion Mitigation and Air Quality (CMAQ).

Local/State:

- Proposed New Countywide Transportation Sales Tax;
- Proposition A and Proposition C Countywide Transportation Sales Taxes (if restrictions on expenditure for subway construction were removed); and
- Regional Improvement Program (RIP).

5.3.1.1 Conceptually Proposed Federal Sources

FTA Section 5309 New Starts Program

The most viable federal funding source for the build alternatives is the FTA New Starts program. The New Starts program is the federal government's primary financial resource for supporting locally-planned, implemented, and operated transit fixed guideway capital investments, such as the build alternatives identified for the project. Since the TSM

Alternative does not include a fixed guideway element, it would not be eligible for New Starts funds.

Projects applying for New Starts funding must undergo evaluation by the FTA throughout the entire project development process. Projects are evaluated according to a variety of criteria such as mobility improvements, environmental benefits, cost-effectiveness, operating efficiencies, transit supportive land use, and local financial capacity. At this stage of project development, FTA's New Starts program is proposed to provide 50 percent of the total funding for the project.

According to Metro's 2008 LRTP, the agency anticipates receiving between $80-$100 million dollars a year in New Starts funds for a variety of planned fixed guideway projects. The projects identified in the LRTP to receive New Starts Funds are the:

- Eastside Light Rail Project;
- Exposition Phase II to Santa Monica; and
- Crenshaw Transit Corridor.

Metro has a successful history of obtaining New Starts funds, including the Red Line and the Eastside Light Rail Project, which received a Full Funding Grant Agreement in the amount of $490.7 million in June 2004.

Metro's LRTP assumes that after the $490.7 million is received for the Eastside Light Rail Project, the agency will receive approximately $80 million per year through FY 2025. As stated above, these funds are currently planned to be used on the Exposition Phase II to Santa Monica and the Crenshaw Transit Corridor projects, with the Regional Connector Transit Corridor not currently identified.

Beyond 2025, Metro staff have determined that no local funds will be available to provide match for federal New Starts funds. According to the LRTP, if in the future local matching funds become available, Metro will evaluate and select future capital projects to be included into the New Starts applications.

Assuming that Metro will have additional New Starts funds available for the Regional Connector's build alternatives in the near future, a 50 percent share would require the following total funding amounts.

- At-Grade Emphasis LRT Alternative – Option A: $509.9 million
- At-Grade Emphasis LRT Alternative – Option B: $454.59 million
- Underground Emphasis LRT Alternative: $583.45 million

Since the Eastside, Exposition, and Crenshaw projects currently have a higher priority than the Regional Connector, the timing for receipt of the New Starts funds could likely be at the end of the project's construction period. If this is the case, Metro would have to use local funds to cover FTA shares and be paid back when New Starts funds are available. Analysis of this issue will be addressed in future iterations of the financial analysis.

FTA Section 5309 Bus Discretionary Program

The Section 5309 Bus Discretionary Program allocates grants on an annual basis primarily through Congressional earmarks. Eligible purposes are acquisition of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, bus preventive maintenance, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fareboxes, computers, shop and garage equipment, and costs incurred in arranging innovative financing for eligible projects. Grants are typically provided in the form of an 80 percent federal and 20 percent local match. The primary components of the TSM Alternative, buses and a new maintenance facility, would be eligible for federal funding under this program.

Congestion Mitigation and Air Quality Program

The CMAQ program is a federal formula grant program for use on projects that contribute to attainment of national ambient air quality standards. Within the 2008 LRTP, Metro has programmed CMAQ funds for new transit lines including Eastside, Exposition Light Rail Line Phases I and II, Crenshaw Transit Corridor and for the first three years of operation of various Metro Rapid bus projects.

While the deadline for compliance with federal air quality standards is 2020, Metro has programmed declining levels of CMAQ funds through 2030 within the 2008 LRTP. The Regional Connector would qualify for CMAQ funding as a project that would contribute to attainment of national ambient air quality standards and reduce congestion.

5.3.1.2 Conceptually Proposed Local/State Funding Sources

Los Angeles Countywide Sales Taxes for Transportation

Currently there are two existing countywide transportation sales taxes in Los Angeles County – Proposition A and Proposition C. However, the 1998 Reform and Accountability Act restricts the use of Proposition A and C funds to construct underground subways. In order to use these funds for the build alternatives, this restriction would need to be removed.

Proposition A

Proposition A is a county-wide half-cent sales tax that was passed in 1980. This voter-approved sales tax is used to improve and expand public transportation throughout Los Angeles County. Proposition A funds are allocated among four funding programs: Local Return Program (25 percent), Rail Development Program (35 percent), Discretionary Program (40 percent), and the 5 percent of 40 percent Incentive Program. The build alternatives would likely only be eligible for one of these programs, the Rail Development

program. The TSM Alternative would be eligible under the Local Return and Discretionary programs. Neither the build alternatives nor the TSM Alternative would be eligible under the 5 percent of 40 percent Incentive Program, as this is for paratransit and special transit programs.

Rail Development Program: For previous major construction projects, such as the Blue, Green and Red Lines, Metro has leveraged these funds by bonding in accordance with the agency's adopted debt policy. Bond debt service has the first claim of funds from this program. Other eligible uses include the acquisition, renovation, rehabilitation, and replacement of rail vehicles, rail facilities, and wayside systems, operation of rail systems, and acquisition and maintenance of rights of way.

Local Return Program: Funds from this program are distributed to Los Angeles County and the cities in the County on a per capita basis for public transit uses. These funds may be traded to other jurisdictions in exchange for general or other funds if the traded funds are used for public transit purposes. Eligible uses include expenditures related to fixed route and paratransit services, Transportation Demand Management (TDM), Transportation System Management (TSM), and fare subsidy programs that exclusively benefit transit.

Discretionary: These funds are allocated based on Metro Board policy for County bus operators by formula based on projected receipts plus CPI, and adjusted once during the mid-year reallocation. Eligible uses include any transit purpose, however current practice limits expenditures to bus capital and operations.

Proposition C

Proposition C is a county-wide half-cent sales tax that was passed in 1990. This voter-approved sales tax is used for public transit purposes throughout Los Angeles County. Proposition C funds are allocated among five funding programs: Rail and Bus Security (5 percent), Commuter Rail/Transit Centers (10 percent), Local Returns (20 percent), Transit-related Improvements to Freeways and State Highways and Public Mass Transit Improvements to Railroad Rights-of-Way (25 percent) and Discretionary program (40 percent). The build alternatives would likely only be eligible for one of these programs, the Discretionary program. The TSM Alternative would be eligible for funds from the Discretionary and Local Returns programs.

Discretionary Program: Funds from this program are currently allocated at the discretion of Metro Board to Metro and non-Metro operators and agencies after all other funding opportunities are exhausted. Eligible uses include the improvement and expansion of rail and bus transit countywide, provision of fare subsidies, increased graffiti prevention and removal, and increased energy-efficient, low polluting public transit service. These funds may also be used for Metro's Call for Projects and other regionally significant transit programs at discretion of Metro Board.

Local Returns Program: These funds are distributed to cities on a per capita basis exclusively for public transit purposes. Unlike the Proposition A Local Returns program, these funds may not be traded to other jurisdictions in exchange for general or other funds. Eligible uses include expenditures related to fixed route and paratransit services, Transportation Demand Management (TDM), Transportation System Management (TSM), fare subsidy programs that exclusively benefit transit, Congestion Management Programs, commuter bikeways and bike lanes, street improvements supporting public transit service, and Pavement Management System projects.

Regional Improvement Program (RIP)

The State's funding for transportation is programmed in the State Transportation Improvement Program (STIP). Within the STIP, 75 percent of the funding is allocated and programmed by the regional transportation planning agencies such as Metro under the Regional Improvement Program (RIP). The remaining 25 percent is programmed by the State under the Interregional Improvement Program. The actual sources of RIP funding are the federal Surface Transportation Program (STP) and the State's Public Transportation Account (PTA). PTA revenues accrue from a sales tax on gasoline and diesel fuel, with revenues used for transit.

Based on a fund estimate prepared by Caltrans, the California Transportation Commission develops the annual RIP programming targets for each agency. Metro selects and programs the projects to be funded through its Call for Projects process and the Metro Long and Short Range Transportation Plans. Metro has programmed and re-programmed its STIP projects to conform to the targets, which have been subject to change based on level of funds available and the extent of borrowing of PTA revenues by the State for use in balancing the State Budget. Future RIP revenues could potentially be used to assist in funding the Regional Connector.

5.3.2 Other Potential Funding Sources

As the project moves forward, the following sources may become viable revenue sources for the alternatives. These potential sources described below include one state source and five local sources.

5.3.2.1 Potential State Source

At this stage of project development, five other potential local funding sources have been identified. While these sources may provide funding in the future, they should be considered as minor supportive sources as they would generate a much smaller revenue stream than the county-wide sales taxes and RIP funding described previously.

Benefit Assessment District Revenues

Under a benefit assessment district, a fee is placed on properties in a specified area to pay part or all of the cost of specific capital improvements made within and specifically benefiting that area. The underlying principle for the creation of benefit assessment districts is that owners of property located within close proximity to a particular public asset, such as a rail transit station, derive benefits from the presence of that asset and, therefore, should share in the costs of its construction, maintenance, operation, and/or

upgrading. In a benefit assessment district, a connection between benefit received and cost charged is essential, in that assessments charged should be proportional to and no greater than the benefit received by the assessed property.

In July 1985, Metro established two benefit assessment districts as part of the funding plan for Segment 1 of the Red Line. The districts, referred to as District A1 and A2, were formed in advance of the initiation of service in 1993. Annual assessments were levied on the gross square footage of the assessable improvement or parcel area of non-residential properties. For District A1, the 2007-2008 assessment rate is $0.33 while the assessment rate for District A2 is $0.32.

Funding from the two benefit assessment districts provided approximately $130.0 million or 9 percent of the Red Line's total costs. The $130.0 million was in the form of bond proceeds to support the construction of stations in each district. The benefit assessment districts have provided the revenue stream to repay the bonds. The final assessment fee was collected in April 2009 with the final bond payment scheduled for September 2009.

At the time the two existing benefit assessment districts were formed, Metro was not required to conduct an election in order to levy an assessment on property owners. With passage of State Proposition 218 in 1996, new assessment districts require approval by a two-thirds vote of property owners. The 2008 LRTP assumes no future funding from benefit assessment districts.

While the existing benefit assessments are expiring, it is of interest to note the considerable overlap between these districts and the PSA boundaries. For this reason, a description of the two districts is provided below.

District A1 – Central Business District: District A1 covers approximately 1,205 acres and includes Bunker Hill, the Civic Center portions of Chinatown, Little Tokyo and the Financial District areas of downtown Los Angeles. This district includes four Red Line stations, Union Station, Tom Bradley Civic Center Station, Pershing Square Station and 7th St./Metro Center Station. The benefit assessment district boundaries were set at a one-half mile distance from the station locations. Within the District A1's one-half mile boundaries there are approximately 2,700 properties, of which 1,250 properties are assessable and contain 63.2 million square feet. Bonds in the amount of $123.5 million were issued for this assessment district to support the construction of the four stations.

District A2 – Westlake/MacArthur Park District: District A2 is located on Wilshire Blvd., midway between Miracle Mile to the west and the Los Angeles Central Business District to the east. The district reflects a one-third mile boundary around one Red Line station, Westlake/MacArthur Park Station, and covers approximately 207 acres. Within the district there are approximately 460 properties of which 230 are assessable and contain 3.3 million square feet. Bonds in the amount of $6.5 million were issued for this assessment district to support the construction of the station.

Joint Development Proceeds

Metro has a long, successful history of joint development projects along its major transit corridors. According to Metro's Joint Development Policies and Procedures document, joint development is a real property asset development and management program designed to secure the most appropriate private and/or public sector development on Metro-owned property at and adjacent to transit stations and corridors. Joint Development also includes coordination with local jurisdictions in station area land use planning in the interest of establishing development patterns that enhance transit use.

The goals of Metro's Joint Development Program include:

- Encouraging comprehensive planning and development around station sites and along transit corridors; and
- Reducing auto use and congestion through encouragement of transit-linked development.

For the specific sites, the Metro's Joint Development Program seeks developments that

- Promote and enhance transit ridership;
- Enhance and protect the transportation corridor and its environs;
- Enhance the land use and economic development goals of surrounding communities and conform to local and regional development plans; and
- Generate value to the MTA based on a fair market return on public investment.

Table 5-8 summarizes the current status of Metro's Joint Development Program. The table includes completed projects, projects under construction, projects that have been approved by Metro's Board, and potential future joint development sites. Additional joint development sites could potentially be identified for the Regional Connector.

Mello-Roos District Revenues

The Mello-Roos Community Facilities Act of 1982, Gov. Code §§ 53311 ff. provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. A local legislative body may create a Mello-Roos Community Facilities District (or "CFD") within defined boundaries to finance a broad range of facilities and services, including the purchase, construction, expansion, improvement, or rehabilitation of any real or other tangible property with an expected useful life of 5 years or longer which the agency conducting the proceedings is authorized by law to construct, own, or operate, or to which it may contribute revenue. The CFD may impose a "special tax" within the boundaries of the CFD, which requires a two-thirds vote of registered voters (if the district is developed). If the vote passes, a "Notice of Special Tax Lien" is recorded which imposes a continuing lien on affected properties. CFD's may issue bonds secured by the special tax.

Table 5-8 Metro Joint Development Project Status	
Joint Development Projects	Development Summary
Completed Projects	
Union Station Gateway, 1995	• 600k Square foot Metro headquarters building • 11 Bay Patsaouras Plaza • Union Station East Portal • 2,800 space below-grade parking garage • Space for additional 2 million square feet of commercial/retail
7th St./Metro Center Station, 1993	• Station in basement of a 550k square foot office tower
Metro Blue Line Willow Station, 1999	• 528k square foot site • 132k net rentable square feet of neighborhood shopping • Major grocery store, retail and food services facilities • 700- car transit parking structure
Metro Red Line Hollywood/Highland Station, 2001	• 389k square feet of retail/entertainment • 3,500 seat Kodak Theater • 640-room Renaissance Hollywood Hotel • 3,000-space parking structure
Metro Red Line Hollywood/Western Station, 2004	• 60 affordable housing units and retail • 9k square foot retail • 4k square foot child care center
Wilshire and Vermont, 2008	• 380 residential units • 26k square feet of commercial space • Child care center • 800 student middle school • 700 space parking structure
Projects in Construction	
Hollywood-Vine	• 300 room W Hotel • 150 W branded condos integrated with hotel • 350 apartments • 72k square feet street level retail • bus layover facility
Wilshire-Western	• 195 Condominiums • 49k square feet retail/restaurant • 700 space parking • bus layover facility with 12 spaces
Projects with Board Approval	
Westlake-MacArthur Park	• 310 affordable housing units • 86k square feet of retail • 483 space parking structure
Potential Sites	
North Hollywood	17.4 Acre 4 parcel potential site
Universal City	12 Acre 2 parcel potential site
Metro Orange Line Sepulveda Station	12.48 Acre 1 parcel potential site
Chatsworth Metrolink Station	12 Acre 2 parcel potential site

Table 5-8 Metro Joint Development Project Status	
Joint Development Projects	Development Summary
Metro Gold Line Eastern Extension	Various Parcel potential site
Taylor Yard	23 Acre 1 parcel potential site
Blue Line Artesia Station Bus Divisions (Div. 7; El Monte)	6.4 Acre potential site
Metro Orange Line Balboa Station	2.2 Acre potential site
Vermont/Beverly	.5 Acre potential site
Vermont/Sunset	.7 Acre potential site

Currently transit capital and operating expenses are not eligible to receive funding from Mello-Roos Districts. In the spring 2008, the Mello-Roos Act and Public Transit (AB 2705) was submitted which would authorize the use of Mello-Roos Community Facilities Districts to finance public transit facilities and operating expenses in new developments. In future iterations of the financial analysis, this pending legislation will be reviewed and further evaluated for potential applicability to the project.

Revenue from Potential Congestion Pricing Strategies

Congestion pricing is the concept of charging for the use of a transportation facility, such as a roadway, based on the level of traffic congestion. The greater the level of congestion, usually occurring during morning and evening rush hours, the higher the cost (tolls) to use the facility.

It is assumed that revenues generated by the tolls would be used first to pay for the operations of the priced lanes and any outstanding debt associated with implementing congestion pricing in a corridor. After paying these expenses, any additional revenues generated from the tolls could be used to improve or enhance transportation services in the corridor where the toll is generated. These enhancements may include additional bus and rail services, roadway improvements, and other complementary services.

Los Angeles County was recently selected to implement a one-year congestion pricing demonstration project under a United States Department of Transportation funding program. The project, called FastLanes, will test innovative pricing strategies to alleviate congestion, maximize freeway capacity usage, and fund additional transit alternatives on High Occupancy Vehicle (HOV) lanes on I-110 between 182nd St./Artesia Transit Center and Adams Blvd. and on I-10 between Alameda St./Union Station and I-605.

Revenue from Potential Countywide Transportation Impact/ Mitigation Fee

Transportation impact fees are charges assessed by local governments against new development projects that attempt to recover the cost incurred by government in providing the public facilities required to serve the new development. Impact fees are typically only used to fund facilities that are directly associated with the new development. While transportation impact fees may be used to pay the proportionate share of the cost of public facilities that benefit the new development, the fees usually cannot be used to

correct existing deficiencies in public facilities. Revenue from the impact fees could be pledged for payment of annual debt service to implement the improvement project.

Metro is currently conducting a Countywide Congestion Mitigation Fee Study which has the following primary objectives:

- Establish a regional mitigation program by meeting regional mitigation requirements under Metro's Congestion Mitigation Program (CMP) and the California Environmental Quality Act (CEQA), replacing the existing CMP debit/credit program and ensuring the continued flow of more than $95 million annually in gas tax revenue to local governments;
- Ensure local control by allowing projects to be selected by each jurisdiction consistent with guidelines, allowing fees to be collected separately by each jurisdiction, and allowing fees to be deposited in separate interest-generating accounts;
- Generate new revenue for unmet transportation needs; and
- Provide a level playing field county-wide.

Results from the study indicate that implementation of mitigation fees could generate between $2 and $15 billion in funding for transportation projects over the 2005 to 2030 period, depending upon the fee imposed. Although Metro is developing and overseeing this program, the cities would have the control to implement the program on a local level. Additionally, the study recommends establishing an advisory committee to oversee the program's implementation and assist in guiding the program's recommendations.

5.3.3 Potential Financing Strategies

This section describes two potential funding strategies that could be evaluated in detail during future iterations of the financial analysis.

Metro Bonding Capacity

Metro leverages a portion of its revenues from Proposition A and Proposition C county-wide sales taxes for use in paying the debt service on bonds issued to support bus, rail, and highway capital projects. Within the 2008 LRTP, the agency's long range financial plan calls for Metro to modify its current debt policy by increasing the percentage of cash to be used for debt as opposed to using it on a pay as you go basis. Specifically, the LRTP assumes increasing the percent of revenue available for debt service within the following funding programs:

- Proposition C 25 Percent Funds (Transit-related Improvements to Freeways and State Highways and Public Mass Transit Improvements to Railroad Rights-of-Way program): from 60 percent to 75 percent; and
- Proposition C 10 Percent Funds (Commuter Rail/Transit Centers program): from 40 percent to 50 percent.

Project Packaging for FTA New Starts Process

Transit agencies across the country are identifying alternative project delivery strategies to implement major capital projects faster. In both Houston and Salt Lake City, the transit agencies have been successful in reaching an agreement with FTA to submit a package of fixed guideway projects that would have a portion of the projects funded entirely with local sources and the remainder of the projects funded jointly between the federal government and the local agency. For example, the Utah Transit Authority (UTA) has entered into a Memorandum of Understanding (MOU) with the FTA for the FrontLines 2015 Program. According to the MOU, the overall funding split for the $2.5 billion five-corridor program will be 20 percent federal and 80 percent local. However, for the two highest performing projects FTA has agreed to an 80 percent federal and 20 percent local funding split. For the remaining three projects in the FrontLines Program, UTA will use 100 percent local funds with the majority of this funding provided through the issuance of bonds.

It's important to note that in order for this approach to be successful there would need to be enabling language included in the SAFETEA-LU reauthorization bill and a successful negotiation of an MOU with the FTA.

5.4 Operations and Maintenance (O&M) Costs and Revenues

5.4.1 O & M Costs

System-wide O&M cost estimates were developed for each of the alternatives and reflect operating plans for the year 2030. For this report, costs are shown in 2008 dollars. In future versions of the financial analysis, O&M costs will be shown in YOE dollars and will be included in a detailed cash flow analysis.

Table 5-9 summarizes the total annual cost by mode for each alternative. Table 5-10 compares the change in annual O&M costs relative to the No Build Alternative, while Table 5-11 compares the change in costs relative to the TSM Alternative. Key findings from these comparisons are described below.

In comparison to the No Build Alternative:

- The Underground Emphasis LRT Alternative has the lowest annual increase in O&M cost ($5.1 million), followed by the At-Grade Emphasis LRT Alternative ($9.6 – $9.8 million). The TSM Alternative has the largest increase in annual O&M costs ($13.6 million) due to the significant increase in bus service and relatively small savings in heavy rail and light rail costs (less than $100,000).

In comparison to the TSM Alternative:

- The Underground Emphasis LRT Alternative has the lowest annual increase in O&M cost and provides the largest annual savings (approximately $8.5 million savings).

- The annual O&M costs of the At-Grade Emphasis LRT Alternative are lower than the TSM Alternative. Option A has a savings of $3.8 million, while Option B has a savings of $4.1 million.

In comparison within/to the At-Grade Emphasis LRT Alternatives:

- At-Grade Emphasis LRT Alternative - Option B annual O&M costs were slightly lower than Option A (approximately $0.25 million less).
- The annual O&M cost of the Underground Emphasis LRT Alternative is approximately $4.5 million lower than the At-Grade Emphasis LRT Alternative.

Table 5-9 2030 Annual Operating Cost of the Alternatives
(in 2008 $, Millions)

Mode	No Build Alternative	TSM Alternative	Couplet Alternative-Option A	Couplet Alternative-Option B	Underground Alternative
Heavy Rail	$117.09	$117.06	$116.30	$116.26	$116.11
Light Rail	$258.01	$257.95	$268.61	$268.42	$264.20
Bus Including BRT	$987.92	$1,001.61	$987.91	$987.88	$987.87
System-wide Total	**$1,363.02**	**$1,376.62**	**$1,372.82**	**$1,372.57**	**$1,368.17**

Table 5-10 Comparison of 2030 Annual Operating Costs to the No Build Alternative
(in 2008 $, Millions)

Mode	No Build Alternative	TSM Alternative	Couplet Alternative-Option A	Couplet Alternative-Option B	Underground Alternative
Heavy Rail	-	-$0.03	-$0.79	-$0.83	-$0.98
Light Rail	-	-$0.06	$10.60	$10.41	$6.19
Bus/BRT	-	$13.69	-$0.01	-$0.04	-$0.05
System-Wide Total	-	$13.60	$9.80	$9.55	$5.15

Table 5-11 Comparison of 2030 Annual Operating Costs to the TSM Alternative (in 2008 $, Millions)					
Mode	No Build Alternative	TSM Alternative	Couplet Alternative Option A	Couplet Alternative Option B	Underground Alternative
Heavy Rail	N/A	-	-$0.76	-$0.80	-$0.95
Light Rail	N/A	-	$10.66	$10.47	$6.25
Bus/BRT	N/A	-	-$13.70	-$13.73	-$13.75
System-Wide Total	N/A	-	-$3.80	-$4.05	-$8.45

5.4.2 O & M Revenue Sources

The sections below describe preliminary estimates of farebox revenue, farebox recovery rates, and levels of annual system-wide operating support associated with the alternatives.

5.4.2.1 Farebox Revenues and Farebox Recovery

Table 5-12 summarizes the annual system-wide farebox revenues and farebox recovery rates of the alternatives for the 2030 horizon year. Annual estimates of 2030 farebox revenues were developed based on the travel forecasting model projections of 2030 total daily linked trips by alternative and Metro's 2007 average fare revenue per linked trip. Total daily linked trips were annualized using an annualization factor of 317.39, consistent with the factor used in calculation of user benefits. The resulting annual numbers of system-wide linked trips are shown in the table below. Annual farebox revenues were then estimated assuming Metro's 2007 average linked trip fare of $0.66. This average fare reflects Metro's most recent fare increase and the current level of use of discounted fare media and programs.

As shown in the table, annual system-wide farebox revenues for the 2030 horizon year are projected to range from $317.5 million for the No Build Alternative to $319.7 million for the Underground Emphasis LRT Alternative. Relative to the annual system-wide O&M costs projected for the 2030 horizon year, farebox recovery is estimated to range from 23.1 for the TSM Alternative to 23.4 for the Underground Emphasis LRT Alternative. While the actual farebox recovery rates are preliminary, the data indicate that the Underground Emphasis LRT Alternative would generate higher levels of fare revenue and farebox recovery than the other alternatives, followed by the At-Grade Emphasis LRT Alternative.

Table 5-12 2030 Annual Farebox Revenues and Farebox Recovery by Alternative (2008 $)					
			At-Grade Emphasis LRT Alternative		
	No Build Alternative	TSM Alternative	Option A	Option B	Underground Emphasis LRT Alternative
Annual Linked Trips (millions)	481.11	481.41	483.52	483.77	484.34
Annual Farebox Revenue (2008 $, millions)	$317.53	$317.73	$319.13	$319.29	$319.67
Farebox Recovery	23.3%	23.1%	23.2%	23.3%	23.4%

5.4.2.2 Operating Support from Metro

The combined effect of lower annual system-wide O&M costs and higher farebox revenues is projected to reduce the level of annual operating support that Metro would be required to fund. Table 5-13 summarizes the reduction in annual operating support associated with the build alternatives relative to the TSM Alternative. As shown in the table, the Underground Emphasis LRT Alternative is projected to reduce the level of annual system-wide operating support required from Metro by $10.4 million. The At-Grade Emphasis Alternative is projected to reduce Metro's system-wide operating subsidy by $5.2 million to $5.6 million.

Table 5-13 2030 Reduction in Annual Operating Support Relative to the TSM Alternative (2008 $, Millions)				
		At-Grade Emphasis LRT Alternative		
	TSM Alternative	Option A	Option B	Underground Emphasis LRT
Increase in Farebox Revenues	-	$1.40	$1.56	$1.94
O&M Cost Savings	-	$3.80	$4.05	$8.45
Reduction in Operating Support	-	$5.20	$5.61	$10.39

5.5 Summary of Findings

The key findings of the financial analysis are summarized below.

- The Regional Connector is included in both of the existing long range financial planning documents for the region: Metro's 2008 Long Range Transportation Plan (LRTP) and the Southern California Association of Governments Regional Transportation Plan (SCAG RTP). Within the LRTP, the Regional Connector is the highest priority project within the Strategic Unfunded component of the plan. Projects in the Strategic Unfunded component of the plan could be implemented if additional funding were made available from new sources. With regard to the SCAG's Regional Transportation Plan, the Regional Connector is included in the financially constrained plan as a funded project (project identification number 1TR0404).

- The alternatives under consideration for the Regional Connector are the Transportation System Management (TSM) Alternative and two build alternatives, in addition to a No Build Alternative. The TSM Alternative would use buses to shuttle passengers between the 7th St./Metro Center Station and Union Station. The build alternatives would provide a continuation of existing light rail service between the two stations. The build alternatives reflect two options for a combined at-grade/cut-and-cover underground alternative that includes one-way couplets on Main St. and Los Angeles St. (At-Grade Emphasis LRT Alternative) and an alternative that is 100 percent underground bore tunnel (Underground Emphasis LRT Alternative).

- The capital costs of the Regional Connector alternatives range from $62.7 million ($73.5 million in YOE dollars) for the TSM Alternative, to $709.3 - $795.7 million ($909.2 - $1,019.9 million in YOE dollars) for At-Grade Emphasis LRT Alternative Options A and B respectively, and to $910.4 million ($1,166.9 million in YOE dollars) for the Underground Emphasis LRT Alternative. At this stage of project development, a conceptual ten year implementation plan has been assumed for the build alternatives and seven years for the TSM Alternative. In future iterations of the financial analysis, the costs and implementation schedule will be refined.

- The capital costs of the TSM and build alternatives are assumed to be funded 50 percent from federal sources and 50 percent from local/state sources. The federal and local/state funding sources conceptually proposed are:

Federal:

- FTA Section 5309 New Starts (for the build alternatives);

- FTA Section 5309 Bus Discretionary (for the TSM Alternative); and

- Congestion Mitigation and Air Quality (CMAQ).

Local/State:

- Proposed New Countywide Transportation Sales Tax;

- Proposition A and Proposition C Countywide Transportation Sales Taxes (if restrictions on expenditure for subway construction were removed for the build alternatives); and

- Regional Improvement Program (RIP).

FTA New Starts funding is proposed to total approximately $600 million ($60 million per year over the 10 year implementation period).

The build alternatives are projected to have lower system-wide operating and maintenance (O&M) costs than the TSM Alternatives. Relative to the TSM Alternative, the Underground Emphasis LRT Alternative would reduce 2030 annual O&M costs by $8.45 million. The At-Grade Emphasis Alternative Options A and B would reduce 2030 annual O&M costs by $3.80 million and $4.05 million respectively.

The build alternatives are projected to generate higher system-wide ridership and farebox revenues than the TSM Alternatives. Relative to the TSM Alternative, the Underground Emphasis LRT Alternative would increase annual farebox revenues by $1.94 million. The At-Grade Emphasis LRT Alternative Options A and B would increase annual farebox revenues by $1.40 million and $1.56 million respectively.

With the combined effect of lower system-wide O&M costs and higher farebox revenues, the build alternatives are projected to reduce the annual operating support that would be required from Metro. Relative to the TSM Alternative, the Underground Emphasis LRT Alternative would reduce Metro's annual system-wide operating subsidy by $10.39 million. The At-Grade Emphasis LRT Alternative Options A and B would reduce Metro's annual system-wide operating subsidy by $5.20 million and $5.61 million respectively.

As the alternatives selection process moves forward, future iterations of the financial analysis will be conducted, with increasing levels of detail and refinement. The refined financial analysis will include a detailed cash flow analysis in YOE dollars through the project horizon year of 2030.

Section 6 Community Outreach and Public Involvement

6.1 Understanding of Public Outreach Challenges and Opportunities

The Regional Connector is a project that brings challenges as well as opportunities to the public involvement process. While its actual design, engineering and operational impacts are focused on a relatively small area in downtown Los Angeles, its potential benefits accrue to all those served by transit throughout the entire Southern California region. Therefore, it was important to reach out not only to downtown stakeholders, including the employees, residents, tourists and businesses within the PSA, but also to those benefiting from improved system connectivity from one side of Los Angeles County to the other.

Downtown Los Angeles has undergone a transformation over the last decade from primarily a daytime employment destination to a dynamic community with a growing residential population. Established business organizations, Chambers of Commerce, Business Improvement Districts (BIDs), Neighborhood Councils, and others, provided access to stakeholders and organized groups. Through these key groups, the project team established contact and ongoing communication channels to downtown stakeholders.

It was equally important to reach out to stakeholders and commuters who could potentially benefit from the regional transit connectivity of the project. These constituents included transit users from the Metro Blue Line which begins in Long Beach, the Metro Gold Line from Pasadena and transit users who would potentially utilize public transit once the Metro Expo Line and Metro Gold Line Eastside Extension finished construction. The project team reached this widely disbursed population segment through electronic and web-based communications as well as by placing meeting notices on existing public transit vehicles prior to the scoping process and each subsequent meeting.

6.1.2 Community Outreach and Public Involvement Program

A detailed Community Outreach and Public Involvement Plan was developed in order to ensure that the public was kept informed about the Regional Connector AA study on an ongoing basis and provided with opportunities to comment at key milestones throughout the study. The Plan included detailed stakeholder identification, communications protocols, public input tracking, and a proposed schedule for interfacing with the public and recommendations for how meetings should be conducted at various stages of the study. Additional recommendations for key stakeholder interviews or briefings, inter-agency coordination, and topical meetings were also included in the Plan. The Plan was

developed with the necessary flexibility to accommodate changing circumstances and enhanced approaches required for complex projects. Details of outreach efforts can be found in the Community Participation Summary and Report prepared in November 2008. Other documents such as public comment sheets, meeting handouts, presentation materials, public notices, and various meeting items can be found in the appendix sections of the Community Participation Summary and Report.

6.1.3 Stakeholder Identification and Database Development

A comprehensive stakeholder identification process was initiated to coincide with the early scoping process. A comprehensive study database was developed for the purposes of a targeted email and direct mail campaign to:

- Elected officials on the local, state and federal level
- Neighborhood Councils and other elected groups
- Homeowners Associations and Neighborhood Organizations
- Chambers of Commerce and business leaders
- Community-based and civic organizations
- Key employment centers and cultural/entertainment destinations
- Transportation advocates and interest groups
- Print, broadcast and electronic media, including community-based publications and blogs
- Local Business Improvement Districts (BIDs)
- Property management firms serving lofts and condominiums in the Downtown Los Angeles area

A copy of the stakeholder database is located in Appendix A.

Hand-in-hand with the development of the project database was preparation of a Community Profile which highlights the key opinion leaders for this project, as well as their possible issues, concerns and potential support/opposition to the alternatives.

6.2 Public Meetings

Three series of public meetings were held in November 2007, February 2008, and October 2008 as part of the ongoing community outreach and public involvement process.

6.2.1 Early Scoping Meetings

In addition to the Early Scoping Notice which was published in the Federal Register on October 31, 2007, a Public Meeting Notice was developed to notify communities about the Regional Connector study, the early scoping meetings, and opportunities for stakeholders to provide their input prior to the deadline for public comment.

Public Meeting Notices were distributed in a number of ways. A detailed list of 83 regional media outlets was developed which included mainstream, community-based and ethnic/foreign language print and broadcast outlets. A complete list of the media contacted for this project is included in Appendix H.

A press release (provided in Appendix C.5 of the Community Participation Summary and Report) was developed and distributed to all 83 outlets; for the community-based and ethnic print media, a specific request was made for inclusion of early scoping meeting information in their community calendars.

In addition, display advertisements for the early scoping meetings were placed in three (3) newspapers in the PSA and were selected based on their geographic focus, language needs and audited circulation numbers. Newspaper advertisements for the early scoping meetings were placed in the following newspapers:

Outlet	Run Date	Language	Circulation
Los Angeles Downtown News	October 26, 2007	English	49,000
Los Angeles Garment and Citizen	October 26, 2007	English, Spanish	25,000
Rafu Shimpo	October 23, 2007	Japanese	45,000

Approximately 400 individuals and organizations with email addresses were included in the initial stakeholder database. Email notices were sent out on October 23, 2007, with follow-up reminders sent on November 5, 2007. An electronic reminder to the community to submit comments was sent on November 21, 2007. Comments were accepted until November 30, 2007 – an extension of the original date of November 21st.

Over 500 notices were mailed to residents, agencies, and organizations in the PSA. Meeting notices were mailed on October 23, 2007. Notices were posted online at www.metro.net/regionalconnector.

Copies of the postal mailer document were delivered to property managers at 12 residential loft and condominium locations for posting in their public areas.

"Take-Ones" were placed on Metro buses and trains serving, and feeding into, the PSA on October 29, 2007.

All those on the stakeholder database either received two (2) email notices about the early scoping meetings (i.e., an initial notice followed by a reminder), or one (1) piece of direct mail. The offices of elected officials representing portions of the PSA were also contacted and alerted about the meetings.

Multiple organizations were contacted requesting that they forward invitations to the early scoping meetings to their members or constituents. These organizations included transportation advocacy groups, neighborhood and business organizations, civic groups, and academic institutions.

Metro staff also made follow-up calls to agencies inviting them to attend the Agency Early Scoping Meeting.

One (1) Agency Early Scoping Meeting and two (2) Public Early Scoping Meetings were held as described below.

6.2.2 Agency Early Scoping Meeting

Tuesday, October 30, 2007; 12:30 – 2:30 p.m.
Metro Headquarters, Board Overflow Room
One Gateway Plaza, Los Angeles, CA 90012

In attendance were 15 individuals, representing the following agencies:

- City of Los Angeles
- Department of City Planning
- Department of Transportation
- Department of Public Works: Bureau of Engineering
- Cultural Affairs Department
- Los Angeles County
- Metro
- Sheriff's Department: Transit Safety Bureau
- Los Angeles Community College District
- Los Angeles Regional Water Quality Control Board
- Southern California Regional Rail Authority
- State of California
- Public Utilities Commission

- United States Department of Homeland Security: Transit Security Agency

Comments were received during the review period from the City of Los Angeles Community Redevelopment Agency (CRA), the Metropolitan Water District (MWD) and the City of Los Angeles Department of Public Works Bureau of Engineering. A copy of the agency early scoping meeting materials is provided in Appendix N of the Community Participation Summary and Report, including the Early Public Scoping Packet, copy of the Power Point presentation and the exhibits.

6.2.3 Public Early Scoping Meetings

Two (2) Public Early Scoping Meetings were scheduled for November 2007. Public comment received at these Early Scoping Meetings formed the basis for development of a comprehensive range of alternatives for further study in the AA.

Meeting locations were selected to reflect equitable geographic coverage, proximity to public transportation and to minimize overlap with other meetings scheduled in the PSA. The public comment period was facilitated, and speakers were asked to limit their comment to two minutes.

The Public Early Scoping Meetings were scheduled as follows:

Early Scoping Meeting #1: Central Business District/Downtown Los Angeles,
Tuesday, November 6, 2007; 11:30 a.m. to 1:30 p.m.
Los Angeles Central Public Library, Meeting Room A
630 W. 5th St., Los Angeles, CA

68 people signed in at this meeting, and 17 individuals elected to speak. Metro received 15 written comments at the end of this meeting.

Early Scoping Meeting #2: Little Tokyo area/Downtown Los Angeles
Wednesday, November 7, 2007; 6 p.m. to 8 p.m.
Japanese American National Museum
369 E 1st St., Los Angeles, CA

49 people signed in at this meeting, and 16 individuals elected to speak. Metro received 13 written comments at the end of this meeting.

6.2.3.1 Overview of Comments Received

The public comment period for the Regional Connector commenced with the publication of the Early Scoping Notice in the Federal Register on October 31, 2007 and written comments were accepted until November 30, 2007.

A total of 132 individuals signed in at the Agency and Public Early Scoping Meetings. However, it is estimated that at least 160 people attended all three meetings. Formal public comments were collected from 88 people in the following five possible ways prior to the close of the comment period:

- 27 Verbal comments at Public Early Scoping Meetings
- 18 Written comments at Public Early Scoping Meetings
- 29 Written comments via email
- 14 Written comments via US mail
- 0 Verbal comments on the Information Phone Line

This section summarizes the 88 comments received from the public in verbal testimony at the early scoping meetings, written comments submitted at the early scoping meetings, via emails, and letters mailed to Metro.

The overwhelming majority of comments received supported the need for a Regional Connector to enhance the efficiency of the current and future rail system by providing through service between the Metro Blue Line, Gold Line, Gold Line Eastside Extension and Expo Line, and service to link these rail corridors directly to Union Station. Most commenter's supported almost equally a Grand Avenue and 1st St. alignment, below-grade (i.e. subway), and utilizing Light Rail Transit (LRT) technology. Several potential stations received wide popularity, including, in order of their level of support, Little Tokyo, 7th St./Metro Center, Bunker Hill, Union Station, Main/1st St. and Civic Center (i.e., in the northern portion of the PSA).

No comments were received opposing the Regional Connector, though a few remarks noted that other transit projects may need to receive a higher priority. Many commenter's specifically pointed out the need to develop a transit system that connects multiple lines, as well as expanding the 7th St./Metro Center Station to accommodate enhanced service and upgrading various operational systems. Of those providing feedback about the evaluation criteria, most thought that access was paramount.

The detailed comments were scanned and are provided in Appendix D.4 of the Community Participation Summary and Report. The following sections provide a summary of the general type of comments received and number of comments received associated with each type and issue by general subject matter and issues identified.

Comments Related to Mode

Whether the comments provided were written, emailed or submitted at the early scoping meetings, public comments showed tremendous support for LRT technology as the preferred mode for the Regional Connector. There was some support for looking at streetcars, but negligible interest in considering Bus Rapid Transit (BRT), Personal Rapid Transit (PRT) or monorail technology.

Comments Related to Grade

Almost all of the comments received by speakers at the early scoping meetings were in favor of a subway, or for a below-grade system. Of the 44 comments that spoke directly to grade preference, 36 stated a preference for a below-grade system. Of the 23 comments that spoke directly to a mode preference, 15 stated a preference for LRT. One comment received was mode neutral.

Comments Related to Alignment

Comments from these early scoping meetings indicated a nearly even split between supporters of a Grand Ave. alignment or a 1st St. alignment. Also receiving limited support was 2nd St., and an extension of the Blue Line. Limited preference was expressed for other routes including 3rd St. and Flower, with even less interest in the other potential alignments identified on the map that was displayed and distributed at the early scoping meetings.

There was also a small, but vocal, minority concerned with the lack of alignment options to provide connectivity with the southern portion of the PSA, and the lack of existing transit options serving Central City East and the Toy District. Some felt that the alignment should move considerably south, using Alameda St., and make a connection through these underserved areas directly to the 7th St./Metro Center Station.

Comments Related to Station Locations

Several potential stations showed wide popularity, and were somewhat reflective of those preferring the 1st St. route or a Grand Ave. option. The potential station location that received the most support was Little Tokyo, which was seen as the gateway of the Regional Connector into the PSA; followed by the 7th St./Metro Center Station, which is regarded as a key hub; Bunker Hill; Union Station; Main/1st St.; and Civic Center, serving the area in the northern portion of the PSA.

Key Issues Identified

Those stakeholders providing their comments about key issues felt strongly about the need for the Regional Connector to provide a link with Metro's transit line. Those providing input also noted that construction of this project would eventually require upgrades to power distribution, signals and controls systems, and would likely entail an expansion of and upgrades to the 7th St./Metro Center Station. Other issues raised included the need to add rail cars, improve station maintenance, examine increased safety for both stations and the lines, and consider implementing the technology used to construct the Gold Line tunnels.

Comments Related to Evaluation Criteria

There were only a few comments submitted that related to additional evaluation criteria that should be used. Three commenter's requested that evaluation criteria include pedestrian, stroller and ADA access. A smaller number of commenter's suggested that air quality and community impacts (with respect to downtown development) be heavily weighted.

Other General Comments

Of the general comments received, 28 expressed overall support for the project, and emphasized the need for connections to even more transit lines. Other responders emphasized that completion of the Regional Connector would ensure access to the Westside from all around the region. Others felt that the Regional Connector was not as important as other projects and should not be Metro's first priority. In addition, some felt that local funding for the Regional Connector should be sought, and that funding for the project should not come from raising fares.

6.3 Community Update Meeting Series #1

After the initial scoping meetings, a set of two community update meetings was held to present stakeholders with the results of the early scoping process.

In preparation for the meetings, focused outreach to the neighboring communities, key stakeholder groups, and local media was conducted. Beginning February 13, 2008, with the distribution of the media notice, a multimedia approach was conducted to alert the community to the upcoming meetings using direct mail and distribution of electronic notices.

In addition, to reach both residents and those working in the downtown area, advertisements were placed in Rafu Shimpo, Los Angeles Garment and Citizen, and the Los Angeles Downtown News. The advertisements were developed by Metro's graphic department.

Outlet	Run Date	Language	Circulation
Los Angeles Downtown News	February 18, 2008	English	49,000
Los Angeles Garment and Citizen	February 22, 2008	English, Spanish	25,000
Rafu Shimpo	February 21, 2008	English	45,000

Over 500 notices were mailed to residents, agencies, and organizations in the PSA via US mail or direct mail where no email contacts were available. Meeting notices were mailed on February 10, 2008. Notices were also posted online at www.metro.net/regionalconnector.

All those in the stakeholder database either received two (2) email notices about the early scoping meetings (i.e., an initial notice followed by a reminder), or one (1) piece of direct mail. The offices of elected officials representing portions of the PSA were also contacted and alerted about the meetings.

Multiple organizations were contacted requesting that they forward invitations to the early scoping meetings to their members or constituents. These organizations included transportation advocacy groups, neighborhood and business organizations, civic groups, and academic institutions.

Meeting notices were sent via email to those with email addresses in the study database. Approximately 383 individuals and organizations with email addresses were included in the initial stakeholder database. Email notices were sent out on February 14, 2008, with follow-up reminders sent again on February 18, 2008. An electronic reminder to the community to submit comments was sent on March 6, 2008.

Community meetings were held at the following locations:

Little Tokyo area/Downtown Los Angeles
Tuesday, February 26, 2008; 6 p.m. to 8 p.m.
Japanese American National Museum
369 E 1st St., Los Angeles, CA

Central Business District/Downtown Los Angeles
Thursday, February 28, 2008: Noon to 1:30 p.m.
Los Angeles Central Public Library, Meeting Room A
630 W. 5th St., Los Angeles, CA

6.3.1 Overview of Comments Received

Eleven alternatives were presented to the community at this series of meetings. All alternatives identified LRT as the preferred mode; however, of the alignments presented, most were below-grade, though one alternative included an aerial component. Of the alternatives considered, 7 utilized the 2nd St. tunnel.

Fifty-nine (59) people signed in at the Japanese American National Museum, with 14 people speaking at the meeting. Fifty-five (55) people signed in at the meeting held at the Central Los Angeles Public Library, with 12 people speaking at that meeting. In total, 57 comments were received, as follows:

- 26 Verbal comments at Public Community update meetings
- 6 Written comments at Public Community update meetings
- 25 Written comments via email
- 0 Written comments via US mail
- 0 Verbal comments on the Information Phone Line

This section summarizes the 57 comments received from the public in verbal testimony at the meetings, written comments submitted at the community update meetings, and via emails.

The majority of those who submitted comments supported a below-grade alignment. There was very little support for an at-grade alignment, particularly in the financial district. There were no concerns expressed about noise and vibration during tunneling through downtown Los Angeles. The community expressed interest in identifying ways to minimize transfers between the transit lines, and improved connections to the Metro Red Line.

Comments Related to Mode

All public comments received (written, emailed or submitted at the community update meetings) expressed continued support for LRT technology as the preferred mode for the Regional Connector.

Comments Related to Grade

Almost all the comments received by speakers at the community update meetings were in favor of subway, or for a below-grade system. Citing congestion concerns, the community preferred that the alignment be located below-grade.

Comments Related to Alignment

The community responded overwhelmingly in support of the project's concept, and specifically for alternatives 5, 6, and 8.

Alternative 5 begins at-grade at the Little Tokyo Gold Line station, and continues below grade through Civic Center, Little Tokyo, Grand Ave., and the financial district. Alternative 6, which appeared to have initial community support, places the entire alignment below-grade, and requires the reconstruction of the Little Tokyo Gold Line station. Alternative 8 would require the Little Tokyo Gold Line station to be relocated further west of the station's current location.

Comments Related to Station Locations

When asked about potential station locations, Grand Ave., Little Tokyo, and Bunker Hill were the most requested by those commenting. Several potential stations were widely popular, and were somewhat reflective of those preferring the 2nd St. option. The order of the level of support was: Little Tokyo, a station connecting Broadway to the LRT alignment at 2nd and Broadway, the 7th St./Metro Center Station, Bunker Hill, and one at the Civic Center, in the northern portion of the PSA.

Key Issues Identified

Those stakeholders providing their comments about key issues were emphatic about the need for the Regional Connector to provide a link with Metro's transit lines. In summary, the project is widely supported; LRT is the preferred mode; and an underground alignment is favored. Other issues raised included the potential need to add rail cars, improve station maintenance, and to consider implementing the technology used to construct the Metro Gold Line tunnels.

6.4 Community Update Meeting Series #2

A final round of community update meetings was held in October 2008 to present to the public Metro's recommendations for the Regional Connector AA study. In preparation for the meetings, focused outreach to the neighboring communities, key stakeholder groups, and local media was conducted. Beginning with the distribution of the media notice, a multimedia approach was implemented to notify stakeholders of the meetings. Ads in major newspapers, community papers, and notification through on-line blogs, direct mail and e-mails rounded out the outreach process.

In order to reach out to downtown residents and those working in the downtown area, advertisements were placed in Rafu Shimpo, Los Angeles Garment and Citizen, and the Los Angeles Downtown News. The advertisements were developed by Metro's graphic department.

Outlet	Run Date	Language	Circulation
Los Angeles Downtown News	October 13th & 20th	English	49,000
Los Angeles Garment and Citizen	October 10th & 17th	English, Spanish	25,000
Rafu Shimpo	October 11th	English	45,000

Meeting notifications were sent to the stakeholder database on September 26, 2008 via US mail or direct mail where no email contacts were available. All project information as well as information about the meetings was posted online at www.metro.net/regionalconnector. All elected officials at the local, state and federal levels within the PSA were also sent notification of the meetings.

Multiple organizations were contacted requesting that they forward invitations to the early scoping meetings to their members or constituents. These organizations included transportation advocacy groups, neighborhood and business organizations, civic groups, and academic institutions.

Approximately 109 people attended the final round of community meetings. The meetings were held as follows:

Thursday, October 16th; 12:00 p.m. to 1:30 p.m.
Los Angeles Central Public Library
630 W. 5th St., Los Angeles, CA

Tuesday, October 21st; 6:30 p.m. to 8 p.m.
Japanese American National Museum
369 E 1st St., Los Angeles, CA

6.4.1 Overview of Comments Received

51 comments were received from the final round of community meetings:

- 33 Verbal comments at Public Community update meetings
- 11 Written comments at Public Community update meetings
- 4 Written comments via email
- 3 Written comments via US mail
- 0 Verbal comments on the Information Phone Line

Comments Related to Mode

Stakeholders who attended the last round of meetings were overwhelmingly in support of building the Regional Connector as an underground LRT to the extent possible. Due to the heavy vehicular and pedestrian traffic in downtown Los Angeles, stakeholders believed that above ground rail will further congest this area. In addition, there are many festivals, films and other events happening in downtown Los Angeles and stakeholders did not want above ground rail to disturb these activities.

Comments Related to Alignment

There was considerable support in the community within the PSA to run the Regional Connector underground, with Alternative 1 as the preferred alignment. The underground alignment emerges at grade in the Little Tokyo area and there were several concerns raised about safety and congestion because of the heavy pedestrian traffic in this area.

Comments Related to Station Locations

Community members did not offer many comments related to station locations. Those commenting were supportive of Alternative 1, and the few comments related to station locations were centered on building the stations to accommodate the future growth of the Metro system. Another comment related to the mezzanine level station proposed at 2nd St., and suggested that this station be located underground. One other commentator mentioned that closing the 2nd St. tunnel to traffic would be very disruptive and suggested a below-grade option.

Key Issues Identified

The majority of comments from meeting attendees focused on the need for an underground system for this project, and warned of the congestion potential presented by the at-grade alternative. In addition, there were concerns about safety and congestion for the above ground section of Alternative 1 where it emerges in the Little Tokyo area. There were also structural concerns raised about the historic buildings in the PSA, especially during tunnel excavation. Most were opposed to perceived disruptions and noise from trains running at-grade.

6.5 Additional Meetings

In addition to the public community meetings held in October, Metro was asked by the Little Tokyo Community Council to attend its October 21st meeting to present the AA findings. Approximately 60 people attended this meeting. Metro's PowerPoint presentation was followed by members of the Council discussing their support for the

project as it moves forward. Concerns were raised by several speakers who wanted Metro to consider a construction mitigation program, and look for ways to protect the unique features of Little Tokyo as a neighborhood.

6.5.1 Additional Stakeholder Outreach Meetings

In addition to the public meetings, the project team proactively conducted a series of meetings with key stakeholders on an ongoing basis. The purpose of meeting with these groups was to create an informal forum to discuss specific concerns with individual stakeholder groups and to create an ongoing dialogue with these critical stakeholders as the project moved forward.

At the time the AA was initiated, Little Tokyo was the epicenter for the construction of the Metro Gold Line's Eastside Extension. The Historic Core, the City of Los Angeles, and Broadway theater owners had just started their investigation of integration of a streetcar into downtown Los Angeles. Additionally, the Metro planning team met with the Grand Avenue Project committee to discuss the evolution of that project. This convergence of projects and their associated champions provided Metro with established forums for stakeholder engagement.

6.5.1.1 Little Tokyo

Metro's team subsequently met with two groups from Little Tokyo on an ongoing basis: the Little Tokyo Community Council (LTCC) and the Little Tokyo Service Center (LTSC). The LTCC represents residents, business owners, land owners, civic leaders, City agencies, and educational institutions. As a Community Development Corporation, the Service Center provides social service and other programs to Little Tokyo residents, and assisted the project team in coordinating a meeting with business owners along 2nd St.

Metro's first presentation to the LTCC took place shortly after the first community update meeting on March 12, 2008. In response to concerns regarding the 11 alternatives presented to the community, the LTCC established a subcommittee to communicate directly with Metro as the AA moved forward. The initial concerns regarding the project centered around preserving the identity of the neighborhood, pedestrian impacts, and construction impacts.

Many on the committee felt the Temple St. alignment would best serve the Little Tokyo community. Alternative 2, using Figueroa, Flower, Dewap, to Temple Streets, would have required additional construction to the new LRT bridge at Temple and Alameda St. That alternative was determined to be financially infeasible. Additionally, potential station locations were identified as less desirable when compared to other project alternatives and potential station locations.

At this initial meeting, a "mitigated" Alternative 5 was presented to the group. This alternative would require a grade separation for auto traffic on Alameda St. Since the group responded positively to this change, additional details were presented at a second meeting.

The second meeting of the subcommittee was held on April 2, 2008. The subcommittee reviewed key concerns: pedestrian impacts, loss of neighborhood identity, and how construction might impact small businesses. In response to these concerns, Metro presented a "mitigated" project alternative, which would minimize construction impacts, and increase pedestrian access to the station and nearby neighborhood activities.

During this meeting, Alternatives 3b and 7 were presented to the group. Alternative 3b involves a couplet on both Los Angeles and Main Streets between 2nd and Temple Streets. Alternative 7 uses 2nd St. from Flower to Los Angeles St., turns at Los Angeles St. and at Temple St. While both alternatives were considered acceptable to the community, Alternative 5 remained as the preferred option.

Alternative 5 includes a grade separation along Alameda St., and the addition of a pedestrian bridge that serves to connect the Japanese American National Museum, the Mangrove project area, and provides an aerial crossing at 1st St. and the Office Depot property (located diagonally from the Little Tokyo/Arts District Gold Line Station.) The appeal of the intersection's treatment and the location of the potential portal satisfactorily addressed the subcommittee's primary concern regarding the construction and operational impacts of the Regional Connector.

A meeting with the Little Tokyo Service Center sought to address the concerns of business owners along 2nd St. This meeting took place on May 13, 2008 at the Japanese American Cultural Center. While there were many operational questions (e.g., how often would the trains cross into Little Tokyo, would the community feel the train passing) that would be addressed during the next phase of the project, the purpose of the meeting was to present the remaining Alternatives 3b, 5, and 7. Overall there was support for the project, and consensus that the business owners would like to be further engaged as the project moves forward. Community preference was for the alignment to be located below-grade, to minimize the construction impacts on access to area businesses.

6.5.1.2 Bringing Back Broadway

The Broadway Streetcar project is looking at ways to provide streetcar service along Broadway, connecting the Grand Avenue Project to LA Live. The project is a public/private venture with support from the City of Los Angeles (with the Community Redevelopment Agency and Council District 14 taking the lead on the project). Metro met with 5 separate organizations that play different roles in the Streetcar project:

- The Downtown Los Angeles Neighborhood Council
- Historic Core Business Improvement District
- Bringing Back Broadway Coalition
- Downtown Los Angeles Business Improvement District
- Central City East Association

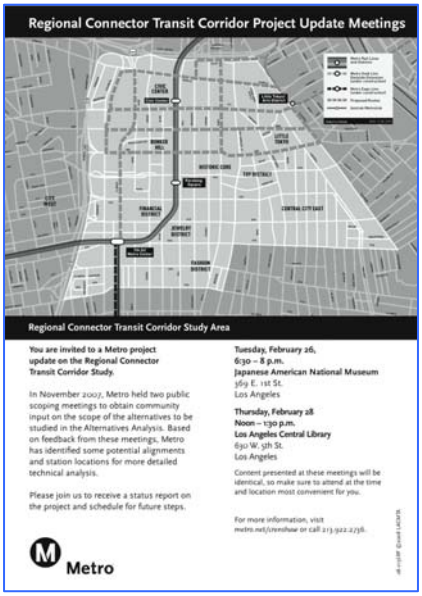
Initially, there was some uncertainty among stakeholders regarding differences between the Streetcar and Regional Connector projects. Metro clearly defined the differences in the project, namely the project goals, potential funding sources, services provided, and agency support. The intent of the Broadway Streetcar is to act as a "walk extender" and to support downtown pedestrian access, whereas the initial intent of the Regional Connector is to provide continuous service between the LRT options traveling through downtown Los Angeles.

With this concern resolved, the organizations began to consider how the Regional Connector could interact with the Broadway Streetcar. The Historic Core Business Improvement District and the Bringing Back Broadway Coalition agreed that a connection at 2nd and Broadway made the most sense.

The groups also recognized that a station need not be located directly at 2nd and Broadway if a portal located near 2nd and Broadway would provide the necessary access to the area as well. It was agreed that as long as transit users felt like they were accessing the station at 2nd and Broadway, it did not matter if they needed to walk a block below-grade to access the train.

The Historic Core Business Improvement District discussed the economic and transit oriented development opportunities located at 2nd and Broadway. They were hopeful that as the Regional Connector Transit Corridor Study continues, the Bringing Back Broadway Coalition will be active participants in the process, as the two projects are complementary. While the Broadway Streetcar issues did not appear to be as multifaceted as the concerns held in Little Tokyo, these two stakeholder groups played a significant role throughout the AA process.

All of the additional meetings are summarized in Table 6-1.


Regional Connector Transit Corridor Project Update Meetings

Regional Connector Transit Corridor Study Area

You are invited to a Metro project update on the Regional Connector Transit Corridor Study.

In November 2007, Metro held two public scoping meetings to obtain community input on the scope of the alternatives to be studied in the Alternatives Analysis. Based on feedback from these meetings, Metro has identified some potential alignments and station locations for more detailed technical analysis.

Please join us to receive a status report on the project and schedule for future steps.

Tuesday, February 26,
6:30 – 8 p.m.
Japanese American National Museum
369 E. 1st St.
Los Angeles

Thursday, February 28
Noon – 1:30 p.m.
Los Angeles Central Library
630 W. 5th St.
Los Angeles

Content presented at these meetings will be identical, so make sure to attend at the time and location most convenient for you.

For more information, visit metro.net/crenshaw or call 213.922.2736.

Metro

6.6 Collateral Materials

Various informational materials such as meetings notices, Fact Sheets and Newsletters were completed during the AA.

6.6.1 Meeting Notices

A postal mailer and an email notice were distributed prior to each series of community meetings. The postal mailer was distributed approximately 10 days prior to the first community meeting. The email notice was sent out twice (once as a "Save the Date" and later as a formal announcement) to the stakeholder list. The Regional Connector database is predominately email-based. A follow up email notice was sent to individuals included in the stakeholder database and those who attended the community meetings.

Table 6-1 Meeting Details			
Organization	Meeting Details	Key Issues	Follow-Up
Office of Councilwoman Jan Perry	July 31, 2007 Attendance: 6	Discussed status of Chief Legislative Analyst's Office RFP for development of property at 1st and Alameda Streets.	None required.
City of Los Angeles Downtown Street Standards	September 14, 2007 Attendance:15	Wanted additional details once the project has proceeded further (e.g., station lengths).	Scheduled a follow-up meeting after Early Scoping completed
Grand Avenue Committee	October 9, 2007 Attendance: 11	Wanted to schedule a working meeting with Committee's architect and engineer to consult as the construction of Grand Avenue proceeds.	Scheduled a meeting with Committee's architect and engineer
Elected Officials Briefing	October 17, 2007 Attendance:9	Interested in the participation of other elected officials both within and outside the PSA as this is a regional project. Concerned about potential impacts to the Little Tokyo community. Supportive of the economic benefit and environmental benefit potential.	Metro established a regular briefing schedule.
Central City Association, Transportation & Infrastructure Committee	October 25, 2007 Attendance: 15	Interested in galvanizing its membership in support of this study. Also undertook to circulate early scoping meeting information to its membership.	Returned to present this Committee with results of early scoping.
Downtown Neighborhood Council	November 13, 2007 Attendance: 45	Wanted to find ways to bring more transit opportunities to the downtown area. While no final recommendation was supported, the board president felt it was very important Union Station be considered as a part of the PSA.	Returned to present this Committee with results of early scoping.
Little Tokyo Service Center	November 20, 2007 Attendance: 64	Supported the project. Concerned that if the Little Tokyo/Arts District Gold line station becomes a terminus, the station would be at capacity. Encouraged by the idea that Little Tokyo would be easier to access, but wanted to protect pedestrian access.	Returned to present this Committee with results of early scoping.
Elected Officials Briefing	2/12/08	Supportive of the project and had a good understanding of the project's benefits. Favored the alterative that was going to be the most cost-effective.	Continued briefings at key milestones.
Little Tokyo Community Council	2/19/08	Standing community council meeting. Attended as a guest.	Participated with the Council's Regional Connector Subcommittee

Table 6-1 Meeting Details			
Organization	Meeting Details	Key Issues	Follow-Up
Little Tokyo Community Council	3/12/08	The group was concerned that an at-grade alignment would negatively impact the Little Tokyo community. Earlier in the day, the planning committee passed a resolution recommending the LTCC not support the Regional Connector if it runs along 2nd St., either above or below-grade. This group's preference was for the alignment to follow Temple. Alternative 5 with additional mitigations was then presented. The group reacted positively once the Alternative showing grade separation for auto traffic on Alameda was shown. However, they wanted more information on the operational impacts of the station. The group was willing to consider a presentation of the proposed resolution to support Alternative 5.	LTCC liaison coordinated next meeting with Metro Project Manager
Office of Councilman Huizar	3/14/08	Supported the project. Understood the regional significance of the project and recommended additional meetings outside of the downtown area.	Additional meetings to be conducted in the next phase of the project.
Rotary: LA Morning Club	3/20/08	The Metro team presented the current list of alternatives currently under review. The presentation was warmly received, with most of the questions focused on how to fund the project and what kind of system connections would be afforded.	Outreach consultant followed up to identify a date for a presentation to the LA 5 Rotary group. (Completed)
Downtown Los Angeles Neighborhood Council (DLANC): Transportation Committee	3/24/08	The presenters emphasized Metro's commitment to investment in Downtown Los Angeles, as well as balancing the need to provide regional service expansion. Those attending the meeting were most receptive to the below-grade alternatives. When asked about the potential for direct connections to Broadway and the Historic Core neighborhood, the Metro team concluded that technical, physical, and geographic limitations (regardless of grade) makes a direct connection infeasible.	Scheduled briefing for "Bringing Back Broadway" and HCBID for May 2008. Scheduled follow-up briefing with the DLANC Transportation Comittee for April 2008.
Little Tokyo Community Council	4/2/08	The group was concerned that an at-grade alignment through Little Tokyo would negatively impact the community. The community was especially concerned about how construction might impact the businesses along 2nd St., or affect plans for the "Go for Broke" monument planned on Temple. Metro's technical consultant requested specific details about the monument's location and construction timeline from the "Go for Broke" organization.	Continued to alert Community Council about upcoming community workshops LTCC liaison coordinated next meeting with Outreach Consultant (Completed)

Table 6-1 Meeting Details			
Organization	Meeting Details	Key Issues	Follow-Up
Historic Core BID	4/30/08	The Historic Core Business Improvement District (HCBID) requested to meet with Metro's project team for the Regional Connector Transit Corridor study to discuss potential impacts to Broadway, more specifically the HCBID's plans for implementing a streetcar on Broadway. Metro encouraged the HCBID to continue with its planning efforts for the Broadway Streetcar (BSC), and offered to work with the BSC planners to coordinate efforts to make the BSC a success. The HCBID asked whether the BSC should be included in the Regional Connector study, but Metro discouraged this approach.	Outreach Consultant secured meeting sign in sheet (Completed)
Downtown Center BID	5/07/08	Supported the project and saw it as an opportunity to promote business growth in the downtown area. Wanted to make sure there is a nexus between the proposed Broadway Streetcar and future station identification.	Continued to alert BID about upcoming community workshops
Bringing Back Broadway	5/07/08	The BBB organization was in the process of studying potential alignments for a local streetcar. The Broadway Streetcar study was then in its conceptual design phase, with the goal to complete the AA by July 2008. The organization hoped to secure a Negative Declaration designation of impact for the project.	Continued to alert group about upcoming community workshops
South Park Stakeholders Group	5/12/08	Group was supportive of the project and saw it as an opportunity to encourage more transit use in the neighborhood, encourage additional residential development, and assist the highly transit-dependent local area workforce. Wanted to find out if the project would include funding for improvements to the current Pico/Chick Hearn station.	Letter of support from the organization. (Letter has not yet been received, followed up with Group liaison via voicemail)
Little Tokyo Service Center	5/13/08	Meeting attendees were most interested in discussing potential construction impacts to 2nd St. Business owners along 2nd St. wanted more specific information regarding construction impacts to business owners, how long construction would impact the street, and traffic restrictions. One person asked if they would be able to feel the vibration of a below-grade LRT system under their building. Metro responded by letting the group know the topic would be covered in the EIS/R portion of the study.	Outreach Consultant added the contact information of those in attendance to the project stakeholder database (Completed)

Table 6-1 Meeting Details			
Organization	Meeting Details	Key Issues	Follow-Up
Little Tokyo Community Council	5/20/08	The Little Tokyo Community Council requested a brief project update during their regular board meeting. The Regional Connector presentation took approximately 20 minutes. The Council remained supportive of the project in concept, and looked forward to participating during the EIR/S process, should the board approve this step.	Continued to alert Community Council about upcoming community workshops
Central City East Association	5/28/08	The group was supportive of the project moving forward into the EIR/S phase. CCEA wanted more information during the EIR/S process about how the project would interface with the Broadway Streetcar, and whether construction of the project could be expedited.	Continued to alert BID about upcoming workshops
Downtown Living Weekend	6/6-8/08	Questions from the community surrounded Metro pass prices. Many of the people who asked about pass prices wanted to know which pass to use for access to both Metro and DASH services (EZ Transit Pass). Youth asked how to go about getting bus passes through the school district. Many people who visited the booth were seeking system maps.	No follow up needed
Westside Central Service Sector Governance Council	7/9/08	The Westside Central Service Sector Governance Council requested a brief project update during their regular meeting. The Regional Connector presentation took approximately 20 minutes. The Council was extremely supportive of the project in concept, and looked forward to future updates.	Report back in next phase
Higgins Building HOA	8/7/08	The group was supportive of the project; however, they were concerned about construction impacts. The group requested that the "box" of any station located at 2nd and Main be located closer to 2nd and Spring or Los Angeles, but station entrances could still be located next to the building.	Continued to alert the HOA about upcoming workshops.
Elected Officials Briefing	10/14/08	The briefing for elected officials was held at Metro. Questions asked pertained to when the project will go to the Board for approval to move into the environmental study. There were questions about station design and connections to the Gold Line and Eastside Extension.	No follow up necessary.

6.6.2 Fact Sheets

In order to provide the community with an updated project summary, fact sheets were developed and distributed at community update meetings and for community events (such as the Downtown Living Weekend). Four fact sheets were developed for public distribution, and posting on the project webpage.

6.6.3 FAQs

Used as both content for the project webpage and to provide a location for additional information, a "Frequently Asked Questions" was developed and updated as the project moved forward.

6.6.4 Project Website

A project website www.metro.net/regionalconnector was established to provide the public with electronic access to information about the project including collateral materials, the dates, times and locations of the community meetings, as well as an opportunity to provide public comment. In total, 56 emails were received via the project website. The website was updated at key project milestones and as needed.

6.6.5 Project Information Line

A dedicated phone line was also established to provide project information to the public. The telephone number for the information line is (213) 922-7277, and information is available on the line in English, Spanish, and Japanese. Information on the line includes times, dates, and locations of the public scoping and update meetings. Additionally, the callers were encouraged to leave public comment, questions about the project, and requests to be placed on the stakeholder mailing list in order to receive study information as it became available.

Regional Connector Transit Corridor Study

地域接続鉄道交通回廊の調査

ファクトシート（2）初期意見聴取集会における一般意見の要約

市民集会

地域接続鉄道交通回廊（Regional Connector Transit Corridor）の調査における一般の意見は、Federal Register に「初期意見聴取の通知（Early Scoping Notice）」を掲載することにより2007 年 10 月 31 日に始まりました。本調査の初期意見聴取プロセスの一環として、メトロでは地域集会を 2 回、以下のように開催しました。

2007 年 11 月 6 日（火）11:30 a.m.～1:30 p.m.
Los Angeles Central Public Library（ロサンゼルス中央市民図書館）

2007 年 11 月 7 日（水）6:00 ～ 8:00 p.m.
Japanese American National Museum（全米日系人博物館）

メトロでは、初期意見聴取集会でのほか、電子メール、郵便、情報電話ライン、本プロジェクトのウェブサイトより一般意見を集めました。初期意見聴取期間における正式な一般意見の受付期間は、2007 年 11 月 30 日に終了しました。

一般意見の要約

集まった意見の圧倒的多数は、メトロのブルー線、ゴールド線、ゴールド線のイーストサイド延長線およびエキスポ線間の直通サービスを提供し、これらの路線回廊を直接ユニオン駅に繋げることにより、現在および将来の鉄道システムの効率を上げる地域接続線の必要性を支持するものでした。意見提供者のほとんどは、Grand Avenue あるいは 1st Street に沿った地下鉄線で、ライト・レール・トランジット（LRT）技術を利用することを支持しました。駅の可能性として幅広い支持を得たものには、「リトル東京」、「7th Street/Metro」、「パンカーヒル」、「ユニオン駅」、「Main/1st」、「シビックセンター」などがありました。

地域接続線に反対する意見は皆無でした。多くの意見者が具体的に指摘したのは、複数の線を接続する交通システムを開発し、サービス強化のため 7th Street/Metro 駅を拡大、さらに様々な運用制度をグレードアップする必要性でした。本評価基準に関する意見を提供した方の中ではほとんどの意見が、最も重要なのはアクセス性である、というものでした。一般意見は全般的に以下のように集中しました。

The information line was activated in September 2007, and was updated in November 2007, February 2008 and September 2008. The information line was checked on a weekly basis when no community meetings were planned within 30 days. The information line was checked daily two weeks before and after community meetings. A tracking matrix was established to record incoming calls, and manage the follow-up process. There have only been three messages left on the information line to date. These calls were all reservations for a meeting with the Little Tokyo Service Center (held May 13, 2008).

6.6.6 Media Relations (Print & Broadcast)

A detailed list of 83 regional media outlets was developed which included mainstream, community-based and ethnic/foreign language print and broadcast outlets. A complete list of the media contacted for this project is included in Appendix H of the Community Participation Summary and Report.

Press releases were distributed by Metro to regional media outlets. The outreach consultant redistributed the press release to the list of media outlets as well as online media outlets, such as blogs, to help draw additional coverage.

To ensure that the AA process addressed the growing prevalence of "new" media in this region, outreach was also conducted to "blogs" which can best be described as an online continual open conversation. The Southern California region is host to thousands of blogs, and after some research, 34 key websites were located that discussed transit, traffic, community development, and neighborhood issues. All of the 34 blogs identified were sent a copy of Metro's press releases and the Public Notices.

Many of these blogs posted notices about the project, the AA process, the meetings, comments about the project, and summaries of the meetings after they occurred. In many cases, lively on-line "conversations" were initiated. Although it is difficult to ascertain how many "hits" each blog received about the project, the online conversations did contribute to a heightened awareness about the project and increased turnout at the community meetings. In addition, articles and comments posted on the blogs provided the study team with additional insight into public sentiment about the project.

6.6.7 New Media

New media is an ever-changing but widely used medium for communicating vital information quickly and effectively. Recognizing that the use of new media tools is relatively new to many government agencies, Metro committed itself to exploring and pursuing appropriate online media to proactively engage a full range of stakeholders. To this end, Metro established the Regional Connector Facebook page designed to reach out to a relatively untapped audience of college students and young adults. Facebook is a prime example of a communications need meeting a technological opportunity. Launched in September, the Regional Connector Facebook site has registered 64 unique users that are actively engaged in conversation about the project.

Facebook is a social network that connects people with friends and others who work, study and live around them. People use Facebook to keep up with friends, upload an unlimited number of photos, share links and videos, and learn more about the people they meet. Facebook has served as an online complement to the project website. Additionally, this new media element of outreach expanded current visibility encouraging any targeted demographic to access/join.

Assigned administrators updated the site with events, reports, videos and presentations. The Facebook group was monitored daily by the project team, and all comments left on discussion board and group's wall were captured in a tracking matrix as well as page PDFs. The content was refreshed frequently to ensure that these stakeholders were provided the most accurate information possible. Members of the Regional Connector Facebook page were also able to RSVP to Metro events such as the monthly board meeting, and converse with each other about the project.

Section 7 Comparative Analysis of Alternatives

7.1 Introduction

This section presents the comparative analysis of the two build alternatives, the No Build, and the Transportation System Management (TSM), carried from the initial screening process. As described in more detail in Section 2, after review and input received during the early scoping process on modes, alignments, station locations, and configurations, over thirty alternatives previously identified in a number of studies were evaluated. The number of alternatives was reduced during preliminary screening to 8, which were then evaluated using screening criteria established during the early scoping process. Based on this evaluation, the number of alternatives was further reduced to two build alternatives with one variation, a TSM, and a No Build Alternative. All other alternatives were eliminated from further consideration due to their inability to meet the project's goals and objectives.

The two build alternatives are as follows:

- At-Grade Emphasis Light Rail Transit (Alternatives 3A & 3B)
- Underground Emphasis Light Rail Transit (Alternative 5)

In addition, the TSM and the No Build alternatives were further analyzed and refined. The analysis and the recommendations are summarized in this section. This section is organized by the developed evaluation criteria, which expanded upon the FTA New Starts Evaluation and Ranking criteria.

7.2 Approach

Based on the Alternative Methodology Report provided to Metro, a final screening of the alternatives is the next step for evaluating alternatives. This final screening involves evaluating the remaining alternatives on a conceptual level and applying the goals and objectives for this project to each alternative. The following goals were identified for the Regional Connector Transit Corridor project:

Goal 1 - Support Community Planning Efforts: Support the progression of the PSA as an integrated destination and a dynamic and livable area, accommodating projected growth in a sustainable manner.

Goal 2 - Support Public Involvement and Community Preservation: Incorporate the public in the planning process and balance the benefits and impacts while preserving communities in the area, such as Little Tokyo/Arts District, Bunker Hill, Civic Center, and Historic District.

Goal 3 - Improve Mobility and Accessibility both Locally and Regionally: Develop an efficient and sustainable level of mobility within L.A. County to accommodate planned growth and a livable environment.

Goal 4 - Support Efforts to Improve Environmental Quality: Minimize adverse environmental impacts.

Goal 5 - Provide a Cost Effective Alternative Transportation System: Develop a system that serves as an economical alternative mode of transportation.

Goal 6 - Achieve a Financially Feasible Project: Develop a project that maximizes opportunities for funding and financing, and that is financially sustainable.

Goal 7 - Provide a Safe and Secure Alternative Transportation System: Develop a project that is safe for riders, pedestrians, and drivers, while meeting the region's needs for security.

The goals established for the Regional Connector are consistent with FTA New Starts Evaluation and Ranking Criteria as shown in Table 7-1.

Table 7-1 Project Justification Criteria and Measures
FTA New Starts Evaluation Criteria/Measures

Criterion	Measure(s)
Mobility Improvements	• Normalized Travel Time Savings (Transportation System User Benefits per Project Passenger Mile) • Number of Transit Dependent Riders Using the Proposed New Starts Project • Transit Dependent User Benefits per Passenger Mile on the Project • Share of User Benefits Received by Transit Dependents Compared to the Share of Transit Dependents in the Region
Environmental Benefits	• EPA Air Quality Designation
Cost Effectiveness	• Incremental Cost per Hour of Transportation System User Benefit • Incremental Cost per New Rider (for informational purposes only)
Transit Supportive Land Use and Future Patterns	• Existing Land Use • Transit Supportive Plans and Policies • Performance and Impacts of Policies
Other Factors	• Economic Development • Making the Case for the Project • Congestion Pricing • Optional considerations

As developed during the early scoping process, specific measures and criteria were established for each goal as a means of assessing whether an alternative meets the goal. A comparative analysis was performed to see how well each alternative performed in comparison to the others.

7.3 Goal 1: Support Community Planning Efforts

- Support land use policies and Community Plans
- Support and coordinate with development and redevelopment efforts
- Support the City's efforts to improve urban design and the pedestrian environment by contributing to a healthy environment
- Support efforts to improve safety and security for downtown residents, employees, and visitors
- Support transit dependent communities

7.3.1 Initial Screening Criteria

The initial screening criteria for Goal 1, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-2. Subsequent sections explain each performance measure and the results for each alternative.

Population, Population Density, Housing, Housing Density

For the two build alternatives, population and population density are higher for the underground versus the at-grade alternative, due to the fact that the underground alternative's alignment travels directly through the Little Tokyo community under 2nd St. Thus, within one-quarter mile of this alternative there are residential developments in Little Tokyo, as well as some converted warehouse lofts in the adjacent Arts District. The at-grade alternative heads north on Main and Los Angeles Streets and traverses the Civic Center area, which contains fewer households and residents, and more offices.

Transit Oriented Design supportive plans and policies in place

Transit Oriented Design (TOD) plans and policies include all state and local policies that support transit friendly development and design. Both the underground and at-grade alternatives are affected by five TOD supportive plans, including the LA City General Plan design/street standards, the Community Redevelopment Agency (CRA) 2006 Streetcar Study, part of the CRA Identified Redevelopment Areas, the CRA City Center Redevelopment Plan, and the Little Tokyo Planning and Design Guidelines. The underground alternative was rated a point higher for this measure because an underground system provides more development opportunities above station entrances and on properties used for construction. The at-grade alignments under consideration are street-running, and therefore do not provide the same off-street development opportunities.

Number of Jobs

For the two build alternatives, the at-grade alternative has higher employment and employment density when compared to the underground alternative. The at-grade alternative runs north-south on Main and Los Angeles Streets, adjacent to City Hall and various other city and federal buildings in the Civic Center. The densities of workers per square mile are greater in these buildings as opposed to the buildings in the vicinity of the underground alternative alignment.

Table 7-2 Support Community Planning Efforts Initial Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
1	Population, Population Density, Households, Housing Density for year 2030 (within 1/4 mile of alignment)			
1	Population (within 1/4 mile of alignment)	10,889	10,889	10,997
1	Population Density (within 1/4 mile of the alignment)	10,675 persons per sq mile	10,675 persons per sq mile	11,201 persons per sq mile
1	Households (within 1/4 mile of alignment)	8,523	8,523	8,744
1	Household Density (within 1/4 mile of alignment)	8,356 units per sq mile	8,356 units per sq mile	8,922 units per sq mile
1	Transit Oriented Design Supportive of Plans and Policies in place (Score 1-worst to 5-best)	4	4	5
1	Number of Jobs, Employment Density for year 2030 within 1/4 mile of alignment			
	Employment (within 1/4 mile of alignment)	133,888	133,888	124,110
	Employment Density (within 1/4 mile of alignment)	131263 jobs per sq mile	131263 jobs per sq mile	126,623 jobs per sq mile
1	Number of direct connections to key activity centers within 1/4 mile of alignment (Score 1-worst to 5-best)	5	5	5
1	Number of Opportunities for Redevelopment within 1/4 mile of alignment (underdeveloped or underutilized properties along alternative alignment)	8	8	9

Number of direct connections to key activity centers

The underground and the at-grade alternatives all received the best score of 5 for the number of direct connections to key activity centers within one-quarter mile of each alignment. Both alternatives traverse some of the busiest downtown corridors, with easy walking distances for key destinations, including the Civic Center, Little Tokyo, the Museum of Contemporary Art, the Grand Avenue Project, and the Bunker Hill/Library district. Further analysis of the final locations of stations and portals will assist in providing exact distances; however, the compact nature of the downtown blocks and the initial placement of the stations provide good coverage of key activity centers.

Number of opportunities for redevelopment

The number of opportunities for redevelopment within one-quarter mile of the alignments is calculated by estimating the number of underdeveloped or underutilized lots that may potentially be obtained for TOD, mixed use development, or transit friendly uses. There were a total of eight locations along the at-grade alternative that were identified as having redevelopment potential, while nine locations were identified for the underground alternative.

7.3.2 Final Screening Criteria

The final screening criteria developed for Goal 1 and its associated performance measures are presented in Table 7-3. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-3 Support Community Planning Efforts
Final Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
1	Number of planned development projects in the area over the next 10 years, including residential/office space/commercial units within 1/4 mile of alignment	20	20	22
1	Number of connections with sidewalks that support the City's Downtown Street Standards (Score 1-worst to 5-best)	5	5	5

Number of planned development projects in the area over the next 10 years, including residential/office space/commercial units

Downtown Los Angeles has experienced resurgence in high-rise residential and business development. The at-grade alternative corridor has approximately 20 planned or currently under construction projects within one-quarter mile of the alignment and the underground corridor has approximately 22 projects. These planned or currently under construction projects do not include the conversion of office space to residential lofts. Some of these new developments include the Yards, Mura, Block 8/Gateway, Vibiana Lofts, The Medallion, Zen, and Park Fifth.

Number of connections with sidewalks that support the City's Downtown Street Standards

The City of Los Angeles' Downtown Street Standards are a set of design guidelines which aid in the current and future planning and development efforts of sidewalks, streets, design enhancements, and any other features which would introduce a more cohesive street network in the downtown area. The design guidelines would not directly affect the underground alternative; however, design guidelines would affect station and portals locations. The at-grade alternative would be more directly affected by the design standards due to the need for redesigning street widths, right-of-ways, and sidewalks.

Both the at-grade and underground alternatives receive a high score for integration potential with the existing street design standards that are in place today. The station designs, as shown in the renderings in Section 2.3.3 and 2.3.4, remain consistent with the standards applicable to the specific street.

7.4 Goal 2: Support Public Involvement and Community

- Balance the benefits and impacts to low income and minority communities
- Enable workers and visitors to gain access to the regional center to increase its economic vitality and benefit from its economic opportunity

7.4.1 Initial Screening Criteria

The initial screening criteria for Goal 2, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-4. Subsequent sections explain each performance measure and the results for each alternative.

Table 7-4 Support Public Involvement and Community Initial Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
2	Evaluation of potential disproportionate effects: Environmental justice effects will be evaluated per NEPA/CEQA requirements (Score 1-worst to 5-best)	4	4	2
2	Initial areas identified for potential acquisitions for station and alignment	Approx.8 Locations	Approx. 8 Locations	Approx. 11 Locations
2	Evaluation of potential disproportionate effects: Number of low income households (HH) within 1/4 mile of proposed alignment (does not include actually in construction)			
	# of Low Income HH	3,702or 34.7%	3,702or 34.7%	3,390 or 35.3%
	# of SROs and shelters	19 (approx. 997 beds/rooms)	19 (approx. 997 beds/rooms)	20 (approx. 1,042 beds/rooms)
	# of Homeless Service Providers	9	9	9
2	Number of residents by ethnicity within 1/4 mile of alignment (US Census)			
	White	3,105	3,105	3,163
	African American	3,437	3,437	3,390
	American Indian/Eskimo	103	103	119
	Asian	8,978	8,978	4,699
	Hawaiian/ PI	23	23	23
	Other	60	60	54
	Two or more	334	334	322

Table 7-4 Support Public Involvement and Community Initial Screening Criteria				
Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
	Hispanic	5,861	5,861	7,769
2	Urban fit potential for alignment and for stations, including physical scale, visual fit, and cultural preservation	4	4	2
2	Percentage of service grade separated	34%	21%	91%
	Total underground - new tunnel & existing 2nd St. tunnel	46%	38%	94%
2	Community acceptance (high, medium, low)	High	High	High

Evaluation of potential disproportionate effects: Environmental justice effects will be evaluated per NEPA/CEQA requirements

Although both build alternatives would be evaluated under NEPA/CEQA requirements, scoring was used to determine which alternatives would potentially have more severe environmental justice impacts relative to others. The at-grade alternative received a score of four because it would not directly impact the Little Tokyo community (the only residential community in the PSA), as the alignment would not run directly through this community. The underground alternative received a lower score of two based on the alignment running directly under the Little Tokyo community, as well as the potential effects due to the 1st and Alameda St. intersection.

Area identified for potential acquisitions

Both build alternatives will require the acquisition of property. The at-grade alternative will require less property acquisition than the underground alternative but will still need property for traction power substations and other ancillary facilities, for incorporation of split stations into the public sidewalks, for portals, for the additional space required to allow for the train turns on the street surface and finally, for construction staging. The following is a list of potential areas impacted by acquisition with the At-Grade Emphasis LRT Alternative:

- Temple St. - south side between Alameda and Judge Aiso St.
- Main and Los Angeles Streets between Temple and 1st Streets to accommodate train turn movements and station platforms
- Corners of 2nd St. at Main and Los Angeles Streets to accommodate train turn movements
- 2nd St. between Hill and Los Angeles Streets to accommodate sidewalk widening, ancillary facilities such as traction power substations and construction staging

- Northeast corner of 3rd and Flower St. for train portal and construction staging
- Station entrances and emergency exits locations adjacent to 5th St.

The Underground Emphasis Alternative will require more property acquisition than the At-Grade Emphasis Alternative, as larger properties would be needed to place relief shafts, emergency exits, station entrances, train portals and construction staging. Although more area is required for the Underground Emphasis Alternative, there is a strong history of successful developments that Metro has undertaken with developers that produces revenue for Metro in terms of ground lease as well as new housing and commercial spaces for the community. Potential areas impacted by acquisition are as follows:

- Property bounded by Alameda, 1st, 2nd Streets and Temple Ave.
- 2 locations for station entrances for each station, total 6 sites
- Blast relief shafts (3) and emergency exits
- One traction power substation location

Evaluation of potential disproportionate effects: Number of low income HH

The evaluation of disproportionate effects considers the number of low income, single-occupancy units (SROs) and homeless shelters along each alignment. Of the total number of households within one-quarter mile of the at-grade alternative, 3,702 or 34.7% are low income households, compared to 3,390 or 35.3% of those within one-quarter mile of the underground alternative alignment. The number of SROs is 19 for the at-grade alternative and 20 for the underground alternative. The same number of homeless shelters are found within one-quarter mile of both alternatives.

Number of residents by ethnicity

The number of residents by ethnicity demonstrates the demographics of the downtown community. Both of the build alternatives are similar in that the population within one-quarter mile of the each alignment is composed of over 80 percent minorities. The ethnic majority population within one-quarter mile of the underground alternative is Hispanic, and the second highest ethnic population is Asian. The Asian population is the ethnic majority in the vicinity of the at-grade alternative, and the Hispanic population is the second highest population, followed by African American, then White.

Urban fit potential, including physical scale, visual fit, and cultural preservation by station and assignment

The urban fit potential was rated by station and by overall alignment. The results for the two build alternatives were rated as 'fitting' well into the existing urban environment while offering the maximum available direct connections to key activity centers within one-quarter mile of the alignment.

Percentage of service grade separated

The underground alternative contains a higher percentage of service grade separation, with 94 percent of the total alignment located underground. The at-grade alternatives differ slightly from each other due to differing lengths of underground alignments along the Flower St. portion of the line. Option A remains underground on Flower St. until just below 3rd St., while Option B surfaces on Flower St. just below 4th St. Thus, more Option A is located underground, including the new tunnel and existing 2nd St. tunnel, than Option B.

Community Acceptance

Both of the build alternatives received 'High' scores for the level of community acceptance, due to the high levels of positive response from community members, community organizations, and feedback received throughout the screening process. Initial comments expressed concern for impacts to the Little Tokyo community from the at-grade alternative. However, because the LRT alignment traverses the edges of the community, the direct impacts on Little Tokyo would be limited.

7.4.2 Final Screening Criteria

The final screening criteria developed for Goal 2 and its associated performance measures are presented in Table 7-5. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-5 Support Public Involvement and Community
Final Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
2	Number of potential acquisitions	12	12	11
2	Percentage of service grade separated	34%	21%	94%
2	Evaluation of potential disproportionate effects and risk to environmental justice populations related to construction activities (Score 1-worst to 5-best)	4	4	5
2	Urban fit potential, including pedestrian accessibility and urban design enhancement opportunities	4	4	4

Number of potential acquisitions

The At-grade Emphasis LRT Alternative includes approximately 12 locations where property acquisition may occur. Specific parcels and property owners will be identified in the next phase, the Draft EIR/EIS. The Underground Emphasis LRT Alternative includes approximately 11 properties where potential property acquisitions may occur.

Percentage of service grade separated

See previous section for a description of the percentage of service that would be grade separated under each build alternative.

Evaluation of potential disproportionate effects and risk to environmental justice populations related to construction activities

The at-grade alternative does not run through, but adjacent to, the only residential community in the PSA, Little Tokyo. Therefore, construction activities would only have limited effects on this community, with most of the activity located to the west and north of Little Tokyo. Construction activities for the underground alternative, which runs underneath Little Tokyo, would affect the community. Construction impacts at the 1st and Alameda Streets intersection and the 2nd and Los Angeles Streets intersection would be mitigated, as these are the areas in Little Tokyo where LRT portals and station entrances would be located.

Urban fit potential including pedestrian accessibility and urban design enhancement opportunities

Both the at-grade and underground alternatives maintain a high level of urban fit potential with the surrounding land uses, including pedestrian accessibility possibilities. The alternatives have the potential to be integrated into the existing environment and dense streetscape. There also exists various possibilities to introduce creative new transit and pedestrian friendly street features, such as bicycle centers, 'green-scapes', and other enhancements.

7.5 Goal 3: Improve Mobility and Accessibility both Locally and Regionally

- Improve the connectivity of the regional transit service and provide a more attractive travel alternative for residents, workers, and visitors in the region
- Facilitate sustainable regional development
- Increase ridership of the Metro transit system and reduce single occupancy trips
- Maintain or enhance transit services to the transit dependent
- Improve travel time for transit users system-wide
- Improve person throughput
- Reduce growth of congestion in corridor

7.5.1 Initial Screening Criteria

The initial screening criteria for Goal 3, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-6. Subsequent sections explain each performance measure and the results of each alternative.

Increase in daily transit boarding's

Of the two build alternatives, the underground alternative demonstrates a significant increase in the number of daily transit users, with 19,800 users compared to the at-grade increase of 10,100 users. Some station locations for the At-Grade Emphasis LRT Alternative are not in prime locations where there is an abundance of dense residential, commercial, and office uses.

New daily transit trips compared to No Build and TSM Alternatives

The TSM alternative would result in the smallest increase in daily transit trips (about 1000). This is likely because it does not reduce transfers for any rail passengers, but does provide a convenient new shuttle service through downtown Los Angeles. The Underground Emphasis LRT Alternative would likely attract the most new users to the system because it has the shortest trip time and it directly serves several major destinations in the PSA. The At-Grade Emphasis LRT Alternative would bring between 7,600 and 8,400 new users to the transit system.

Traffic impacts

With the Underground Emphasis LRT Alternative, all of the intersections in the PSA will either remain at the same level of service as under the No Build Alternative or improve. Traffic congestion at 1st and Alameda Streets would lessen by about 20%. Traffic congestion will be largely the same under the TSM Alternative as under the No Build Alternative. However, traffic congestion will worsen at many intersections under the At-Grade Emphasis LRT Alternative, including 1st and Broadway, 1st and Spring, 1st and Los Angeles, 1st and Judge John Aiso, 2nd and Main, 2nd and Los Angeles, 2nd and Spring, 2nd and Main, Los Angeles and 3rd, San Pedro and 3rd, Temple and Main, Los Angeles and Temple, Judge John Aiso and Temple, and Temple and Alameda.

Reduction in number of transfers

Both of the build alternatives would reduce transfers for many Metro Blue, Gold, and Expo Line passengers. The At-Grade Emphasis LRT Alternative would eliminate 16,600 transfers from both existing and new transit trips system-wide. The Underground Emphasis LRT Alternative would attract more new riders to the system due to its faster speeds and favorable station locations. As such, it would eliminate 20,700 transfers daily.

Table 7-6 Improve Mobility and Accessibility Both Locally and Regionally Initial Screening Criteria						
Goal	Performance Measure	No Build	TSM	At-Grade		Underground
				Option A	Option B	
3	Increase in daily transit boarding's (amount of transit users increased compared to No Build)			10,100	10,100	19,800
3	New daily transit trips (compared to No Build)		1000	7,600	8,400	10,200
3	New daily transit trips (compared to TSM)			6,700	7,400	9,200
3	Traffic Impacts (number of intersections with E or F Level of Service)			3	3	1
3	Reduction in number of transfers by operational plan of alignment (daily reductions at Union Station & 7th St./Metro Center Station)			16,600	16,600	20,700
3	Total number of lanes reduced (cumulative for all streets)			24	27	0
3	Number of potentially impacted intersections			12	13	1
3	Peak period travel time through Regional Connector Alignment (including 5 min. for each transfer)					
	North-South: Union Station to Pico Station	17 min	22 min	14 min	14 min	12 min
	East-West: 1st St./Utah St. (to Union Station) to Pico Station	23 min	30 min	15 min	14 min	10 min
3	Number of left turn pockets affected			8	10	4
3	Number of on-street public parking spaces affected			88	88	0
3	Number of driveways affected			26	30	2
3	Daily hours of transportation user benefits (compared to No Build)		700	8,900	9,900	12,100

Total number of lanes reduced

The number of lanes reduced is the cumulative number of roadway segments (blocks) where there will potentially be a reduction in the lane width due to an LRT alignment. The At-Grade Emphasis LRT Alternative will have a greater number of possible lane width reductions, with Option A affecting 24 lanes and Option B affecting 27 lanes. Traffic impacts are also considered higher due to the resulting reduction in the existing roadway capacity.

The Underground Emphasis LRT Alternative would not cause a reduction in any street lane widths along the alignment. Although the underground alternative introduces an underpass along Alameda St., the existing lanes would drop below ground while street

level movements would retain the current number of lanes. The At-Grade Emphasis LRT Alternative has a similar underpass proposed at Temple and Alameda Streets, so there would be little difference between the two alternatives in terms of impacts on Alameda St. traffic.

Number of potentially impacted intersections

The number of potentially impacted intersections is the number of intersections that the LRT alignment will pass through that may experience disruption or alteration due to current configuration or physical features. The At-grade Emphasis LRT Alternative options differ at the 4th and Flower St. intersection; Option A may impact a total of 12 intersections, while Option B may potentially impact 13 intersections. The Underground Emphasis LRT Alternative has only one intersection that may be impacted, at 1st St. and Alameda St. These estimates include only permanent impacts, not temporary construction impacts.

Peak period travel time between major origins and destinations

In addition to reducing transfers, one of the objectives of the Regional Connector is to provide faster travel to downtown destinations and to destinations outside of downtown. For north to south movement, the Metro Gold Line and Blue Line would be connected, resulting in reduced travel time between Union Station and Pico Station. Currently, the travel time between these destinations is approx. 17 minutes. The underground alternative lessens this travel by nearly six minutes to 12 minutes total. For the at-grade alternative, the trip from Union Station to Pico Station would take about 14 minutes.

For east to west movements, the Eastside Gold Line and Exposition Line would be connected, reducing travel time between 1st St./Utah St. and Pico Station. When the Eastside Gold Line begins operation in 2009, the travel time between these two destinations will be about 23 minutes. The underground alternative would see a peak period reduction of this trip to 12 minutes. For the at-grade alternative, the trip would take 14-15 minutes.

Number of left turn pockets affected

This performance measure considers the number of left turn pocket lanes that will be removed or displaced by the LRT alignment. The at-grade Option A would displace a total of 8 left-turn pocket lanes, while Option B would displace a total of 10 left-turn pocket lanes. In comparison, the underground alternative would displace a total of 4 left-turn pockets.

Number of parking spaces potentially affected

The total numbers of potentially affected parking spaces are those that exist along the alignment that could potentially be removed and would need to be replaced. Both options for the at-grade alternative could affect 88 parking spaces located along 2nd, Main, Los Angeles, and Temple Streets. Comparatively, the underground alternative has minimal impacts on existing parking spaces due to being predominantly below-grade.

Number of driveways affected

The driveways that would potentially be impacted are those located directly along the alignment corridor. The at-grade alternative Option A would impact a total of 26 driveways along the alignment compared to a total of 30 driveways with Option B. The additional driveways for Option B are located along the Flower St. segment between 5th St. and 3rd St. and are those associated with the World Trade Center, the Westin Bonaventure, and other financial district buildings. The underground alternative does not affect any driveways along the alignment corridor.

7.5.2 Final Screening Criteria

The final screening criteria developed for Goal 3 and its associated performance measures are presented in Table 7-7. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-7 Improve Mobility and Accessibility Both Locally and Regionally
Final Screening Criteria

Goal	Performance Measure	No Build	TSM	At-Grade		Underground
				Option A	Option B	
3	Daily hours of transportation user benefits (compared to No Build)		700	8,900	9,900	12,100
3	Congestion relief (Number of intersections with improved LOS/worsened LOS in both AM and PM peak periods)		Same as No Build	1 improved (AM) 11 worsened (AM) 1 improved (PM) 16 worsened (PM)	1 improved (AM) 11 worsened (AM) 1 improved (PM) 16 worsened (PM)	1 improved (AM) 0 worsened (AM) 1 improved (PM) 0 worsened (PM)
3	Comparison of peak period travel times between major travel pairs (assuming 5 minutes per transfer)					
	Sierra Madre Villa to Long Beach Transit Mall	97 mins	102 mins	94 mins	94 mins	92 mins
	Sierra Madre Villa to Pomona/Atlantic	49 mins	49 mins	58 mins	58 mins	58 mins
	Sierra Madre Villa to Washington/National	70 mins	75 mins	72 mins	71 mins	70 mins
	Pomona/Atlantic to Washington/National	61 mins	66 mins	52 mins	51 mins	48 mins
	Pomona/Atlantic to Long Beach Transit Mall	88 mins	93 mins	84 mins	84 mins	80 mins
3	Peak period travel times (Union Station to Staples Center - Pico Station)	17 mins	22 mins	14 mins	14 mins	12 mins
3	Travel times savings (over No Build)			3 mins	3 mins	5 mins
3	Reduction in VMT			N/A	N/A	N/A
3	Assessment of expandability (Score 1-worst to 5-best)			4	4	2

Hours of transportation user benefits

The Underground Emphasis LRT Alternative would yield about 12,000 daily hours of user benefit, the most of any alternative under consideration. This is partly due to the fact that it would have the fastest travel speeds and is projected to attract the most riders. The At-Grade Emphasis LRT Alternative would generate 8,900 daily hours of user benefit under Option A and 9,900 under Option B. The TSM Alternative would yield the fewest hours of benefit, 665, beyond the No Build scenario, as it would not eliminate any transfers for rail passengers or significantly speed their trips.

Congestion relief

The TSM Alternative would not have any effect on LOS at intersections within the PSA. The Underground Alternative would improve the intersection of 1st St. and Alameda St during both the morning and afternoon peak periods, but would leave LOS at the rest of the PSA's intersections largely unchanged. The At-Grade Emphasis LRT Alternative would yield LOS improvements at the intersection of 2nd St. and Broadway in the morning and at 2nd St. and San Pedro St. in the evening, but would worsen the performance of 14 to 16 other intersections in the PSA. This is likely because the At-Grade Emphasis LRT Alternative would require the conversion of existing traffic lanes to street-running rail right-of-way.

Comparison of peak period travel times between major travel pairs

For the most part, each of the build alternatives would yield a travel time savings of three to eight minutes during peak hours on trips involving the Metro Blue, Gold, or Expo Lines. For some trips, including those involving the Metro Expo Line and the Pasadena Gold Line, trip times would increase by one or two minutes under the build alternatives, but passengers would have one less transfer and would accordingly experience less uncertainty regarding their travel times. All build alternatives would add a new transfer to trips between the Pasadena and East Los Angeles branches of the Metro Gold Line, thus lengthening the trip time by about 9 minutes. The TSM alternative would increase trip times slightly because the shuttle buses would not run as quickly as the existing Metro Red and Purple Line subway.

Peak period travel times

The peak period travel times from Union Station to Pico Station would be 17 minutes under the No Build Alternative. The TSM Alternative would lengthen this time to 22 minutes due to the use of shuttle buses in mixed-flow traffic lanes. The At-Grade Emphasis LRT Alternative would shorten the trip to approximately 14 minutes, and the faster Underground Emphasis LRT Alternative would yield a travel time of 12 minutes. It should be noted that peak hour headways on the Metro Blue, Red, Purple, and Gold Lines are all different, and the actual transfer times between these lines vary from trip to trip. One advantage of the Regional Connector would be the elimination of transfers and the associated trip time uncertainty.

Travel times savings

During peak hours, when headways are short on all Metro Rail lines, the travel time savings over the No Build Alternative would range from three minutes on the At-Grade Emphasis LRT Alternative to five minutes on the Underground Emphasis LRT Alternative. During off-peak and late night hours, when headways are typically 20 minutes, the travel time savings will increase to 15 minutes or more.

Reduction in VMT

Due to the small length of the Regional Connector project, the reduction in VMT are minor compared to the overall system and may not be statistically meaningful in distinguishing one project from the other. However, both build alternatives are considered to provide some level of VMT reductions for the PSA.

Assessment of expandability

Due to the built out nature of the PSA, the existing light rail system and the proposed build alternatives would require significant infrastructure to expand in the future. Metro has identified at least two extensions in its 2007 Draft Long Range Transportation Plan, including an extension to the northwest and an extension south eventually connecting with Metro's Harbor subdivision. While the At-grade Emphasis LRT Alternative provides greater accessibility, at some point either extension will require aerial or underground configurations due to topography, the built environment and traffic considerations. The Underground Emphasis LRT Alternative initiates below-grade, so the cost of extension is already high; however, extension may be feasible depending on growth projections in jobs, population and ridership. The Underground Emphasis LRT Alternative does not currently include provisional design features to facilitate such a future extension.

7.6 Goal 4: Support Efforts to Improve Environmental Quality

- Minimize adverse environmental impacts
- Implement mitigation measures to reduce environmental effects to acceptable levels
- Reduce emissions and improve air quality

7.6.1 Initial Screening Criteria

The initial screening criteria for Goal 4, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-8. Subsequent sections explain each performance measure and the results of each alternative.

Table 7-8 Support Efforts to Improve Environmental Quality Initial Screening Criteria				
Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
4	Noise (number of curves for LRT alignment)	6	6	3
4	Potential visual impacts to notable architectural resources within 1/4 mile of alignment (Score 1-worst to 5-best)	1	2	4
4	Number of Potential Sensitive Receptors within 1/4 mile of alignment (Score 1-worst to 5-best)	5	5	5
4	Potential impacts to historically significant locations within 1/4 mile of alignment	217	217	203
4	Geologic and geotechnical issues along alignment (Score 1-worst to 5-best)	2	2	1

Noise

To evaluate noise, the number of required curves in the track is used, as curves have higher potential to generate noise. Curves include on-street turns as well as turns from surface to underground configurations. The At-Grade Emphasis LRT Alternative would require six curves, while the underground alternative surfaces at one location and also contains three directional movements that may impact noise levels. Therefore, the at-grade alternative has a higher potential than the underground alternative for direct noise impacts.

Potential visual impacts to notable architectural resources

Through the initial screening process, current landmarks and notable architecturally significant buildings were identified as potentially sensitive to visual impacts. The underground alternative scores higher than the at-grade alternative in this regard because there is less potential for visual impacts along an underground alignment. The at-grade alternative Option A scores lower than Option B because, although identical in alignment, the differences in configuration cause differences in visual impacts.

Number of potential sensitive receptors along alignment

Sensitive receptors are initially described as individuals with respiratory diseases, children, and the elderly who occupy sensitive land uses such as daycare facilities, libraries, parks, churches. Due to the minimal amount of these sensitive land uses within the PSA, both build alternatives receive a high score for having low potential impacts on sensitive receptors.

Potential impacts to historically significant locations along alignment

Of the two build alternatives, the underground alternative has a higher (less impactful) score in terms of potential impacts to historically significant locations within one-quarter mile of the alignment, which include two National Historic Landmarks, four National

Register Districts, 78 individual National Register properties/resources, 88 California Register destinations, and 31 local landmarks. In comparison, the at-grade alternative has the potential to impact a handful more locations, including two National Historic Landmarks, five National Register Districts, 75 Individual National register properties/resources, 98 California Register designations, and 37 local landmarks.

Geologic and geotechnical issues along the alignment

Geologic and geotechnical issues are generally related to the amount of new underground configuration the alternative includes. Therefore, the underground alternative has the higher potential for these issues since the alignment is over 90% underground. The at-grade alternative also has the potential for geologic and geotechnical issues along the Flower St. tunnel. This portion of the alignment connects with the existing 7th St./Metro Center Station, in a new tunnel segment.

7.6.2 Final Screening Criteria

The final screening criteria developed for Goal 4 and its associated performance measures are presented in Table 7-9. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-9 Support Efforts to Improve Environmental Quality
Final Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
4	Expected level of impacts after mitigation to biological, social, and physical resources will be evaluated per CEQA/NEPA requirements (Score 1-worst to 5-best)	3	3	4
4	Reductions in PM10, NOx, and SOx emissions (Score 1-worst to 5-best)	N/A	N/A	N/A
4	Reduction in carbon footprint for average user (Score 1-worst to 5-best)	N/A	N/A	N/A

Expected level of impacts after mitigation to biological, social, and physical resources will be evaluated per NEPA/CEQA requirements

During the initial study, it was determined that there was no evidence that the proposed alignments would cause significant environmental effects on the following impact areas: biological, land use and planning, and population and housing. Because of existing downtown Los Angeles characteristics, both the at-grade and underground alternatives can be integrated into the existing urban environment. The at-grade alternative receives a point less since it has higher potential for impacts to these resources, being located at-grade versus underground.

During next phases of analysis (EIR/EIS), mitigation measures will be proposed to reduce any significant impacts on issues such as air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, public services, recreation, transportation and traffic, and utilities and service systems, among others.

Reductions in PM10, NOx and SOx emissions

There is no difference in reductions in PM10, NOx, and SOx emissions under the at-grade or underground alternative.

Reduction in carbon footprint for average user

There is no difference in carbon footprint reduction for the average user under the at-grade or underground alternative.

7.7 Goal 5: Provide a Cost Effective Alternative Transportation System

- Increase ridership on the Metro system
- Minimize cost per passenger
- Maximize travel time savings

7.7.1 Initial Screening Criteria

The initial screening criteria for Goal 5, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-10. Subsequent sections explain each performance measure and the results of each alternative.

Table 7-10 Provide a Cost Effective Alternative Transportation System Initial Screening Criteria

Goal	Performance Measure	TSM	At-Grade		Underground
			Option A	Option B	
5	Rough order of magnitude annual O&M (2008 $) costs per alignment (millions)	$13.60 M	$9.80 M	$9.55 M	$5.15 M
5	User Cost - Cost Effectiveness compared to No Build ($/hour of transit user benefit)	$97.28	$24.75	$20.36	$18.63

Rough order of magnitude (ROM) O&M costs

Operating and maintenance (O&M) costs are correlated with the number of peak LRT vehicles needed for daily operations. Estimating the number of total and peak LRT vehicles for each alternative requires the development of an operating plan for each

alternative, including running times and 'recovery' times, the number of cars per train, and the number of vehicles needed for spares and other services. Based on the operating plans for each alternative, the at-grade alternative will require 319 LRT vehicles and the underground alternative will require 303 LRT vehicles (due to the better travel time underground).

The ROM annual operating and maintenance cost for the at-grade alternative would be $10 Million, while the underground alternative O&M cost would be $5 Million.

User Cost – Cost Effectiveness

The cost effectiveness index measures the annualized change in capital cost and the annual O&M cost divided by the annual hours of transit-users benefits. FTA currently uses approximately $24 to $25 per hour of transit user benefit. The underground alternative rates the highest in cost effectiveness at $19. The at-grade alternative Option A performs the worst at $25, with Option B following at $20.

7.7.2 Final Screening Criteria

The final screening criteria developed for Goal 5 and its associated performance measures are presented in Table 7-11. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-11 Provide a Cost Effective Alternative Transportation System
Final Screening Criteria

Goal	Performance Measure	TSM	At-Grade		Underground
			Option A	Option B	
5	Annualized cost per hour of user benefit beyond the No Build Alternative	$97.28	$24.75	$20.36	$18.63
5	Year 2030 Annual O&M costs (in millions)	$13.60	$9.80	$9.55	$5.15

Annualized cost per hour of transit system user benefit compared to No Build and TSM Alternatives

The TSM Alternative would have the highest cost per hour of transit system user benefit of all of the alternatives. Even though it has the smallest capital cost, the TSM Alternative does not eliminate any transfers for rail passengers, and would impart a much lower level of benefit than the build alternatives. The At-Grade Emphasis LRT Alternative would have a cost per hour of user benefit of $20.36 to $24.75. The Underground Emphasis LRT Alternative would have the lowest cost per hour of user benefit ($18.63), largely because it serves the same area as the At-Grade Emphasis LRT Alternative but has a shorter travel time and station locations are more conducive to high ridership.

Annual O&M costs

Though it has the highest capital costs, the Underground Emphasis LRT Alternative would be the least expensive to operate. At $5.15 million per year, operational costs would be just over half of the annual O&M costs of the At-Grade Emphasis LRT Alternative ($9.55-$9.8 million). This is because the speeds on the underground alignment would be faster, and fewer trains would be needed to operate the service. The TSM alternative would be the most expensive to operate, at $13.6 million per year, likely due to the high volume of buses that would be needed to yield frequent headways.

7.8 Goal 6: Achieve a Financially Feasible Project

- Opportunities for private/public funding
- Opportunities for Federal and outside funding

7.8.1 Initial Screening Criteria

The initial screening criteria for Goal 6, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-12. Subsequent sections explain each performance measure and the results of each alternative.

Table 7-12 Achieve a Financially Feasible Project
Initial Screening Criteria

Goal	Performance Measure	TSM	At-Grade		Underground
			Option A	Option B	
6	ROM Capital Costs - total and per mile per alignment (millions) (2008$)				
	total	$62.74	$795.67	$709.30	$910.36
	per mile per alignment		$424	$339	$414
6	Evaluation of availability and eligibility of capital funds at federal/state local levels to construct, operate and maintain (Score 1-worst to 5-best)				
	Federal (CEI)		1	2	5
	State (cost)		1	2	2
	Local (Cost & Subway restrictions)		1	2	1

ROM Capital Costs – total and per mile

The categories estimated for each alternative include fixed-guideway construction costs, station costs, LRT vehicles, parking (if required), maintenance and operating facility allowance, and a 10 percent unallocated contingency. The lowest cost alternative is the at-grade Option B at $709.60 million, followed by Option A at $795.67. The underground alternative capital cost would be $910.36 million.

Another measure of interest is the capital cost per mile. Again, the at-grade Option B has the lowest capital cost per mile at $339 million, followed by the underground alternative at $414 million per mile. The at-grade Option A would have the highest capital cost per mile at $424 million.

Evaluation of availability and eligibility of capital funds at federal/state/local levels to construct, operate and maintain

Three measures for funding sources were evaluated: federal, state, and local. The FTA New Starts Program is the primary funding source for federal funds. For this evaluation, the cost-effectiveness threshold is used as the measure for federal funding potential. The higher the cost-effectiveness compared to the threshold, the better the alternative. FTA currently uses a cost-effectiveness threshold of approximately $24 to $25 per hour of transit user benefit. The underground alternative currently rates the highest (best) in cost-effectiveness at $19, followed by the at-grade Option B at $20, then at-grade Option A at $25.

For state funding, the alternative with the lowest capital cost has the higher potential for state funding assistance. Because of the competitiveness of this project with other high priority transit projects, both the underground and the at-grade Option B receive the same score of two, while the at-grade Option A (with the highest capital cost) receives the lowest score of 1.

7.8.2 Final Screening Criteria

A comparative discussion of the build alternatives based on the final screening criteria and associated performance measures developed for Goal 6 is provided below. Table 7-13 contains a comparison of each build alternative's costs broken down into FTA's Standard Cost Categories. The results of the findings for the No Build, TSM, and two build alternatives are discussed in subsequent sections.

Table 7-13 Achieve a Financially Feasible Project
Final Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
6	Capital cost per rail route mile estimate disaggregated by right of way (ROW), guideway, stations, yards, and vehicles (in millions of dollars)			
	Guideway and Track Elements	$120.4	$114.3	$146.2
	Stations, Stops, and Terminals	$46.3	$25.0	$73.6
	Support Facilities: Yards, Shops, Maintenance Buildings	$8.7	$8.7	$3.3
	Site work and Special Conditions	$86.5	$80.9	$117.0
	Systems	$18.2	$18.2	$19.6
	ROW, Land, Existing Improvements	$2.1	$2.1	$34.3
	Vehicles	$29.4	$29.4	$11.1
	Professional Services	$92.5	$81.6	$118.7
	Unallocated Contingency	$40.3	$36.0	$52.4
	TOTAL COST PER ROUTE MILE	$444.4	$396.2	$576.2

Capital cost estimate disaggregated by ROW, guideway, stations, yards, and vehicles on a cost per mile basis

At-Grade Emphasis LRT Alternative Option B has the lowest capital cost per route mile because it has the least amount of track mileage underground and only one underground station. Option A has a higher cost per route mile because there it has one additional underground station and more underground tracks. The Underground Emphasis LRT Alternative is almost entirely underground and has three underground stations, resulting in the highest capital costs.

7.9 Goal 7: Provide a Safe and Secure Alternative Transportation System

- Secure entire alignment, stations, track and other facilities
- Develop direct and indirect safety measures that exceed safety precautions typical of the Metro system
- Develop a system that balances the need for accessibility and mobility with security
- Develop a system that uses accessibility and mobility as measures for safety and security

7.9.1 Initial Screening Criteria

The initial screening criteria for Goal 7, its associated performance measures, and results of the findings for the two build, the No Build, and the TSM alternatives are presented in Table 7-14. Subsequent sections explain each performance measure and the results of each alternative.

Table 7-14 Provide a Safe and Secure Alternative Transportation System Initial Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
7	Safety - determined to be able to provide measures typical of requirements per ADA, per typical CPUC requirements, fire life safety guidelines, and per Metro Design Guidelines for access to and from stations (amount grade separated) (Score 1-worst to 5-best)	2	1	5
	Total underground - new tunnel, existing 2nd St. tunnel, and aerial	46%	38%	94%
7	Number of emergency facilities located within 1/4 mile of the alignment (i.e., fire stations, police stations, hospitals)	4	4	4
7	Number of public events within 1/4 mile of alignment	14	14	14

Safety- determined to be able to provide measures typical of requirements per ADA, typical CPUC requirements, fire life safety guidelines and Metro Design Guidelines for access to and from stations

The measures used to evaluate the build alternatives included the percentage of the alignment that was fully grade separated and the percentage of the alignment totally underground in a new tunnel or in the existing 2nd St. tunnel. It is generally assumed that the more grade separated the alignment, the 'more safe and secure' it will be. Based on that assumption, the underground alternative received the best score, with 94 percent of the line underground, as opposed to the at-grade alternative Option A which is 46 percent underground and Option B which is 38 percent underground.

Number of emergency facilities located within one-quarter mile of the alignment, (i.e. fire stations, police stations, hospitals, etc.)

Both build alternatives have four emergency facilities located within their one-quarter mile buffer, three fire stations and one police station.

Number of public events

Currently, there are a total of 14 annually scheduled public events within one-quarter mile of the at-grade and underground alternatives, including 12 street closures and two additional annual events. These public events include the Little Tokyo Cherry Blossom Festival, the Los Angeles Marathon, Fiesta Broadway, City of Angels Half-Marathon, El Grito Celebration, and the St. Patrick's Day Parade.

7.9.2 Final Screening Criteria

The final screening criteria developed for Goal 7 and its associated performance measures are presented in Table 7-15. The results of the findings for the two build, No Build, and TSM alternatives are presented in subsequent sections.

Table 7-15 Provide a Safe and Secure Alternative Transportation System Final Screening Criteria

Goal	Performance Measure	At-Grade		Underground
		Option A	Option B	
7	Number of crossings with high pedestrian activities on a daily basis	10	10	1
7	Number of events along the alignment	14	14	14
7	Potential issues related to accessibility and line of sight for pedestrians and vehicle drivers (Score 1-worst to 5-best)	1	1	4

Number of crossings with high pedestrian activities on a daily basis

The at-grade alternative has considerably more intersections with high pedestrian activity, 10 total, due to its at-grade configuration and its location along a pedestrian heavy corridor, specifically along 2nd St. The pedestrian activity along 2nd St. is not limited to

Civic Center purposes, but includes the historic and art buildings along 2nd St. as well. Many people walk along 2nd St. and up and down Main and Los Angeles Streets, especially during weekday lunch hour. In addition, because Civic Center buildings are all centrally located, people walk during most of the day to and from different departments.

The underground alternative would affect one intersection, 1st St. and Alameda St. In the past, this was a predominantly vehicle and truck heavy only intersection, but with the recent addition of residential developments along Alameda St. and the Arts District, and with the future Metro Goldline Extension and mixed-use development, this will be a pedestrian heavy intersection.

Number of events along the alignment

See Section 7.9.1 for a description of public events.

Number of potential issues related to accessibility and line of sight for pedestrian and vehicle drivers

An at-grade LRT may have a higher number of potential issues related to accessibility and line of sight for pedestrians and vehicles. An at-grade LRT introduces a new, fixed, transit route that drivers may not be accustomed to. Train movements and signal operations may be unfamiliar and cause initial confusion or uncertainty. Likewise, for pedestrians, an at-grade LRT presents safety concerns due to train speeds, track crossings, and/or proper notifications for oncoming trains. For these and other reasons, the at-grade alternative receives a low score in terms of potential issues that may arise.

The underground alternative presents fewer concerns for pedestrians and street vehicular traffic due to its underground configuration throughout much of the alignment, with the exception of the 1st St. and Alameda St. intersection. Some potential issues at this intersection include through-traffic ability, driver confusion, proper signage for turning movements, and vehicle approaching train signals. There are various features of the underground alignment that will facilitate both vehicular and pedestrian movements. The underpass for north-south traffic removes the vehicular activity from street level to underground, leaving only the LRT and local traffic movements. In addition, the introduction of a pedestrian bridge provides pedestrians with the option to move from street level to an upper platform space. For this reason, the underground alternative received a high score with respect to potential accessibility issues.

7.10 Summary of Recommendations

After the screening of alternatives from eight build alternatives to two build alternatives, a number of refinements were made to both alternatives with input from the community and stakeholders. Much of the input received was regarding the impacts to the Little Tokyo community, connections to a potential historic trolley line on Broadway, and a connection to the Grand development. The addition of a new underpass and pedestrian bridge for both alternatives help to address some key concerns. Continued engineering refinement and coordination with the stakeholders during the next phase of this process will help resolve any remaining issues.

At this point, both build alternatives are viable and can be constructed. However, the Underground Emphasis LRT Alternative has a greater benefit in the long term. This segment will be the core of the light rail system for the PSA and the region as a whole. A high number of trains will be traversing this nearly two-mile segment to go north, south, east or west in the County. The Underground Emphasis LRT Alternative avoids surface conflicts with autos and pedestrians which is beneficial both from a safety standpoint as well as an operational standpoint, as one unplanned stop by a train could cause significant delays for riders in different parts of the County.

Still, the Underground Emphasis LRT Alternatives creates some significant short term impacts to the culturally sensitive Little Tokyo community. This community has a lot to gain in the long run as it will be at the core for public transit in the region. However, there is a concern that Little Tokyo business and therefore Little Tokyo itself will be significantly impacted during construction. Specific considerations for this community will need to be reviewed during the next phase, the Draft EIR/EIS. Therefore, both build alternatives are recommended for further study in a Draft EIR/EIS to evaluate potential impacts and mitigation and to further engineer the details for each option.

7.11 Tradeoffs between Alternatives

Table 7-16 provides a summary comparison of the build alternatives that will be carried on to the next phase for full environmental review. The No Build and TSM Alternatives are required by the state and federal processes to be included in the environmental review as well.

Due to the regional significance of this central 1.8-mile connection, both alternatives will provide substantial mobility and accessibility improvements, consistent with Goal 3. However, due to the volume of potential conflicts with autos that an at-grade alternative provides, and considering that such conflicts would generate substantial interruptions for existing transit operations in the region, the Underground Emphasis LRT Alternative would perform the best, with only one potential conflict location. In addition, the Underground Emphasis LRT Alternative provides better travel times and in turn attracts more riders due to the avoidance of at-grade traffic conditions and at-grade traffic signals.

The cost for either project is significant due to the urban and built out character of the PSA. Both alternatives have substantial portions below-grade, with the At-Grade Emphasis LRT Alternative below-grade for more than 40 percent of the alignment. The capital cost differential between the two alternatives is approximately $200 million, but the O&M cost between the two alternatives is substantially different. The At-Grade Emphasis LRT Alternative will require additional vehicles to account for the slower speeds through downtown LA due to traffic conditions. Additional costs will also be incurred by the maintenance of at-grade components, including track repair, OCS maintenance, station cleaning and station facility repairs. As both alternatives score well using FTA criteria for transit system user benefits, either alternative would be financially feasible.

Table 7-16 Summary Comparison of Alternatives			
Goal	At-Grade Alt – Option A	At-Grade Alt – Option B	Underground Alt
1: Community Planning	Similar demographic characteristics, transit oriented design policies, connections to activity centers, and redevelopment opportunities under all build alternatives.		
2: Public Involvement, Community Preservation	- Smaller proportion of alignment is grade separated - Similar urban fit and potential disproportionate environmental justice effects compared to Underground Emphasis LRT Alt. - One more acquisition needed than Underground Emphasis LRT Alt.		-Greater proportion of alignment is grade separated. -Similar urban fit and potential disproportionate environmental justice effects compared to At-Grade Emphasis LRT Alt. -One fewer acquisition needed than At-Grade Emphasis LRT Alt.
3: Improve Mobility and Access	-8,900 daily hours of transportation user benefits -Union Station to Pico in 14 minutes (3 faster than No Build) -Easily adapted for further system expansions	-9,900 daily hours of transportation user benefits -Union Station to Pico in 14 minutes (3 faster than No Build) -Easily adapted for further system expansions	-12,100 daily hours of transportation user benefits -Union Station to Pico in 12 minutes (5 faster than No Build) -Not easily adapted for further system expansions
4: Improve Environmental Quality	Slightly more impacts than Underground Emphasis LRT Alt. to biological, social, and physical resources after mitigation		Slightly fewer impacts than At-Grade Emphasis LRT Alt. to biological, social, and physical resources after mitigation
5: Cost Effectiveness	-Operating Costs: $9.8M/yr -Annualized cost per hour of user benefit: $24.75	-Operating Costs: $9.6M/yr -Annualized cost per hour of user benefit: $20.36	-Operating Costs: $5.2M/yr -Annualized cost per hour of user benefit: $18.63
6: Financial Feasibility	-Capital Costs: $796M ($424M per mile) -Low eligibility for federal/state/local funds	-Capital Costs: $709M ($339M per mile) -Moderate-Low eligibility for federal/state/local funds	-Capital Costs: $910M ($414M per mile) -Moderate-Low eligibility for state/local funds -High eligibility for federal funds
7: Safety and Security	-10 high-activity grade crossings -Many potential issues related to accessibility and vehicle line of sign -Similar number of public events along the alignment, compared to Underground Emphasis LRT Alt.		-1 grade crossing -Few potential issues related to accessibility and vehicle line of sight -Similar number of public events along the alignment, compared to At-Grade Emphasis LRT Alt.

The build alternatives meet one of two distinct criteria important to the general community. The Underground Emphasis LRT Alternative addresses the desire for the project to be primarily, if not entirely, underground. The At-grade Emphasis LRT Alternative addresses the desire for an alternative that does not directly impact the community of Little Tokyo by traversing Temple, Los Angeles and Main Streets instead. Though the Underground Emphasis LRT Alternative avoids directly conflicting with Little Tokyo's busy streets and businesses, this alternative features a single at-grade crossing at Alameda and 1st Streets, and potential impacts to Little Tokyo are still a great concern.

After initial screening, Metro worked closely with a special task force created within the Little Tokyo community, as well as with major stakeholders within the historic core, financial district, Bunker Hill and the Civic Center. The decision to include underpasses for intersections at Temple and 1st St., and to include a pedestrian bridge for both alternatives, has led to support from the Little Tokyo community for both alternatives. In addition, the historic core will continue to be involved in the potential fourth station at 2nd and Spring Streets and the final location of an underground station on 2nd St., in order to best enhance a connection to a proposed street-car on Broadway. Both alternatives score well based on support for community planning efforts.

Based on the comparative analysis, the following alternatives are being recommended for consideration for future study in a Draft EIR/EIS process:

- No Build (required)
- Transportation System Management (TSM) (required)
- At-Grade Emphasis LRT (including Alameda underpass and pedestrian bridge at Temple Street)
- Underground Emphasis LRT (including Alameda underpass and pedestrian bridge at 1st Street)

These alternatives are considered the best alternatives that meet the Purpose and Need for the Regional Connector Transit Corridor and are the most competitive for possible Federal New Starts funding participation.

The following issues will continue to be addressed during development of the Draft EIR/EIS and the selection of the Locally Preferred Alternative (LPA). The LPA will be submitted to the Federal Transit Administration as the project Metro recommends for Preliminary Engineering.

- Design of auto underpasses, pedestrian crossings, and pedestrian bridges for both build alternatives
- Decision about specific location and configuration of stations
- Decision about a possible fourth station for the At-Grade Emphasis LRT

- Impact identification and proposed mitigation for construction and operations
- Costs
- Evaluation of the cost effectiveness of project elements

Appendix A References

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Appendix B Transit Lines Serving the Project Study Area

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
AVTA	785	Freeway Express Bus	4AM-6AM, 3PM-6PM	20 mins	Palmdale/Lancaster
BBB	10 Express	Freeway Express Bus	6AM-8PM	15 mins	Santa Monica
Gardena	1	Freeway Express Bus	5AM-12AM	15 mins	Gardena/Lawndale
Foothill	481	Freeway Express Bus	6AM-9AM, 3PM-6PM	20 mins	El Monte/Wilshire Center
Foothill	493	Freeway Express Bus	5AM-8AM, 2PM-8PM	10 mins	Pomona/Phillips Ranch
Foothill	497	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	Chino
Foothill	498	Freeway Express Bus	5AM-8AM, 2PM-7PM	7 mins	Covina/Azusa
Foothill	499	Freeway Express Bus	5AM-8AM, 2PM-7PM	12 mins	San Dimas
Foothill	699	Freeway Express Bus	4AM-8AM. 2PM-7PM	9-12 mins	Montclair
Foothill	Silver Streak	Freeway Express Bus	24 Hours	10 mins	Montclair
LADOT	CE 409	Freeway Express Bus	6AM-9AM, 4PM-6PM	15 mins	Sylmar/Sunland/Tujunga/Montrose/Glendale
LADOT	CE 413	Freeway Express Bus	7AM-9AM, 4PM-6PM	25 mins	Van Nuys/North Hollywood/Burbank
LADOT	CE 419	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Chatsworth/Northridge/Granada Hills/Mission Hills
LADOT	CE 422	Freeway Express Bus	5AM-9AM, 4PM-8PM	8 mins	Hollywood/San Fernando Valley/Agoura Hills/Thousand Oaks
LADOT	CE 423	Freeway Express Bus	7AM-9AM, 4PM-7PM	15 mins	Encino/Woodland Hills/Agoura Hills/Thousand Oaks/Newbury Park
LADOT	CE 430	Freeway Express Bus	6AM-7AM, 5PM-6PM	30-50 mins	Brentwood/Pacific Palisades
LADOT	CE 431	Freeway Express Bus	7AM-9AM, 5PM-6PM	30 mins	Westwood/Rancho Park/Palms
LADOT	CE 437	Freeway Express Bus	7AM-9AM, 4PM-6PM	15-30 mins	Venice/Marina del Rey/Culver City
LADOT	CE 438	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Redondo Beach/Hermosa Beach/Manhattan Beach/El Segundo
LADOT	CE 448	Freeway Express Bus	7AM-9AM, 4PM-6PM	15 mins	Rancho Palos Verdes/Torrance/Lomita/Wilmington Harbor City
LADOT	CE 534	Freeway Express Bus	7AM-8AM, 4PM-5PM	30 mins	Century City/Westwood
LADOT	DASH A	Circulator Bus	7AM-7PM	7 mins	Little Tokyo/City West
LADOT	DASH B	Circulator Bus	6AM-7PM	8 mins	Chinatown/Financial District
LADOT	DASH C	Circulator Bus	7AM-7PM	7 mins	Financial District/South Park

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
LADOT	DASH D	Circulator Bus	6AM-7PM	5 mins	Union Station/South Park
LADOT	DASH E	Circulator Bus	7AM-7PM	5 mins	City West/Fashion District
LADOT	DASH F	Circulator Bus	7AM-7PM	10 mins	Financial District/Exposition
LADOT	DASH CH	Circulator Bus	6AM-6PM	6 mins	City Hall Shuttle
LADOT	DASH DD	Circulator Bus	Weekend Only	20 mins	Downtown Discovery
LADOT	DASH MBH	Circulator Bus	7AM-9AM, 3PM-6PM	10 mins	Metrolink/Bunker Hill
Metro	2/302	Local/Limited Stop Bus	24 Hours	5 mins	Pacific Palisades via Sunset Bl.
Metro	4	Local Bus	24 Hours	7 mins	Santa Monica via Santa Monica Bl.
Metro	10	Local Bus	5AM-12AM	7 mins	West Hollywood via Temple St. and Melrose Av.
Metro	14/37	Local Bus	24 Hours	10 mins	Beverly Hills via Beverly Bl./West LA via Adams Bl.
Metro	16/316	Local/Limited Stop Bus	4AM-1AM	3 mins	Century City via 3rd St.
Metro	18	Local Bus	24 Hours	3 mins	Wilshire Center - Montebello via 6th St. and Whittier Bl.
Metro	20	Local Bus	24 Hours	4 mins	Santa Monica via Wilshire Bl.
Metro	26/51/52/352	Local/Limited Stop Bus	24 Hours	4 mins	Hollywood - Compton - Artesia Blue Line via Avalon Bl.
Metro	28	Local Bus	5AM-1AM	8 mins	Century City via Olympic Blvd.
Metro	30/31/330	Local/Limited Stop Bus	24 Hours	4 mins	Pico-Rimpau - Monterey Park via Pico Bl and E 1st St.
Metro	33/333	Local/Limited Stop Bus	24 Hours	2 mins	Santa Monica via Venice Bl.
Metro	38	Local Bus	24 Hours	8 mins	Fairfax and Washington via Jefferson Bl.
Metro	40	Local Bus	24 Hours	6 mins	South Bay Galleria via Hawthorne Bl., Crenshaw Bl., and MLK Bl.
Metro	42/42A	Local Bus	5AM-12AM	12 mins	LAX via MLK Bl., Stocker St., and La Tijera Bl.
Metro	45	Local Bus	24 Hours	6 mins	Montecito Heights - Rosewood via Broadway and Mercury Av.
Metro	48	Local Bus	5AM-11PM	7 mins	Avalon Green Line via Main St. and S. San Pedro St.
Metro	53/350	Local/Limited Stop Bus	24 Hours	5 mins	Carson via Central Av.
Metro	55/355	Local/Limited Stop Bus	24 Hours	4 mins	Imperial Blue/Green Line via Compton Av.
Metro	60	Local Bus	24 Hours	6 mins	Artesia Blue Line via Long Beach Bl.

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	62	Local Bus	5AM-11PM	15 mins	Hawaiian Gardens via Telegraph Rd.
Metro	66/366	Local/Limited Stop Bus	4AM-1AM	2 mins	Wilshire Center - Montebello via 8th St. and Olympic Bl.
Metro	68/84	Local Bus	24 Hours	8 mins	West LA - Montebello via Washington Bl. and Cesar Chavez Av.
Metro	70/71/370	Local/Limited Stop Bus	24 Hours	5-9 mins	El Monte via Garvey Av.
Metro	76/376	Local/Limited Stop Bus	24 Hours	10 mins	Arcadia via Valley Bl., Huntington Dr. and Las Tunas Dr.
Metro	78/79/378	Local/Limited Stop Bus	5AM-1AM	10 mins	Arcadia via Huntington Dr. and Las Tunas Dr.
Metro	81/381	Local/Limited Stop Bus	5AM-1AM	5 mins	Eagle Rock - Exposition Park via Figueroa St.
Metro	83	Local Bus	24 Hours	10 mins	Eagle Rock via York Av.
Metro	90/91	Local Bus	5AM-12AM	10 mins	Sunland via Foothill Bl., Cañada Bl., and Glendale Av.
Metro	92	Local Bus	24 Hours	12 mins	Burbank via Glendale
Metro	94/394	Local/Limited Stop Bus	5AM-1AM	5 mins	Sylmar via San Fernando Rd. and Spring St.
Metro	96	Local Bus	5AM-8PM	20 mins	Sherman Oaks via Griffith Park Dr. and Riverside Dr.
Metro	439	Freeway Express Bus	5AM-9PM	40-60 mins	Aviation Green Line via Culver City
Metro	442	Freeway Express Bus	6AM-8AM, 4PM-6PM	30 mins	Hawthorne via Harbor Transitway, Manchester Bl., and La Brea Av.
Metro	444	Freeway Express Bus	5AM-8PM	10-20 mins	Rancho Palos Verdes via Harbor Transitway and Hawthorne Bl.
Metro	445	Freeway Express Bus	5AM-7PM	30 mins	San Pedro via Harbor Transitway, 1st St., and Pacific Av.
Metro	446/447	Freeway Express Bus	5AM-12AM	15 mins	San Pedro via Harbor Transitway, Avalon Bl., and Pacific Av.
Metro	450X	Freeway Express Bus	6AM-9AM, 4PM-6PM	15 mins	South Bay Express via Harbor Transitway
Metro	460	Freeway Express Bus	5AM-12AM	30 mins	Disneyland via Harbor Transitway, I-105, and I-5
Metro	484	Freeway Express Bus	5AM-12AM	5 mins	Pomona via El Monte Busway and Valley Bl.
Metro	485	Freeway Express Bus	5AM-12AM	20 mins	Altadena via El Monte Busway, Oak Knoll Av., and Lake Av.
Metro	487	Freeway Express Bus	6AM-9PM	30 mins	Sierra Madre Villa Gold Line via El Monte Busway
Metro	489	Freeway Express Bus	6AM-8AM, 3PM-5PM	12 mins	Temple City via El Monte Busway and Rosemead Bl.
Metro	490	Freeway Express Bus	5AM-11PM	10 mins	Pomona via El Monte Busway and Ramona Bl.
Metro	704	Rapid Bus	6AM-8PM	8 mins	Santa Monica Bl. Rapid

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	714	Rapid Bus	6AM-9AM, 3PM-6PM	15 mins	Beverly Bl. Rapid
Metro	720	Rapid Bus	4AM-1AM	4 mins	Wilshire Bl. - Whittier Bl. Rapid
Metro	728	Rapid Bus	5AM-8PM	8 mins	Olympic Bl. Rapid
Metro	740	Rapid Bus	5AM-8PM	10 mins	Hawthorne Bl. Rapid
Metro	745	Rapid Bus	5AM-8PM	5 mins	South Broadway Rapid
Metro	760	Rapid Bus	5AM-8PM	8 mins	Long Beach Bl. Rapid
Metro	770	Rapid Bus	6AM-6PM	12 mins	Garvey Av. - Cesar Chavez Av. Rapid
Metro	940	Rapid Express Bus	6AM-8AM, 4PM-6PM	30 mins	Hawthorne Bl. Rapid Express
Metro	Blue Line	Light Rail	5AM-12AM	5 mins	Long Beach via South Los Angeles, Willowbrook, and Compton
Metro	Red Line	Heavy Rail	5AM-12AM	5 mins	Wilshire Center and North Hollywood
Montebello	40	Local Bus	5AM-10PM	8 mins	Montebello and Whittier via Beverly Bl.
Montebello	50	Local Bus	5AM-12AM	30 mins	Whittier and La Mirada via Washington Bl.
Montebello	341	Limited Stop Bus	7AM-9AM, 4PM-6PM	30 mins	Montebello and Whittier via Beverly Bl.
Montebello	342	Limited Stop Bus	7AM, 5PM	One Trip	Montebello and Whittier via Beverly Bl.
Montebello	343	Limited Stop Bus	7AM-8AM, 5PM-6PM	30 mins	Montebello and Whittier via Beverly Bl.
OCTA	701	Freeway Express Bus	5AM-6AM, 4PM-5PM	20 mins	Huntington Beach
OCTA	721	Freeway Express Bus	6AM-9AM, 3PM-6PM	30 mins	Fullerton
Santa Clarita	799	Freeway Express Bus	5AM-7AM, 3PM-7PM	20 mins	Valencia/Santa Clarita
Torrance	1	Freeway Express Bus	6AM-9AM, 4PM-10PM	30 mins	Torrance via Harbor Transitway and Artesia Transit Center
Torrance	2	Freeway Express Bus	7AM-7PM	60 mins	Torrance via Harbor Transitway

Appendix C Bus Lines Serving Both Union Station and 7th St./Metro Center Station

Line	Average Daily Boardings within Study Area	Average Daily Boardings for Entire Line	Route Description
78/79/378	1,405	11,868	Arcadia via Huntington Dr. and Las Tunas Dr.
484	1,393	8,914	Pomona via El Monte Busway and Valley Bl.
70/370	1,330	15,569	El Monte via Garvey Av.
76/376	1,108	11,106	Arcadia via Valley Bl., Huntington Dr. and Las Tunas Dr.
490	631	5,568	Pomona via El Monte Busway and Ramona Bl.
485	431	3,683	Altadena via El Monte Busway, Oak Knoll Av., and Lake Av.
487	410	2,985	Sierra Madre Villa Gold Line via El Monte Busway
446/447	289	4,373	San Pedro via Harbor Transitway, Avalon Bl., and Pacific Av.
444	285	3,132	Rancho Palos Verdes via Harbor Transitway and Hawthorne Bl.
445	210	1,243	San Pedro via Harbor Transitway, 1st St., and Pacific Av.
439	141	946	Aviation Green Line via Culver City
489	122	584	Temple City via El Monte Busway and Rosemead Bl.
442	56	249	Hawthorne via Harbor Transitway, Manchester Bl., and La Brea Av.
TOTAL	7,811		

Figure D-1 Plan View of Alternative 1a

Figure D-2 Plan View of Alternative 1b

Figure D-3 Plan View of Alternative 2

Figure D-4 Plan View of Alternative 3a

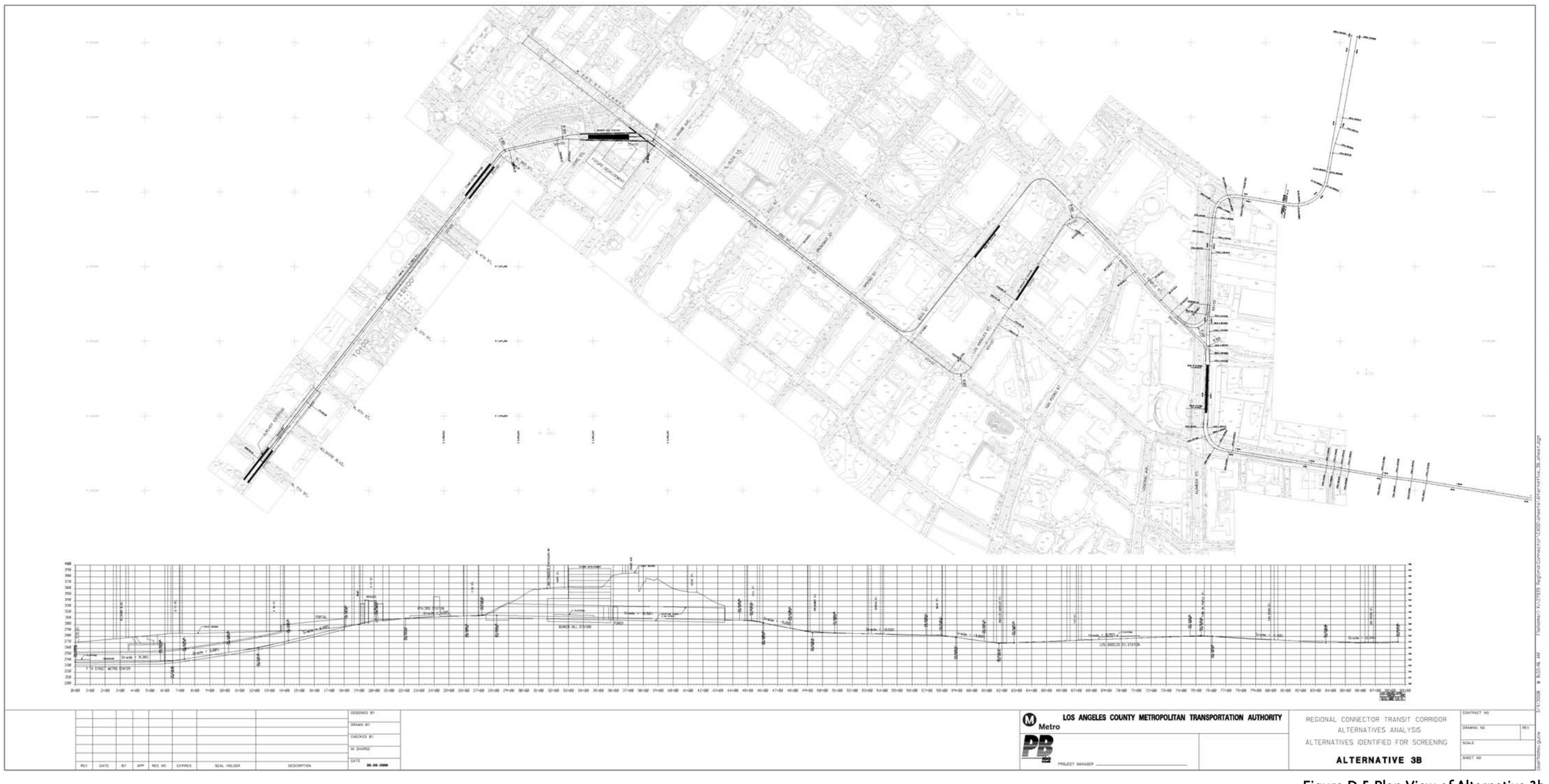


Figure D-5 Plan View of Alternative 3b

Figure D-6 Plan View of Alternative 4a

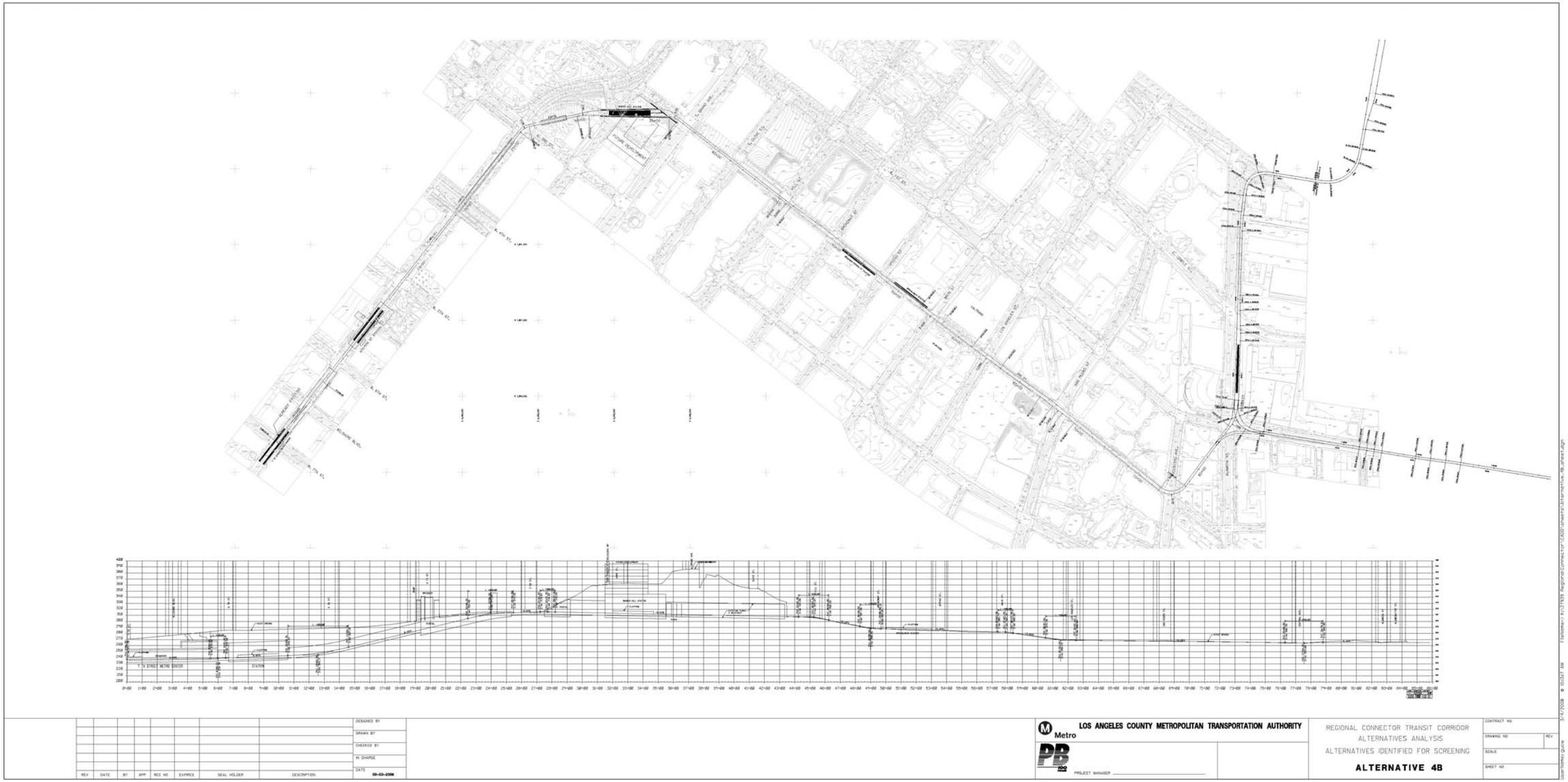


Figure D-7 Plan View of Alternative 4b

Figure D-8 Plan View of Alternative 5

Figure D-9 Plan View of Alternative 6

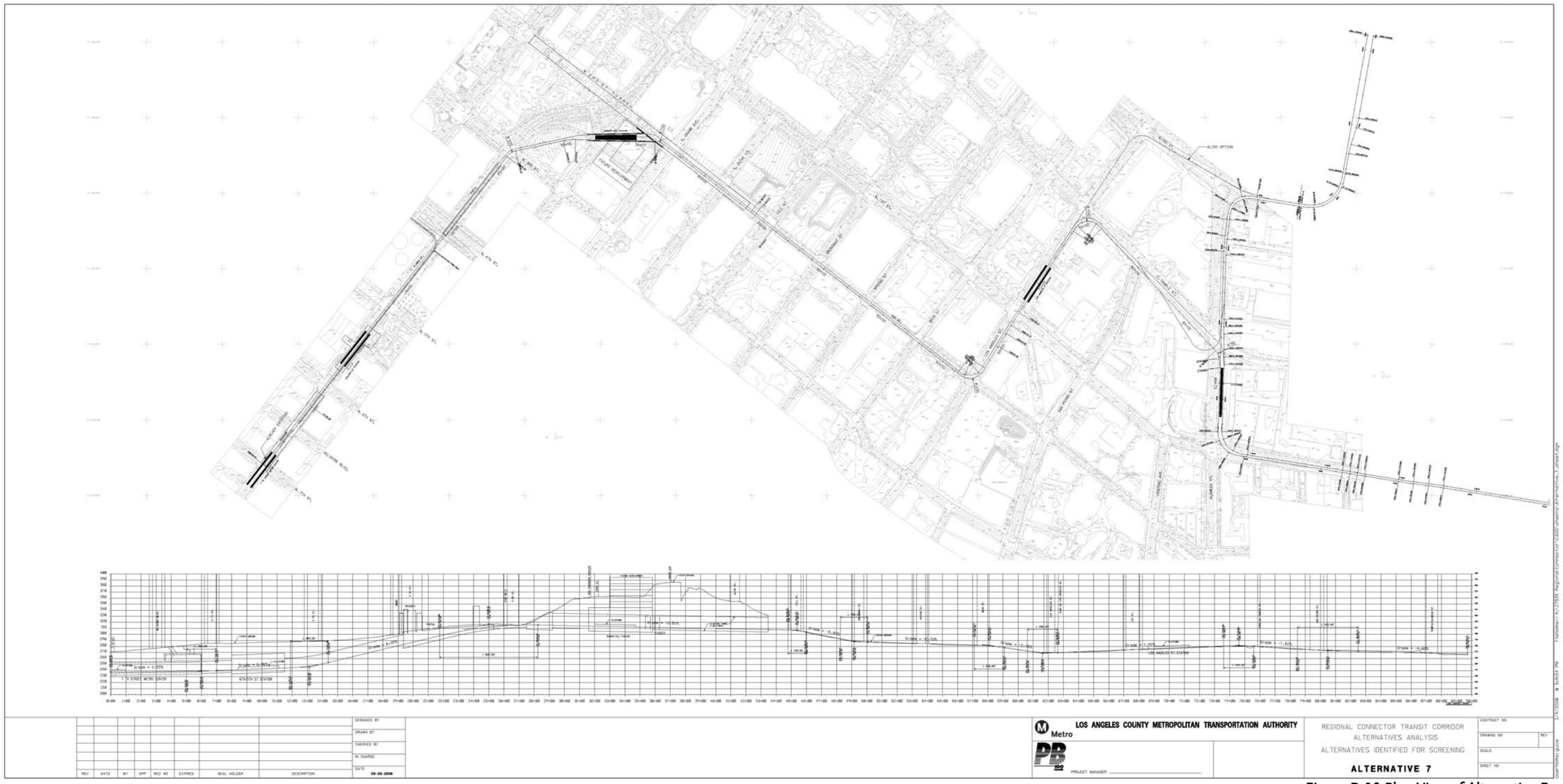


Figure D-10 Plan View of Alternative 7

Figure D-11 Plan View of Alternative 8

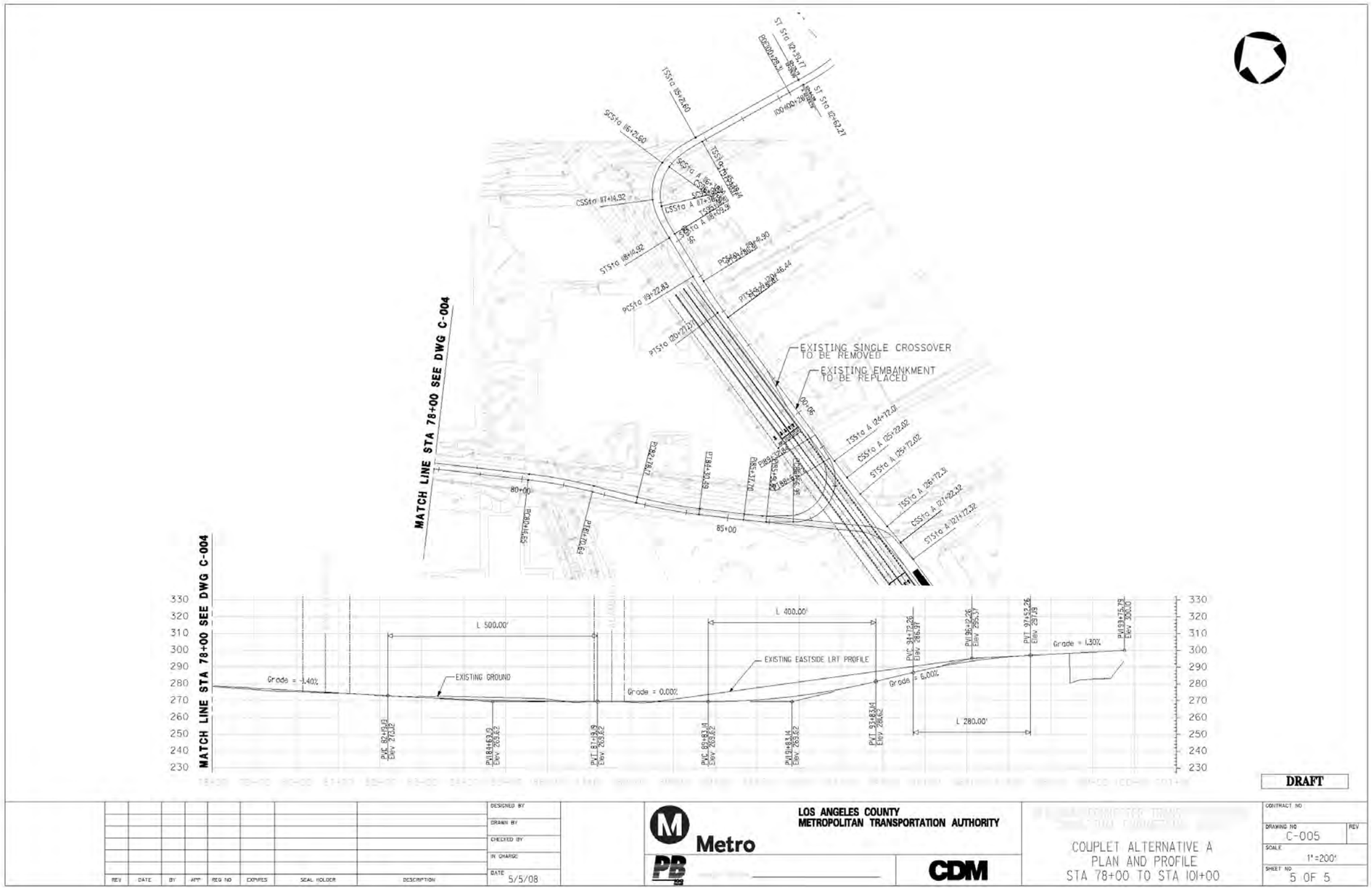


Figure D-12 At-Grade Emphasis LRT Alternative Option A: Temple St. and Alameda St. Intersection

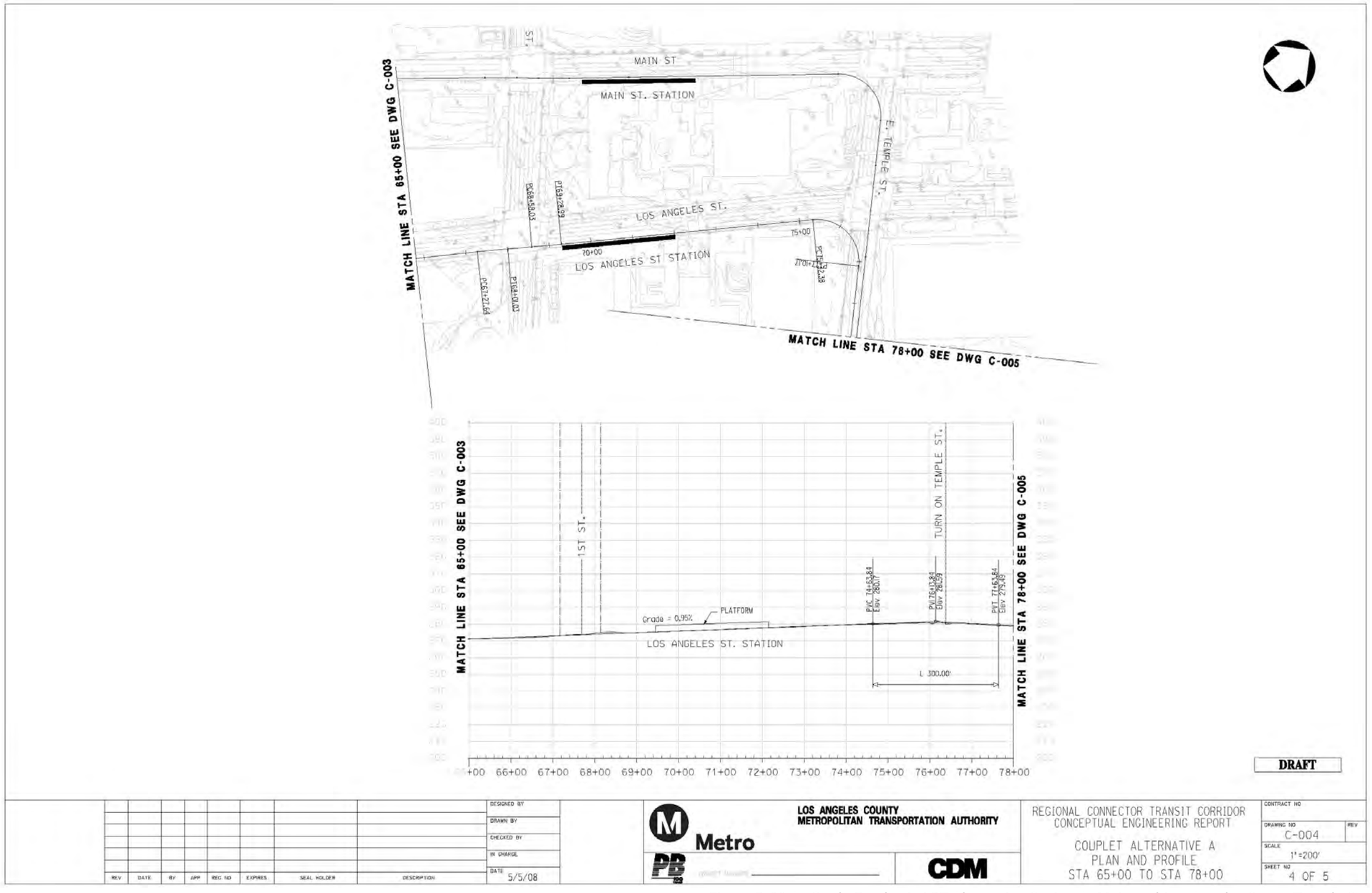


Figure D-13 At-Grade Emphasis LRT Alternative Option A: Main and Los Angeles Sts. at Temple St.

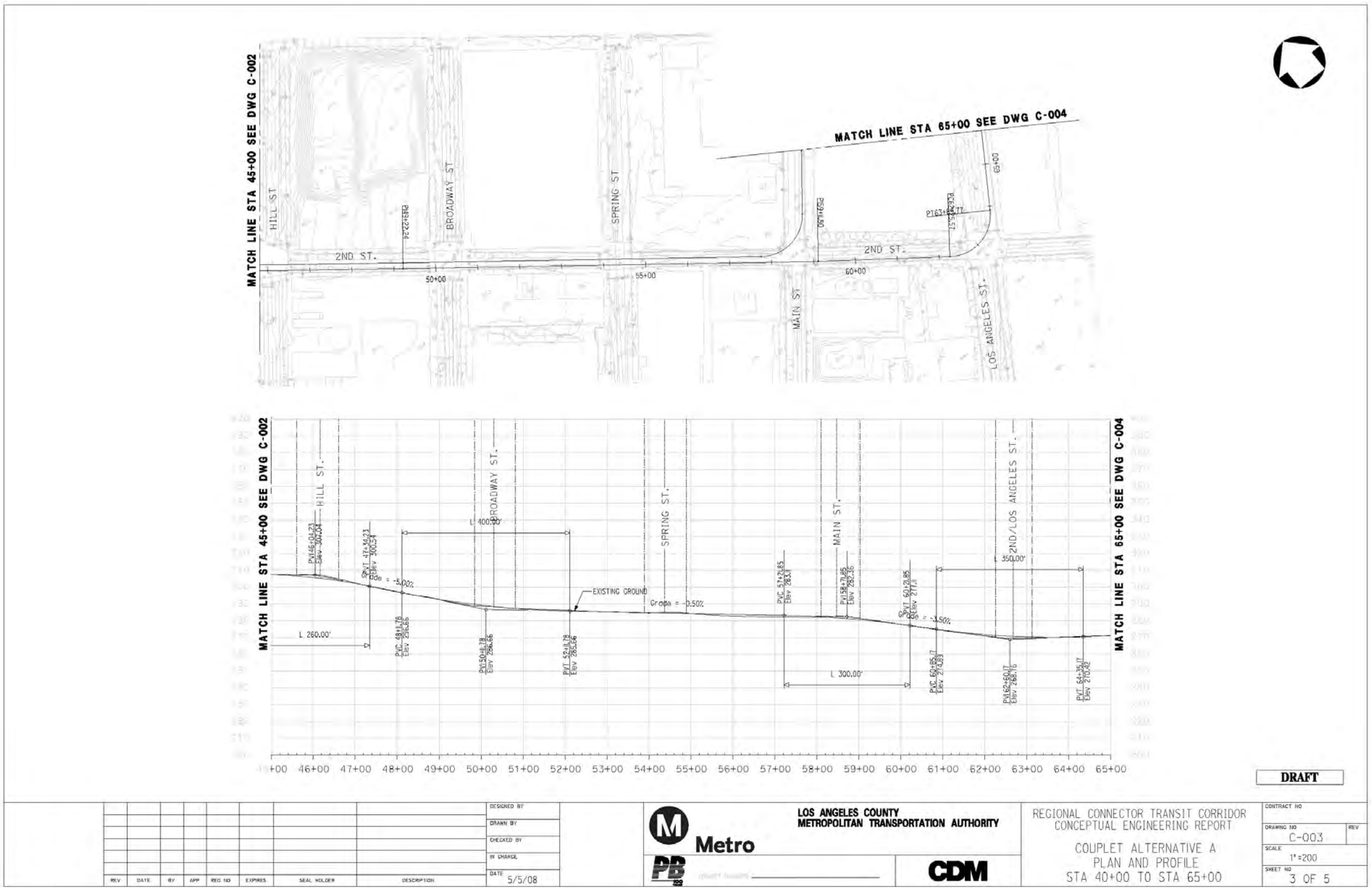


Figure D-14 At-Grade Emphasis LRT Alternative Option A: 2nd St. Corridor at main and Los Angeles Sts.

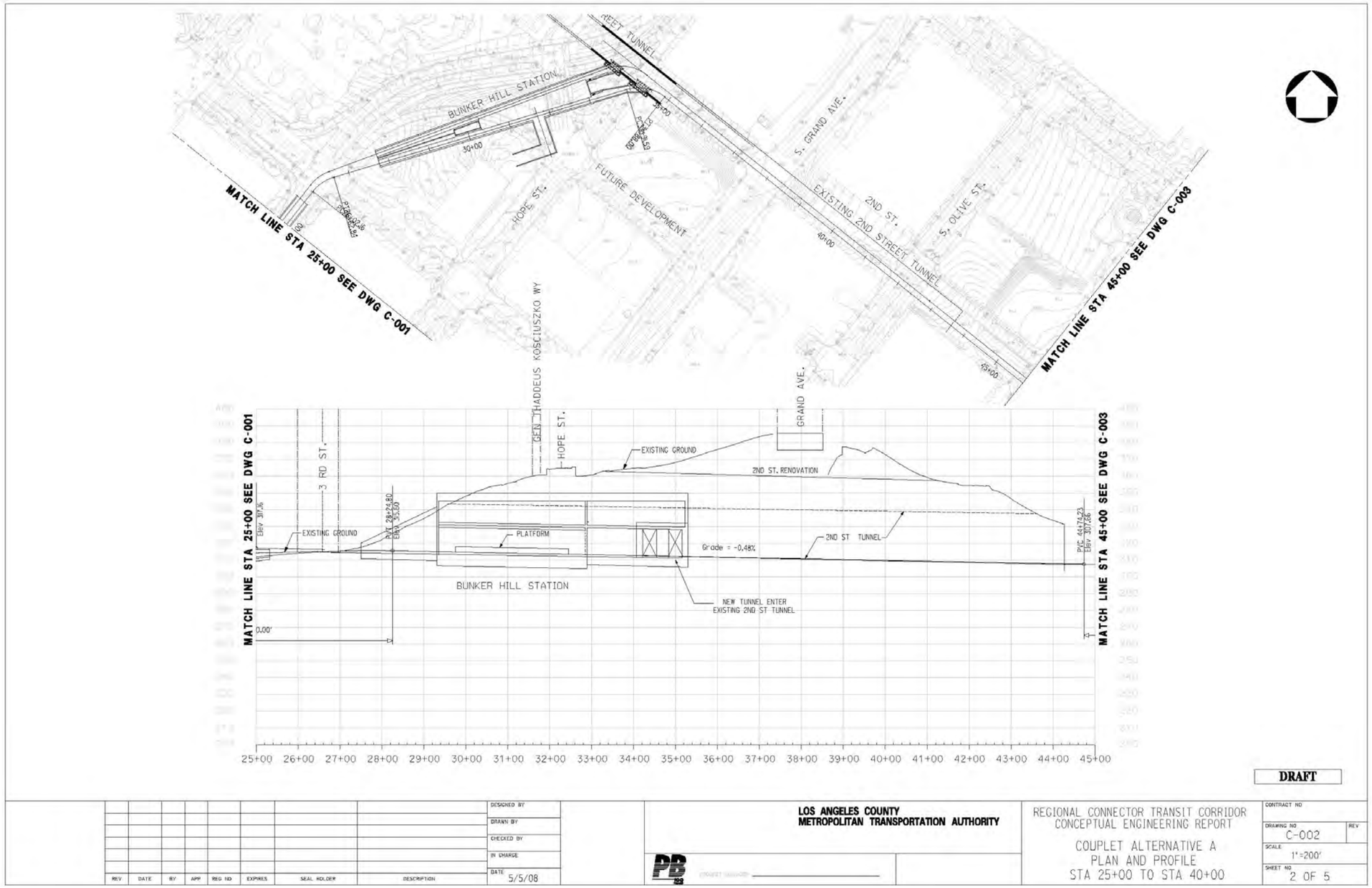


Figure D-15 At-Grade Emphasis LRT Alternative Option A: Grand Avenue Station & Portal

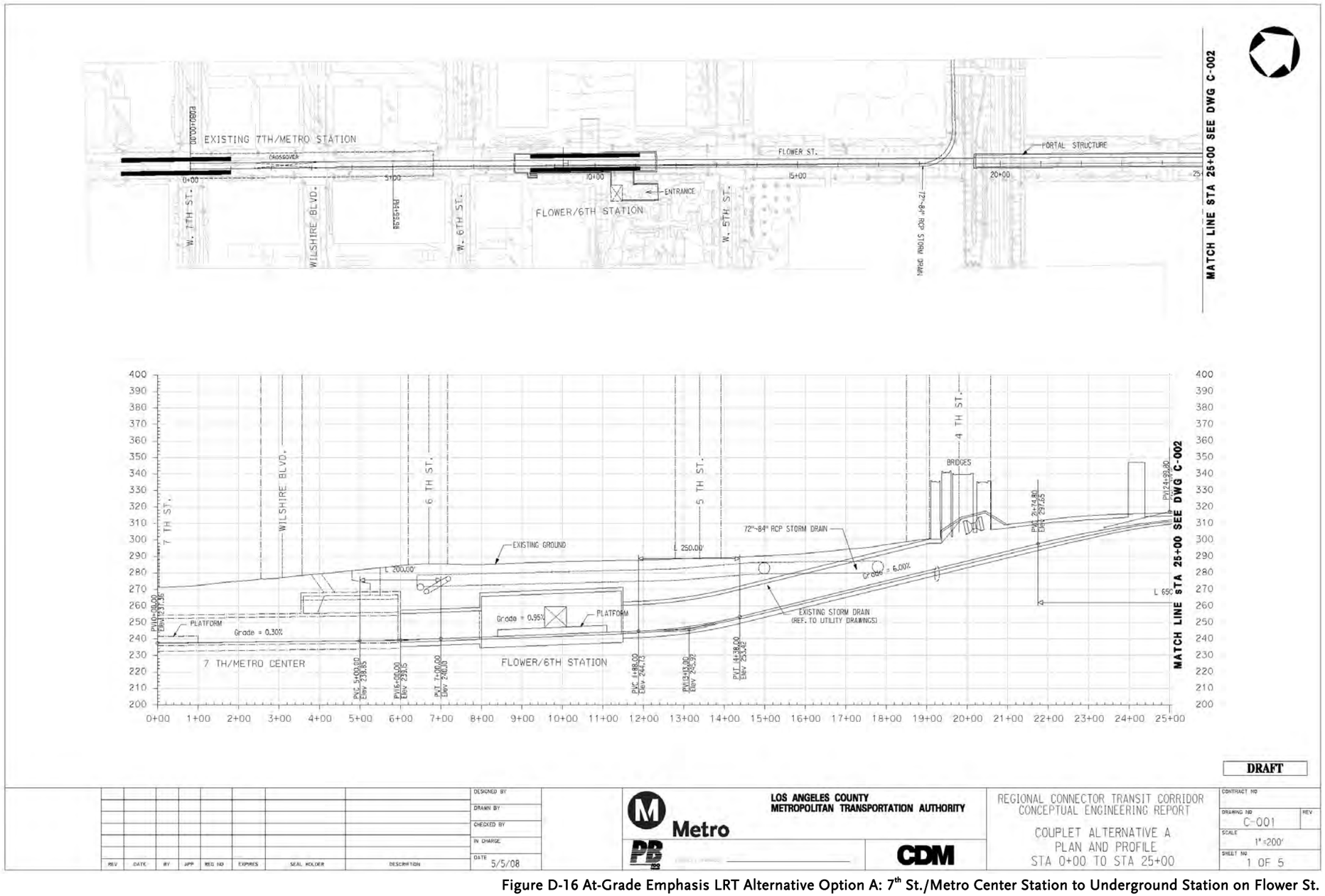


Figure D-16 At-Grade Emphasis LRT Alternative Option A: 7th St./Metro Center Station to Underground Station on Flower St.

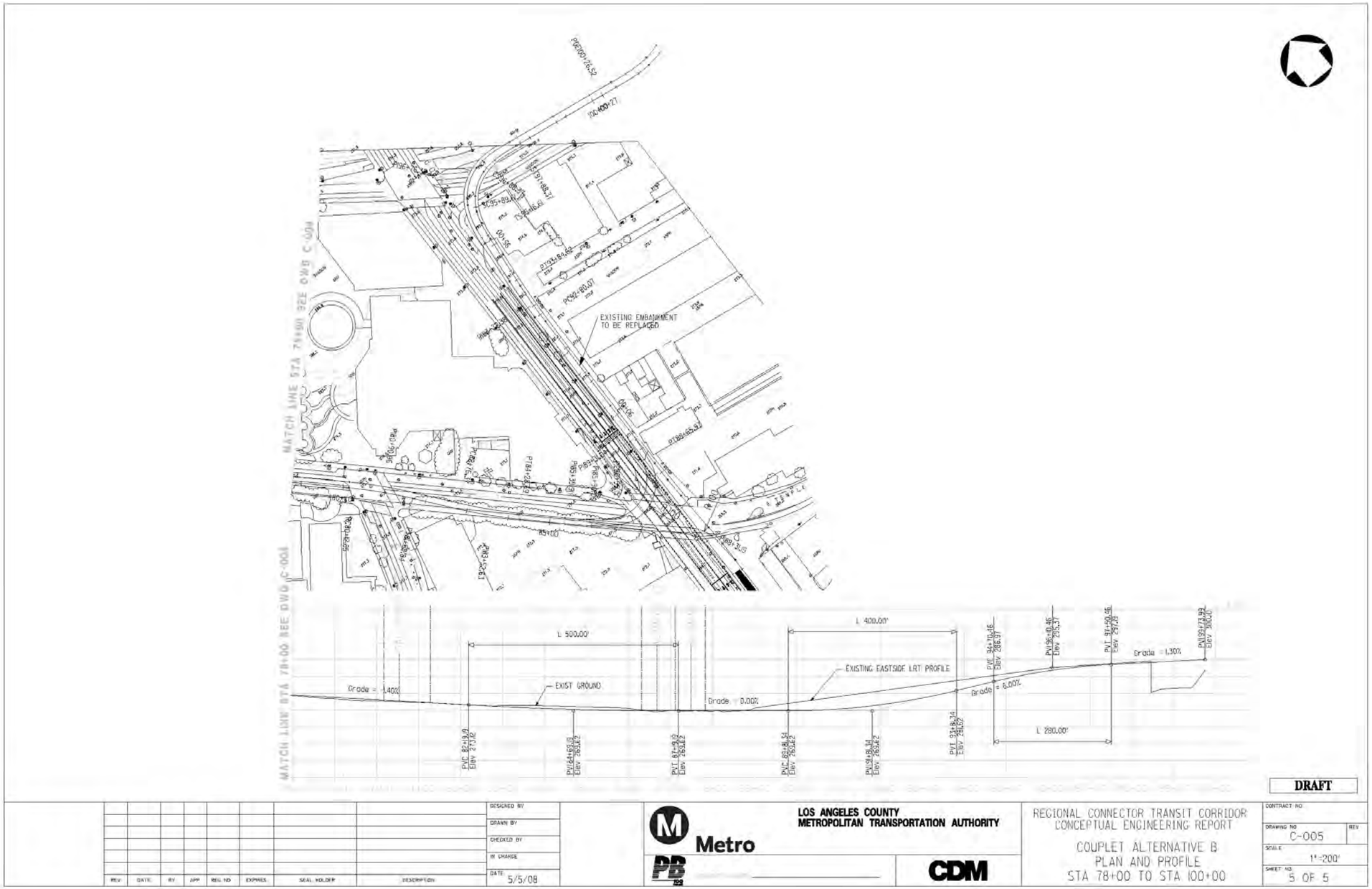


Figure D-17 At-Grade Emphasis LRT Alternative Option B: Temple St. and Alameda St. Intersection

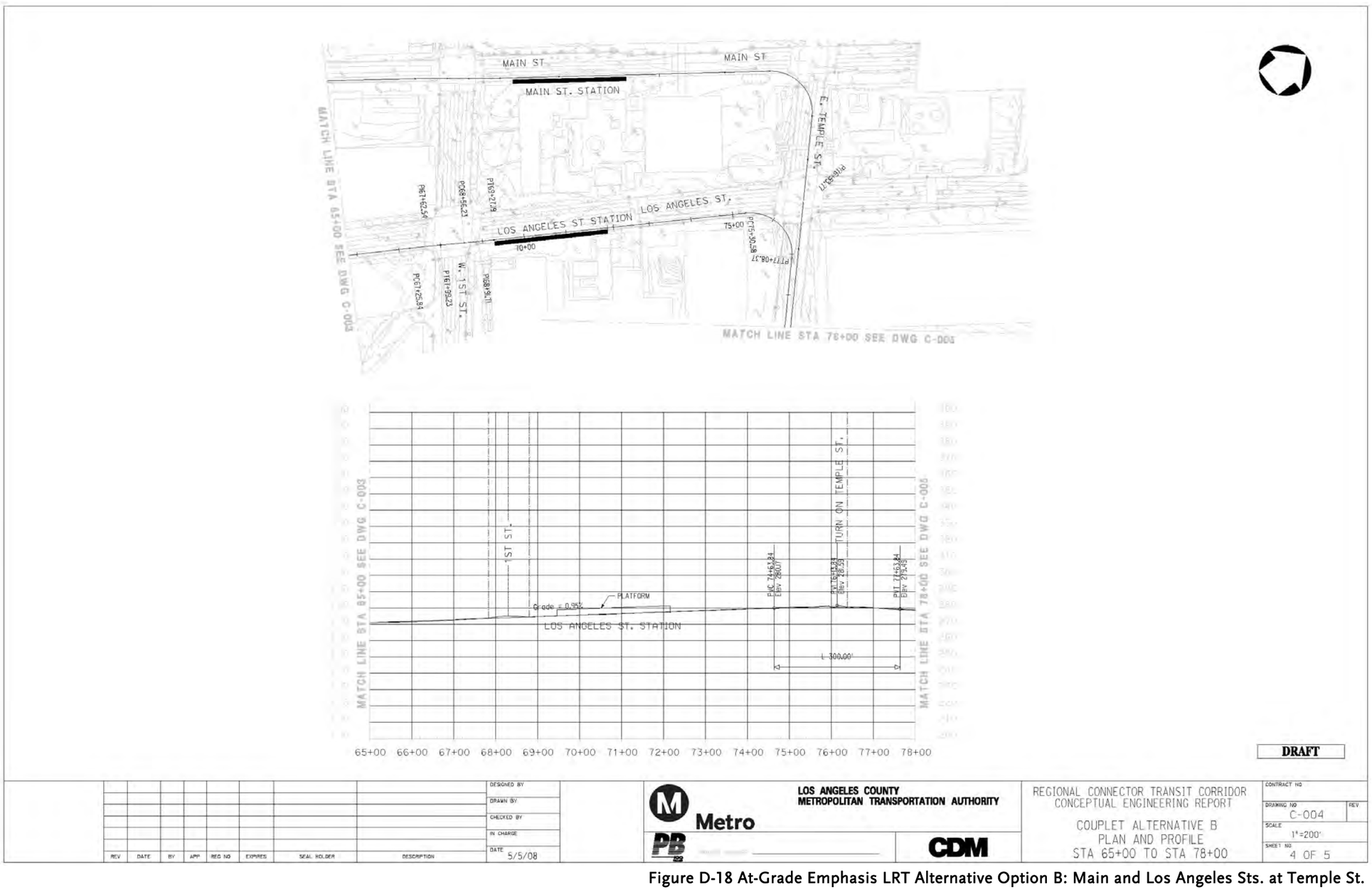


Figure D-18 At-Grade Emphasis LRT Alternative Option B: Main and Los Angeles Sts. at Temple St.

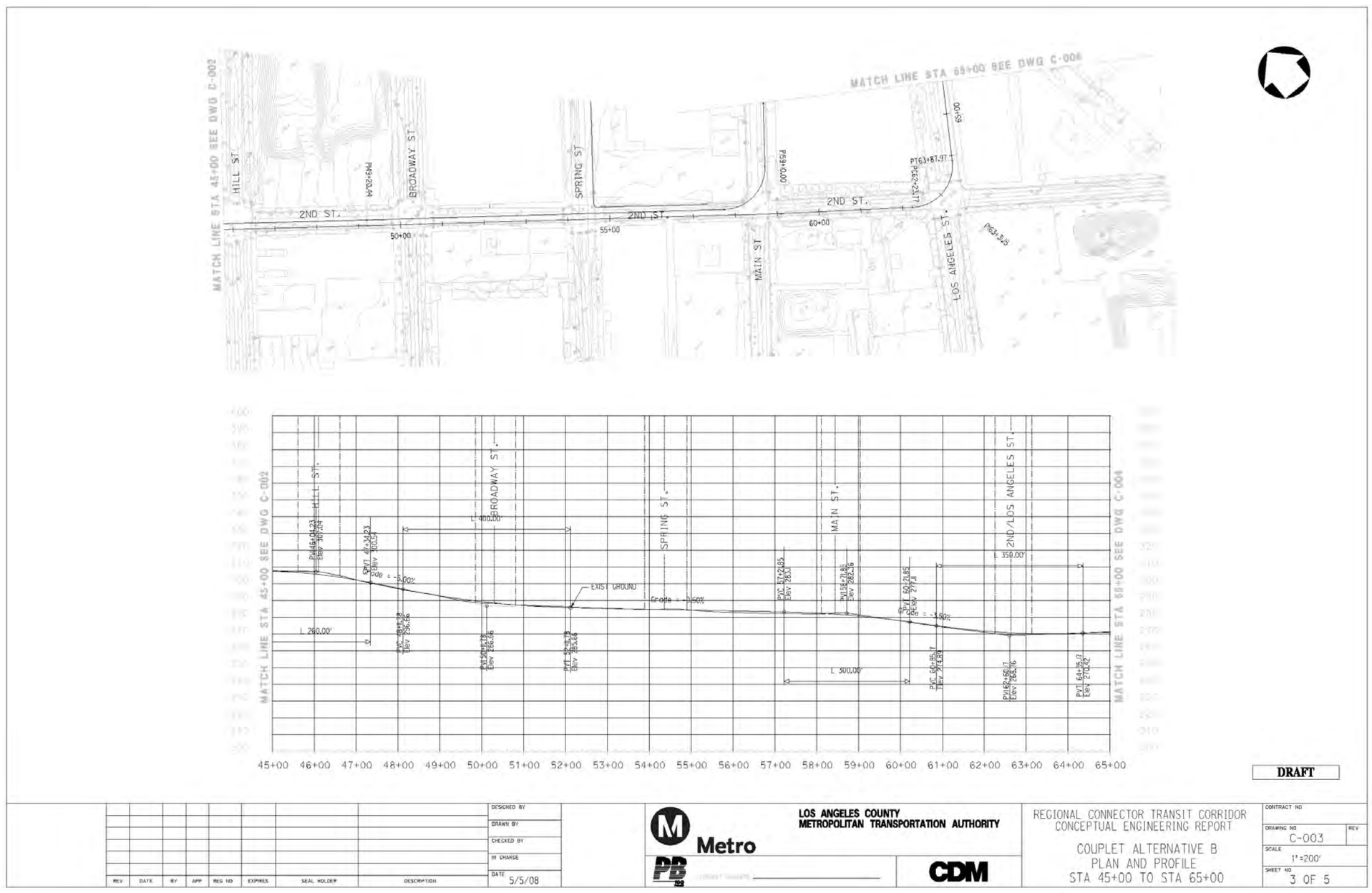


Figure D-19 At-Grade Emphasis LRT Alternative Option B: 2nd St. Corridor at Main and Los Angeles Sts.

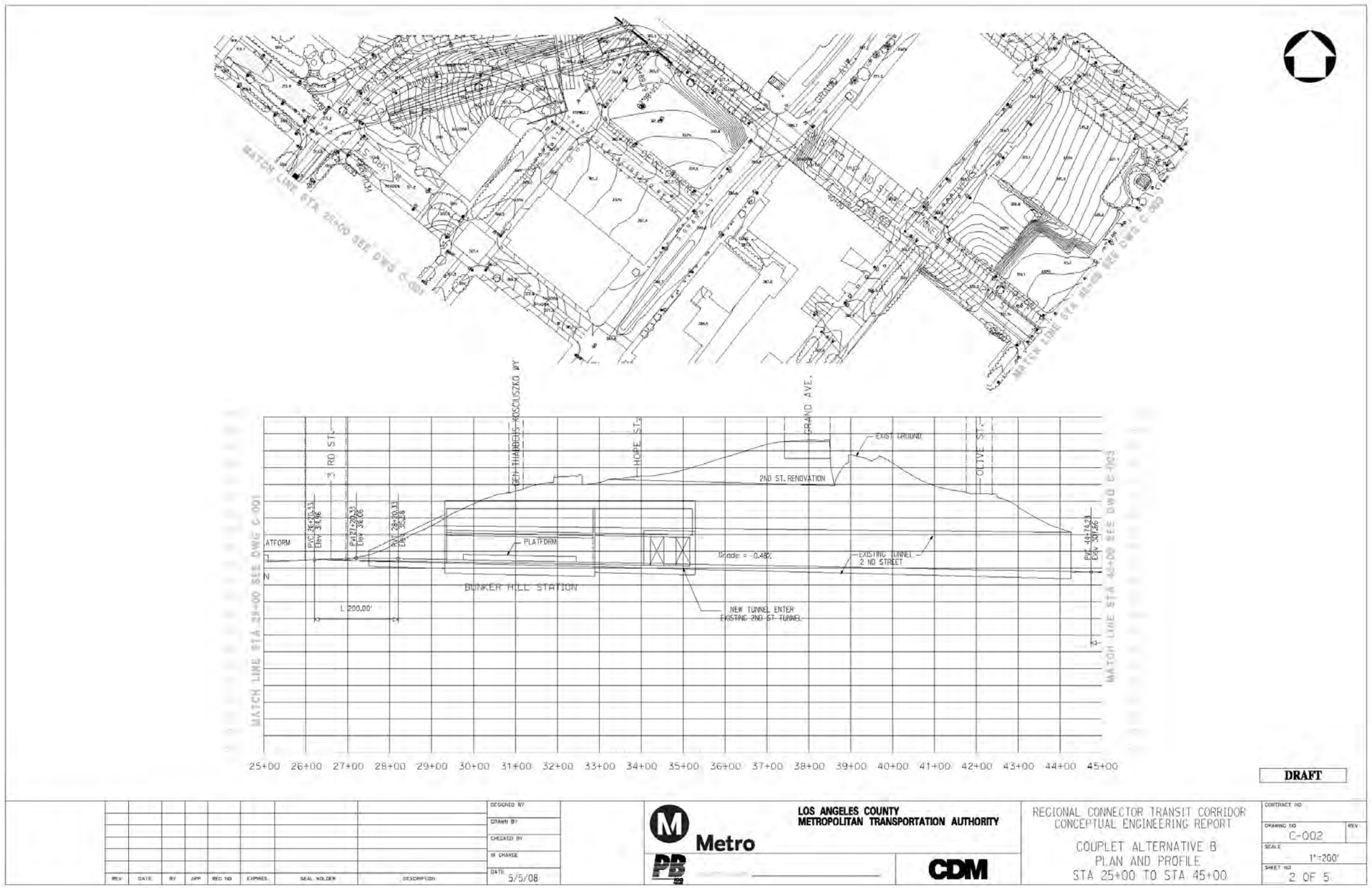


Figure D-20 At-Grade Emphasis LRT Alternative Option B: Grand Avenue Station and Portal

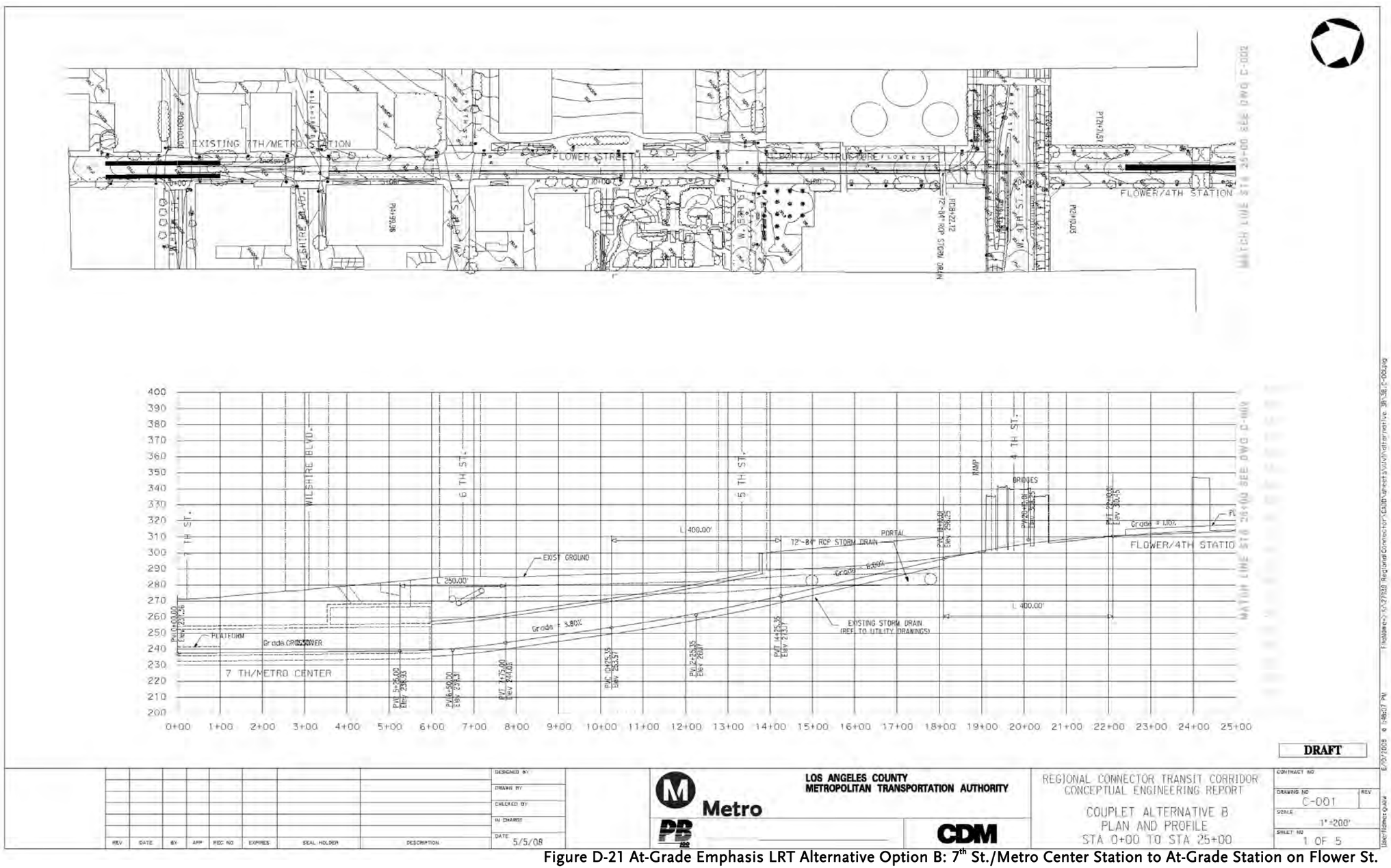


Figure D-21 At-Grade Emphasis LRT Alternative Option B: 7th St./Metro Center Station to At-Grade Station on Flower St.

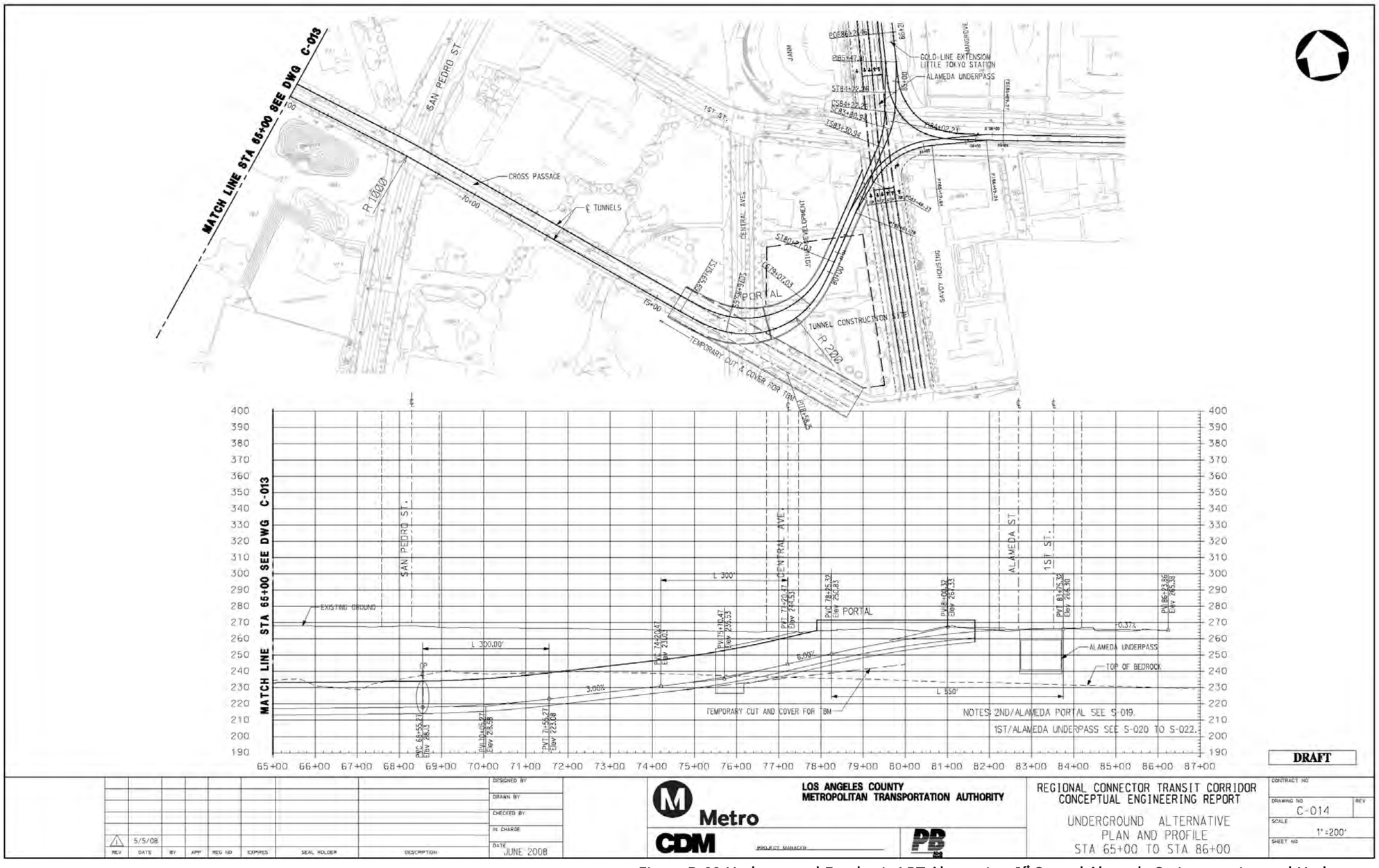


Figure D-22 Underground Emphasis LRT Alternative: 1st St. and Alameda St. intersection and Underpass

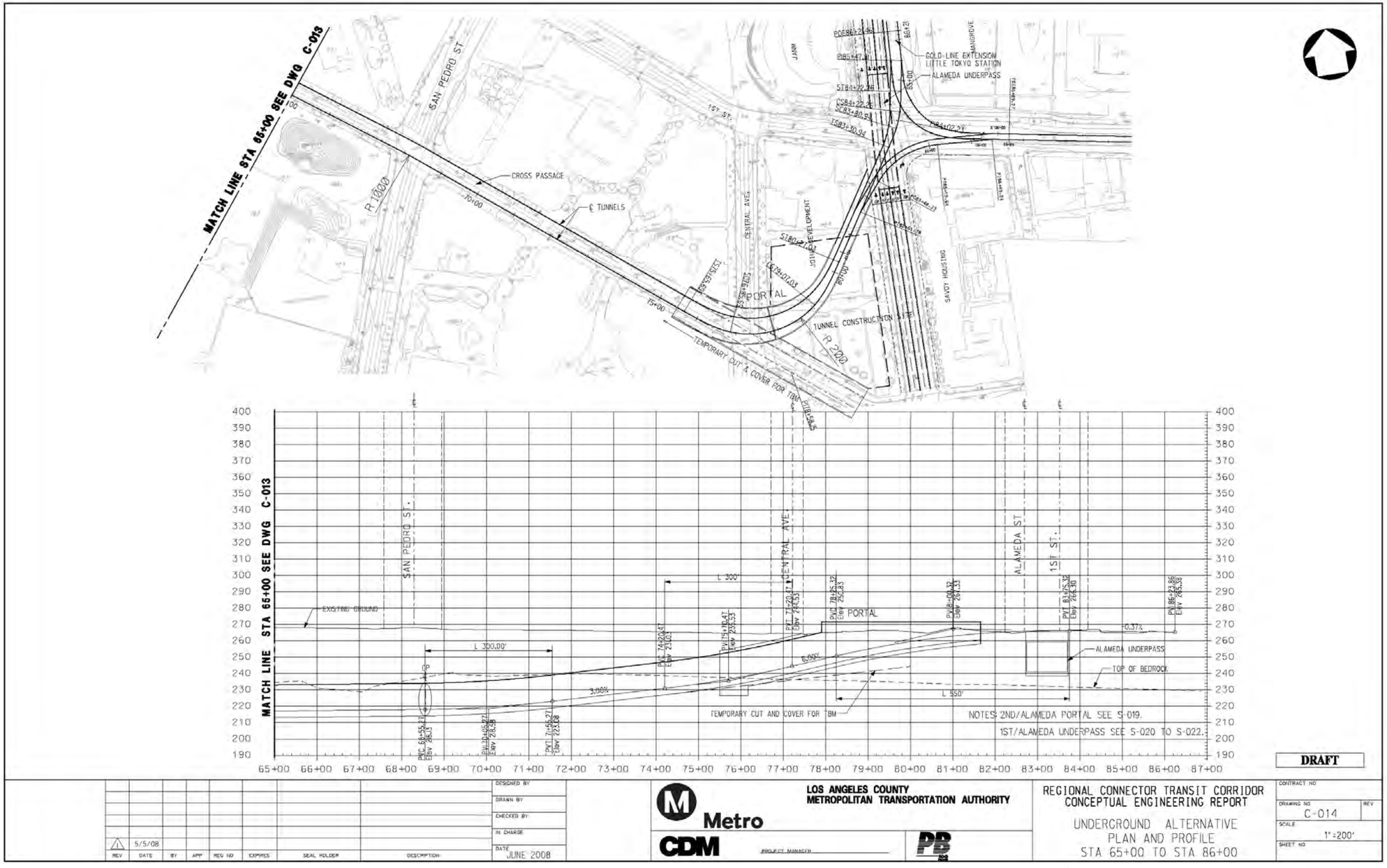


Figure D-22 Underground Emphasis LRT Alternative: 1st St. and Alameda St. intersection and Underpass

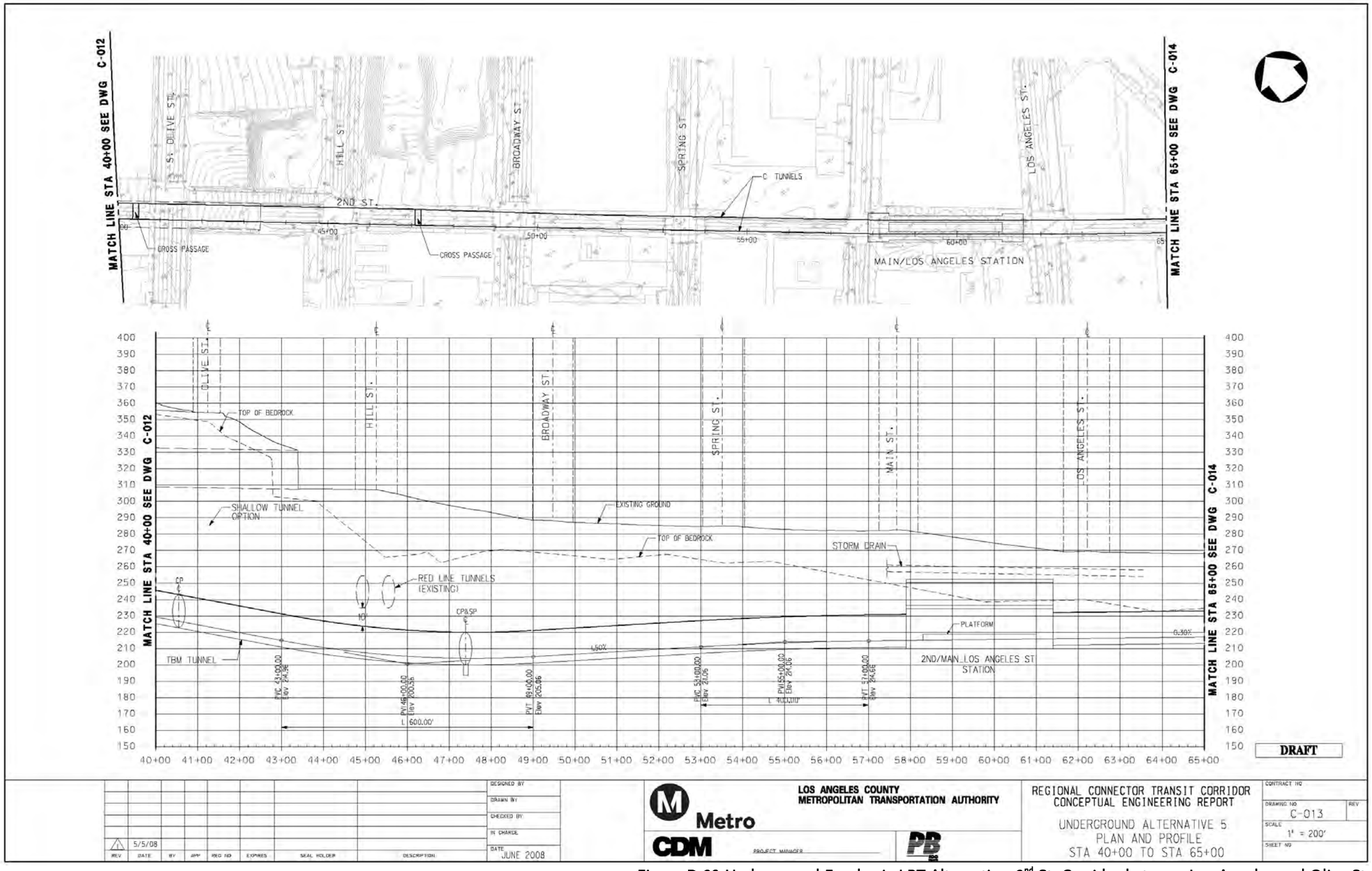
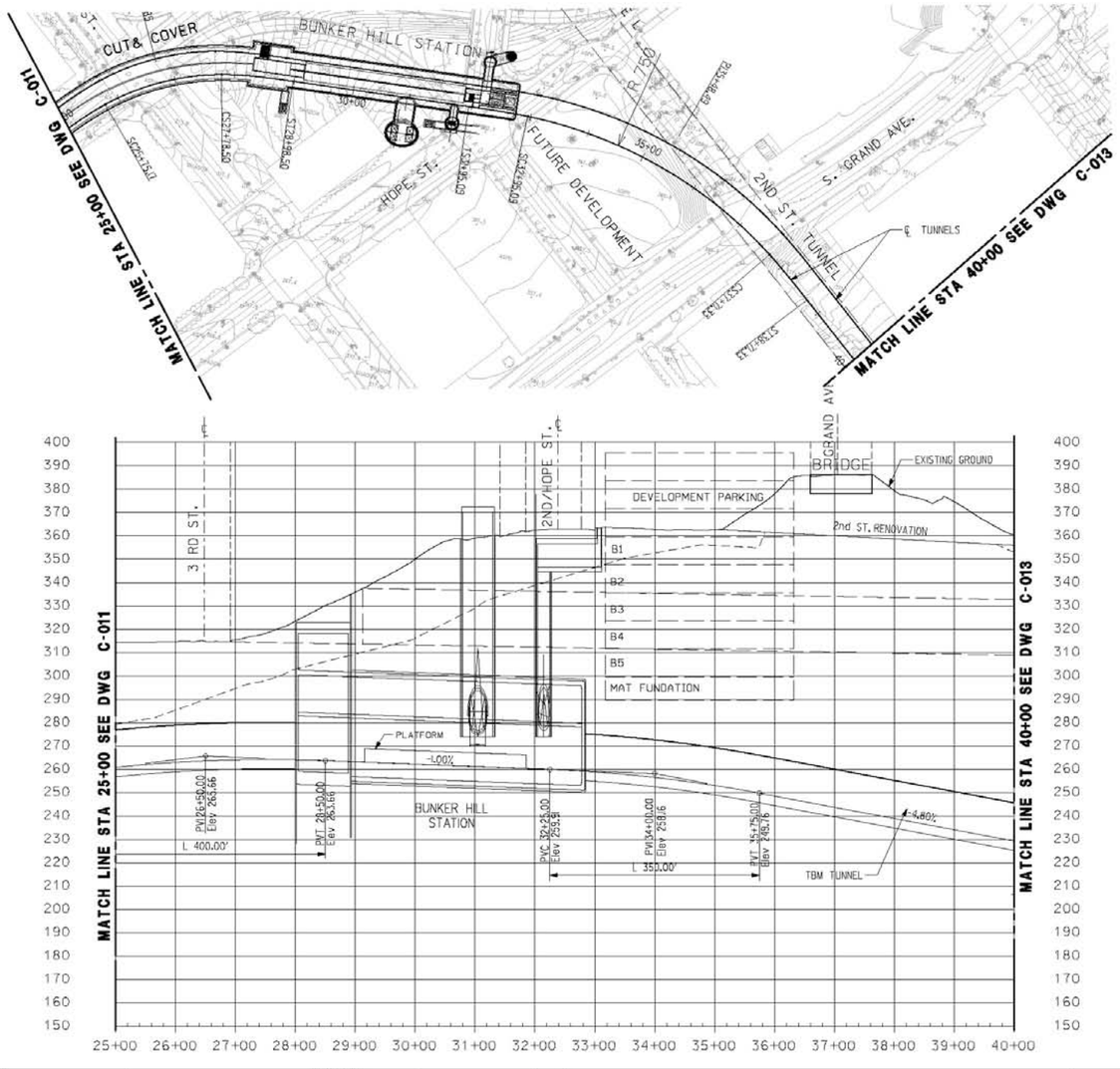


Figure D-23 Underground Emphasis LRT Alternative: 2nd St. Corridor between Los Angeles and Olive St.



NOTES:
BUNKER HILL STATION DETAILS SEE S-011 TO S-016.

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION	
1	5/5/08							

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JUNE 2008

Metro
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
CDM PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
CONCEPTUAL ENGINEERING REPORT
UNDERGROUND ALTERNATIVE
PLAN AND PROFILE
STA 25+00 TO 40+00

CONTRACT NO
DRAWING NO C-012 REV
SCALE 1" =200'
SHEET NO

Figure D-24 Underground Emphasis LRT Alternative: Grand Avenue Station and Portal

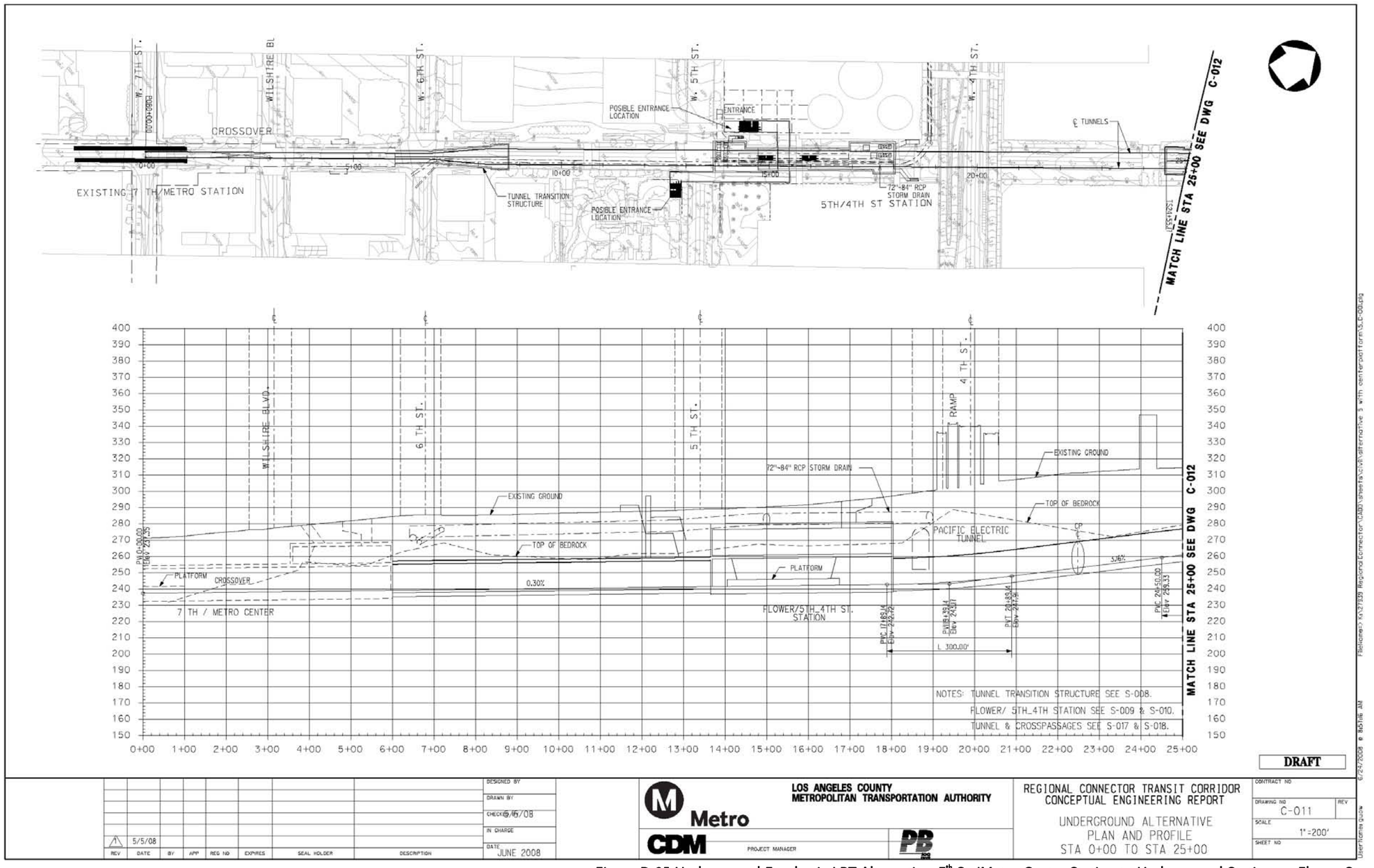


Figure D-25 Underground Emphasis LRT Alternative: 7th St./Metro Center Station to Underground Station on Flower St.

Appendix E Acronyms

AA	Alternatives Analysis
ADA	Americans with Disabilities Act
AVTA	Antelope Valley Transit Authority
ADT	Average Daily Traffic
BID	Business Improvement District
BRT	Bus Rapid Transit
CARB	California Air Resources Board
CBD	Central Business District
CDM	Camp Dresser & McKee Inc
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
CRA	Community Redevelopment Agency of the City of Los Angeles
DASH	Downtown Area Short Hop
DEIS/DEIR	Draft Environmental Impact Statement/Draft Environmental Impact Report
EPA	Environmental Protection Agency
FTA	Federal Transit Administration
HPOZ	Historic Preservation Overlay Zone
HRT	Heavy Rail Transit
HVAC	Heating, Ventilating, and Air Conditioning
ICU	Intersection Capacity Utilization
JANM	Japanese American National Museum
LAHSA	Los Angeles Homeless Service Authority

LADOT	City of Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAPD	Los Angeles Police Department
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LTCC	Little Tokyo Community Council
LTSC	Little Tokyo Service Center
Metro	Los Angeles County Metropolitan Transportation Authority
MOCA	Museum of Contemporary Art
NEPA	National Environmental Policy Act
O&M	Operation & Maintenance
OCTA	Orange County Transportation Authority
PRT	Personal Rapid Transit
PSA	Project Study Area
ROM	Rough Order of Magnitude
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCRRA	Southern California Regional Rail Authority
SRO	Single-Occupancy Unit
TOD	Transit Oriented Design
TPS	Transit Priority System
TSM	Transportation System Management
U.S.	United States

USGS	United States Geological Survey
V/C	Volume –to –Capacity
VMT	Vehicle Miles Traveled
YOE	Year of Expenditure

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX HH

FINANCIAL ANALYSIS REPORT

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Draft Financial Analysis Report

April 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

This technical memorandum was prepared by:

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ACRONYMS

AA	Alternatives Analysis
CALTRANS	California Department of Transportation
CEQA	California Environmental Quality Act
CMAQ	Congestion Mitigation and Air Quality
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FFGA	Fully Funded Grant Agreement
FTA	Federal Transit Administration
FY	Fiscal Year
LONP	Letter of No Prejudice
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LTF	Local Transportation Fund
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NEPA	National Environmental Policy Act
RIP	Regional Improvement Program
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
SCAG	Southern California Association of Governments
STA	State Transportation Assistance

STIP	State Transportation Improvement Plan
STP	Surface Transportation Plan
TCRP	Traffic Congestion Relief Plan
TIP	Transit Improvement Plan
TSM	Transportation Management System
YOE	Year of Expenditure

1.0 INTRODUCTION

The Los Angeles County Metropolitan Transportation Authority (Metro) has completed an Alternatives Analysis (AA) and is moving forward with the preparation of a Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Regional Connector Transit Corridor project. Metro is serving as the lead agency for purposes of the California Environmental Quality Act (CEQA) environmental clearance, and the Federal Transit Administration (FTA) is serving as lead agency for purposes of the National Environmental Policy Act (NEPA).

The project has been organized into two phases or stages. Stage 1 consists of the AA, including conceptual engineering and preparation of the DEIS/DEIR, which will lead to the selection of a Locally Preferred Alternative (LPA). Stage 2, consists of the preparation of the Final EIS/EIR (FEIS/FEIR). The project will be conducted in accordance with the most recent FTA guidelines for project development and Section 5309 New Starts, and all environmental documentation prepared will satisfy the requirements of NEPA and CEQA.

The Regional Connector Transit Corridor is proposed to create a connection in downtown Los Angeles that will link the Metro Blue Line terminus at the 7th Street/Metro Center LRT Station to the Metro Gold Line Eastside Station at 1st and Alameda streets. This connection will provide through service between the Metro Blue Line, Metro Gold Line Pasadena, Metro Gold Line Eastside, and Metro Exposition Line light rail corridors. With the implementation of the Regional Connector Transit Corridor project, these four lines will link at a station in Downtown Los Angeles. The result of this connection will be enhanced regional connectivity by providing continuing operation from Azusa to Long Beach and Santa Monica to Interstate 605 (I-605) without the need to transfer, thus making it easier for potential riders to get to and from Downtown Los Angeles.

The project area is primarily in the Los Angeles central business district. The 1.6 square mile study area includes Little Tokyo, Central City East, Toy District, Financial Core, Historic Core, Jewelry District, Bunker Hill, Civic Center, and the Fashion District and is bounded by the I-110 freeway to the west and north, Alameda Street to the east, and 9th and 7th Street to the south.

1.1 Purpose of the Financial Report

This financial report supports the Stage 1 development of the DEIS/DEIR and the selection of an LPA. The purpose of the financial report is to compare the capital and operating and maintenance (O&M) costs and revenues associated with the alternatives under consideration for the Regional Connector Transit Corridor project. The alternatives being evaluated in the DEIS/DEIR include a No Build, Transportation Systems Management (TSM) and three Build Alternatives. The Build Alternatives reflect an At-Grade Emphasis Light Rail Transit (LRT) Alternative; the Underground Emphasis LRT Alternative and the Fully Underground LRT

Alternative, which includes two alignment variations. Descriptions of the alternatives are provided in Section 1.2.

Following the selection of the LPA and as part of the project Stage 2 activities, the financial analysis will reflect the development of a detailed financial plan for the LPA. The purpose of the detailed financial plan is to document Metro's financial capacity to construct and operate the Regional Connector consistent with FTA requirements for grants awarded under the Section 5309 New Starts Program. This document will assist the FTA, Metro, other City Officials and the general public in the understanding and evaluation of Metro's financial capacity to construct the Regional Connector Transit Corridor as well as the agency's capacity to operate and maintain the existing transit system.

1.2 Description of Alternatives

The following provides an overview of the alternatives under consideration in the DEIS/DEIR.

1.2.1 No Build Alternative

The No-Build Alternative includes all existing transportation facilities as well as all committed transportation projects outlined in the Metro Long Range Transportation Plan (LRTP) (2009) and the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) (2004). This includes the Metro Gold Line Eastside Extension opened in 2009, and the first and second phase of the Metro Exposition Line scheduled to open in 2010. An update to Metro's LRTP was released for public review in March 2008 and was finalized and approved by Metro's Board in November 2009. The No Build Alternative would preserve existing service levels, as well as the projects listed in the LRTP and RTP.

1.2.2 TSM Alternative

The TSM Alternative includes all services defined in the No Build Alternative plus two new express shuttle bus lines that would provide frequent service between the 7th Street/Metro Center LRT Station and Union Station (see Figure 1-1). The buses may also have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green time to ongoing vehicles. Enhanced transit stops would be located every two to three blocks to maximize coverage of the area surrounding the routes.

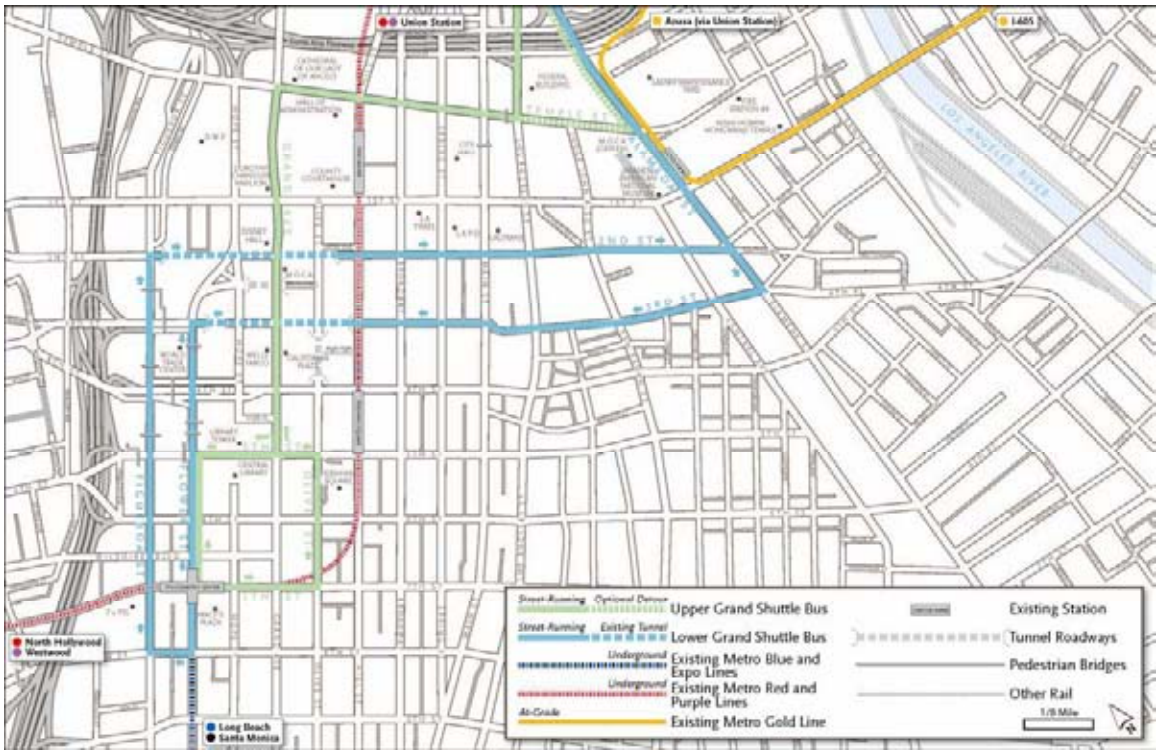


Figure 1-1: TSM Alternative

1.2.3 At Grade Emphasis LRT Alternative

As shown in Figure 1-2, the At-Grade Emphasis LRT Alternative would begin at the existing 7th Street/Metro Center LRT station and would continue north on Flower Street in a cut-and-cover tunnel to a portal just south of 4th Street where it would rise to the street surface and cross 3rd Street at-grade before turning slightly to the east and entering a second cut-and-cover tunnel just north of 3rd Street. The second tunnel would continue to the existing 2nd Street vehicular tunnel where it would break into its south wall and continue east in the tunnel, along its southern side, requiring the removal of one traffic lane. East of the tunnel portal at Hill Street, the LRT would occupy the south side of 2nd Street as an at-grade double track line to Main Street where the southbound track would follow the east side of Main Street to Temple Street, and the eastbound track would continue on 2nd Street before turning north along the easterly side of Los Angeles Street to Temple Street.

At the intersection of Temple and Main Streets, the southbound track would turn east on Temple down the center of the street to Los Angeles Street, where it would be joined by the northbound track. The tracks would continue in the center of Temple Street to San Pedro Street, where both tracks would transition to the south side of the street and continue to Alameda Street. At this point a double track wye junction would be built with the existing Metro Gold Line Eastside Extension. Since this rail junction would be difficult to operate in-

street, it is proposed to build an underpass for Alameda Street which would minimize Temple Street traffic conflicts with LRT movements.

Three stations are planned for this alternative

- Flower/6th/5th Street Station: an underground side-platform station located on Flower Street between 6th Street and 5th Street.
- 2nd/Hope Street Station: an underground center platform station would be located in a parkway area just southwest of the intersection of 2nd and Hope Streets.
- Los Angeles/1st Street Station and Main/1st Street Station: This split couplet station would be located on Main and Los Angeles Streets just north of 1st Street. The northbound platform would be on the eastern side of Los Angeles Street, and the southbound platform would be on the eastern side of Main Street.

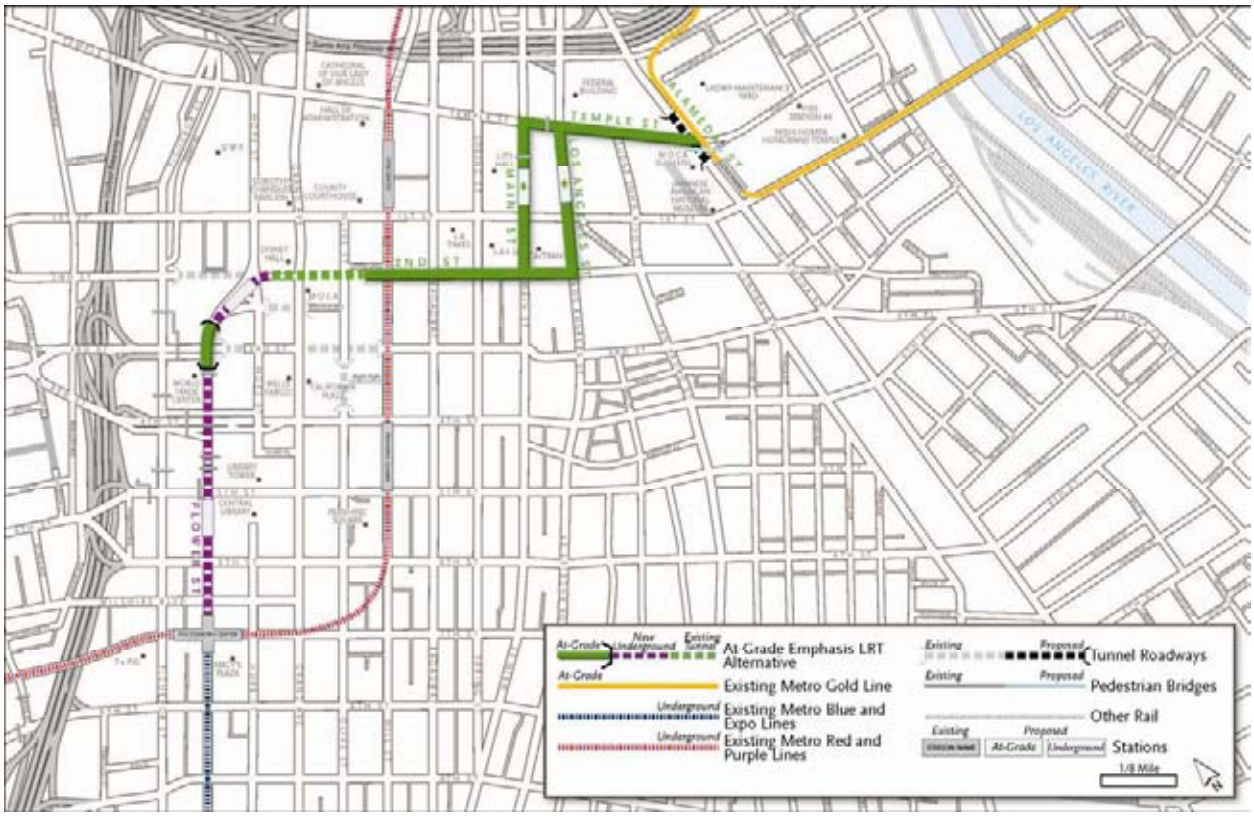


Figure 1-2: At-Grade Emphasis LRT Alternative

1.2.4 Underground Emphasis LRT Alternative

Figure 1-3 shows the Underground Emphasis LRT Alternative. This alternative would begin at the end of the existing 7th Street/Metro Center LRT station just south of 6th Street and would continue north on Flower Street in a cut-and cover tunnel to just north 4th Street where it

would continue as a mined tunnel or cut and cover tunnel to Hope Street, curving in an easterly direction north of 3rd Street. Easter of Hope Street the alignment would continue in a bored tunnel under 2nd Street to just west of Central Avenue, where cut-and-cover construction would bring the tracks closer to the surface, allowing a portal to be located just east of the centerline of Central Avenue. The tracks would rise to the surface diagonally on private property between the intersections of 2nd Street/Central Avenue and 1st Street/Alameda Street, at which point a double track wye junction would be constructed with the existing Metro Gold Line Eastside Extension. Since this rail junction would be difficult to operate in-street, it is proposed to build an underpass for Alameda Street, which would minimize 1st Street traffic conflicts with LRT movements.

Three stations locations are planned for this alternative. As described below there are two options still under consideration for the third location:

- Flower/5th/4th Street Station: An underground side-platform station located on Flower Street between 5th Street and 4th Street
- 2nd/Hope Street Station: An underground center platform station in the hillside area just southwest of 2nd and Hope Streets
- 2nd Street Station: An underground center platform station on 2nd Street either between Main and Los Angeles Streets (2nd Street Station/Los Angeles Option) or between Broadway and Spring Street (2nd Street Station/Broadway Option)

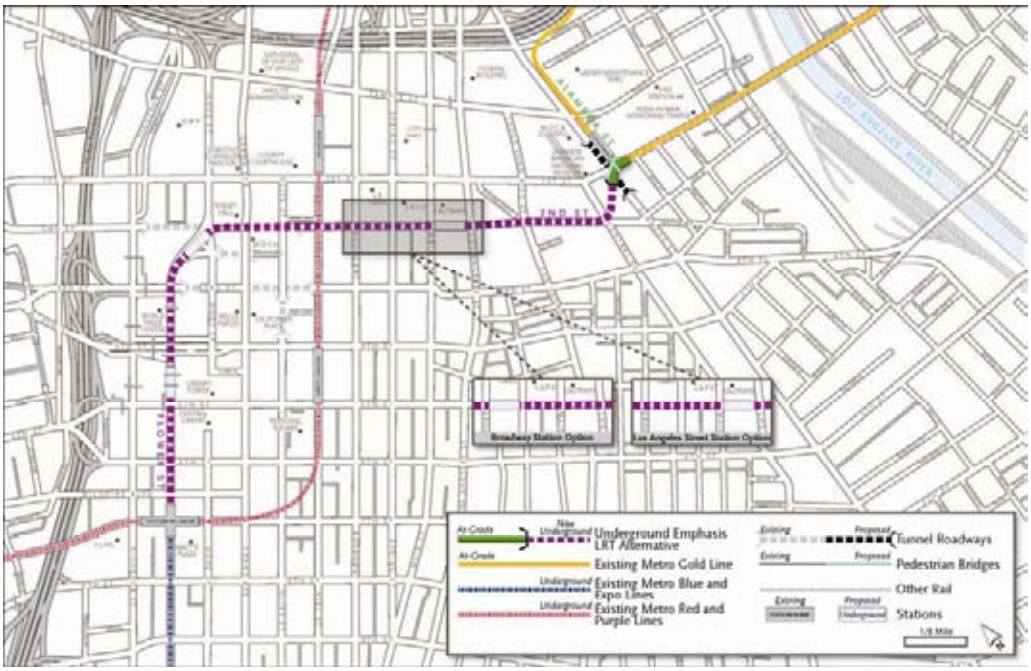


Figure 1-3: Underground Emphasis LRT Alternative

1.2.5 Fully Underground LRT Alternative

Figure 1-4 shows the Fully Underground LRT Alternative. As shown on the figure, the Fully Underground LRT Alternative is underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center LRT Station.

Additionally, two alignment variations are located beyond the 1st and Alameda intersection:

- Little Tokyo Variation 1: This alignment variation would provide four new stations and a direct connection from the 7th Street/Metro Center LRT Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend fully underground from the 7th Street/Metro Center LRT Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street Tunnel and 2nd Street to Central Avenue. At 2nd and Central, the tracks continue underground heading to northeast under 1st and Alameda Streets. A three-way (wye) junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect the Metro Gold Line heading north to Azusa and east to I-605.

- Little Tokyo Variation 2: This alignment variation is similar to Variation 1 until the 1st and Alameda Street intersection. At this intersection a new two-level track junction would be constructed. Trains travelling north toward Azusa and east to I-605 would use the lower level of the junction, and trains south towards Long Beach would and west towards Santa Monica would use the upper level. To the north and east of the junction, trains would rise to the surface through two new portals to connect the Metro Gold Line heading north to Azusa and east to I-605.

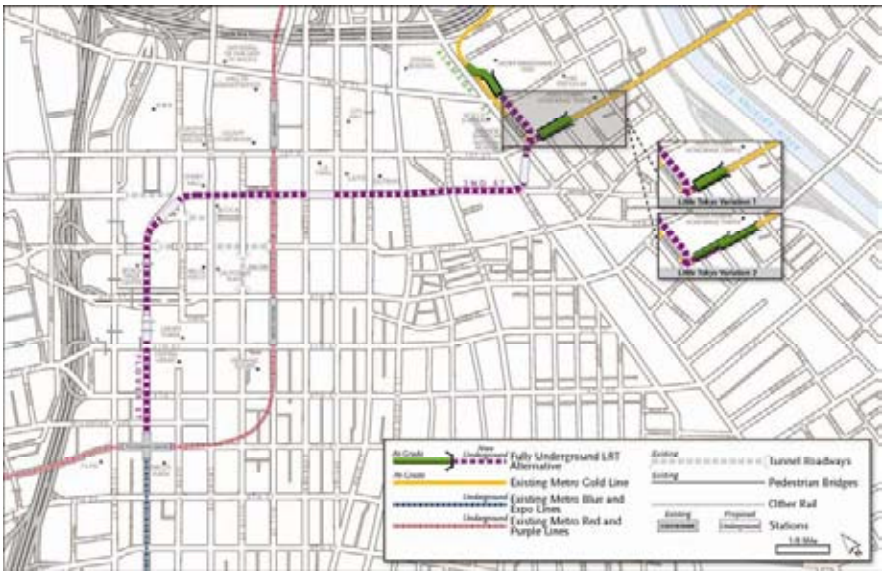


Figure 1-4: Fully Underground LRT Alternative

1.3 Contents of this Report

The remainder of this report reflects the following:

- Section 2 of this report focuses on the capital costs of the alternatives. Costs are presented in both base year and Year of Expenditure (YOE) dollars using annual inflation rates and the project's current implementation schedule. In order to understand the financial impact of actual funds that would need to be expended in the actual year of expenditure and the relative effects of inflation on costs and revenues, an inflation rate is used to project from base year dollars to YOE dollars. More specifically, YOE dollar values are computed by multiplying base year dollar values by the compounded escalation factor for the year in which funds would be expended. For example, in YOE dollars, $1.00 in 2010 is equivalent to $1.03 in 2011, using an inflation rate of 3.0 percent.

  Additionally, the capital costs are presented using FTA's Standard Cost Categories (SCC). FTA implemented the SCC to establish a consistent format for the reporting, estimating and managing of capital costs for projects that intend to proceed through the New Starts major capital project development process.

  Finally, this section describes the federal, State, and local capital revenue sources and funding strategies identified to date for the Regional Connector Transit Corridor project.

- Section 3 compares projected O&M costs of the alternatives and projected farebox revenues assuming fares consistent with Metro services and fare payment media. This section also identifies potential system-wide operating savings that could be realized due to improved efficiency of service associated with the selected alternatives. An estimate is also provided of the potential level of operating support required.

- Section 4 summarizes key potential risks and uncertainties that could affect project costs and revenues over the course of the refinement of the Regional Connector financial plan.

- Section 5 reviews key findings of the DEIS/DEIR financial analysis and highlights the differences among the alternatives.

2.0 CAPITAL COSTS AND REVENUES

This section describes the capital costs of the alternatives and the federal, State, and local revenue sources proposed.

2.1 Capital Costs

Capital costs of the alternatives were estimated based on concept drawings developed in 2009 dollars to an approximate 10 percent level of engineering completion. Where the level of design does not support quantity measurements, parametric estimating techniques were utilized. Detail on capital cost estimation is provided in the *Regional Connector Transit Corridor: Final Capital Cost Estimate Report* dated April 12, 2010.

As shown in Table 2-1, capital costs are presented in 2009 constant dollars and in Year of Expenditure dollars inclusive of inflation. The capital costs of the alternatives range from $67.3 million ($80.0 million in YOE dollars) for the TSM Alternative to $1,360.2 million ($1,575.8 million in YOE dollars) for the Fully Underground LRT Alternative – Little Tokyo Variation 2. The YOE cost for the TSM and Build Alternatives reflect the implementation plan assumed in the LRTP. As the Regional Connector's LPA moves through the FTA's major capital project development process the costs and implementation schedule will be further refined.

Table 2-1: Capital Costs Estimates in 2009 Dollars and YOE Dollars ($ in Millions)

Alternative	2009 Dollars	YOE Dollars
TSM	$67.3	$80.0
At Grade Emphasis	$899.2	$1,042.2
Underground Emphasis	$1,120.1	$1,297.0
Fully Underground Little Tokyo - Variation 1	$1,245.2	$1,442.0
Fully Underground Little Tokyo - Variation 2	$1,360.2	$1,575.8

2.1.1 Capital Costs in 2009 Dollars

Table 2 and Figure 5 present the capital costs of the alternatives in 2009 dollars using the FTA's Standard Cost Categories. FTA requires submission of capital costs in the SCC format at key milestones in the major capital project development process, including the application to enter Preliminary Engineering, which will follow selection of the LPA.

FTA's ten required cost categories are:

- 10 Guideway and Track Elements
- 20 Stations, Stops, Terminals, Intermodal
- 30 Support Facilities: Yards, Shops, Administration Buildings
- 40 Sitework and Special Conditions (removal of structures or existing trackwork, utility relocations, roadway modifications, and environmental mitigation)
- 50 Systems (overhead catenaries and communication infrastructure)
- 60 Row, Land, Existing Improvements
- 70 Vehicles
- 80 Professional Services
- 90 Unallocated Contingency
- 100 Finance Charges

Cost categories 10 through 60 are the construction and right of way elements associated with each alternative. Category 70 is the cost of vehicles and includes buses (TSM Alternative) and/or light rail vehicles (Build Alternatives). Categories 80 through 100 represent "soft costs." These costs include allowances for Professional Services (Category 80) such as engineering and design, construction management, agency program management, project management oversight, project implementation, and training/start-up/testing. The allowances are computed by applying a percentage to the total construction cost estimated for each cost category (Categories 10 through 50). The Unallocated Contingency (Category 90) is an overall project contingency, which is typically higher during the early stage of project development and decreases as more detailed planning and engineering is completed. Finally, Finance Charges (Category 100) are estimated if the financial plan for the project includes the issuance of bonds. At this point in the project development process no financing charges have been assumed at this time.

Table 2-2: Capital Cost Estimates by Alternative, by FTA Standard Cost Category (2009 $ in Millions)

FTA Standard Cost Categories	Build LRT Alternatives				
	TSM	At Grade Emphasis	Underground Emphasis	Fully Underground - Little Tokyo Var 1	Fully Underground - Little Tokyo Var 2
10 Guideway and Track Elements	$0.0	$117.2	$160.3	$208.5	$218.0
20 Stations, Stops, Terminals, Etc.	$0.0	$173.6	$301.2	$363.7	$426.2
30 Support Facilities	$21.0	$29.7	$12.5	$6.3	$6.3
40 Sitework and Special Conditions	$0.0	$157.2	$186.6	$163.3	$169.9
50 Systems	$3.1	$34.9	$39.6	$48.3	$48.4
60 ROW, Land, Existing Improvements	$0.0	$52.4	$51.9	$63.6	$63.6
70 Vehicles	$29.1	$83.4	$35.1	$17.6	$17.6
80 Professional Services	$8.0	$169.1	$231.1	$260.7	$286.7
90 Unallocated Contingency	$6.1	$81.7	$101.8	$113.2	$123.7
100 Finance Charges	$0.0	$0.0	$0.0	$0.0	$0.0
Total	**$67.3**	**$899.2**	**$1,120.1**	**$1,245.2**	**$1,360.2**

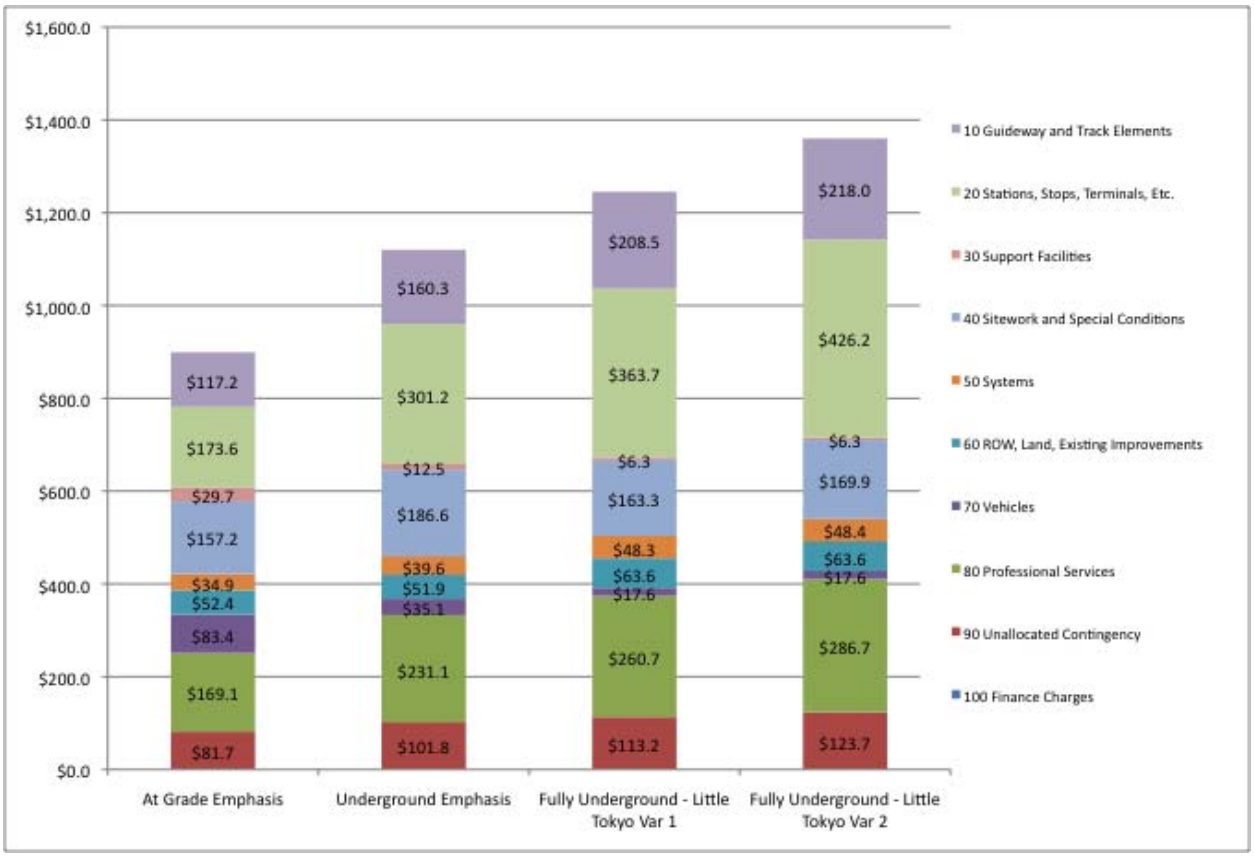


Figure 2-1: Build Alternatives Capital Cost Estimates by Standard Cost Category (2009 $ in Millions)

As shown in Table 2-2 and Figure 2-1, a review of the costs for each alternative reveals:

- **TSM Alternative**: Of the $67.3 million cost of this alternative, approximately $50.1 million (74 percent) is for Support Facilities (31 percent) and Vehicles (43 percent). This reflects the need for a new maintenance facility and a total of 42 new buses. Professional Services account for approximately $8.0 million (12 percent), with $6.1 million (nine percent) for Unallocated Contingency and $3.1 million for Systems (4.6 percent).

- **At-Grade Emphasis LRT Alternative**: Of the $899.2 million cost of this alternative, approximately $512.5 million (57 percent) is related to construction elements, with Stations (19.3 percent) Guideway and Track Elements (13 percent), and Sitework and Special Conditions (17.5 percent) accounting for the majority of the construction costs. Nineteen light rail vehicles would be required for this alternative, which is $83.4 million (9.3 percent) of the total costs. Professional Services account for $169.1 million (18.8 percent), with $81.7 million (9.1 percent) for Unallocated Contingency.

- **Underground Emphasis LRT Alternative**: Similar to the At Grade Emphasis Alternative, of the $1,120.0 million cost of this alternative, approximately $700.2 million (63 percent) is related to construction, with Stations (26.9 percent), Guideway and Track (14.3 percent), and Sitework and Special Conditions (16 percent) accounting for the majority of the construction costs. Eight light rail vehicles would be required for this alternative at a cost of $35.1 million (3.1 percent) of the total costs. Professional Services account for $231.1 million (20.6 percent), with $101.8 million (9.1 percent) for Unallocated Contingency.

- **Fully Underground LRT Alternative – Little Tokyo Variation 1**: Of the $1,245.2 million cost of this alternative, $790.1 million (63 percent) is related to construction, with Stations (29.2 percent), Guideway and Track (16.7 percent), and Sitework and Special Conditions (13 percent) accounting for the majority of the construction costs. Four light rail vehicles would be required for this alternative, which is $17.6 million (1.4 percent) of total costs. Professional Services account for $260.7 (20.9 percent), with $113.2 million (9.1 percent) for Unallocated Contingency.

- **Fully Underground LRT Alternative – Little Tokyo Variation 2**: Of the $1,360.2 million cost of this alternative, $868.7 million (64 percent) is related to construction, with Stations (31.3 percent), Guideway and Track (16 percent), and Sitework and Special Conditions (12.5 percent) accounting for the majority of the construction costs. Four light rail vehicles would be required for this alternative, which is $17.6 million (1.3 percent) of total costs. Professional Services account for $286.7 (21.1 percent), with $123.7 million (9.1 percent) for Unallocated Contingency.

2.1.2 Capital Costs in YOE Dollars

For the YOE cost analysis, capital costs were escalated from 2009 dollars using annual growth rates and a preliminary implementation plan developed by LA Metro staff and team members. The annual and compound growth rates are shown in Table 2-3. In addition to these escalation rates, the percent of project completion by year (cost curve) shown in Table 2-4 was used to estimate the annual cost estimates for the TSM and Build Alternatives.

Table 2-3: Year of Expenditure Dollar Escalation Rates

Fiscal Year	Growth Rate	Compound Annual Growth Rate
2010	1.01	1.010
2011	1.02	1.030
2012	1.03	1.061

Table 2-3: Year of Expenditure Dollar Escalation Rates		
Fiscal Year	**Growth Rate**	**Compound Annual Growth Rate**
2013	1.03	1.093
2014	1.03	1.126
2015	1.03	1.159
2016	1.03	1.194
2017	1.03	1.230
2018	1.03	1.267
2019	1.03	1.305

Table 2-4: Cost Curve Assumptions										
FTA SCC Categories	**FY 11**	**FY 12**	**FY 13**	**FY 14**	**FY 15**	**FY 16**	**FY 17**	**FY 18**	**FY 19**	**Total**
10 Guideways			5.6%	37.9%	32.0%	11.6%	12.9%			100.0%
20 Yards and Shops						13.0%	87.0%			100.0%
30 Systems					1.0%	30.0%	55.0%	13.9%		100.0%
40 Stations			6.1%	19.7%	24.9%	21.4%	26.2%	1.7%		100.0%
50 Vehicles			4.2%	19.8%	22.9%	27.1%	26.0%			100.0%
60 Special Conditions	1.4%	5.4%	21.7%	22.0%	27.0%	14.7%	6.2%	1.6%		100.0%
70 Right-of-Way	2.0%	12.9%	35.0%	50.0%						100.0%
80 Professional Services	8.5%	24.4%	4.5%	9.0%	12.0%	19.0%	16.5%	5.8%	0.3%	100.0%
90 Project Contingency	2.0%	8.0%	11.0%	23.0%	19.0%	16.0%	18.0%	2.9%	0.1%	100.0%

Figure 2-2 and Table 2-5 provide a comparison of the alternatives with respect to costs incurred per year in YOE dollars. As shown in the table and figure, the major expenditures (80 percent) for the Build Alternatives are assumed to occur in years 4 through 7 of the nine year project implementation period, while the costs of the TSM Alternative are focused in year 7.

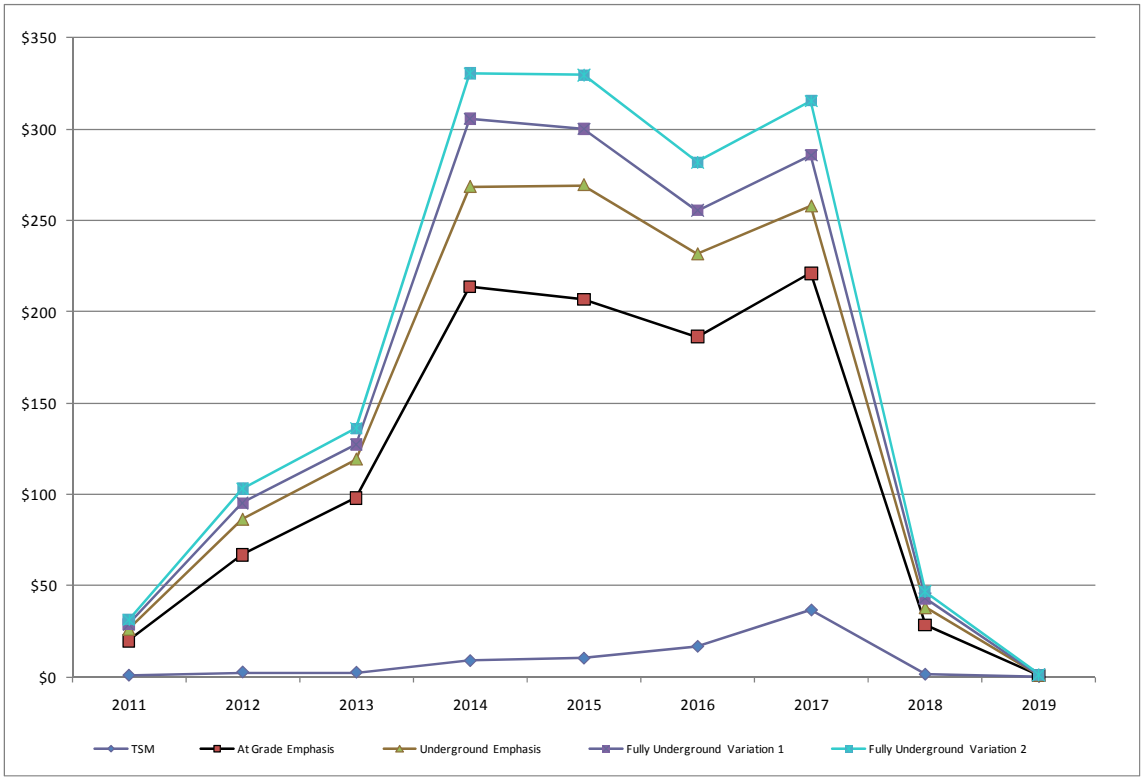


Figure 2-2: Annual Capital Costs by Alternative (YOE $ in Millions)

Table 2-5: Capital Costs by Alternative (YOE $ in Millions)

Fiscal Year	Implementation Year	TSM	Build LRT Alternatives			
			At Grade Emphasis	Underground Emphasis	Fully Underground - Little Tokyo Var 1	Fully Underground - Little Tokyo Var 2
2011	1	$0.8	$19.9	$26.1	$28.9	$31.4
2012	2	$2.6	$66.9	$86.3	$95.2	$103.2
2013	3	$2.5	$98.0	$119.2	$127.3	$136.2
2014	4	$8.9	$213.8	$268.2	$305.5	$330.4
2015	5	$10.2	$206.9	$269.2	$299.9	$329.5
2016	6	$16.8	$186.3	$231.4	$255.4	$281.7
2017	7	$36.9	$221.0	$257.6	$285.7	$315.4
2018	8	$1.4	$28.4	$37.9	$42.9	$46.7
2019	9	$0.0	$0.8	$1.0	$1.2	$1.3
Total		**$80.0**	**$1,042.2**	**$1,297.0**	**$1,442.0**	**$1,575.8**

2.2 Capital Revenue Sources

Metro's LRTP proposes the following combination of federal, State, and local revenue sources for the Regional Connector:

- Federal Sources:
  - FTA Section 5309 New Starts
  - Congestion Mitigation and Air Quality (CMAQ)
- State Sources:
  - California High Speed Rail Bonds
  - State Transportation Improvement Program (STIP)Regional Improvement Program (RIP) Funds

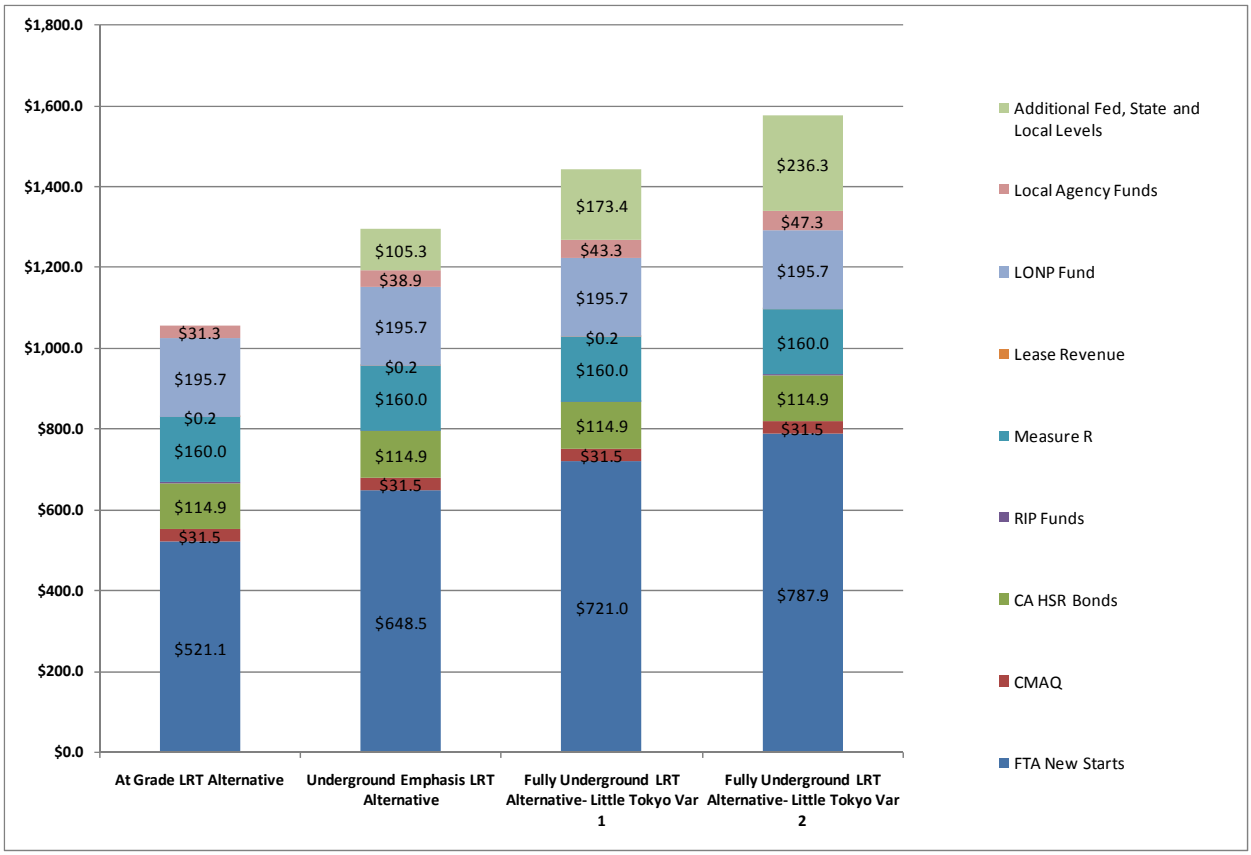
- Local Sources
  - Measure R Sales Tax
  - Lease Revenue
  - Letter of No Prejudice (LONP) Reimbursement Fund
  - Local Agency Funds
- Additional Local, State and Federal Funding Levels

Table 2-6 and Figure 2-3 summarize the composition of funding proposed from each source. In order of contribution, FTA Section 5309 New Starts funding is the largest source and is proposed to fund 50 percent of the cost of each alternative. LONP Reimbursement funds is the second largest source, followed by Measure R, High Speed Rail bond proceeds, Local Agency Funds, and CMAQ, with minor contributions from lease revenues and STIP RIP funds. As shown in the table and figure, additional revenues will need to be identified to fully fund the most recent capital cost estimates of the Build Alternatives. The required revenues range from $105.3 million for the At Grade Emphasis LRT Alternative to $236.3 million for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 2-6: Proposed Sources of Capital Funding (YOE $ in Millions)

Capital Revenue Sources	Build LRT Alternatives			
	At Grade Emphasis	Underground Emphasis	Fully Underground - Little Tokyo Var 1	Fully Underground - Little Tokyo Var 2
Federal				
Section 5309 - New Starts (50% of Costs)	$521.1	$648.5	$721.0	$787.9
CMAQ – Transit	$31.5	$31.5	$31.5	$31.5
State				
High Speed Rail Bonds	$114.9	$114.9	$114.9	$114.9
Regional Improvements Funds–Transit	$2.0	$2.0	$2.0	$2.0
Local				
Measure R Sales Tax ($160)	$160.0	$160.0	$160.0	$160.0
Lease Revenue	$0.2	$0.2	$0.2	$0.2
LONP Reimbursement Fund 3562	$195.7	$195.7	$195.7	$195.7
Local Agency Funds (3% of Costs)	$31.3	$38.9	$43.3	$47.3
Additional Federal, State, and Local Levels	$0.0	$105.3	$173.4	$236.3
Total Revenues	**$1,056.7**	**$1,297.0**	**$1,442.0**	**$1,575.8**
Total Cost	**$1,042.2**	**$1,297.0**	**$1,442.0**	**$1,575.8**

Note: With the exception of Section 5309, Local Agency Funds, and Additional Federal, State and Local Levels, all other sources match the funding amount included for the Regional Connector in Metro's LRTP.



Note: With the exception of Section 5309,Local Agency Funds, and Additional Federal, State and Local Levels, all other sources match the funding amount included for the Regional Connector in Metro's LRTP.

Figure 2-3: Proposed Sources of Capital Funding (YOE $ in Millions)

A brief description of each source is provided below.

2.2.1 Federal Funding Sources

FTA Section 5309 New Starts Program

The major funding source for the Build Alternatives is the FTA New Starts program. The New Starts program is the federal government's primary financial resource for supporting locally-planned, implemented, and operated transit fixed guideway capital investments, such as the Build Alternatives identified for the Regional Connector. Since the TSM Alternative does not include a fixed guideway element, it would not be eligible for New Starts funds.

Projects applying for New Starts funding must undergo evaluation by the FTA throughout the entire project development process. Projects are evaluated according to a variety of criteria

such as mobility improvements, environmental benefits, cost-effectiveness, operating efficiencies, transit supportive land use, and local financial capacity.

FTA's New Starts program is proposed to provide 50 percent of the funding for the Regional Connector. Table 2-7 summarizes the total and annual levels of New Starts funding proposed over the FY 2012 t0 FY 2018 period. As shown in the table, total New Starts funding ranges from approximately $521.1 million for the At-Grade Emphasis LRT Alternative to $787.9 million for the Fully Underground LRT Alternative – Little Tokyo Variation 2. Annual funding levels range from $24.3 million to $177.7 million.

Table 2-7: Projected Total and Annual New Starts Funding for the Regional Connector LRT Alternatives: FY 2012 to FY 2018 (YOE $ in Millions)

Fiscal Year	Build LRT Alternatives			
	At Grade Emphasis	Underground Emphasis	Fully Underground - Little Tokyo Var 1	Fully Underground - Little Tokyo Var 2
2012	$54.2	$67.5	$75.0	$82.0
2013	$53.4	$66.5	$73.9	$80.7
2014	$117.5	$146.2	$162.6	$177.7
2015	$107.8	$134.2	$149.2	$163.0
2016	$79.7	$99.2	$110.3	$120.5
2017	$84.2	$104.8	$116.5	$127.3
2018	$24.3	$30.2	$33.6	$36.7
Total	**$521.1**	**$648.5**	**$721.0**	**$787.9**

Congestion Mitigation and Air Quality Program (CMAQ)

The CMAQ program is a federal formula grant program for use on projects that contribute to attainment of national ambient air quality standards. Within the 2009 LRTP, Metro has programmed CMAQ funds as a source of capital funding for new rail and bus transit lines including Exposition Light Rail Line Phase I, Crenshaw Transit Corridor, Regional Connector,

rail system improvements, rail fleet procurement and for Metro Bus and Metro Rapid Bus projects. CMAQ is also programmed for rail and bus operations and can be used for the first three years of operation of individual new rail and bus projects.

The Regional Connector is programmed to receive $31.5 million in CMAQ funds. These funds are projected to be received over three years, with $28.9 million proposed in FY 2017, $2.6 million in FY 2018, and $0.1 million in FY 2019.

2.2.2 State Funding Sources

Safe, Reliable High Speed Rail Passenger Train Bond for the 21st Century (AB 3034):

As approved by California voters in November 2008, the high-speed rail bond allows for $9.95 billion of general obligation bonds to be issued for the California high speed rail project Of the $9.95 billion, $9.0 billion dollars is designated to provide a portion of the local share of funding for the first segment of the high speed rail network which is Los Angeles Union Station to San Francisco's Transbay Terminal.

The remaining $950.0 million has been designated for capital projects to connect existing passenger rail lines to the high-speed rail system as well as to enhance capacity and improve safety. The $950.0 million is proposed to be allocated to the following programs:

- Twenty percent ($190.0 million) will be allocated to the Department of Transportation for state supported intercity rail lines that provide regular service and operate and maintain their rail facilities, right of way and equipment with public funds. A minimum of 25 percent of the $190.0 million, approximately $47.5 million, will be allocated to California's three intercity rail corridors.
- Eighty percent ($760.0 million) will be allocated upon appropriation to eligible recipients according to the percent amount calculated of the following provisions:
    - One third of the eligible recipient's share of statewide track miles
    - One third of the eligible recipient's percentage share of statewide annual vehicle miles
    - One-third of the eligible recipient's percentage share of statewide annual passenger trips

Metro's LRTP assumes Metro will receive a total of $240.9 million in High Speed Rail Bond proceeds. Of this total, $114.9 million is proposed to be available for the Regional Connector, with $102.2 million in funding proposed in FY 2014 and $12.7 million in FY 2015. The remaining $126.0 million is proposed for improvements to the Metrolink commuter rail system.

Regional Improvement Program (RIP)

The State's funding for transportation is programmed in the State Transportation Improvement Program (STIP). Within the STIP, 75 percent of the funding is allocated and programmed by the regional transportation planning agencies such as Metro under the Regional Improvement Program (RIP). The remaining 25 percent is programmed by the State under the Interregional Improvement Program. The primary source of RIP funding is the federal Surface Transportation Program (STP).

Based on a fund estimate prepared by Caltrans, the California Transportation Commission develops the annual RIP programming targets for each agency. Metro selects and programs the projects to be funded through its Call for Projects process and the Metro Long and Short Range Transportation Plans. Metro has programmed and re-programmed its STIP projects to conform to the targets, which have been subject to change based on level of funds available and the extent of borrowing of transit revenues by the State for use in balancing the State Budget.

Metro's LRTP reflects expenditure of $2.0 million in RIP funding in FY 2008 for the Regional Connector.

2.2.3 Local Funding Sources

Measure R Sales Tax

The Regional Connector is programmed to receive $160.0 million in Measure R funds. These revenues are programmed over FY 2015 to FY 2017, with $95.9 million in FY 2015, $48.9 million in FY 2016, and $15.2 million in FY 2017.

Measure R is a 30-year ½-cent local sales tax approved by LA County voters is 2008 for rail expansion, local street improvements, traffic reduction, better public transportation, and quality of life. The tax went into effect on July 1, 2009. Metro is responsible for administering the funds. Funds flow to Metro which allocates to itself and other agencies according to the ordinance, Metro's Formula Allocation Procedure, and Metro Board actions. The voter-approved ordinance specifies the following apportionments:

- **35 Percent Transit Capital Specific Projects**: Allocated to Metro for new Rail and/or Bus Rapid Transit Capital Projects listed in the Ordinance. The Regional Connector is one of the named projects in the legislation and will receive $160 million from the Measure R sales tax.
- **20 Percent Highway Projects**: Capital project allocations per Metro Board action which can include construction of specific list of carpool lanes, highways, goods movement, grade separations, and soundwalls

- **20 Percent Bus Operations**: Allocated to Metro and non-Metro operators and agencies for bus operations. Suspends a scheduled July 1, 2009 Metro fare increase for one year and freeze all Metro Student, Senior, Disabled, and Medicare fares through June 30, 2013 by instead using Metro's Formula Allocation Procedure share of this subfund

- **15 Percent Local Return**: Distributed to the incorporated cities within Los Angeles County and to Los Angeles County for the unincorporated area of the County on a per capita basis to support major street resurfacing, rehabilitation and reconstruction; pothole repair; left turn signals; bikeways; pedestrian improvements; streetscapes; signal synchronization; and transit

- **5 Percent Rail Operations**: Provides funding for operation and maintenance of new transit projects

- **3 Percent Metrolink**: Allocated to the Southern California Regional Rail Authority (SCRRA) for capital improvements to the Metrolink commuter rail system. Funds may be used for Metrolink capital improvement projects within Los Angeles County as well as funding operations and maintenance costs.

- **2 Percent Rail Capital General Improvements**: Allocated to Metro for capital improvements to Metro's rail system including, system improvements, rail yards, and rail cars

- **Administration:** Metro may use 1.5 percent for program administration including planning, management, execution, use and conduct of the projects and programs funded by Measure R.

On March 25, 2010, the Metro Board approved the LRTP Near-Term Strategies, Priority Setting Criteria, and 2011 Los Angeles County Transportation Improvement Program. The purpose of this policy document is to define near-term strategies and priority-setting criteria for developing the FY 2011 Los Angeles County Transportation Improvement Program (TIP) and to address current and projected revenue shortfalls.

The Regional Connector Transit Corridor project has been included in the fourth priority category - projects seeking funds to begin or continue development phases. Based on the Board-approved criteria, projects in this category are the highest priority after: 1) projects currently under construction; 2) projects with construction bids advertised as of February 25, 2010; and 3) projects requiring right-of-way acquisition to continue with the project development process. Additionally projects in the fourth category are limited to those that are funded for construction completion in the first decade (through FY 2019) of the 2009 LRTP. The Regional Connector is included in this category to complete the environmental clearance phase of project development.

The Regional Connector is also included in the fifth priority category which reflects criteria for selecting projects to advance to construction. The top criterion in this category is Safety and New Starts. Under this criterion, rail safety projects are recommended as a first priority followed closely by New Starts projects that demonstrate high likelihood of successfully competing for discretionary federal funds.

Lease Revenue

Metro receives approximately $12.0 million annually in revenue from leases of property and assets. Lease revenues are assumed to be available to fund administration, rail and bus capital, and bus operations. Metro's LRTP reflects $0.2 million in lease revenue expended on the Regional Connector in FY 2007.

LONP Reimbursement Fund

The FY 2010 Metro budget includes a "Special Revenue Other" fund balance of $297.0 million in AB 3090 and Traffic Congestion Relief Program (TCRP) LONP reimbursements from the State of California. These capital reimbursements are for advances made by Metro to the State in lieu of capital project funding that could not be provided by the State on the originally programmed schedule. In the LRTP Metro assumed that these funds must be used for capital purposes only. As they are reimbursements for prior capital expenses, the funds are flexible for many transportation capital purposes, including subway uses now prohibited by Proposition A and Proposition C.

The LRTP takes advantage of the flexibility by assuming the use of the funds, in part, for leveraging federal New Starts funds for planned subway construction projects, including the Regional Connector.

Metro's LRTP assumes $195.7 million in LONP Reimbursement Fund revenue will be available for the Regional Connector. These funds are programmed for receipt over FY 2009 through FY 2019.

Local Agency Funds

To assist in funding the Measure R program of projects, Metro has proposed for consideration that local jurisdictions provide a three percent local match for projects. Metro is working with cities, the County of Los Angeles, the Technical Advisory Committee, and subregional entities on an appropriate policy to support this. Issues currently being addressed include timing, clarification as to what constitutes a local match, definition of how to determine proportional share, and discussion of whether the three percent match changes if there is an increase or decrease in total project cost.

Metro's LRTP assumes 3 percent of total project costs of the Regional Connector will be provided from Local Agency Funds. This would result in $31.3 to $47.3 million for the Regional Connector depending on the Build Alternative recommended.

2.2.4 Refined Local, State, and Federal Funding Levels

Based on a comparison of the sources and funding levels for the Regional Connector identified in the LRTP compared to the updated capital cost estimates in the environmental document, the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would require additional funding ranging from $105.3 million to $236.4 million. Prior to selection of the LPA for the Regional Connector, Metro staff will refine the long range financial plan to reflect the prioritization criteria adopted by the Board on March 25, 2010 as well as other policy actions associated with accelerating the Measure R program. It is anticipated that the results of this refinement will identify local, State and federal revenue levels to fully fund the Regional Connector as well as other LRTP projects identified as priorities for construction. Supplementary funding could potentially be secured from use of Proposition C 25% funds for eligible project elements, additional LONP Reimbursement Funds, STIP RIP funds, CMAQ, and other sources to be defined.

3.0 OPERATING AND MAINTENANCE COSTS AND REVENUES

This section describes the O&M costs of the alternatives and the revenue sources proposed to fund them.

3.1 O&M Costs

System-wide O&M cost estimates were developed for the heavy rail, light rail, and bus components of the alternatives and reflect operating plans for the year 2035. The resource build-up methodology for estimating O&M costs was designed to satisfy FTA guidance. Detailed information regarding O&M costs is provided in the *Regional Connector Transit Corridor: Operating and Maintenance Cost Estimate Report* dated January 26, 2010

For this report, O&M costs are shown in 2009 dollars. In the next iteration of the financial analysis, O&M costs will be shown in YOE dollars and will be included in a detailed cash flow analysis reflecting costs and revenues from opening year to the horizon year of FY 2035.

Table 3-1 summarizes Metro's FY 2035 heavy rail, light rail, and bus O&M cost by mode for each alternative. As shown in the table, total FY 2035 O&M cost for these modes in the Build Alternatives ranges from $1,634.8 million for the Underground Emphasis LRT Alternative to $1,644.0 million for the TSM Alternative. Table 3-2 compares the change in annual O&M costs relative to the No Build Alternative, while Table 3-3 compares the change in O&M costs relative to the TSM Alternative. Key findings from these comparisons are summarized below.

- In comparison to the No Build Alternative:
    - All of the alternatives increase O&M costs relative to the No Build Alternative. The Underground Emphasis LRT Alternative has the lowest annual increase in O&M cost ($5.1 million), followed by the Fully Underground LRT Alternatives ($6.1 million for both variations) and At-Grade Emphasis LRT Alternative ($11.9 millions). The TSM Alternative has the largest increase in annual O&M costs ($14.3 million) due to the significant increase in bus service and relatively small savings in heavy rail and light rail costs (approximately $0.2 million).
- In comparison to the TSM Alternative:
    - All of the Build Alternatives reduce O&M costs relative to the TSM Alternative. The Underground Emphasis LRT Alternative provides the largest annual savings (approximately $9.2 million in savings), followed by the Fully Underground LRT Alternatives (approximately $8.2 million in savings for both variations) and the At-Grade Emphasis LRT Alternative (approximately $2.4 million in savings).

Table 3-1: FY 2035 Heavy Rail, Light Rail, and Bus O&M Costs by Alternative (2009 $ in Millions)

Mode	No Build	TSM	Build LRT Alternatives			
			At - Grade Emphasis	Underground Emphasis	Fully Underground – Little Tokyo: Var 1	Fully Underground – Little Tokyo: Var 2
Heavy Rail	$189.1	$188.9	$188.2	$188.2	$188.2	$188.2
Light Rail	$483.5	$483.5	$496.3	$489.5	$490.6	$490.6
Bus	$921.9	$936.4	$921.9	$921.9	$921.9	$921.9
Contracted Bus	$35.1	$35.1	$35.1	$35.1	$35.1	$35.1
System-wide Total	**$1,629.7**	**$1,644.0**	**$1,641.6**	**$1,634.8**	**$1,635.8**	**$1,635.8**

Table 3-2: Comparison of FY 2035 O&M Costs to the No Build Alternative (2009 $ in Millions)

Mode	No Build	TSM	Build LRT Alternatives			
			At - Grade Emphasis	Underground Emphasis	Fully Underground– Little Tokyo: Var 1	Fully Underground– Little Tokyo: Var 2
Heavy Rail	-	-$0.2	-$0.9	-$0.9	-$1.0	-$1.0
Light Rail	-	$0.0	$12.8	$6.0	$7.0	$7.1
Bus	-	$14.5	$0.0	$0.0	$0.0	$0.0
Contracted Bus	-	$0.0	$0.0	$0.0	$0.0	$0.0
System-wide Total	**-**	**$14.3**	**$11.9**	**$5.1**	**$6.1**	**$6.1**

Table 3-3: Comparison of FY 2035 O&M Costs to the TSM Alternative
(2009 $ in Millions)

Mode	No Build	TSM	Build LRT Alternatives			
			At - Grade Emphasis	Underground Emphasis	Fully Underground – Little Tokyo: Var 1	Fully Underground – Little Tokyo: Var 2
Heavy Rail	N/A	-	-$0.7	-$0.7	-$0.8	-$0.8
Light Rail	N/A	-	$12.8	$6.0	$7.1	$7.1
Bus	N/A	-	-$14.5	-$14.5	-$14.5	-$14.5
Contracted Bus	N/A	-	$0.0	$0.0	$0.0	$0.0
System-wide Total	**N/A**	**-**	**-$2.4**	**-$9.2**	**-$8.2**	**-$8.2**

3.2 O&M Revenue Sources

The sections below describe the estimated fare revenue, farebox recovery rates, and levels of annual system-wide operating support associated with the alternatives.

3.2.1 Farebox Revenues and Farebox Recovery

Table 11 summarizes the annual system-wide farebox revenues and farebox recovery rates for the heavy rail, light rail, and bus components of the alternatives for the FY 2035 horizon year. To compare the differences among alternatives, annual estimates of FY 2035 farebox revenues were developed based on the travel forecasting model projections of 2035 total daily boardings and linked trips by alternative and an average fare revenue per linked trip calculation, which is described in detail below. Total daily linked trips were annualized using an annualization factor of 317.80, consistent with the factor used in calculation of user benefits. The resulting annual revenue realized from system-wide linked trips are shown in the table below.

The following process was used to develop total fare revenue for each alternative:

- Three sources of data were used by Metro to derive the average fare paid for heavy rail, light rail, and bus linked trips with multiple boardings. These sources are:
  - Metro's 2002 On-Board survey, which provided data on the distribution of linked trips by number of boardings and by fare instrument used
  - Service Performance Branch data for 2002 on the number of boardings by fare instrument used
  - Records of the units sold in 2002 of each fare instrument (cash, weekly pass, monthly pass, elderly and disabled discounts, etc)
- Using these three sources in combination, Metro staff calculated the average fare paid for each segment of a linked trip with multiple boardings. The analysis indicated that the average fare for the first boarding was approximately $1.07, and the incremental fare for additional boardings was approximately $0.22.
- In order to incorporate these results into Metro travel demand model, the values were deflated to 1999 dollars. Based on the LA region's consumer price index (CPI) over the 1999 to 2002 period, the values were deflated by 0.91 which resulted in the first boarding average fare equivalent to approximately $0.98 and the incremental fare for additional boardings equivalent to approximately $0.20. These are equivalent to the values used in the travel demand model runs for the Regional Connector.
- Based on the results of the Regional Connector travel demand model runs, total heavy rail, light rail, and bus boardings and total linked trips were calculated for each alternative.
- Fare revenues for each alternative were developed using a two step process. First, total linked trips were multiplied by the 1999 first boarding fare equivalent ($0.98). Second, to account for linked trips that required multiple boarding, the incremental fare for additional boardings ($0.20) was multiplied by the number of additional boardings (total boardings minus total linked trips) for each alternative.
- Finally the total fare revenue for each alternative was inflated to 2009 dollars using an inflation factor of 1.34 which represents the change in CPI over the 1999 to 2009 period. The resulting fare in 2009 dollars is equivalent to approximately $1.31 for the initial boarding and $0.26 for each additional boarding.

Table 3-4 provides the summary results of the fare revenue analysis process. As shown in the table, annual system-wide farebox revenues for the 2035 horizon year are projected to range from $566.4 million for the No Build Alternative to $572.4 million for the Fully Underground

Little Tokyo LRT Alternative - Variation 1. With the exception of the At-Grade Emphasis LRT Alternative, the Build LRT Alternatives are projected to generate higher annual fare revenues relative to the TSM Alternative. The Underground Emphasis LRT Alternative is projected to increase annual fare revenues by $0.6 million and the Fully Underground LRT Alternatives are projected to increase annual fare revenues by $1.3 million and $1.4 million respectively.

Relative to the annual system-wide O&M costs projected for the 2035 horizon year shown previously in Table 3-4, farebox recovery is estimated to range from 34.7 percent for the TSM Alternative to approximately 35.0 percent for the Underground Emphasis LRT Alternative and both variations of the Fully Underground LRT Alternative.

Table 3-4: FY 2035 Annual Fare Revenues and Farebox Recovery by Alternative (2009 $ in Millions)

Alternative	No Build	TSM	Build LRT Alternatives			
			At-Grade Emphasis	Underground Emphasis	Fully Underground - Little Tokyo Var 1	Fully Underground Little Tokyo Var 2
Annual Boardings (millions)	694.0	704.9	691.0	692.1	693.0	693.1
Annual Linked Trips (millions)	364.9	366.6	369.6	370.4	370.8	370.9
Fare Revenue	$566.5	$571.1	$570.6	$571.8	$572.4	$572.5
Farebox Recovery	34.8%	34.7%	34.8%	35.0%	35.0%	35.0%

3.2.2 Level of Operating Support from Metro

The combined effect of lower annual system-wide O&M costs and higher farebox revenues is projected to reduce the level of annual operating support that Metro would be required to fund. Table 3-5 summarizes the reduction in annual operating support associated with the Build Alternatives relative to the TSM Alternative. As shown in the table, the Underground Emphasis LRT Alternative is projected to reduce the level of annual system-wide operating support required from Metro by $9.8 million while variations 1 and 2 of the Fully Underground LRT Alternative are projected to reduce Metro's annual system-wide operating subsidy by $9.5 million and $9.6 million respectively. The At Grade Emphasis LRT Alternative is projected to result in a lesser reduction in Metro's annual system-wide operating subsidy, or $1.9 million.

Table 3-5: FY 2035 Reduction in Annual Operating Support Relative to the TSM Alternative (2009 $, Millions)					
	TSM	Build LRT Alternatives			
		At Grade Emphasis	Underground Emphasis	Fully Underground-Little Tokyo Var 1	Fully Underground-Little Tokyo Var 2
Increase in Farebox Revenues	-	-$0.5	$0.6	$1.3	$1.4
O&M Cost Savings	-	$2.4	$9.2	$8.2	$8.2
Reduction in Operating Support	**-**	**$1.9**	**$9.8**	**$9.5**	**$9.6**

3.2.3 Sources of O&M Funding Sources

The Regional Connector will be funded as an incremental component of Metro's existing and planned rail program. In addition to fare revenue, the following summarizes the local, State and federal revenue sources that are projected to provide approximately $8.1 billion in operating support for the Metro rail system based on the LRTP Financial Plan. Table 3-6 summarizes the level of funding each source is projected to provide for Metro rail operations over the FY 2019 to FY 2035 period.

Table 3-6: Funding Support for Rail Operations, by Source FY 2019 – FY 2035 (YOE $ in Millions)	
Source	**Total, FY 2019-2035**
Local Funds	
Proposition A Rail Development Program	$1,834.3
Proposition C Security Program	$316.6
Proposition C Discretionary Program	$1,326.9
Measure R Rail Operations Program	$1,158.3
Transportation Development Act	$1,213.0
Other Metro Funds	$37.7
State Funds	
State Transportation Assistance	$1,060.6
Federal Funds	
Section 5309 Fixed Guideway Modernization Program	$778.5
Section 5340 Growing States and High Density Program	$138.9
CMAQ	$276.1
TOTAL	**$8,140.9**

3.2.3.1 Local Funds

- **Proposition A Rail Development Program Funds:** Proposition A is a county-wide half-cent sales tax that was passed in 1980. This voter-approved sales tax is used to improve and expand public transportation throughout Los Angeles County. Proposition A funds are allocated among four funding programs: Local Return Program (25 percent), Rail Development Program (35 percent), Discretionary Program (40 percent), and the 5 percent of 40 percent Incentive Program.

  Rail Development Program funds can be used for a variety of construction and operation purposes. For previous major construction projects, such as the Blue,

Green and Red Lines, Metro has leveraged these funds by bonding in accordance with the agency's adopted debt policy. Bond debt service has the first claim of funds from this program. Other eligible uses include the acquisition, renovation, rehabilitation, and replacement of rail vehicles, rail facilities, and wayside systems; operation of rail systems, and acquisition and maintenance of rights of way.

2019-2035 Funding Projection: $1,834.3 million

- **Proposition C Security and Discretionary Programs**: Proposition C is a county-wide half-cent sales tax that was passed in 1990. This voter-approved sales tax is used for public transit purposes throughout Los Angeles County. Proposition C funds are allocated among five funding programs: Rail and Bus Security (5 percent), Commuter Rail/Transit Centers (10 percent), Local Returns (20 percent), Transit-related Improvements to Freeways and State Highways and Public Mass Transit Improvements to Railroad Rights-of-Way (25 percent) and Discretionary program (40 percent).

  Security funds improve and expand rail and bus security services such as new rail line security, transit service and facilities security, security incentives, security improvements, and demonstration projects.

  2019-2035 Funding Projection: $316.6 million

  Discretionary Program funds are currently allocated at the discretion of Metro Board to Metro and non-Metro operators and agencies after all other funding opportunities are exhausted.

  2019-2035 Funding Projection: $1,326.9 million

- **Measure R Rail Operations Program:** As stated earlier, 5 percent of Measure R sales tax revenue is to be used to support operating costs of new rail projects.

  2019-2035 Funding Projection: $1,158.3 million

- **Transportation Development Act (TDA) Funding**: Each California County receives funding from the Local Transportation Fund (LTF) which is derived from a ¼ cent of the 7.25 cent statewide retail sales tax. The funds are apportioned by the State Board of Equalization according to the amount of tax collected within the each county.

  2019-2035 Funding Projection: $1,213.0 million

- **Other Metro Funds**: This category reflects fees collected by Metro for advertising, chartering, leasing, ridesharing, and other miscellaneous services.

  2019-2035 Funding Projection: $37.7 million

3.2.3.2 State Funds

- **State Transportation Assistance (STA)**: Through FY 2008, funding was provided through 50 percent of the Public Transportation Account (PTA) revenue. Funds were apportioned to counties based 50 percent on population share and 50 percent to operator revenue share (the ratio of each transit operator's revenues to the revenues of operators in the State) In 2007, Senate Bill 717 (SB 717) changed the allocation of the PTA program beginning in FY 2009. Under SB 717, STA has been funded from 75 percent of the PTA revenue and is apportioned 50 percent based on population share and 50 percent based on operator revenue share. Applicants for funds must meet one of the following eligibility tests:

  - Latest audited operating cost per revenue vehicle hour does not exceed the sum of the preceding year's operating cost per revenue vehicle hour and an amount equal to the product of the percentage change in CPI for the same period multiplied by the preceding year's operating cost per revenue vehicle hour.

  - Latest audited 3-year average operating cost per revenue vehicle hour does not exceed the sum of the average of the operating cost per revenue vehicle hour in the 3 years preceding the latest audited year and an amount equal to the product of the average percentage change in CPI for the same period multiplied by the average operating cost per revenue vehicle hour in the same 3 years.

  Metro's policy has been to allocate the population share of STA funds for rail operations, which is also reflected in the long range financial plan. It should be noted that legislation passed in 2010 to eliminate the sales tax on motor fuels will change the level of funding in the STA by eliminating the PTA.

  2019-2035 Funding Projection: $1,060.6 million

3.2.3.3 Federal Funds

- **Section 5309 Fixed Guideway Modernization Funds:** A federal formula program that is allocated to urbanized areas with populations greater than 200,000 with fixed guideway systems that have been in operation for at least seven years. These funds can be used for preventive maintenance activities incorporated into the operating plan. These activities can include preservation of fixed guideway infrastructure such as maintenance of vehicles, buildings, equipment, electric power facilities, vehicle movement control systems, fare collection and counting equipment, structures, tunnels, subways, and roadways.

  2019-2035 Funding Projection: $778.5 million

- **Section 5340 Growing States and High Density Program:** Funds from this program are allocated based on two categories. First, 50 percent of funds are made available under the Growing States factors and are apportioned based on State population

forecasts for 15 years beyond the most recent census. Amounts apportioned for each State are then allocated to urbanized and rural areas based on the State's urban/rural population ratio. Second, the remaining 50 percent is allocate based on the High Density States factor which distributes funds to States with population densities greater than 370 people per square mile and are apportioned only to urbanized areas within those States. The State of California does not qualify for High Density funds since its population density is 217 people per square mile. Metro uses the Growing States funds for rail operations.

2019-2035 Funding Projection: $138.9 million

- **CMAQ:** In addition to the capital use of CMAQ funds as described earlier, these funds can also be used for operating costs.

  2019-2035 Funding Projection: $176.1 million

4.0 RISKS AND UNCERTAINTIES

This report has summarized the proposed costs and revenues that would provide Metro sufficient funding to support the construction, operation and maintenance of the Regional Connector and at the same time allow for operation, maintenance, and expansion of the existing transit system.

The implementation of the LPA selected for the Regional Connector is proposed to receive 50 percent federal participation through the FTA New Starts program. The magnitude of this investment demands that Metro have complete assurance that at the time of construction, federal funding will follow the distribution schedule detail in a New Starts Full Funding Grant Agreement (FFGA). Conversely, the FTA must have assurance that limited federal funds will be fully and productively utilized and leveraged to the greatest extent possible. If the Regional Connector LPA is carried forward, these mutual assurances will be negotiated and described in an FFGA between FTA and Metro, which would occur during the project's final design stage.

4.1 Key Risks and Uncertainties

Although Metro has proposed a most likely scenario based on the funding and cost assumptions presented above, there are a number of capital and operating risks and uncertainties that could influence the financial plan in future phases of project development. The following sections discuss risks and uncertainties related to:

- Availability of Federal Funds
- Revenue Risk
- Construction Cost Risk
- Operating Risk

Strategies to address risk are also described.

4.1.1 Availability of Federal Funds

- The guaranteed transit funding levels that were included in SAFETEA-LU provided greater certainty about the annual flow of federal transit monies. However FTA funds are appropriated on a yearly basis. As result, annually there continued to be a level of uncertainty regarding the amount and timing of the discretionary and formula funds that would be available to transit agencies.
- Although SAFETEA-LU was to expire in 2009, the next surface transportation authorization legislation has not been approved and SAFETEA-LU has been extended until December 31, 2010. At this time there is considerable uncertainty regarding

when Congress will pass new transportation authorization legislation, if the annual appropriation process will remain unchanged, and the level of funding that will be provided for the New Starts program.

4.1.2 Revenue Risk

- Capital Funding Availability - The availability of capital funds from various sources (e.g., federal level and match of Section 5309 and Section 5307, and local sources) affects the timing and overall cost of the project. Insufficient annual allocations require an extension of the construction schedule so that costs do not exceed available resources.

- Tax Revenues: Variations in tax revenues affect the availability of resources to fund capital and operating needs.

4.1.3 Construction Cost Risk

- Construction Costs: The Regional Connector requires underground construction through a densely developed area. Differences in construction costs may occur because of: (1) unforeseen conditions not evaluated at the current conceptual level of engineering, such as soil conditions or utility relocation; (2) variations in construction unit costs, bid quantities and other contingencies; and (3) changes in design elements.

- Real Growth: The rate of real growth (i.e., the difference between the rate of inflation for a specific commodity or service and the baseline rate of inflation, as measured by the local Consumer Price Index or Construction Cost Index), may vary. These variations in the real rate of cost growth are particularly important for certain commodities or services which constitute a significant element of the capital and O&M cost structure of the transit system (e.g., labor, electricity, fuel, parts and construction).

- Schedule: A number of issues could result in construction delay including but not limited to unforeseen construction challenges or the local decision-making process. At this early stage in the project development process, the exact timing of the construction phases is not finalized. This uncertainty could impact the availability and timing of local and federal funds. However, both of Metro's federal rail projects, Red Line and Eastside Gold Line, were delivered on the FFGA schedule and budget.

4.1.4 Operating Risk

- Fares, Fare Policy and Cost Recovery: Changes in fare level and structure affect ridership, fare revenue and cost recovery. Changes in ridership affect the level of service required which, in turn, affects capital and operating costs and revenue.

- Service Levels: The frequency of service and hours of operation affect ridership, fare revenue and capital and operating costs.

4.2 Strategies to Address Risk

As the Regional Connector Transit Corridor project is implemented, there are several strategies that Metro could utilize to address risks, if one or more should occur. These strategies include: redefining project schedules; short term financing strategies such as grant anticipation notes and revenue anticipation notes or federal loans which can be used to close gaps between needed and available revenues. These types of strategies will be considered in subsequent iterations of the financial plan.

In addition, Metro, with support from the City of Los Angeles and a coalition of local civic leaders and organizations, is seeking to accelerate delivery of the Measure R program through public-private partnerships and a "30/10" initiative. This initiative calls for Metro to leverage Measure R sales tax through an innovative program involving advanced federal infrastructure funding and federally-back debt.

5.0 SUMMARY OF KEY FINDINGS

The key findings of the financial analysis are summarized below.

- Regional Connector Priority in Policy and Planning Documents:
  - The Regional Connector is included in both of the existing long range financial planning documents for the region: LA Metro's *2009 LRTP* and the Southern California Association of Governments *2008 Regional Transportation Plan*. Within the LRTP, the Regional Connector is identified as one of the priority transit corridor projects to be funded and implemented by 2019. With regard to the SCAG's RTP, the Regional Connector is included in the financially constrained plan as a funded project (project identification number 1TR0404).
  - Based on the adopted March 25, 2010 Board policy, the Regional Connector has been prioritized for funding in the first category of projects after construction and right-of-way related activities to complete environmental clearance. Additionally, the Regional Connector is included in the highest priority category to fund the next set of long range projects that will be constructed.
- Capital Costs
  - The capital costs of the TSM Alternative and three Regional Connector Build Alternatives in 2009 dollars range from $67.3 million for the TSM Alternative to $1.36 billion for the Fully Underground LRT Alternative Little Tokyo Variation 2. Capital costs by alternative are summarized below. These costs reflect a nine year implementation schedule, which is consistent with planning estimates in the LRTP. In future iterations of the financial analysis, the costs and implementation schedule will be refined.
    - TSM Alternative: $67.3 million ($80.0 million YOE dollars);
    - At-Grade Emphasis LRT Alternative: $899.2 million ($1,042.2 million YOE dollars);
    - Underground Emphasis LRT Alternative: $1,120.1 million ($1,297.0 million YOE dollars);
    - Fully Underground LRT Alternative - Little Tokyo Variation 1: $1,245.2 million ($1,442.0 million YOE dollars); and
    - Fully Underground LRT Alternative - Little Tokyo Variation 2: $1,360.2 million ($1,595.8 million YOE dollars).

- Capital Revenue Sources
  - The capital costs of the Build Alternatives are proposed to be funded from the sources listed below. Prior to submittal of an application for FTA authorization to advance to the next stage of New Starts project development, Metro will refine the proposed funding plan to reflect Board policies related to LRTP prioritization and anticipated changes in projected revenue levels and financing opportunities.
    - Federal:
      - FTA Section 5309 New Starts: 50 percent of capital costs.
      - Congestion Mitigation and Air Quality (CMAQ): $31.5 million.
    - Local/State:
      - California High Speed Rail Bonds: $114.9 million.
      - Region Improvement Plan: $2.0 million.
      - Measure R Sales Tax: $160.0 million.
      - Lease Revenue: $0.20 million.
      - Letter of No Prejudice Reimbursement: $195.7 million.
      - Local Agency Funds: 3 percent of capital costs.
- Additional Capital Funding Sources to be Defined:
  - Additional local, State, and federal revenues are needed to fund the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2. These alternatives require identification of sources for unfunded balances of $105.3 million, $173.4 million, and $236.4 million respectively.
  - Prior to selection of the LPA for the Regional Connector, Metro staff will refine the long range financial plan to reflect the prioritization criteria adopted by the Board on March 25, 2010 as well as other policy actions associated with accelerating the Measure R program. It is anticipated that the results of this refinement will identify local, State and federal revenue levels to fully fund the Regional Connector as well as other LRTP projects identified as priorities for construction. Supplementary funding could potentially be secured from use of Proposition C 25% funds for eligible project elements, additional LONP Reimbursement Funds, STIP RIP funds, CMAQ, and other sources to be defined.

- Level of FTA New Starts Funding Proposed:
  - The FTA New Starts program is proposed to fund 50 percent of the cost of each Build LRT Alternative. The range of FTA New Starts funding proposed ranges from $521.1 million for the At-Grade Emphasis LRT Alternative to $787.9 million for the Fully Underground LRT Alternative - Little Tokyo Variation 2. These funds are proposed to be provided over the FY 2012 to FY 2018 period.
- O&M Cost Savings Relative to the TSM Alternative:
  - All of the Build Alternatives are projected to reduce O&M costs relative to the TSM Alternative. The Underground Emphasis LRT Alternative provides the largest annual savings (approximately $9.2 million in savings), followed by the Fully Underground LRT Alternatives (approximately $8.2 million in savings for both variations) and the At-Grade Emphasis LRT Alternative (approximately $2.4 million in savings).
- Higher Farebox Revenues Relative to the TSM Alternative:
  - With the exception of the At-Grade Emphasis LRT Alternative, the Build LRT Alternatives are projected to generate higher annual fare revenues relative to the TSM Alternative. The Underground Emphasis LRT Alternative is projected to increase annual fare revenues by $0.6 million and both variations of the Fully Underground LRT Alternatives are projected to increase annual fare revenues by $0.6 million. The At-Grade Emphasis LRT Alternative is projected to reduce annual farebox revenues by $0.5 million.
- Reduction in Metro Funding Support Required for Rail Operations Relative to the TSM Alternative:
  - The combined effect of lower annual system-wide O&M costs and higher farebox revenues for the Underground Emphasis and Fully Underground LRT Build Alternatives is projected to reduce the level of annual operating support that Metro would be required to fund relative to the TSM Alternative.
  - The Underground Emphasis LRT Alternative is projected to reduce the level of annual system-wide operating support required from Metro by $9.8 million while variations 1 and 2 of the Fully Underground LRT Alternative are projected to reduce Metro's annual system-wide operating subsidy by $9.5 million and $9.6 million respectively. The At Grade Emphasis LRT Alternative is projected to result in a lesser reduction in Metro's annual system-wide operating subsidy, or $1.9 million.

- Key Risks and Uncertainties:
  - As the Regional Connector Transit Corridor project advances to subsequent stages of project development, strategies will be identified to address key risks and uncertainties related to:
    - Availability of Federal Funds
    - Revenue Risk
    - Construction Cost Risk
    - Operating Risk
- Future Actions:
  - Metro, with support from the City of Los Angeles and a coalition of local civic leaders and organizations, is seeking to accelerate delivery of the Measure R program through public-private partnerships and a "30/10" initiative. This initiative calls for Metro to leverage Measure R sales tax through an innovative program involving advanced federal infrastructure funding and federally-back debt.
  - As the alternatives selection process moves forward, future iterations of the financial analysis will be conducted, with increasing levels of detail and refinement. The refined financial analysis will identify revenue sources for the unfunded balances of the Build LRT Alternatives. In addition, detailed cash flow analyses will be conducted to document Metro's financial capacity to implement the Regional Connector and to maintain, operate, and expand the overall transit network through the project horizon year of 2035.

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT

State Clearinghouse Number: 2009031043

APPENDIX I: AGENCY COORDINATION AND PUBLIC INVOLVEMENT

Stakeholder List

Collateral Materials

Facebook Screenshot

Sample Media Coverage

Community Update Meeting No. 1

Community Update Meeting No. 1 - Meeting Announcements, Advertisements, and Notifications

Community Update Meeting No. 2

Community Update Meeting No. 2 - Meeting Announcements, Advertisements, and Notifications

Little Tokyo Working Group

Urban Design Working Group

Community Meeting Matrix

2009 Community Response (Post Scoping)

2010 Community Response (Post Scoping)

Public Agency Meeting Matrix (Post Scoping)

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Stakeholder List

State Clearinghouse Number: 2009031043

Metro

Regional Connector Transit Corridor Study

Stakeholder List

100 Black Men of LA
1010 Development Corporation
330 Alameda LLC
800 W. 6th Building
953 Associates LLC
A Range Ments Special Event Planning
ABC's 123
Access Services Inc.
Advanced Investment Group
Advanced Parking Systems
Advisory Council on Historic Preservation
AFSCME
Air Quality Management District (AQMD)
Alameda Corridor Jobs Coalition
Aldaron: Inc.
Altadena Senior Center
American Holiday Travel
American Lung Association of California
American Lung Cancer Association
AMTRAK
Anschutz Entertainment Group
APT Parking Technologies
Architecture Tours Los Angeles
ARCO Plaza Management Office
Arnie Berghoff & Associates
Artisan on Second Management Office
Asian American Architects & Eng.
Automobile Club of Southern California
Avalon Gardens
Backstage 21 / May 15
Bakewell Company
Banerjee & Associates
Bank of America Plaza
Bank of the West
Barker Block Management Office
Barrio Planners: Inc.
Bethesda Missionary Baptist
Beulah Baptist
Bikestation Coalition
Biltmore
Biscuit Company Lofts Management Office
Black Business Assocation of LA
Black Women's Forum
BlogDowntown
BNSF Railway
Boeing
Bonaventure
Bradley Multipurpose Center
Breathe California of Los Angeles County
Brookfield Properties Corporation
Brotherhood Crusade
Bruins for Transit
Building LLC Binford
Building Owners and Management Association
Bunker Hill Towers Management Office
Burke, Williams, & Sorensen
Bus Riders Union
CAKCO Management
California Bank & Trust
California Club
California Coastal Commission
California Community Economic Development Association
California Endowment
California High-Speed Rail Authority
California Hospital
California League of Conservation Voters
CALPIRG/Environment California
Calstart
Cambodian American Chamber of Commerce
Cameo Woods Homeowners Association
Carpenters-Contractors Cooperation Committee
Carson Chamber of Commerce
Carson Chamber of Commerce
Casa Heiwa Tenants Council
Catellus Development Corporation
Cathedral of Our Lady of the Angels
CB Richard/Ellis
Centenary United Methodist Church
Center for the Study of Los Angeles
Central City Association of Los Angeles
Central City East Association
Central Library
CH2MHILL
Cherrywood Ave Block Club
Chicago School
Chow Mark & N Trust
Christ Unity
Cinema Properties Group
Citibank
Citigroup Center
Citiside Federal Credit Union
Citizens United to Save South Pasadena
City National Bank
City of Carson
City of Commerce
City of Commerce Industrial Council
City of Compton
City of Culver City
City of El Monte
City of Gardena
City of Huntington Park
City of Industry
City of Long Beach
City of Los Angeles
City of Lynwood
City of Monterey Park
City of Norwalk
City of Pasadena
City of San Marino
City of Signal Hill
City of South Gate
City of South Pasadena
City of Vernon
Civic Alliance c/o Manatt Phelps & Phillips: LLP
Coalition for Clean Air
Coalition for Clean and Safe Ports
Coalition for Humane Immigrant Rights of Los Angeles
Coalition of Labor Union Women
Colfax Consulting
Communities for a Better Environment
Communities for Clean Ports
Community Health Council
Compton Chamber of Commerce
Compton Latino Chamber of Commerce
Compton School District 57
Concerned Citizens of South Central Los Angeles
Consulate General of Japan at Los Angeles
Copy Best: Inc.
CORO
Crenshaw Chamber of Commerce
Crenshaw Christian Center
Crenshaw Economic Development Departmet
CS Broadview
Culver City Chamber of Commerce
Daily Grill
Dakota Communications

Metro

Regional Connector Transit Corridor Study

Stakeholder List

Dan Beal & Associates
Davis Christian
Debbie's Day Care
Debris Free: Inc.
Downtown Art Walk
Downtown Los Angeles Neighborhood Council
Downtown Women's Center
East Los Angeles Chamber of Commerce
East Los Angeles Remarkable Citizens' Association, Inc.
East West Development Corporation
East West Eye Institute Third Street Medical Building
East West Players
East Yard Communities for Environmental Justice
Edison Bar
Electric Railway Historical Association
Elizabeth Peterson Group: Inc.
Emerson & Associates
Emi Yamaki: K. Shishido
Empowerment Congress Central Area Neighborhood Development Congress
Empowerment Congress South West Neighborhood Development Congress
Empowerment Congress West Neighborhood Development Council
Endangered Habitats League
Engineers & Architects IUPA 8000
Environmental Defense
Epicenter
Equity Office
Ethnic Coalition
Euclid Avenue Elementary School
Evergreen Academy
Evergreen Avenue Elementary School
Exposition Construction Authority
Factory Place Lofts Management Office
Fair Housing Foundation
FAME Renaissance Program
Fansteel Inc
Far East Café Management Office
Fashion Institute of Design & Merchandising
Festival Companies
Figueroa Corridor Partnership
Film L. A. Inc.
Film This!
First AME Church
First Street Elementary School
First Street South Plaza
First United Methodist Church of Los Angeles
Flanigan Farms
Foc Electronics Inc
Ford Boulevard Elementary School
Fourth Street Elementary School
Frank D. Lanterman Regional Center
Freda Mohr Multiservice Center - JFS
Friedman Occupational Center - LAUSD
Friends 4 Expo
Friends of the Little Tokyo Library
Friends of the Los Angeles River
Fukui Mortuary
Gabrielino Tongva Indians of California Tribal Council
Garboard/Keelson Asset and Property Management Company
Garfield High School
Gascon Elementary School
Gateway to Los Angeles Business Improvement District
Gilmore Associates
Go for Broke National Education Center
Gold Line Construction Authority
Gonzaque Village
Grand Avenue Community Club
Grand Avenue Medical Joint Venture
Grand Tower Management Office
Greater Leimert Park Village/Crenshaw Corridor BID
Greater Los Angeles African American Chamber of Commerce
Green Tech Coast, LLC
Griffith Middle School
Groundwork Café
Grubb & Ellis Management Services
GVA Charles Dunn
GVA Daum
Hacienda La Puente Unified School Distrit
Hamasaki Elementary School
Hammel Street Elementary School
Happy Day, Inc.
Harrison Elementary School
HERE (Hotel Employee & Restaurant Employees)
Hewitt St Lofts Management Office
Higashi Honganji Buddhist Temple
Higgins Building Homeowners Association
Hikari Management Office
Hillcrest Elementary School
Hilton Checkers
Hiroshima Kenjinkai Of Southern California
Historic Cultural Neighborhood Council
HMC Arhitects
HNTB Corporation
Hollenbeck Middle School
Hollenbeck Police Station
Hollywood Business Improvement District
Hollywood Chamber of Commerce
Home Depot
HomeBoy Industries
Honda Plaza Management Office
Honda Plaza Merchants
Hotel Llc Sogo
House of Trophies
Housing Authority of Los Angeles
Humphreys Avenue Elementary School
Huntington Park Chamber of Commerce
Hyatt Grand Regency
IBEW 11
IBEW 18 (DWP)
IBEW 47
Imperial Courts
Industry Manufacturers Council (Chamber)
Infinity Insurance/Staff Counsel
Interfaith Environmental Council
International Brotherhood of Teamsters
International Enterprise Singapore
Iron Workers Local 416
Ironworkers Local 433
Itsuo & Fusako Tachibana
J-Town Voice
Japan America Television: Inc.
Japan Travel Bureau Intl Inc
Japanese Amercian Citizens League - Pacific Southwest District
Japanese American Community Services
Japanese American Cultural & Community Center
Japanese American National Museum
Japanese American Optimist Club

Metro

Regional Connector Transit Corridor Study

Stakeholder List

Japanese Chamber of Commerce of Southern California
Japanese Community Pioneer Center
Japanese Evangelical Missionary Society
Japanese Village Plaza Tenant Association
Japanese Women's Society of Southern California
Jeffer Mangels Butler and Marmaro
Jodoshu N.A. Buddhist Missions
Jones Lang LaSalle
Kaiser Permanente
Kaji & Associates
Kajima Building
Katz Fram and Company
Kawada Hotel
Keiro Sr. Health Care
Keller Williams Beverly Hills Commercial
Kennedy Elementary School
Kimota Photomart
King Taco
Kor Group
Koraku
Korean Business & Professional Women's Association
Korean Resource Center
Korean-American Coalition
Koreatown Youth & Community Center
Kosmont Companies
Koyasan Buddhist Temple
Kumamoto Associates
Kyoto Grand Hotel
LA ArtCore
LA City/County Native American Indian Committee
LA Cityview 35
LA Live
LA OPERA
LA/OC Building/Construction Trades Council
Labor/Community Strategy Center
Laborers Local 507
Laborers Local 777
Laborers's Local 300
Lafayette Square
Laguna Nueva Elementary School
Lane Elementary School
Larchmont Boulevard Association
Latham & Watkins
LBA Realty
Leadership Education for Asian Pacifics: Inc.
Legal Aid Foundation of Los Angeles
Leimert Park Village Farmers Market
Little Tokyo Branch Library
Little Tokyo Business Association
Little Tokyo Community Council
Little Tokyo Lions Club
Little Tokyo Public Safety Association
Little Tokyo Recreation Center
Little Tokyo Serivce Center Community Development Corporation
Little Tokyo Towers Residents Council
Loft Appeal
Loft Exchange
Lofts at the Security Building Management Office
Long Beach 66/58/63
Long Beach Alliance for Children with Asthma
Long Beach Area Chamber of Commerce
Long Beach Area Convention and Visitors Bureau
Long Beach City College
Long Beach Community Partner Council
Lorena Street Elementary School
Los Angeles Alliance for a New Economy
Los Angeles Archdiocese
Los Angeles Area Chamber of Commerce
Los Angeles Business Council
Los Angeles Community College District
Los Angeles Conservancy
Los Angeles Convention Center
Los Angeles Council of Black Professional Engineers
Los Angeles County
Los Angeles County Bicycle Coalition
Los Angeles Downtown Arts District
Los Angeles Economic Development Council
Los Angeles Fashion District
Los Angeles Gay & Lesbian Center
Los Angeles Hompa Hongwanji Buddhist Temple
Los Angeles Housing Department
Los Angeles Junior Chamber of Commerce
Los Angeles League of Conservation Voters
Los Angeles Marriot
Los Angeles Men's Project (LAMP)
Los Angeles Metropolitan Hispanic Chambers of Commerce
Los Angeles Music & Art School
Los Angeles Neighborhood Initiative (LANI)
Los Angeles Regional Water Quality Control Board
Los Angeles River Artists and Business Association (LARABA)
Los Angeles Sentinel
Los Angeles Times
Los Angeles Trade Tech College
Los Angeles Unified School District
Los Angeles Urban League
Los Angeles Urban League
Los Angeles Visitors and Conventions Bureau
Los Angeles World Airports
Lost Souls
Love of God Missionary
Lowe International
Loyola Law School
Lynwood Chamber of Commerce
M. Okamoto & Associates Inc.
Macy Intermediate
Madres del Este de Los Angeles Santa Isabel
Maguire Properties
Majestic Realty
Makoto America Inc
Malabar Street Elementary School
Manufacturers Bank
Manulife Financial
Mar Vista Gardens
Maria's Italian Kitchen
Marianna Avenue Elementary School
Martin Building Company
Mary's Child Care
Maryknoll Japanese Catholic Center
Masayuki & Taka Ohashi
Mayer: Brown: Rowe & Maw LLP
Mayzels Chiropracic Clinic: Inc.
MegaToys
Meher Montessori School
Melendrez
Meruelo Maddox Properties
Met Lofts Management Office

Metro

Regional Connector Transit Corridor Study

Stakeholder List

Metcalfe Associates
Metropolitan News
Metropolitan Water District of Southern California
Midnight Mission
Milbank Real Estate Services
Miracle Baptist
Mitsuru Sushi & Grill
Miyako Gardens Tenant Council
Miyako Hotel Los Angeles
Mobility 21
MOCA - Geffen Contemporary
Montakan Mathiyakom
Montebello Park Elementary School
Monterey High School
Monterey Highlands Elementary School
Monterey Park Chamber of Commerce
Monterey Park Hospital
Monterey Vista Elementary Scoool
Moore, Iacofano & Goltsman
Morlin Asset Management
Mothers of East Los Angeles
Mt Olive Second Missionary
Mura Management Office
Museum Tower Management Office
Music Center
Muslim Public Affairs Councils
Mutual Trading Co Inc
MV Child Care
Nanka Kenjinkai Kyogikai
National Association for the Advancement of Colored People
National Council-Negro Women
National Marine Fisheries
Neighborhood Music School Association
Network Public Affairs
New Avenue School
Nickerson Gardens
Nikkei Bridge
Nikkei for Civil Rights and Redress
Nisei Week
Nishi Hongwanji Buddhist Temple
Obayashi Corporation OC America Construction: Inc.
Office of Clients' Rights Advocacy
Protecting & Advocacy Inc
Oldtimers Foundation
Omni Hotel @ California Plaza
Operation Hope
Orpheum Lofts Management Office
Our Lady of Guadalupe Elementary School
Our Lady of Lourdes Parish
Our Lady of Soledad School
Our Lady of Talpa Elementary School
P T C Partnership
Pacific Commerce Bank
Pacific Electric Management Office
Pat Brown Institute of Public Affairs
Payne & Fears LLP
Pegasus Residential Apartments
People Coordinated Services
Phoenix Realty Partners
Physicians for Social Responsibility
Pico Gardens
Pico Neighborhood Council
Pilgrim Tower North
Pitfire Pizza
Plains All American Pipeline: L.P.
Planning Company Associates
Plasterers & Cement Masons 600
Port of Long Beach
Prayer Assembly COGIC
Pride at Work: LA Chapter
Program in American Studies & Ethnicity College of Letters: Arts & Sciences
Project Amiga
Promenade West Management Office
Pueblo del Rio
Puente Learning Center
Rafu Shimpo
Ramona Gardens
Raw Inspiration Inc.
Reason Foundation
Reavans Corp
Reconnecting America/Subway to the Sea Coalition
Reggiardo
Related Companies
Repetto Elementary School
Resurrection Elementary School
Rico Suave Productions
RNL Design
Roger Williams Baptist
Roosevelt High School
Rose Hills Court
Rosewood Park Elementary School
Rowan Avenue Elementary School
Safe Cycling
Saint Thomas Aquinas Elementary School
San Antonio De Padua Elementary School
San Gabriel Valley Council of Governments
San Gabriel Valley Journal
San Pedro Firm Building Tenants Council
Santa Isabel Elementary School
Santa Teresita Elementary School
Santee Court Management Office
Save Leimert
Savoy Homeowners Association
Savoy Management Office
SCI-ARC Architectural College
SCLARC Education Empowerment Program
SCRRA/Metrolink
Second Street Elementary School
SEIU
Senior Sites
Senka International Inc
Senor Fish
Share Los Angeles Art
Sheraton
Sheridan Street Elementary School
Shrine Auditorium
Siemens ITS
Sierra Club
Signal Hill Chamber of Commerce
Skid Row Housing Trust
So Cal Gardeners Federation
Songs of the Cross Temple
Soto Mission Zenshuji
Soto Street Elementary School
South Alameda Properties Inc
South Central Multi Purpose Center
South Coast Air Quality Management District
South Coast Interfaith Council
South Gate Chamber of Commerce
South Park Stakeholders
Southern California Association of Governments
Southern California Gas Company
Southern California General Contractors
Southern California Transit Advocates
Southern Christian Leadership Conference LA
Southwestern School of Law

Metro

Regional Connector Transit Corridor Study

Stakeholder List

St Mary Tower
St. Alphonsus Elementary School
St. Francis Center
St. Mary Elementary School
St. Stephens Martyr School
St. Vincent Medical Center
Standard Hotel
State Farm
State of California
Stevenson Middle School
Stonefield Josephson: Inc.
Strategic Planning/Access Services
Strategy Workshop: Inc.
Streets Blog LA
STS-Round Table Members
Stuart Ketchum YMCA
Sunrise Elementary School
Sushi Gen
System Metrics Group: Inc.
Taira Services Corp.
TCI Leasing
Team CFO
Teamsters 396
Teamsters 911
Teramachi Housing
The Bonaventure
The Colburn School
Thomas Properties Group
Titan Group
Tokyo Cleaners
Tokyo Public Safety Association
Tokyo Villa Tenants Association
TransCore
Transit Coalition
Transportation & Land Use Collaborative
Transportation Foundation of LA
Tri Modal Express
TriCounty Watchdogs
Trifecta
Trust for Public Lands
UA 78 - Plumbers
UCLA Government & Community Relations
UCLA Nikkei Student Union
UFCW Local 770
Union Bank of California
Union Church of Los Angeles
Union De Vecinos
Union Pacific Railroad
Union Rescue Mission
Unite HERE Local 11
United Gospel
United Homeowners Association of Crenshaw
United Neighborhoods of Historic Arlington Heights: West Adams & Jefferson Park Communities
University of Southern California
Urban Design Technology Strategic Planning
Urban Foundation
Urban Land Institute LA
Urban Partners
US Bank
UTU Local 1565
UTU Local 84
Uyeda S K Investment Corp
Vermont Village Community Dev. Corp.
Vernon Chamber of Commerce
Village Green Owners Association
Visual Communications
Volk Properties
Watson Land Company
Watts Community Housing Corporation
Watts Towers Arts Center
Weiland Brewery
Weingart Center
Weller Court
Wells Fargo
Wesley United Methodist
West Angeles Church
West Angeles Community Development Corporation
West Los Angeles Chamber of Commerce
West Los Angeles College
Westchester Playa Del Rey Neighborhood Council
Westfield Fox Hills Mall
Westside Center for Independent Living
Westside Cities Council of Governments
White Memorial Medical Center
William Mead Homes
Windsor Square Association
Winter Gardens Elementary School
World Trade Center
WOW Productions
Wyndham Commerce Hotel
Yamato Travel Bureau
YMCA
Ynez Elementary School
Young Communications Group: Inc.
Zenshuji Soto Mission

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Collateral Materials

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor

Overview | Benefits | The Process

The Metropolitan Transportation Authority (Metro) is conducting an environmental review of the Regional Connector Transit Corridor, a project that, if built, creates an almost 2-mile transit link between the Metro Gold and Metro Blue Line light rail transit (LRT) systems through downtown Los Angeles.

This Regional Connector will connect the Metro Gold Line Eastside Extension and the Metro Expo Line, which is currently under construction and will link Downtown to Culver City with other potential new light rail transit projects.

By providing continuous through service between these lines, the Regional Connector will improve access to both local and regional destinations – and help create a true transportation network for the region. The Regional Connector is slated to receive partial funding from Measure R, the half-cent sales tax increase approved by voters in November 2008.

Last Revised: Tuesday April 13, 2010 11:09:01 AM
Printer Friendly Version for 'Overview '

Get Email Alerts
Receive email alerts when news and information is updated on this project.

Latest News
- Articles
- Press Releases

Meetings
- Upcoming Meetings
- Completed Meetings
- Additional Meetings
- Meetings Held During Alternatives Analysis

Maps
- Project Map
- Conceptual Map

Fact Sheets
- Frequently Asked Questions (FAQs)
- Community Participation Fact Sheet - November 2009
  - Spanish
  - Japanese
- Environmental Review Fact Sheet - November 2009
  - Spanish
  - Japanese
- Archives

Reports and Info
- Draft EIS/EIR
- Public Scoping
- Alternatives Analysis (AA) Study

Useful Links
- Metro Art

Contact Us

Project Team:
Dolores Roybal Saltarelli, Project Manager

Contact Information:
METRO
One Gateway Plaza, Mail Stop 99-22-2
Los Angeles, CA 90012

Comment/Question Form: Complete the form to leave us your questions and comments, or be added to our mailing list.

Tel: Call the project phone line at 213.922.7277.
Facebook: Be sure to visit us on Facebook

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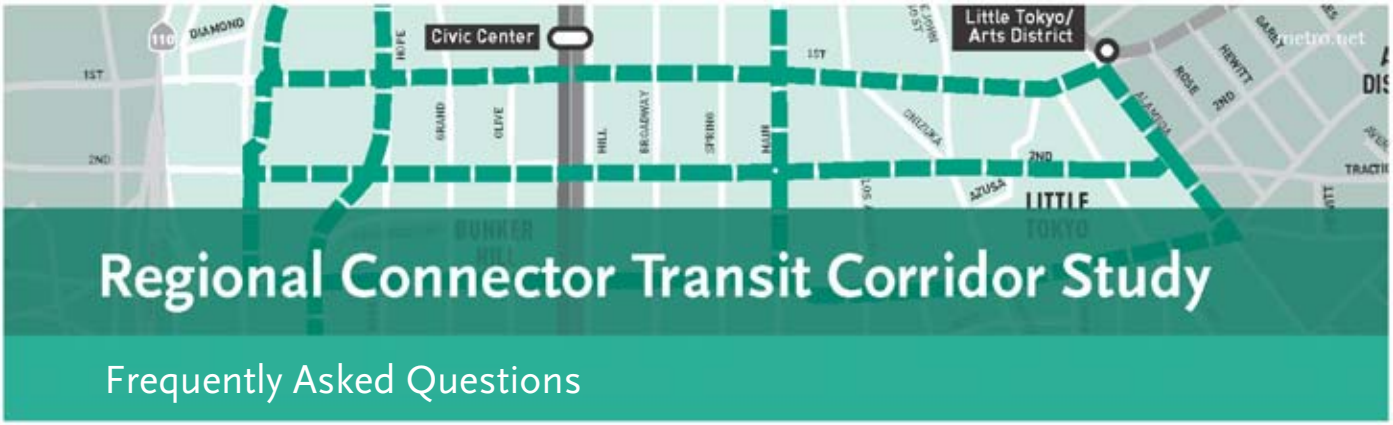


Frequently Asked Questions

GENERAL BACKGROUND

What is the Regional Connector Transit Corridor Study? How did it come about?

Metro will analyze options for connecting the Metro Gold, Blue, and Expo Lines through downtown Los Angeles from 7th Street/Metro Center to Alameda Street between 1st and Commercial Streets. By more directly linking these existing rail lines, Metro aims to increase mobility, accessibility and ridership throughout the region.

The Regional Connector Transit Corridor project was originally part of the planning of the Metro Gold Line but was deferred due to funding considerations. The Regional Connector was subsequently recommended for further study in both Metro's 1992 Long Range Transportation Plan and 2003 Short Range Transportation Plan. A 2004 feasibility study found that connecting these key light rail transit lines would significantly increase utilization of all rail lines and improve mobility throughout the region.

What area is Metro studying as part of the Regional Connector?

The study corridor extends from the Metro Blue Line terminus at 7th Street and Wilshire Boulevard to the vicinity of the Metro Gold Line Eastside station at 1st and Alameda streets in downtown Los Angeles. The study area encompasses approximately two square miles and includes the communities of Little Tokyo, the Arts District, Historic Core, Toy District, Bunker Hill, Financial District, Jewelry District, and Civic Center.

What transit modes are being considered?

The transit modes under consideration for the Alternatives Analysis include existing modes in operation by Metro, including light rail (Blue/Green/Gold Lines), and different bus modes (Bus Rapid Transit or "BRT," Metro Rapid Bus, etc.).

ROUTES/ALIGNMENTS

What does Metro consider to be alternatives?

Alternatives will be developed by:

- Mode of transit – Potential modes include light rail, or bus rapid transit,,
- Alignment – The route to be taken to connect the Metro Gold Line Little Tokyo Station to the 7th Street/Metro Center station.
- Configuration – Whether the segments of the route will be at street level, aerial or underground
- Station location – Where stations would be located.

Regional Connector Transit Corridor Study

Frequently Asked Questions

What factors will Metro use to select a project?
Factors or criteria used to evaluate alternatives will be consistent with the Federal New Starts Funding guidelines, Metro guidelines, and the input received from the public during the early scoping period. Typical evaluation criteria include improvements to air quality and the environment, increases in transit ridership, improvements to travel time, project cost, and ability to generate economic activity.

Where will new stations be located?
Public input will help Metro determine potential station locations. Locations are usually determined by factors such as the ability of the station to serve a greater number of riders, whether a station supports the community's vision, and how the station might contribute to local economic vitality.

Will the Regional Connector consider all the new residential development downtown when evaluating station locations?
The Regional Connector's performance is based on 2030 forecasts for regional growth. This takes into consideration not only the communities now developing around the extensive rail and bus system throughout the region, but also the ongoing revitalization of downtown Los Angeles.

RELATIONSHIP WITH TRANSIT

How will the Regional Connector coordinate with DASH and other frequently used bus corridors like Broadway and Spring Streets?
The Regional Connector will be part of an integrated transportation system that includes pedestrian and bike amenities, regional rail, and various bus systems. As part of the AA, the ability of an alternative to best integrate and optimize transit usage, including services on local streets, will be determined.

Will this project consider closing any major arterial streets to automobile traffic?
Should an alternative require elimination of parking or a traffic lane, the associated impacts will be discussed with the community and other stakeholders, and ways to mitigate those impacts will be developed in collaboration with the public. The alternatives will be evaluated based on criteria established from input received from the public during early scoping, criteria from the Federal New Starts Funding guidelines, and Metro guidelines.

Regional Connector Transit Corridor Study

Frequently Asked Questions

SAFETY

If a subway mode is selected, how can I be sure that tunnels will be safe during an earthquake?
Similar to existing Red and Purple Line tunnels, engineers use the most recent seismological data along with subsurface ground conditions to design reinforcing for the tunnels and station structures. During the Northridge Earthquake, tunnels performed exactly as predicted. No damage to Metro structures was observed.

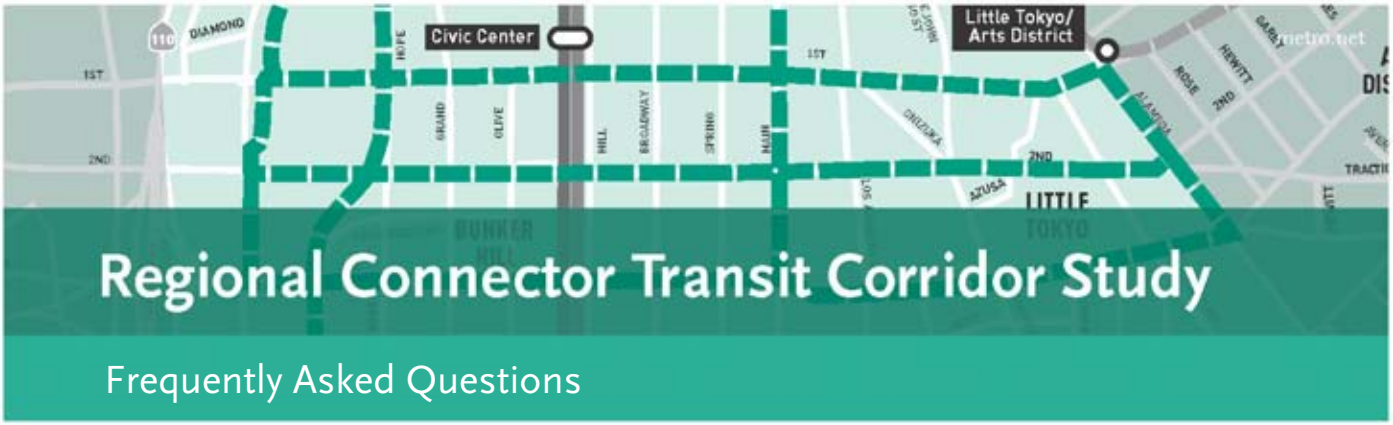
How will pedestrian safety be addressed if at-grade crossings are anticipated?
Any safety program would include education, engineering, and enforcement. Metro has implemented a Rail Safety Education Program to address auto and pedestrian safety. This program offers rail safety orientation and training, particularly to schools and other community groups within a 1.5-mile radius of a Metro fixed-route transit system.
During the project development process, various agencies that have jurisdiction over safety and security will review all designs. At-grade crossing designs must be approved for safety by the California Public Utilities Commission.

IMPACTS AND MITIGATION MEASURES

What would the impacts be for street traffic, noise, and visual appearance if the project were underground? At street level? Above ground?
General impacts and methods to mitigate them are determined during the Alternatives Analysis Study. Studies will determine the general impacts for traffic, noise, visual, historic resources and other issue areas that are normally discussed in a NEPA/ CEQA document.

ENVIRONMENTAL PROCESS

What is an Alternatives Analysis? How does this fit into the overall environmental process?
An Alternatives Analysis is a preliminary study of a wide range of alternatives. The primary objective of this analysis is to narrow the number of alternatives that could be carried forward for further study. The Alternatives Analysis for this project will evaluate several rail and bus mode options, as well as alternative alignments and segment lengths. Based on the Alternatives Analysis, the Metro Board will be asked to select a Locally Preferred Alternative (LPA) identifying the alignment, mode, and station locations. The Metro Board may then direct that the selected LPA be further evaluated in a Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) and be subject to Preliminary Engineering.



Frequently Asked Questions

PROJECT SCHEDULE

What is the schedule for the study?
Metro's Board of Directors has authorized the completion of an Alternatives Analysis. Early scoping will be completed in November 2007. An initial screening or reduction of alternatives to be analyzed will be completed in February 2008 and the Alternatives Analysis report is anticipated to be completed by June 2008.

Is this study the final step in determining what will get built and when?
No. This is the first step in the project development and funding process. At the conclusion of the AA, Metro's Board of Directors may authorize conducting environmental studies per NEPA and CEQA on reasonable alternatives and a no-action alternative.

How much will the project cost? Where will the money for construction come from?
Cost figures will be developed with each alternative for this two-mile connection. At this time, funding will be identified from Federal, State and local sources.

PUBLIC INPUT

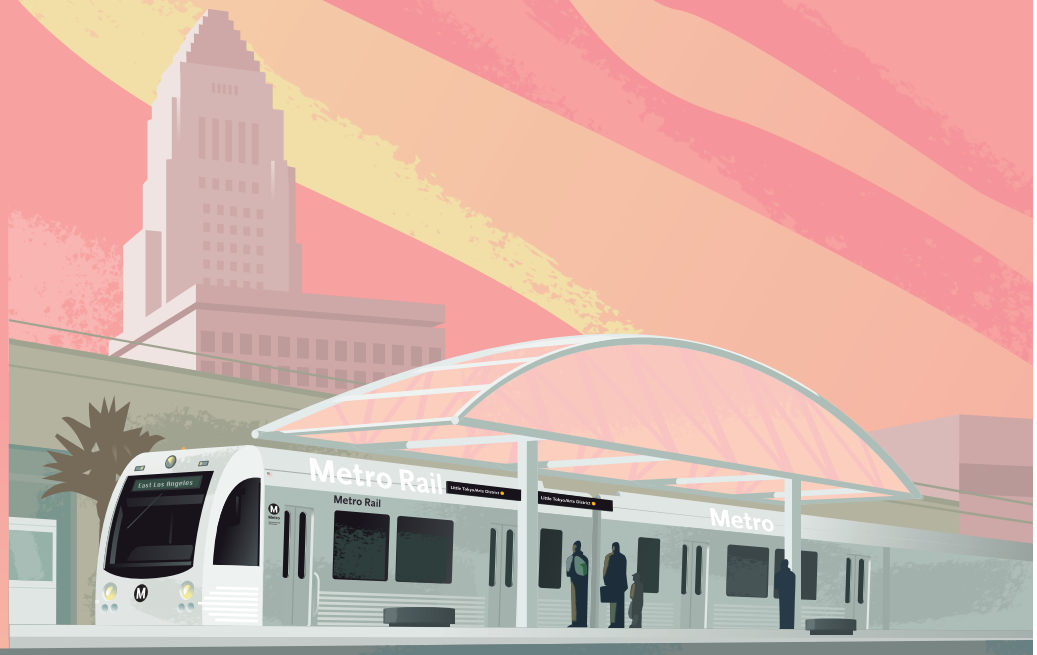
How can I be involved in the decision-making process? How can I stay informed about this study?
You can register to receive future updates on the project and meeting notices by visiting www.metro.net/regionalconnector or by calling the project information line at (213) 922-7277. The website will be updated frequently with additional meeting notifications and project related information.

Can Metro make a presentation to my neighborhood or business organization?
Yes. Metro and the project team is available to make presentations, upon request, to interested stakeholders. Please leave a message on the project phone line at (213) 922-7277, or visit the project website, and a Metro representative will contact you to arrange a meeting for your group or to invite you to one planned in your community.

metro.net

地域コネクター
トランジット回廊地帯

草案*EIS/R:* 公共の婚約とコミュニティへの参加



2009年11月
地域参加概要表

*Metro*の連絡先と参加方法

郵便リストにあなたの氏名を追加したい場合、あなたの組織に対するプレゼンテーションをお望みの場合、または地域コネクターに関しての詳細の情報をお求めの場合には、さまざまな方法で連絡を取ることが可能です。

EMAIL
regionalconnector@metro.net

書信
紙面のコメントは以下に送ってください
Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza,
Los Angeles, CA 90012-2952

電話
プロジェクトに関する質問やコメントは、電話213.922.7277を通じてメッセージで残すことも可能です。電話のメッセージは平日最低1回再生されます。

FACEBOOK (フェースブック)
フェースブックの"Metro Regional Connector"をご参照ください。

10-0857.indd ©2009 Metro

公開スコープ会議が2009年3月4月に開催され、草案環境影響調査／再検討(EIS/R)期間中にMetroが調査しなければならない問題に関する意見を受け付けました。約200人が4回の会議に参加し、Metroは126件のコメントを受け取りました。草案EIS/Rスコープ過程における公式的な意見受付の期間は2009年5月に終了しましたが、あなたのご意見やアイデアは、継続して提出することができます。

Metroは開発全般にわたり、包括的かつ透明な地域アウトリーチと一般の参加に尽力しています。カリフォルニア州環境基準法(*CEQA*)および全国環境保護法(NEPA)で義務付けられる 公開スコープ会議と公聴会に加え、Metroは主要地域グループおよびプロジェクト利害関係者と積極的に連絡を取り、集中的な会議において、移動、生活の質、経済的持続性、文化／歴史的考慮、近隣に与える影響等に関する重要な問題に取り組んでいます。

あなたのご意見をお寄せください

次の方法で参加することができます

> 年2回の地域アップデート会議にご参加ください。この会議は当方の調査結果に関する情報を提供し、通常プロジェクトの主要里程標に合わせて行われます。次回の会議は2009年11月に予定しています。あなたの名前が当局の郵便・Eメールのリストに載っているのであれば、会議の案内が自動的に送られます。会議の案内をお望みなら、regionalconnector@metro.netまでEメールで、または電話213.922.7277.でご連絡ください。

>草案EIS/R完了が予定されている2010年の夏に、Metroは環境文書を発行し、数回にわたる公式的な公聴会を開催します。これらの公聴会についても通知を受け取ることができ、Metroは会議の情報を幅広く公表する予定です。

地域からの意見を反映するための他の手順

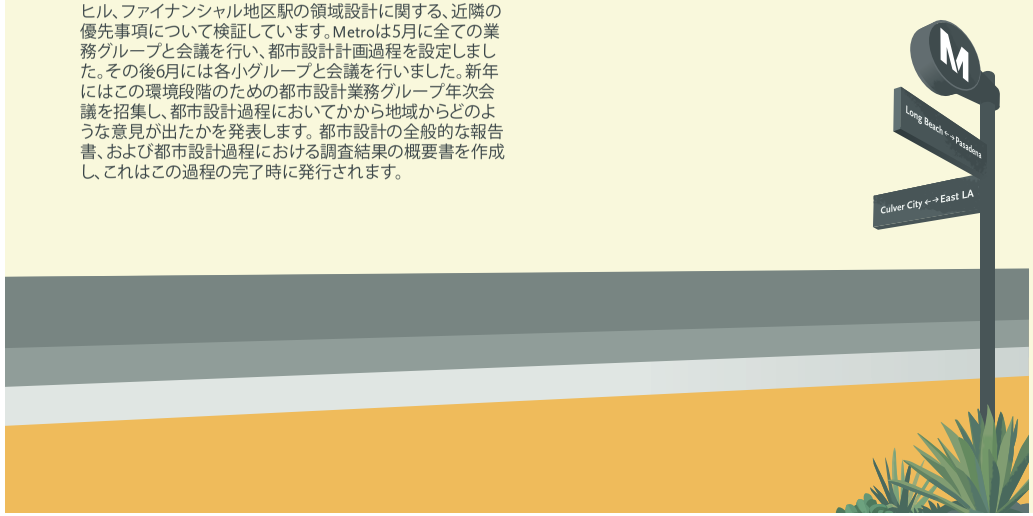
アウトリーチ過程の一環として、Metroは3つの地理的な小グループを含む、都市設計グループを召集します。これは2件の構造物の代替案に関する、提案されている駅の領域です。この小グループは、特にセコンド・ストリート、バンカー・ヒル、ファイナンシャル地区駅の領域設計に関する、近隣の優先事項について検証しています。Metroは5月に全ての業務グループと会議を行い、都市設計計画過程を設定しました。その後6月には各小グループと会議を行いました。新年にはこの環境段階のための都市設計業務グループ年次会議を招集し、都市設計過程においてかから地域からどのような意見が出たかを発表します。都市設計の全般的な報告書、および都市設計過程における調査結果の概要書を作成し、これはこの過程の完了時に発行されます。

集中的なアウトリーチ

都市設計業務グループは、Metroと地理的小グループとの相互作用をさらに活性化させ、特にリトル東京領域において、駐車場、ビジネス、工事中の近隣の影響、将来的な稼動などに関する懸念に取り組んでいます。それによって地域との建設的な対話が生じ、この地域の特定な問題に取り組むための、集中的なリトル東京業務グループが形成されました。この活動は2009年の9月に開始しました。

完了した会議および現行の会議

義務付けられている会議および集中業務グループに加え、Metroは個々のプロジェクト利害関係者に対して、定期的なプロジェクトのアップデートを提供し、質問や懸念に対して応答しています。この連絡先のリストは、あなたが計画過程に参加できるよう追加の利害関係者と協力していくにつれて、さらに長くなります。以下は現在までに完了した会議の概要です。



公式的な公開会議 公開EIS/Rスコープ会議

都市設計業務グループ

>セコンド・ストリート駅
>バンカー・ヒル駅
>ファイナンシャル地区駅

利害関係者会議／説明会

>ブリンギング・バック・ブロードウェイ
>セントラルシティー協会
>セントラルシティー東部協会
>ゴー・フォー・ブロック
>日米国立博物館
>南カリフォルニア日系商工会議所
>企画および文化保存委員会（PCPC）を含むリトル東京地域委員会
>リトル東京サービスセンター
>ロサンゼルス・コンサーバトリー
>近代美術館
>南カリフォルニア大学

当局の会議

>ロサンゼルス市
市計画部、地域再開発部、公共業務部（エンジニアリング局）、交通部

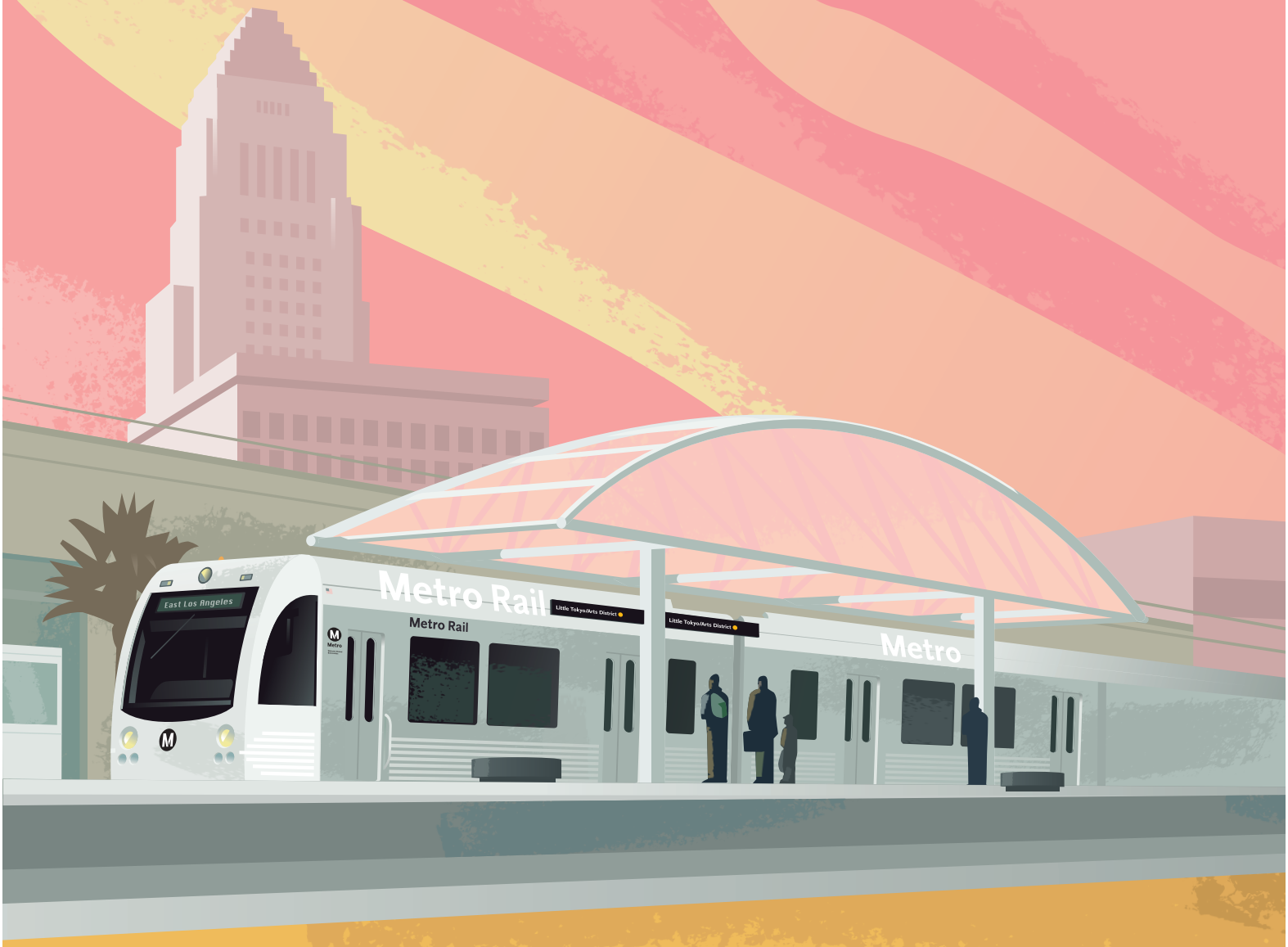
>ロサンゼルス郡
>公共業務部
>市町村、州、連邦の選抜された公式的説明会

会議の種類	会議	現状
CEQA/NEPAに要求される会議	公式的なスコープ会議 公聴会	2009年5月に完了 2010年夏
周期的なアップデート	地域会議	2009年11月に最低1回アップデート会議を開催し、追加の会議を2010年春に開催する
集中的な会議	都市設計業務グループ リトル東京業務グループ	2009年5月ー進行中 2009年9月ー進行中
現行の会議／状況説明会	利害関係者との数回にわたる会議	必要に応じて／要求に応じて

metro.net

地域コネクター
トランジット回廊地帯

環境評価の過程



2009年11月

環境検討概要書

背景

地域コネクター軽鉄道交通機関（LRT）調査には、ロサンゼルスのダウンタウンを通過する7th Street Metro Center とUnion Station を結ぶ選択肢の分析が含まれています。このプロジェクトは2007年に代替分析調査として開始されました。ロサンゼルスのダウンタウンを通過する約33件の選択肢を、重要な判断基準に基づき開発・分析した後、選択肢分析の過程を通じて4件の選択肢に絞り込みました。2009年の初頭Metroの理事会はプロジェクトチームが次の段階に進むことを承認し、草案環境影響白書／報告書(Draft EIS/R)を作成して、次の4案件に関して詳細にわたる評価を開始しました。

> 構造なし
> 交通システム管理 (TSM)
> 道路と同一水平面のLRT 構造の代替案
> 地下のLRT構造の代替案

環境過程の概要

EIS/R 過程では、政府当局、利害関係者がプロジェクトを見直し、コメントする機会を提供するためのいくつかのステップがあります。

1. 意向通知(NOI)/準備通知 (NOP)

2009年3月(完了)

METROが行うこと

> Metro はCEQA/NEPA 過程を開始する。
> NEPAおよびCEQAで義務付けられているNOIとNOPの発行。

皆様の役割 (公衆の活動)

> NOI/NOPによりプロジェクトの開始とスコープ会議の予定を発表するが、スコープ会議に参加する以外の活動はなし。
> 公衆は環境分析に関して評価・コメントする機会を与えられる。

2. 公開のスコープ調査

2009年3月－5月　(完了)

METROが行うこと

> Metroは 2009年4月/5月に公開会議を開催する。
> 公衆も会議に参加し、Eメールや紙面でコメントしてもらうようにした。Metroは次の4ケ所で会議を開催した。Financial District、Little Tokyo、South Park/USC、Pasadena。合計175人が調査会議に参加し、口頭・紙面・Eメールのコメントを受け付けた。
> Metroはこれらの会議に関して、郵便、Eメール、Metroのトランジット・サービス、新聞広告、多種のメディア、地域ごとの広告手段を通じて広範囲に公表した。

皆様の役割 (公衆の活動)

> 公衆は環境分析に関して評価・コメントする機会を与えられる。
> MetroがDEIS/Rにおいて何を調査すべきか、即ちプロジェクトの目的と要件、EIS/Rにおける分析の他の選択肢、EIS/Rにおいて考えられるインパクトとその緩衝に関し、公衆がコメントできる最初の機会。
> DEIS/Rスコープ調査過程における公式的な公衆コメント受付は終了したが、公衆が自分の意見を提出できないということではない。Metroは継続的な透明な地域アウトリーチに尽力し、プロジェクト領域における利害関係者グループへの現行のアウトリーチとともに、重要なプロジェクトの要所要所で地域のアップデート会議を行う。
> 公衆の調査期間は2009年5月11日に終了。Metroは調査報告書にコメントを含め記録する。

3. 草案EIS/Rの作成

2009年の3月－2010年夏

METROが行うこと

> プロジェクトおよび、プロジェクトの設計と影響緩和に関し、地域との現行の作業における影響を分析する。
> その結果に関する情報をMetroは継続して提供する。その間Metroは4件の代替案に関しても引き続き分析する。質問によってはすぐに答えが出ないこともあるが、それに対しては必ず追って返答する。

皆様の役割 (公衆の活動)

> 公開会議に参加する。
> 次回の公開会議は2009年11月に開催する予定。
> 各地域の利害関係者会議を参観する。一般向けのアップデートに加え、プロジェクトの進行に沿って、Metroは組織やプロジェクトの利害関係者と話し合いを継続する。
> ここで地域における影響とそれを緩衝するための方策を話し合う。

NEPA および CEQA 過程

全国環境政策法 (NEPA) およびカリフォルニア州環境基準法 (CEQA) は、あらゆる悪影響を回避・軽減・緩衝するために、政府当局が彼らの活動における環境への影響を明確にすることを要求する法です。NEPAのための環境影響白書(EIS)およびCEQAのための環境影響報告書は、政府が行う、または政府の援助を受けて行う全ての活動に要求されています。本プロジェクトはNEPA とCEQAの承認が必要なため、合同のEIS/Rを作成します。

地域コネクターの EIS/R では、大気の質、文化・歴史的資源、地域的な影響、騒音、可視的な影響、土壌、水、生物学的資源等、提案されているプロジェクトに関する環境的な影響を幅広い観点で検討します。草案 EIS/R 段階では、Metroはまた本プロジェクト関し、工事中と稼動開始以後に生じる影響の可能性を調査し、悪影響を回避、軽減、緩衝する方策を検討します。この段階ではさらに、(平面線形、駅の場所を含み) 代替におけるコストの効率性、工事の資金調達オプション等も、Metroが詳細にわたり検討していきます。

4. 草案EIS/Rに関する公衆の評価およびコメント

*2010*年夏

METROが行うこと

> 草案環境文書を配布する。

> DEIS/R作成の終了にあたり、環境文書が完成し、公衆が評価できるようにMetroが配布する。Metroは文書がいつ配布されるかを知らせる。

> Metro は公式的な公聴会を開催し、公衆が草案EIS/Rに関してコメントできるようにする。

皆様の役割 (公衆の活動)

> 公衆が草案EIS/Rを見直し、影響、緩衝、その他の関連する問題に取り組む。

> 公聴会に参加し、環境過程の一環として、ここでもプロジェクトに関する公式的なコメントを提出する。このような方法で、公衆はプロジェクト設計と悪影響への緩衝方策が充分であるかについて、取り組むことができる。

> 公聴会は暫定的に2010年夏に開催する予定。

5. 理事会は地域優先の代替選択肢(LPA)を選択する。

*2010*年晩夏／初秋

METROが行うこと

> Metroの 理事会は地域優先の代替選択肢 LPAを選択する。

> Metro のスタッフはMetroの理事会に対してDEIS/Rに関する考察を発表する。理事会はLPAの承認を行い、スタッフに対して最終EIS/Rを作成するよう指示する。LPAは最終EIS/Rへ進行する定められるプロジェクト。

> Metroの理事会は連邦交通省に対して、初期エンジニアリング、即ちプロジェクトを実行するための最終図面と設計図を開発する承認を求める。

皆様の役割 (公衆の活動)

> 公衆はMetro理事会に、LPA提案におけるコメントを提出する。

> Metro理事会の会議に参加する。ここではMetro理事会に対して、実行に移すプロジェクトに関して意見を述べることができる。この時にあなたの望むプロジェクトについて発表することができる。

6. 最終EIS/Rの作成

*2010/11*年夏

METROが行うこと

> Metro は 最終EIS/Rに関するEIS/Rのコメントに対して返答する。

> Metro はを配布し、公衆に評価してもらう。

> この過程はNEPA/CEQAを遵守するもの。

皆様の役割 (公衆の活動)

> 公衆の活動なし。

> 最終EIS/Rの時点では、草案EIS/R期間の公衆のコメントに対して応答済み。決定記録に対する承認の前に、公衆が最終EIS/Rを見直す30日の期間がある。

7. 理事会の決定/プロジェクトの承認

*2011*年夏

METROが行うこと

> Metroの理事会は地域コネクタープロジェクトの工事。

> Metroのスタッフは理事会に対して、実行することを提案する地域コネクタープロジェクトに関して、最終的な発表をする。理事会がスタッフの提案を承認した場合に限り、プロジェクトを着工する。

皆様の役割 (公衆の活動)

> 公衆の提案に関するコメント理事会に提出する。

> 公衆はこの機会に、理事会が決定する前の最終コメントを提出する。

連絡先

調査に関して質問したい、詳細の情報がほしい、当局のメールリストに加えてほしい、等をお望みですか？あなたの会社・団体に対する説明会もリクエストすることができます。以下の方法であなたの意見や質問を送ってください。

EMAIL
regionalconnector@metro.net

書信
紙面のコメントは郵便で、
Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza,
Los Angeles, CA 90012-2952
に宛てて送ってください。

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フェースブック (FACEBOOK)
フェースブックの“Metro Regional Connector”をご覧ください。

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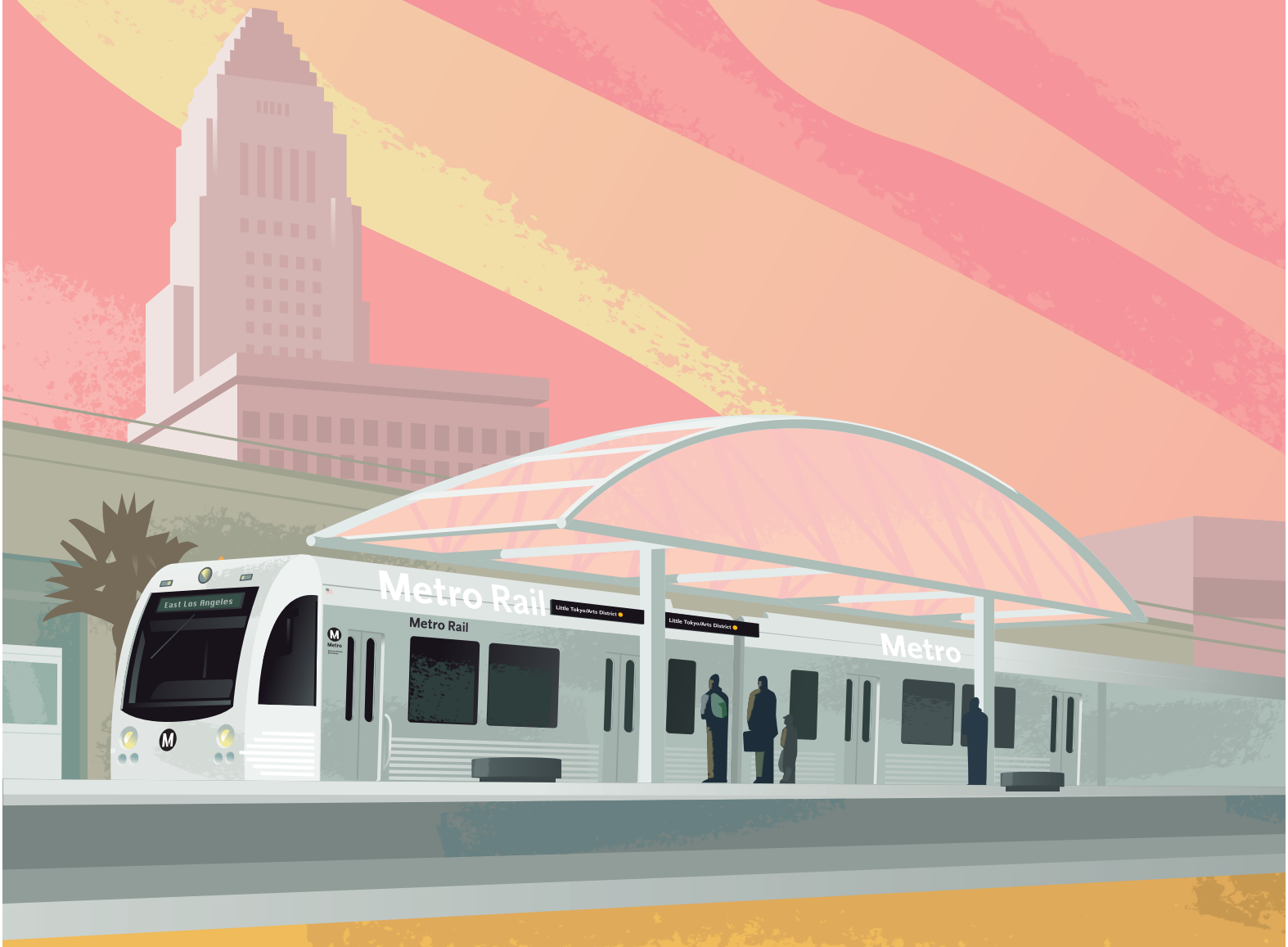
metro.net

地域コネクター
トランジット回廊地帯

環境評価の過程



2009年11月

環境検討概要書

背景

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2009年3月(完了)

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2009年3月－5月　(完了)

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> 公衆は環境分析に関して評価・コメントする機会を与えられる。
> MetroがDEIS/Rにおいて何を調査すべきか、即ちプロジェクトの目的と要件、EIS/Rにおける分析の他の選択肢、EIS/Rにおいて考えられるインパクトとその緩衝に関し、公衆がコメントできる最初の機会。
> DEIS/Rスコープ調査過程における公式的な公衆コメント受付は終了したが、公衆が自分の意見を提出できないということではない。Metroは継続的な透明な地域アウトリーチに尽力し、プロジェクト領域における利害関係者グループへの現行のアウトリーチとともに、重要なプロジェクトの要所要所で地域のアップデート会議を行う。
> 公衆の調査期間は2009年5月11日に終了。Metroは調査報告書にコメントを含め記録する。

3. 草案EIS/Rの作成

2009年の3月－2010年夏

METROが行うこと

> プロジェクトおよび、プロジェクトの設計と影響緩和に関し、地域との現行の作業における影響を分析する。
> その結果に関する情報をMetroは継続して提供する。その間Metroは4件の代替案に関しても引き続き分析する。質問によってはすぐに答えが出ないこともあるが、それに対しては必ず追って返答する。

皆様の役割 (公衆の活動)

> 公開会議に参加する。
> 次回の公開会議は2009年11月に開催する予定。
> 各地域の利害関係者会議を参観する。一般向けのアップデートに加え、プロジェクトの進行に沿って、Metroは組織やプロジェクトの利害関係者と話し合いを継続する。
> ここで地域における影響とそれを緩衝するための方策を話し合う。

NEPA および CEQA 過程

全国環境政策法 (NEPA) およびカリフォルニア州環境基準法 (CEQA) は、あらゆる悪影響を回避・軽減・緩衝するために、政府当局が彼らの活動における環境への影響を明確にすることを要求する法です。NEPAのための環境影響白書(EIS)およびCEQAのための環境影響報告書は、政府が行う、または政府の援助を受けて行う全ての活動に要求されています。本プロジェクトはNEPA とCEQAの承認が必要なため、合同のEIS/Rを作成します。

地域コネクターの EIS/R では、大気の質、文化・歴史的資源、地域的な影響、騒音、可視的な影響、土壌、水、生物学的資源等、提案されているプロジェクトに関する環境的な影響を幅広い観点で検討します。草案 EIS/R 段階では、Metroはまた本プロジェクト関し、工事中と稼動開始以後に生じる影響の可能性を調査し、悪影響を回避、軽減、緩衝する方策を検討します。この段階ではさらに、(平面線形、駅の場所を含み) 代替におけるコストの効率性、工事の資金調達オプション等も、Metroが詳細にわたり検討していきます。

4. 草案EIS/Rに関する公衆の評価およびコメント

*2010*年夏

METROが行うこと

> 草案環境文書を配布する。

> DEIS/R作成の終了にあたり、環境文書が完成し、公衆が評価できるようにMetroが配布する。Metroは文書がいつ配布されるかを知らせる。

> Metro は公式的な公聴会を開催し、公衆が草案EIS/Rに関してコメントできるようにする。

皆様の役割 (公衆の活動)

> 公衆が草案EIS/Rを見直し、影響、緩衝、その他の関連する問題に取り組む。

> 公聴会に参加し、環境過程の一環として、ここでもプロジェクトに関する公式的なコメントを提出する。このような方法で、公衆はプロジェクト設計と悪影響への緩衝方策が充分であるかについて、取り組むことができる。

> 公聴会は暫定的に2010年夏に開催する予定。

5. 理事会は地域優先の代替選択肢(LPA)を選択する。

*2010*年晩夏／初秋

METROが行うこと

> Metroの 理事会は地域優先の代替選択肢 LPAを選択する。

> Metro のスタッフはMetroの理事会に対してDEIS/Rに関する考察を発表する。理事会はLPAの承認を行い、スタッフに対して最終EIS/Rを作成するよう指示する。LPAは最終EIS/Rへ進行する定められるプロジェクト。

> Metroの理事会は連邦交通省に対して、初期エンジニアリング、即ちプロジェクトを実行するための最終図面と設計図を開発する承認を求める。

皆様の役割 (公衆の活動)

> 公衆はMetro理事会に、LPA提案におけるコメントを提出する。

> Metro理事会の会議に参加する。ここではMetro理事会に対して、実行に移すプロジェクトに関して意見を述べることができる。この時にあなたの望むプロジェクトについて発表することができる。

6. 最終EIS/Rの作成

*2010/11*年夏

METROが行うこと

> Metro は 最終EIS/Rに関するEIS/Rのコメントに対して返答する。

> Metro はを配布し、公衆に評価してもらう。

> この過程はNEPA/CEQAを遵守するもの。

皆様の役割 (公衆の活動)

> 公衆の活動なし。

> 最終EIS/Rの時点では、草案EIS/R期間の公衆のコメントに対して応答済み。決定記録に対する承認の前に、公衆が最終EIS/Rを見直す30日の期間がある。

7. 理事会の決定/プロジェクトの承認

*2011*年夏

METROが行うこと

> Metroの理事会は地域コネクタープロジェクトの工事。

> Metroのスタッフは理事会に対して、実行することを提案する地域コネクタープロジェクトに関して、最終的な発表をする。理事会がスタッフの提案を承認した場合に限り、プロジェクトを着工する。

皆様の役割 (公衆の活動)

> 公衆の提案に関するコメント理事会に提出する。

> 公衆はこの機会に、理事会が決定する前の最終コメントを提出する。

連絡先

調査に関して質問したい、詳細の情報がほしい、当局のメールリストに加えてほしい、等をお望みですか？あなたの会社・団体に対する説明会もリクエストすることができます。以下の方法であなたの意見や質問を送ってください。

EMAIL
regionalconnector@metro.net

書信
紙面のコメントは郵便で、
Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza,
Los Angeles, CA 90012-2952
に宛てて送ってください。

電話
本プロジェクトに関する質問やコメントを電話のメッセージに残すこともできます。電話番号は 213.922.7277。電話のメッセージは平日に最低1回は再生されます。

フェースブック (FACEBOOK)
フェースブックの“Metro Regional Connector”をご覧ください。

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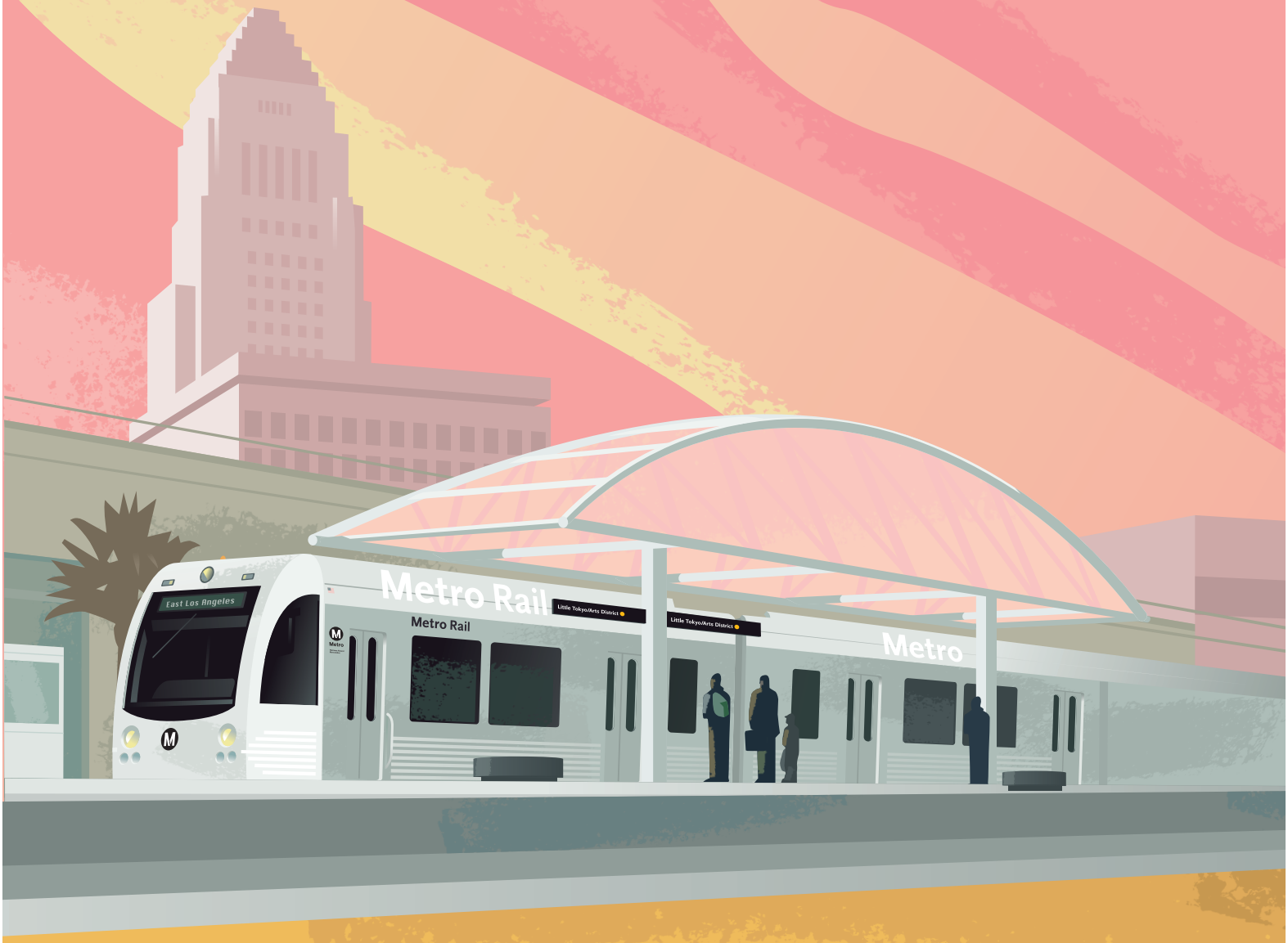
Corredor de Transporte Conector Regional

Proceso de Revisión Ambiental



NOVIEMBRE 2009

Hoja Informativa

Antecedentes

El estudio del Conector Regional de transporte de tren ligero (LRT) incluye un análisis de alternativas para conectar la Estación 7th Street/Metro Center y Union Station a través del Centro de Los Angeles. El proyecto fue iniciado en el 2007 con un Estudio de Análisis de Alternativas. Aproximadamente 33 alternativas para pasar por el Centro de Los Angeles fueron desarrolladas y analizadas basadas en un número de criterios importantes, luego fueron reducidas por el proceso de Análisis de Alternativas a cuatro alternativas. A comienzos del 2009, la Junta Directiva de Metro autorizó al equipo del proyecto a moverse hacia la siguiente fase del proyecto y empezar a trabajar en el Borrador de la Declaración/Reporte del Impacto Ambiental (Borrador EIS/R) para examinar y completar una revisión cabal de las siguientes cuatro alternativas:

> No Construcción

> Administración de Sistemas de Transporte (TSM)

> Alternativa de Construcción de LRT, énfasis a nivel

> Alternativa de Construcción de LRT, énfasis subterráneo

Resumen del Proceso Ambiental

Hay varios pasos en el proceso del EIS/R que proveen a las agencias, personas interesadas en el proyecto y público en general la oportunidad para revisar el proyecto y proporcionar sus comentarios.

1. Notificación de intención (NOI) y notificación de preparación (NOP)

Marzo del 2009 (Completo)

LO QUE METRO HACE

> Metro inicia el proceso de CEQA/NEPA.

> Publicación del NOI/NOP para cumplir con los requisitos de NEPA y CEQA.

SU PAPEL (ACCION PUBLICA)

> El NOI/NOP anuncia el principio del proyecto y las próximas reuniones de alcance, y no requiere ninguna accion publica aparte de la participación en el alcance.

2. Alcance público

Marzo - mayo del 2009 (Completo)

LO QUE METRO HACE

> Metro llevó a cabo reuniones de alcance público en abril/mayo de 2009.

> El público también fue invitado a mandar comentarios por correo electrónico o correspondencia. Metro realizó las reuniones en cuatro lugares: Financial District, Little Tokyo, South Park/USC y Pasadena. Un total de 175 personas asistió a las reuniones de alcance, y se recibieron 126 comentarios verbales, escritos y enviados por correo electrónico.

> Metro hizo públicas estas reuniones por medio de correspondencia y correo electrónico, en el servicio de tránsito de Metro, por publicidades de periódico, diversos medios de comunicación y anuncios en los vecindarios.

SU PAPEL (ACCION PUBLICA)

> Se le proporciona al público una oportunidad para revisar y hacer comentarios sobre el análisis ambiental.

> La primera oportunidad del público para proporcionar comentarios acerca de lo que Metro debería estudiar en el Borrador EIS/R, por ejemplo: el propósito y necesidad del proyecto, alternativas para análisis en el EIS/R y los posibles impactos y mitigaciones para análisis en el EIS/R.

> El período oficial para comentarios públicos ha terminado, pero no significa que ya no pueda proveer su aporte. Metro está comprometido a un proceso continuo y transparente de alcance comunitario que incluye reuniones de actualización con la comunidad en hitos importantes del proyecto y alcance continuo con grupos clave interesados en el área del proyecto.

> El periodo de alcance público cerró el 11 de mayo de 2009. Metro registrará e incluirá todos los comentarios en el reporte del alcance.

3. Preparación del Borrador EIS/R

Marzo de 2009 - verano de 2010

LO QUE METRO HACE

> Analizar los impactos del proyecto y el trabajo continuo con la comunidad en el diseño del proyecto y las mitigaciones.

> Continuar proveyendo información actualizada a medida que los resultados estén disponibles. Sin embargo, Metro todavía está analizando las cuatro alternativas. Si no podemos contestar sus preguntas inmediatamente, tenemos el compromiso de hacer el seguimiento cuando tengamos las respuestas.

SU PAPEL (ACCION PUBLICA)

> Asista a reuniones públicas.

> La siguiente ronda de reuniones públicas está programada para noviembre del 2009

> Esté atento a reuniones para las personas interesadas en su comunidad. Además de las actualizaciones públicas, Metro continuará reuniéndose con organizaciones y personas interesadas en el proyecto a medida que el proyecto avanza.

> Ahora es el momento de hablar sobre lo que usted piensa que son los impactos y cómo pueden ser mitigados.

NEPA and CEQA Process

La ley de política ambiental nacional (NEPA) y la ley de calidad ambiental de California (CEQA) son leyes que requieren que agencias gubernamentales identifiquen los impactos signifcantes de sus acciones hacía el medioambiente y eviten, reduzcan o mitiguen cualquier efecto desfavorable. Una Declaración de Impacto Ambiental (EIS) para NEPA y un Reporte de Impacto Ambiental (EIR) para CEQA son requeridos para cualquier acción que sea tomada por el gobierno o que recibe financiación de éste. Este proyecto requiere aprobaciones de NEPA y CEQA, por lo cual se preparará un EIS/R en conjunto.

El EIS/R para el Conector Regional considerará los impactos medioambientales del proyecto propuesto en una gran variedad de temas como calidad de aire, recursos culturales e históricos, efectos a la comunidad, ruido, impactos visuales, tierra, agua, recursos biológicos y otros. Durante la fase del Borrador EIS/R, Metro también estudiará los efectos potenciales del proyecto durante su construcción y una vez que esté operando, y evaluará medidas para evitar, minimizar y mitigar efectos desfavorables. Durante esta fase, Metro mejorará las alternativas (incluyendo alineaciones y lugares para las estaciones), incluyendo la consideración de la eficacia de costos de las alternativas y opciones de financiamiento para la construcción.

4. Revisión pública y comentario sobre el Borrador EIS/R

Verano de 2010

LO QUE METRO HACE

> Circular el borrador del documento ambiental.

> Cuando se concluya la preparación del Borrador EIS/R, el documento ambiental estará disponible y será circulado por Metro para revisión. Metro informará al público cuando el documento esté disponible.

> Metro llevará a cabo audiencias públicas formales a fin de que el público puede hacer comentarios sobre el Borrador EIS/R.

SU PAPEL (ACCION PUBLICA)

> El público revisa el Borrador EIS/R, ocupándose de impactos, mitigaciones u otros asuntos pertinentes.

> Asista a audiencias públicas para otra vez proveer comentarios formales acerca del proyecto como parte del proceso ambiental. De este modo, el público puede hablar sobre el diseño del proyecto y de medidas de mitigación adecuadas.

> Las audiencias públicas están tentativamente programadas para el verano del 2010.

5. La Junta Directiva selecciona la alternativa preferida localmente (LPA)

Final de verano/Comienzo del otoño 2010

LO QUE METRO HACE

> La Junta Directiva de Metro selecciona la LPA.

> El personal de Metro presentará las conclusiones del Borrador EIS/R a la Junta Directiva de Metro. Se pedirá a la Junta Directiva que adopte la LPA para su aprobación y que dirija al personal para completar el EIS/R Final. La LPA es el proyecto identificado para avanzar al EIS/R Final.

> Luego, la Junta Directiva buscará la aprobación de la agencia de transporte federal (FTA) para empezar la ingeniería preliminar, por ejemplo: el desarrollo de planos y planes finales para que el proyecto sea implementado.

SU PAPEL (ACCION PUBLICA)

> Comentario del público a la Junta Directiva sobre las recomendaciones de la LPA.

> Asista a la reunión de la Junta Directiva. En este momento tendrá una oportunidad para hablarle a la Junta Directiva acerca del proyecto que avanzará a implementación. Aquí es cuando puede hablar con la Junta Directiva acerca del proyecto que usted quiere ver.

6. Preparación del EIS/R Final

Verano de 2010/11

LO QUE METRO HACE

> Metro responderá a los comentarios sobre el Borrador EIS/R en el EIS/R Final.

> Metro circula el EIS/R Final para revisión pública.

> Este proceso está en conformidad con NEPA/CEQA.

SU PAPEL (ACCION PUBLICA)

> Ninguna accion publica

> El EIS/R Final habrá respondido a los comentarios públicos durante el Borrador EIS/R. Habrá un período de 30 días para la revisión pública del EIS/R Final antes de la aprobación del registro de decisión.

7. Aprobación de la Junta Directiva de la decisión/ proyecto

Verano de 2011

LO QUE METRO HACE

> La Junta Directiva de Metro decidirá si seguirá hacia delante con la construcción del proyecto del Conector Regional.

> El personal de Metro hará su presentación final a la Junta Directiva acerca del proyecto del Conector Regional recomendado implementación. Si la Junta Directiva aprueba la recomendación del personal, sólo entonces puede ser construido el proyecto.

SU PAPEL (ACCION PUBLICA)

> Comentarios públicos hechos a la Junta Directiva acerca de la recomendación.

> El público tendrá esta oportunidad para proporcionar sus comentarios finales a la Junta Directiva de Metro antes de que una decisión sea tomada.

Cómo contactarnos y permanecer involucrado

Si quiere ser agregado a nuestra lista de correo, programar una presentación para su organización o aprender más acerca del Conector Regional, hay muchas maneras de contactarnos:

CORREO ELECTRONICO
regionalconnector@metro.net

CORRESPONDENCIA
Mande sus comentarios por escrito a:
Dolores Roybal Saltarelli
Administradora del Proyecto
Metro
One Gateway Plaza
Los Angeles, CA 90012-2952

TELEFONO
También puede dejar sus preguntas o comentarios en nuestro teléfono del proyecto llamando al 213.922.7277. Los mensajes telefónicos son escuchados al menos una vez cada día hábil.

FACEBOOK
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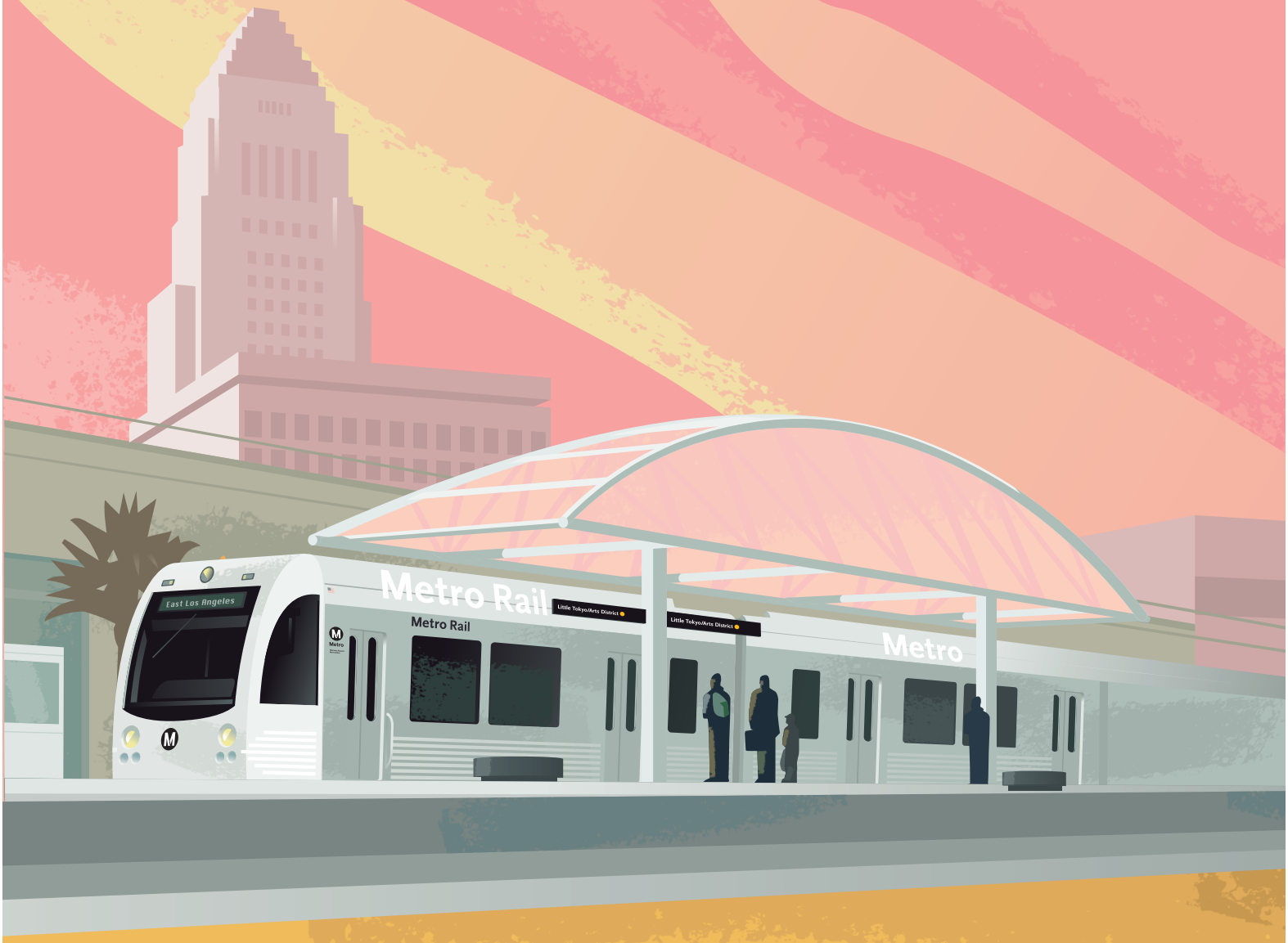
Corredor de Transporte Conector Regional

Proceso de Revisión Ambiental



NOVIEMBRE 2009

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Marzo - mayo del 2009 (Completo)

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3. Preparación del Borrador EIS/R

Marzo de 2009 - verano de 2010

LO QUE METRO HACE

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4. Revisión pública y comentario sobre el Borrador EIS/R

Verano de 2010

LO QUE METRO HACE

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> Metro llevará a cabo audiencias públicas formales a fin de que el público puede hacer comentarios sobre el Borrador EIS/R.

SU PAPEL (ACCION PUBLICA)

> El público revisa el Borrador EIS/R, ocupándose de impactos, mitigaciones u otros asuntos pertinentes.

> Asista a audiencias públicas para otra vez proveer comentarios formales acerca del proyecto como parte del proceso ambiental. De este modo, el público puede hablar sobre el diseño del proyecto y de medidas de mitigación adecuadas.

> Las audiencias públicas están tentativamente programadas para el verano del 2010.

5. La Junta Directiva selecciona la alternativa preferida localmente (LPA)

Final de verano/Comienzo del otoño 2010

LO QUE METRO HACE

> La Junta Directiva de Metro selecciona la LPA.

> El personal de Metro presentará las conclusiones del Borrador EIS/R a la Junta Directiva de Metro. Se pedirá a la Junta Directiva que adopte la LPA para su aprobación y que dirija al personal para completar el EIS/R Final. La LPA es el proyecto identificado para avanzar al EIS/R Final.

> Luego, la Junta Directiva buscará la aprobación de la agencia de transporte federal (FTA) para empezar la ingeniería preliminar, por ejemplo: el desarrollo de planos y planes finales para que el proyecto sea implementado.

SU PAPEL (ACCION PUBLICA)

> Comentario del público a la Junta Directiva sobre las recomendaciones de la LPA.

> Asista a la reunión de la Junta Directiva. En este momento tendrá una oportunidad para hablarle a la Junta Directiva acerca del proyecto que avanzará a implementación. Aquí es cuando puede hablar con la Junta Directiva acerca del proyecto que usted quiere ver.

6. Preparación del EIS/R Final

Verano de 2010/11

LO QUE METRO HACE

> Metro responderá a los comentarios sobre el Borrador EIS/R en el EIS/R Final.

> Metro circula el EIS/R Final para revisión pública.

> Este proceso está en conformidad con NEPA/CEQA.

SU PAPEL (ACCION PUBLICA)

> Ninguna accion publica

> El EIS/R Final habrá respondido a los comentarios públicos durante el Borrador EIS/R. Habrá un período de 30 días para la revisión pública del EIS/R Final antes de la aprobación del registro de decisión.

7. Aprobación de la Junta Directiva de la decisión/ proyecto

Verano de 2011

LO QUE METRO HACE

> La Junta Directiva de Metro decidirá si seguirá hacia delante con la construcción del proyecto del Conector Regional.

> El personal de Metro hará su presentación final a la Junta Directiva acerca del proyecto del Conector Regional recomendado implementación. Si la Junta Directiva aprueba la recomendación del personal, sólo entonces puede ser construido el proyecto.

SU PAPEL (ACCION PUBLICA)

> Comentarios públicos hechos a la Junta Directiva acerca de la recomendación.

> El público tendrá esta oportunidad para proporcionar sus comentarios finales a la Junta Directiva de Metro antes de que una decisión sea tomada.

Cómo contactarnos y permanecer involucrado

Si quiere ser agregado a nuestra lista de correo, programar una presentación para su organización o aprender más acerca del Conector Regional, hay muchas maneras de contactarnos:

CORREO ELECTRONICO
regionalconnector@metro.net

CORRESPONDENCIA
Mande sus comentarios por escrito a:
Dolores Roybal Saltarelli
Administradora del Proyecto
Metro
One Gateway Plaza
Los Angeles, CA 90012-2952

TELEFONO
También puede dejar sus preguntas o comentarios en nuestro teléfono del proyecto llamando al 213.922.7277. Los mensajes telefónicos son escuchados al menos una vez cada día hábil.

FACEBOOK
Asegúrese de visitarnos en Facebook en "Metro Regional Connector."

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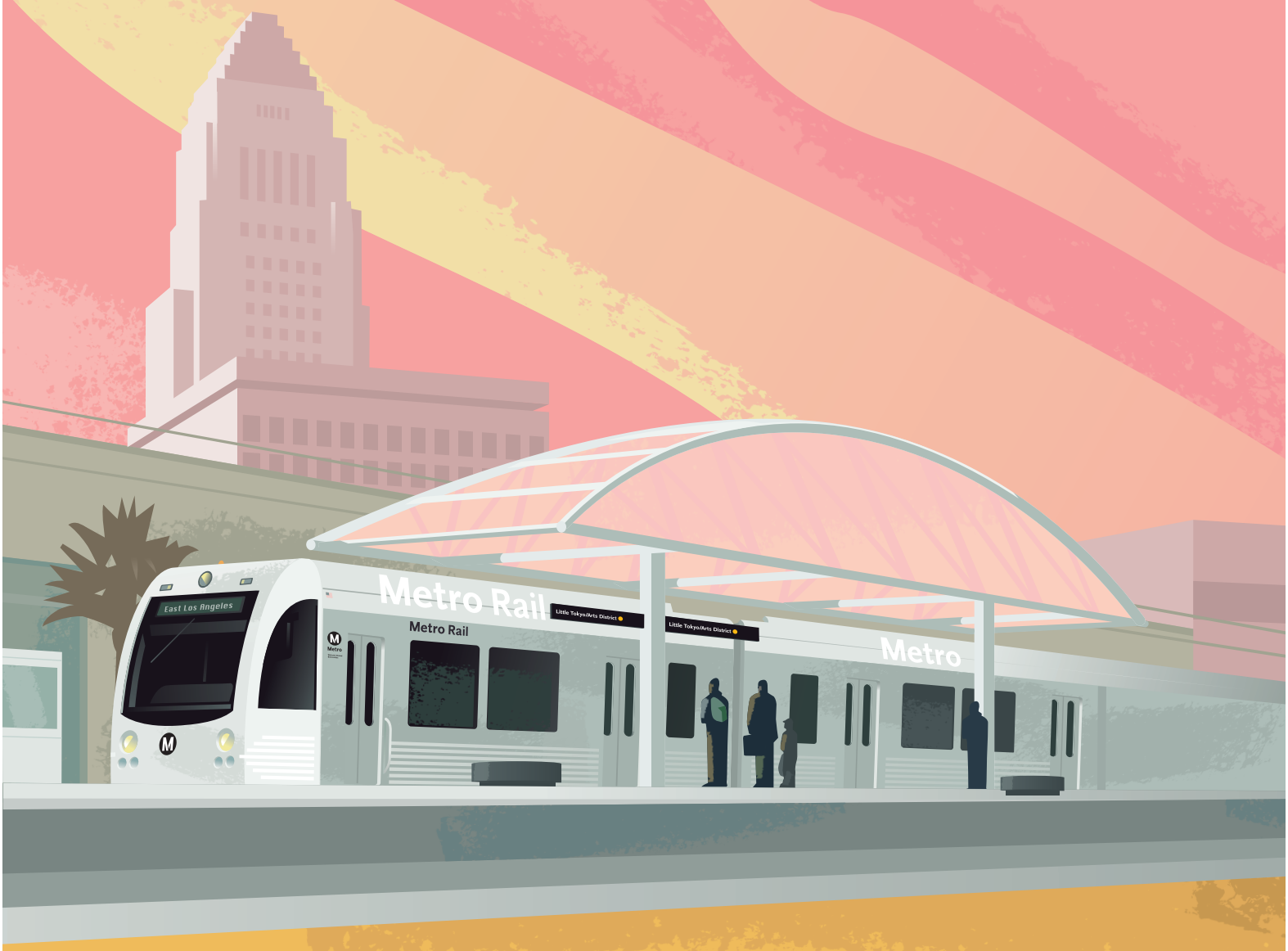
Regional Connector Transit Corridor Study

Environmental Review Process



NOVEMBER 2009

Environmental Review Fact Sheet

Background

The Regional Connector Light Rail Transit (LRT) study includes an analysis of alternatives to connect the 7th Street Metro Center and Union Station through Downtown Los Angeles. The project was initiated in 2007 with an Alternatives Analysis Study. Approximately 33 alternatives traversing Downtown Los Angeles were developed and analyzed based on a number of important criteria, then narrowed by the Alternative Analysis process to four alternatives. In early 2009, the Metro Board of Directors authorized the project team to move into the next phase of the project and begin work on a Draft Environmental Impact Statement/Report (Draft EIS/EIR) to examine and complete a thorough review of the following four alternatives:

> No Build

> Traffic Systems Management (TSM)

> LRT Build Alternative, At-Grade Emphasis

> LRT Build Alternative, Underground Emphasis

Summary of Environmental Process

There are several steps in the EIS/EIR process that provide agencies, project stakeholders and the general public the opportunity to review the project and provide comments.

1. Notice of Intent (NOI)/ Notice of Preparation (NOP)

March 2009 (Complete)

WHAT METRO DOES

> Metro initiates the CEPA/NEPA process.

> Publication of NOI and NOP to meet the requirements of NEPA and CEQA.

YOUR ROLE (PUBLIC ACTION)

> The NOI/NOP announces the start of the project and upcoming scoping meetings, and does not require public action other than participation in scoping.

> Public is provided an opportunity to review and comment on Scope of the Environmental Analysis.

2. Public Scoping

March - May 2009 (Complete)

WHAT METRO DOES

> Metro conducted public scoping meetings in April/May 2009.

> The public was also invited to comment by e-mail or letter. Metro held meetings at four locations: Financial District, Little Tokyo, South Park/USC and Pasadena. A total of 175 people attended the scoping meetings, with 126 verbal, written and email comments received.

> Metro publicized these meetings widely, including mail and email, on Metro transit service, via newspaper advertisements, diverse media, and neighborhood canvassing.

YOUR ROLE (PUBLIC ACTION)

> Public is provided an opportunity to review and comment on Scope of the Environmental Analysis.

> Public's first opportunity to provide comment about what Metro should study in the DEIS/EIR, e.g. project purpose and need, alternatives for analysis in the EIS/EIR and potential impacts and mitigations for analysis in the EIS/EIR.

> Although the official public comment period for the DEIS/R scoping process has closed, this does not mean that you can no longer provide your input. Metro is committed to an ongoing, transparent community outreach process which includes community update meetings at important project milestones, as well as ongoing outreach to key stakeholder groups in the project area.

> Public Scoping period closed on May 11, 2009. Metro will record and include all comments in the Scoping Report.

3. Prepare Draft EIS/EIR

March 2009 - Summer 2010

WHAT METRO DOES

> Analyze project impacts and ongoing work with the community on project design and mitigations.

> Metro will continue to provide updated information as results become available. However, Metro is still analyzing the four alternatives. If we are not able to answer your questions immediately, we are committed to following up when we have an answer.

YOUR ROLE (PUBLIC ACTION)

> Attend public meetings.

> Next round of public meetings scheduled for November 2009.

> Be on the lookout for stakeholder meetings in your community. In addition to the public updates, Metro will continue to meet with organizations and project stakeholders as the project moves forward.

> Now is the time to talk about what you think the impacts are and how they can be mitigated.

NEPA and CEQA Process

The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) are laws that require government agencies to identify the significant environmental impact of their actions and to avoid, minimize or mitigate any adverse effects. An Environmental Impact Statement (EIS) for NEPA and an Environmental Impact Report (EIR) for CEQA are required for any action that is taken by the government or receives government funding. This project requires approvals from both NEPA and CEQA, and therefore a joint EIS/EIR will be prepared.

The EIS/EIR for the Regional Connector will consider the proposed project's environmental impacts on a wide range of topics such as air quality, cultural and historic resources, community effects, noise, visual impacts, soil, water, biological resources and others. During the Draft EIS/EIR phase, Metro will also study the potential effects of the project both during construction and once it is operating, and will evaluate measures to avoid, minimize and mitigate adverse impacts. During this phase, Metro will further refine the alternatives (including alignments and station locations), including consideration of the cost effectiveness of the alternatives and funding options for construction.

4. Public Review & Comment On Draft EIS/EIR

Summer 2010

WHAT METRO DOES

> Circulate Draft Environmental Document.

> At the conclusion of the DEIS/EIR preparation, the environmental document is available and will be circulated by Metro for public review. Metro will inform the public when the document is available.

> Metro will host formal public hearings so that the public may comment on the Draft EIS/EIR.

YOUR ROLE (PUBLIC ACTION)

> Public reviews Draft EIS/EIR, addressing impacts, mitigations or other relevant issues.

> Attend public hearings to again provide formal comment about the project as part of the environmental process. In this way, the public can address project design and adequacy of mitigation measures.

> Public hearings tentatively scheduled in summer 2010.

5. Board Selects Locally Preferred Alternative (LPA)

Late Summer/Early Fall 2010

WHAT METRO DOES

> Metro Board selects Locally Preferred Alternative.

> Metro staff will present findings of DEIS/EIR to Metro Board of Directors. The Board will be asked to adopt LPA for approval and direct staff to complete the Final EIS/EIR. The LPA is the project identified to move forward into the Final EIS/EIR.

> Metro Board then will seek approval from Federal Transportation Agency (FTA) to begin Preliminary Engineering i.e., development of final drawings and plans for the project to be implemented.

YOUR ROLE (PUBLIC ACTION)

> Public comment to Metro Board on the LPA recommendations.

> Attend the Metro Board of Directors meeting. At this time, you will have an opportunity to speak to the Metro Board about the project that will move forward to implementation. This is when you can speak to the Board about the project you want to see.

6. Prepare Final EIS/EIR

Summer 2010/11

WHAT METRO DOES

> Metro will respond to comments on the Draft EIS/EIR in the Final EIS/EIR.

> Metro circulates the FEIS/EIR for public review.

> This process is in compliance with NEPA/CEQA.

YOUR ROLE (PUBLIC ACTION)

> No public action.

> The Final EIS/R will have responded to public comments during the Draft EIS/EIR. There will be a 30 day period for public review of the Final EIS/EIR prior to approval of the Record of Decision.

7. Board Decision/Project

Approval Summer 2011

WHAT METRO DOES

> Metro Board will decide whether to move forward with construction of Regional Connector project.

> Metro staff will make its final presentation to the Board about the Regional Connector project recommended for implementation. If the Board approves the staff recommendation, it is only then that a project may be constructed.

YOUR ROLE (PUBLIC ACTION)

> Public Comments made to Board about recommendation.

> The public will have this opportunity to provide final comments to the Metro Board before a decision is made.

Contact Us

Do you have a question about the study, want more information or want to be added to our mailing list? You can also contact us about scheduling a presentation for your organization. Here's how you can send us your views or questions:

EMAIL
regionalconnector@metro.net

LETTER
Written comments can be mailed to
Ms. Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza,
Los Angeles, CA 90012-2952

PHONE
You can also leave your questions or comments on our project phone line by calling **213.922.7277**. Phone messages are retrieved at least once every business day.

FACEBOOK
Be sure to visit us on Facebook at "Metro Regional Connector."

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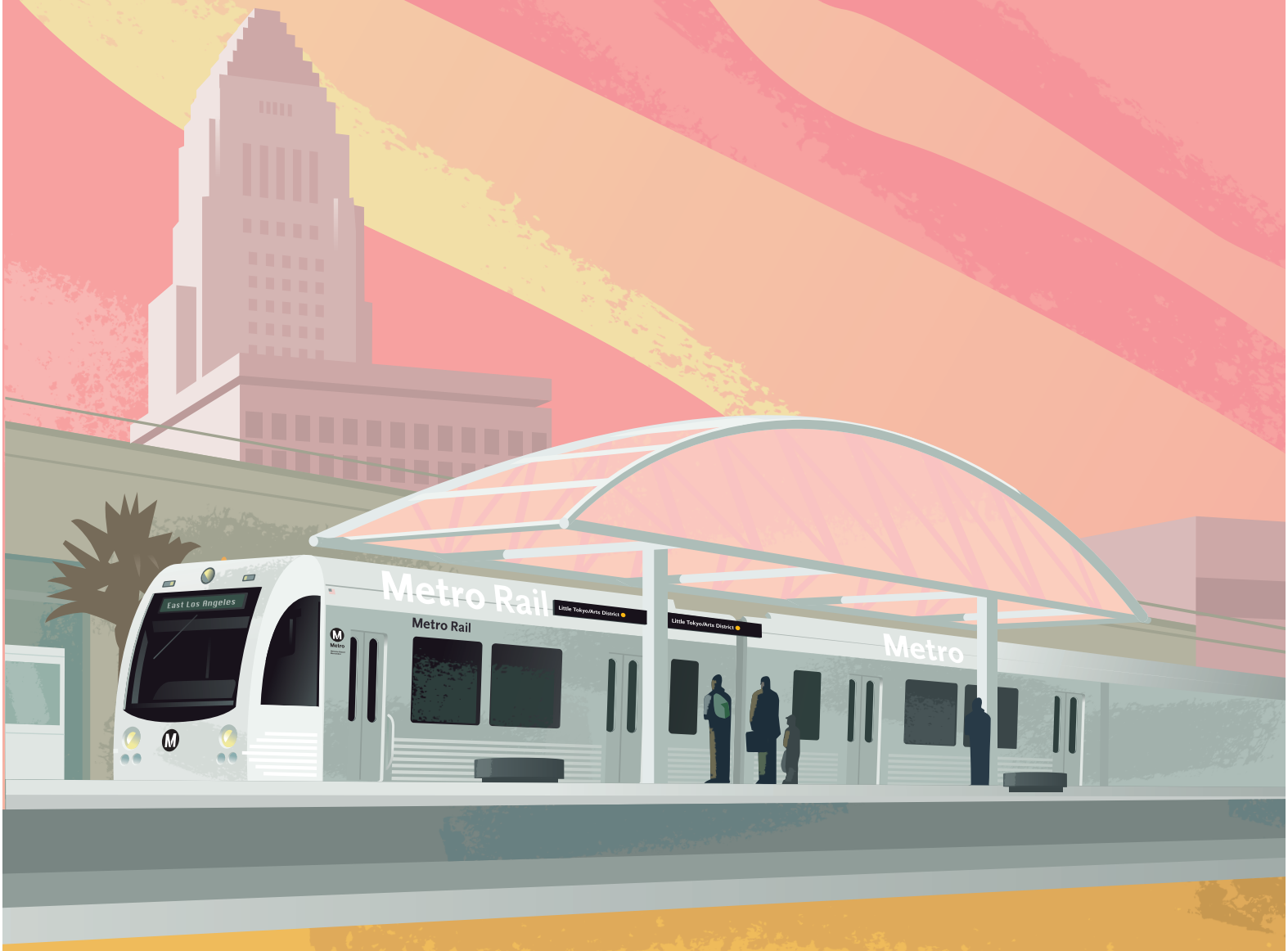
Regional Connector Transit Corridor Study

Draft EIS/R: Public Engagement and Community Participation



NOVEMBER 2009

Community Participation Fact Sheet

Public scoping meetings were held in March/April 2009 *to receive the community's input on issues Metro should study during the Draft Environmental Impact Study/ Review (EIS/R). Approximately 200 people attended four meetings and Metro received 126 comments. Although the official public comment period for the Draft EIS/R scoping process closed on May 11, 2009, you can continue to share your thoughts and ideas.*

GIVE US YOUR INPUT

Here Are the Ways You Can Participate

> Attend our bi-annual community update meetings. These meetings are intended to be a conduit of new information about our findings and usually coincide with important project milestones. Our next series of meetings will take place in November 2009. If you are on our mail or email list, you will automatically receive meeting invitations. To sign up for meeting notices, email us at *regionalconnector@metro.net* or call our information line at 213.922.7277.

> At the culmination of the Draft EIS/R, anticipated in the summer of 2010, Metro will circulate the environmental document and will hold a series of formal public hearings. Again, you will be notified of these meetings and Metro will publicize meeting information widely.

Other Community Input Mechanisms

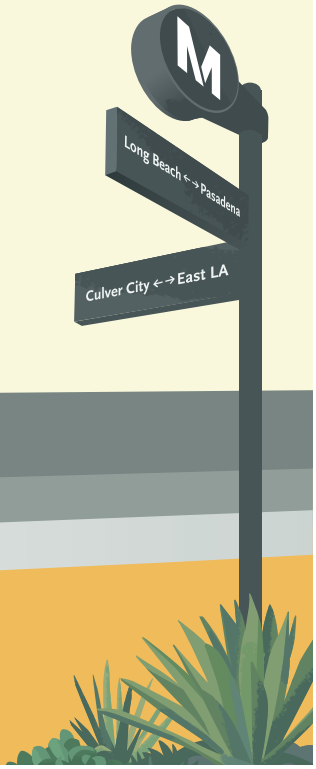
As part of the outreach process, Metro convened an Urban Design Working Group, with three geographic subgroups, coinciding with the proposed station areas for the two build alternatives. These subgroups are looking at neighborhood priorities for station area design specifically around 2nd Street, Bunker Hill and the Financial District. In May, Metro met with the full Working Group to set the stage for the urban design planning process; this was followed by a meeting with each of the geographic subgroups in June. A final Urban Design Working Group meeting for this environmental phase will be convened in the new year to share the results of what we heard from these communities during the urban design process. A full report on urban design, as well as a fact sheet on the findings of the urban design process will be developed and distributed at the culmination of this effort.

Focused Outreach

The Urban Design Working Group sparked further interaction between Metro and the geographic subgroups, especially in the Little Tokyo area, to address specific neighborhood concerns such as parking, business and neighborhood impacts during construction and future operations. This led to a constructive dialog with the community and the formation of a focused Little Tokyo Working Group to address issues specific to this community. This effort commenced in September 2009.

Completed and Ongoing Meetings

In addition to the required meetings and the focused Working Groups, Metro has continued to reach out to individual project stakeholders to provide regular project updates and to respond to questions and concerns. This list of contacts continues to grow as we work with additional stakeholders to involve you in the planning process. Following is a summary of meetings completed to date:



Metro is committed to an inclusive, transparent community outreach and public involvement effort *throughout the development. In addition to the public scoping meetings and hearings that are required for the California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) processes, Metro is working to proactively engage key community groups and project stakeholders at focused meetings to address important issues that affect mobility, quality of life, economic sustainability, cultural/historic considerations and neighborhood impacts.*

FORMAL PUBLIC MEETINGS *Public EIS/EIR Scoping Meetings*

Urban Design Working Group

> 2nd Street Station

> Bunker Hill Station

> Financial District Station

Stakeholder Meeting(s)/Briefing(s)

> Bringing Back Broadway

> Central City Association

> Central City East Association

> Go For Broke

> Japanese American National Museum

> Japanese Chamber of Commerce of Southern California

> Little Tokyo Community Council, including Planning and Cultural Preservation Committee (PCPC)

> Little Tokyo Service Center

> Los Angeles Conservancy

> Museum of Contemporary Art

> University of Southern California

Agency Meetings

> City of Los Angeles
Departments of City Planning, Community Redevelopment, Public Works (Bureau of Engineering) and Transportation

> County of Los Angeles

> Department of Public Works

> Elected Official Briefings
Local, state and federal

MEETING TYPE	MEETING	STATUS
Meetings Required by CEQA/NEPA	Formal Scoping Meetings Public Hearings	Completed May 2009 Summer 2010
Periodic Updates	Community Meetings	At least one round of update meetings in November 2009; additional round of meetings in Spring 2010
Focused Meetings	Urban Design Working Group Little Tokyo Working Group	May 2009 – ongoing September 2009 - ongoing
Ongoing Meetings/Briefings	Multiple meetings with individual stakeholder groups	As needed/requested

How to reach us and stay involved

Should you want to be added to our mailing list, schedule a presentation for your organization or learn more about the Regional Connector, there are many ways to contact us:

EMAIL
regionalconnector@metro.net

LETTER
Written comments can be mailed to
Ms. Dolores Roybal Saltarelli
Project Manager
Metro
One Gateway Plaza,
Los Angeles, CA 90012-2952

PHONE
You can also leave your questions or comments on our project phone line by calling **213.922.7277**. Phone messages are retrieved at least once every business day.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Facebook Screenshot

State Clearinghouse Number: 2009031043

facebook

Search

Regional Connector Transit Corridor Project

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- Invite People to Join
- Create Group Event
- Leave Group

Visit our website
metro.net/regionalconnector

Information

Category:
Organizations – Community Organizations

Description:
Welcome to the official Facebook home of Metro's Regional Connector Study. This is for anyone who lives, works, visits

Write something...

Attach:

Share

Options

Ginny Brideau A short video from Masao "Mike" Okamoto, AIA, LEED AP. discussing the Regional Connector and Little Tokyo.

Mike Okamoto to Little Tokyo Community
Length: 2:11

April 15 at 12:00pm · Comment · Like · Share · Report

Simon Seunghwan Oh Is the Regional Connector on Twitter?
April 7 at 12:03am · Comment · Like · Report

Ginny Brideau No...sorry. Metro is! @metrolosangeles
April 8 at 4:19pm · Delete

Write a comment...

Ginny Brideau Rail Track and Structures short bit... although no mention of the live broadcast this friday...

New community meetings for LA Regional Connector Project
www.rtands.com
Railway Track and Structures

April 6 at 9:38am · Comment · Like · Share

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Sample Media Coverage

State Clearinghouse Number: 2009031043

Can You Dig It?

Volleyball legend heats up Nikkei Games.
—page 2

LOS ANGELES JAPANESE DAILY NEWS

The RAFU SHIMPO

Established 1903 • www.rafu.com

NO. 31,449 WEDNESDAY, AUGUST 5, 2009

羅府新報

今日のニュース

（日本語欄）

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in the news

TAMING THE TORO: Japanese novice bullfighter Tara Nono makes a pass during a bullfight in Torremolinos, southern Spain on Sunday. Tara moved closer to achieving his goal of becoming his country's first full-fledged professional matador by taking part in his first bullfight involving mounted lancers.

japan-at-a-glance

GRIM STATISTIC: The rise of Japan's suicide rate is accelerating towards record levels, with the number of suicides in June alone totaling 2,822. The total number of suicides during the first half of 2009 was 17,076, up by 768 compared to the same period last year, with males accounting for about 75 percent of that figure. The continuing recession is believed to be partly to blame.

what's happening?

DRUM LINE: L.A. Matsui Taiko will take part in Taiko 10, a free concert to be held in the Noguchi Plaza of the Japanese American Cultural & Community Center in Little Tokyo this Friday at 7:30 p.m. The concept for this event draws from the group presentation sessions that have been held during the early Taiko Conferences and hopes to demonstrate the diversity of taiko styles that have developed across North America.

correction

A caption for yesterday's photos of the Nisei Week fashion show failed to mention one of the participating designers, Nutmeg.

INSIDE TODAY'S RAFU

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Yen-Dollar Rate

DOLLAR DOWN: The dollar closed lower on the Tokyo foreign exchange market Tuesday, sinking 0.02 yen to finish at 94.97 yen.

North Korea Pardons Journalists

Special pardon is ordered following negotiations with Bill Clinton.

ASSOCIATED PRESS

Laura Ling, left, and Euna Lee have been held by North Korea since March when they were accused of sneaking into the country illegally.

Former President Bill Clinton, seated left, meets with North Korean leader Kim Jong Il, seated right, in Pyonggyang on Tuesday.

SEOUL, South Korea – North Korean leader Kim Jong Il issued a "special pardon" for two jailed American journalists and ordered their release at former President Bill Clinton's request, North Korean media reported Wednesday.

The move to free reporters Laura Ling and Euna Lee reflected North Korea's "humanitarian and peaceloving policy," the Korean Central News Agency said in a dispatch from Pyongyang early Wednesday.

Clinton spokesman said the former president and the two journalists departed North Korea en route to Los Angeles.

On their Web site, the families of Ling and Lee expressed joy and gratitude at the news that their loved ones were to be released.

"The families of Laura Ling and Euna Lee are overjoyed by the news of their pardon. We are so grateful to our government, President Obama, Secretary Clinton and the U.S. State Department for their dedication to and hard work on behalf of American citizens," the statement read.

Clinton landed in the North Korean capital on Tuesday on a private mission to negotiate the freedom of the two women working for former Vice President Al Gore's Current TV media venture.

During his visit, he held rare talks with Kim — the reclusive North Korean leader's first meeting with a prominent Western figure since reportedly suffering a stroke a year ago.

Lee, 36, and Ling, 32, were arrested in March after crossing into North Korea from China, where they had been reporting on North Korean defectors. They were sentenced to 12 years of hard labor for illegal entry and engaging in "hostile acts."

Washington had pushed for their release, with Clinton's wife, Secretary of State Hillary Rodham Clinton, requesting last month that they be granted amnesty. She described the women as remorseful, and expressed their families' anguish.

Lee, a South Korean-born U.S. citizen, is married and has a 4-year-old daughter in Los Angeles; a native Californian, Ling is the married younger sister of TV journalist Lisa Ling.

State media said Clinton offered Kim "words of sincere apology" for the women's transgressions, and "courteously" conveyed President Barack Obama's gratitude for North Korea's leniency, KCNA said.

White House spokesman Robert Gibbs, however, denied Clinton went with a message from Obama. "That's not true," he told reporters in Washington.

Clinton's landmark visit, which was not announced in advance by North Korea or the U.S., comes at a time of heightened tensions between Washington and Pyongyang, foes during the Korean War of the 1950s, over the regime's nuclear program.

North Korea in recent months has conducted a nuclear test and test-fired an array of ballistic mis-

Please see Journalists, page 4

Furutani, Hayashi Assume Helm of Legislative Caucus

SACRAMENTO – The Asian Pacific Islander (API) Legislative Caucus elected Assemblymember Warren T. Furutani (D-South L.A. County) and Assemblymember Mary Hayashi (D-Hayward) to serve as the new chair and vice chair, respectively, starting Sept. 11. The API Legislative Caucus was established in 2001 with the mission of representing and advocating for the interests of the diverse API communities of California. Additionally, the caucus seeks to increase API participation and representation in all levels of government.

Furutani

Hayashi

"I look forward to serving the API community as chair of the API Legislative Caucus," stated Assemblymember Furutani. "The caucus has played a critical role in our community under Assemblymember Lieu's stewardship, and I hope to continue the standard he has set for the Caucus and for our community."

"Assemblymembers Warren Furutani and Mary Hayashi bring an extensive history of API community work and advocacy to the API Legislative Caucus," said Assemblymember Ted Lieu (D-Torrance), who serves as the current chair of the API Legislative Caucus. "I look forward to the great work they will be making on behalf of the API community as the caucus leadership."

Elected as caucus chair in 2007, Lieu will be serving out his term until the end of the current legislative session. Under his leadership, API representation in the State Legislature reached a historic high of 11 members. He has announced his candidacy for state attorney general.

"Assemblymember Lieu has done an extraordinary job encouraging and achieving higher Asian Pacific Islander involvement," added Assemblymember Hayashi, who is the first Korean American woman to be elected to the California State Legislature. "In harnessing this activism, Assemblymember Lieu has been able to channel the diverse talents of Asian Pacific Islanders into civic engagement."

Working with the Black Legislative Caucus and the Latino Legislative Caucus, Lieu played a significant role in increasing judicial and political appointments of minorities and in securing a historic agreement with top foundations to increase funding to minority communities. Additionally, Lieu took the lead in 2008 to reverse the Ladies Professional Golf Association's proposed racist ban on women golfers who did not speak English. As chair of the API Legislative Caucus, Assemblymember Lieu worked with community partners to bring together over 330 community leaders and advocates to the API Policy Summit.

Metro Regional Connector Meeting Tonight

A meeting will be held on Wednesday, Aug. 5 with the Metro Regional Connector Light Rail Transit Team to discuss issues specific to the Little Tokyo area from 4:30 to 6:30 p.m. at the Japanese American National Museum.

The Metro team will present 3-D models of the intersection of First and Alameda, and will answer questions and concerns for the four alternatives for the Regional Connector that is being planned to travel through Little Tokyo. Metro will also discuss potential construction activities and also present a sample of the construction mitigation process used during the Gold Line East Extension.

Metro wants to provide seamless travel for riders from all parts of Los Angeles County through Little Tokyo by providing service between existing Metro Blue and Gold Lines and the future Gold Line Eastside Extension and the Expo Line, which is slated to be operational in 2009 and 2010 respectively.

OCJAA Scholarships Now Available

The Orange County Japanese American Association is now accepting applications for the eighth annual Japanese Cultural Scholarships. The scholarship, donated to OCJAA by the late Koichi and Toyo Nerio, aims to encourage young men and women of Japanese ancestry who are in training to acquire Japanese cultural skills such as flower arrangement, tea ceremony, calligraphy, Japanese dance, Ryukyu dance, manyo folk songs, folk dance, taiko, judo, kendo and karate, to continue their studies in the future.

OCJAA is offering up to five scholarships of $750 each to those who meet the following qualifications:

• OCJAA members, children/grandchildren of OCJAA members or any persons of Japanese ancestry who are ages between 19 and 40 and are residing in Orange County or taking Japanese cultural lessons in Orange County, and

• who have been and are currently in training to acquire Japanese cultural skills and plan to continue training in the future.

• Children/grandchildren of current OCJAA members residing outside Orange County may also apply if the parents/grandparents had paid membership dues for three years or more.

Selected students are required to attend the OCJAA Senior Citizens Appreciation Day on Sunday, Oct. 11. Application forms are available by calling the OCJAA office at (714) 283-3551. The deadline for submission is Tuesday, Sept. 15.

Toyota Quarterly Losses at $819 Mill

ASSOCIATED PRESS

TOKYO – Booming sales of the Prius hybrid helped the world's No. 1 automaker Toyota deliver a smaller-than-expected $819 million quarterly loss and narrow its forecast of red ink for the full year.

The Japanese carmaker, whose models include the Corolla subcompact and luxury Lexus, said Tuesday it expects a $4.7 billion loss for the fiscal year through March 2010, better than the 550 billion yen loss initially projected.

The results for the April-June quarter showed that Toyota Motor Corp. is getting some traction from aggressive cost-cutting and Japanese government incentives that have boosted sales of green cars like the Prius. Analysts surveyed by Thomson Reuters had forecast a fiscal first quarter loss of 210 billion yen.

Toyota, which dethroned General Motors Corp. as the world's top selling automaker in 2008, raised its global vehicle sales forecast for the fiscal year by 100,000 to 6.6 million vehicles. The increase reflected the success of the Prius in Japan while sales forecasts for Europe and North America were unchanged.

The growing popularity of environment-friendly vehicles has given Toyota some respite from the auto meltdown. The Prius gas-electric hybrid has been the top-selling model in Japan for two months straight, the first time a hybrid clinched that spot, and is reportedly on track to take that spot again for July. Toyota says it has received 345,000 orders for the Prius in Japan since it went on sale in May.

Toyota sold 1.4 million vehicles worldwide during the quarter, a decrease of 785,000 from a year earlier.

A Grand Dance Finale

The Gardena Buddhist Church obon marked the end of Southern California's obon season last weekend. An estimated 1,000 to 1,300 dancers lined the closed off street on Saturday alone. Clockwise from above, Arlene Miya, far right, obon chairperson for this year's festival, leads dancers by example. At left, church members Brent Sasaki, and Bob Harada man the hot grill to feed the thousands in attendance. At right, carnivalgoers of all ages enjoy a good game of coin toss.

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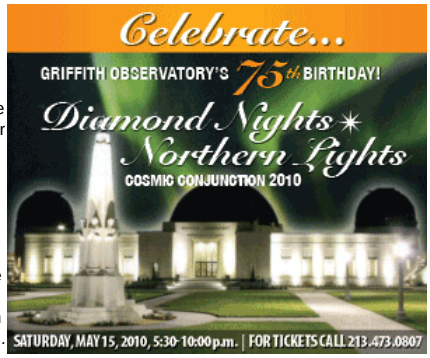
Regional Connector Meetings Ahead

Metro Planning Four Sessions to Cover Underground Alternative Starting April 9

by Ryan Vaillancourt, Staff Writer

Published: Wednesday, March 31, 2010 1:37 PM PDT


Celebrate...
GRIFFITH OBSERVATORY'S 75th BIRTHDAY!
Diamond Nights * Northern Lights
COSMIC CONJUNCTION 2010
SATURDAY, MAY 15, 2010, 5:30-10:00 p.m. | FOR TICKETS CALL 213.473.0807

DOWNTOWN LOS ANGELES –Metro is inviting community members to learn more about the underground alternative for the proposed Downtown regional connector at a series of upcoming meetings, the first happening on April 9 (noon-1:30 p.m.) at the Central Library at 630 W. Fifth St.

The sessions will include presentations highlighting the features of the new build alternative, as well as comparisons with the other options being considered.

The regional connector is a proposed two-mile transit link that would connect the Metro Gold and Blue lines. In February, the Metro board voted unanimously to authorize staff to study a new, third build alternative for the proposed Downtown regional connector, placing the infrastructure entirely underground in Little Tokyo.

The other meetings are scheduled as follows: 6:30-8 p.m. on April 13 at Lake Avenue Church, Pasadena, 393 N. Lake Ave.; 2-3:30 p.m. and 6:30-8 p.m. on April 14 at the Japanese American National Museum, 369 E. First St.; and from 11 a.m.-1:30 p.m. on April 17 at the Los Angeles Theater Center, 514 S. Spring St.

For more information, visit metro.net/regionalconnector or email regionalconnector@metro.net.

This Week's Issue

Today's Weather

Los Angeles, CA
51°F
forecast...

LA College INTERNATIONAL

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Return of the Butterflies

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Reader Comments

The following are comments from the readers. In no way do they represent the view of ladowntownnews.com.

Submit a Comment

Downtown News welcomes comment from anyone and will almost always post it whether it is favorable or critical, as long as it is substantive and advances debate.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Community Update Meeting No. 1

Portions of this appendix have been intentionally left blank. This information is available from Metro upon request.

State Clearinghouse Number: 2009031043

Los Angeles County
Metropolitan Transportation Authority

Regional Connector Transit Corridor Project DEIS/DEIR Community Update

Wurlitzer Building
Saturday, November 7, 2009

Metro

Project Progress

- In January 2009, Metro Board of Directors approved alternatives for further study in a Draft Environmental Impact Statement/ Draft Environmental Impact Report (DEIS/DEIR)

- DEIS/DEIR effort commenced with Scoping Meetings

- Scoping period ended May 11, 2009
  - Four Scoping Meetings
  - 175 attended
  - 82 comments received at meetings
  - 44 additional comments received during the scoping process

What we heard

- The community supports the need to increase system connectivity.
- There is support for grade-separated LRT connecting the 7th/Metro Center to the Little Tokyo Arts District Station.
- The environmental and quality of life impacts by the construction and operations of the project.
- Steps must be taken by Metro to identify, and look for ways to minimize and mitigate these impacts.

Additional Stakeholder Meetings

- Bringing Back Broadway
- Central City East
- Go For Broke
- Japanese American Cultural and Community Center
- Japanese American National Museum (2 meetings)
- Japanese Chamber of Commerce of Southern California
- Little Tokyo CRA CAC
- Little Tokyo Community Council (7 meetings)
- Little Tokyo Service Center (2 meetings)
- Los Angeles Conservancy
- MOCA
- Savoy Homeowners Association
- Thomas Properties Group
- University of Southern California
- Urban Design Working Group

Metro

Little Tokyo Working Group

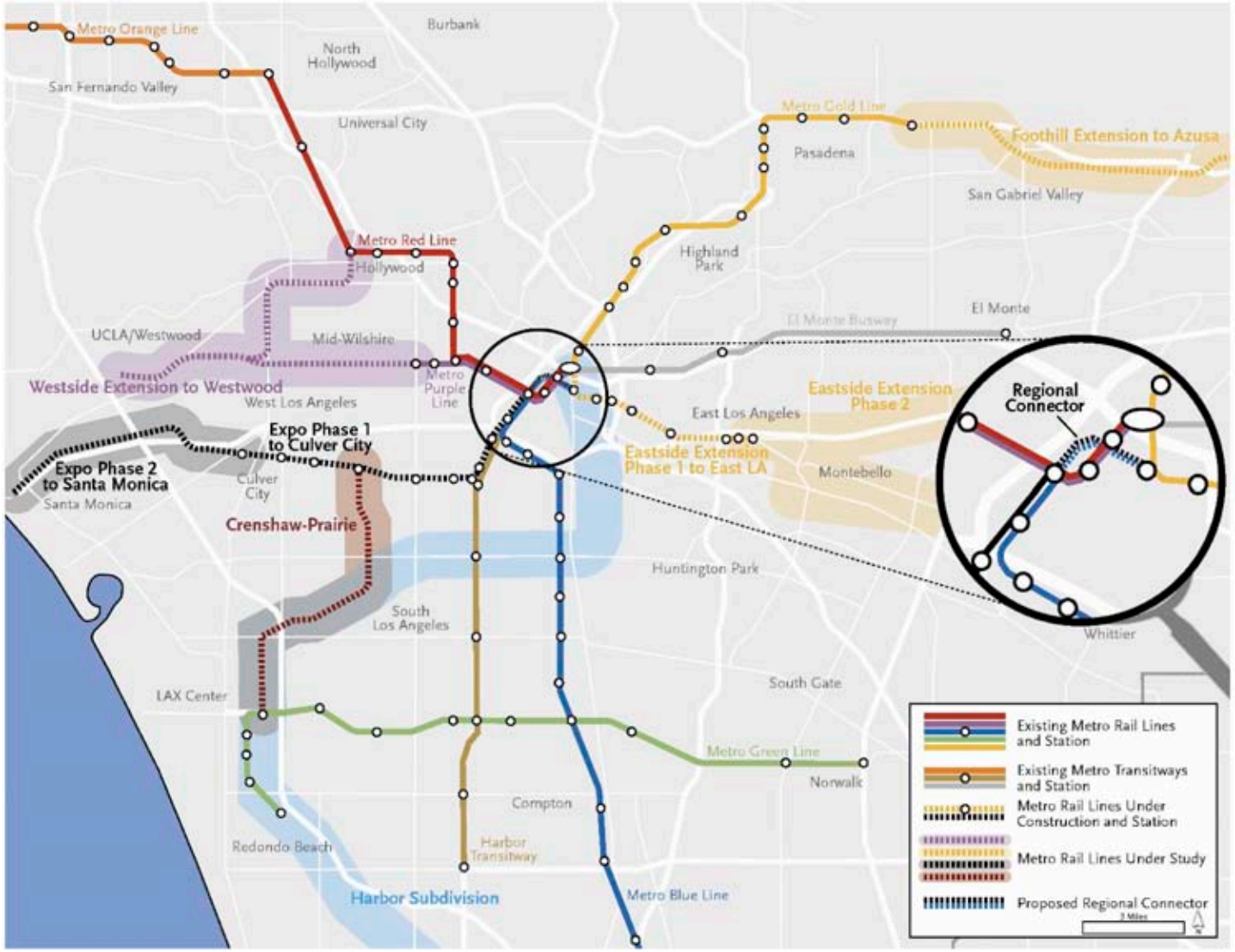
- Supporting Little Tokyo Community Council
- Review and discuss the 4 alternatives
- 3 meetings have taken place
  - Discussed at-grade impacts and potential mitigations
- Remaining meetings to discuss impacts and potential mitigations of the TSM, No-Build and Below-Grade Emphasis alternatives

Metro

System Overview

Metro approved the Long Range Transportation Plan, October 2009

- Regional Connector
- Westside Extension
- Eastside Extension Phase 2
- Crenshaw-Prairie



Metro

Purpose & Need

- LA County Population Growth – Almost 2 million additional people by 2035
- Downtown Los Angeles is the largest employment center
- 5.7 million person-hours of daily delay
- Transfers at Union Station and 7th Metro can add up to 20 additional minutes to a trip
- Payment of transfers adds costs to riders

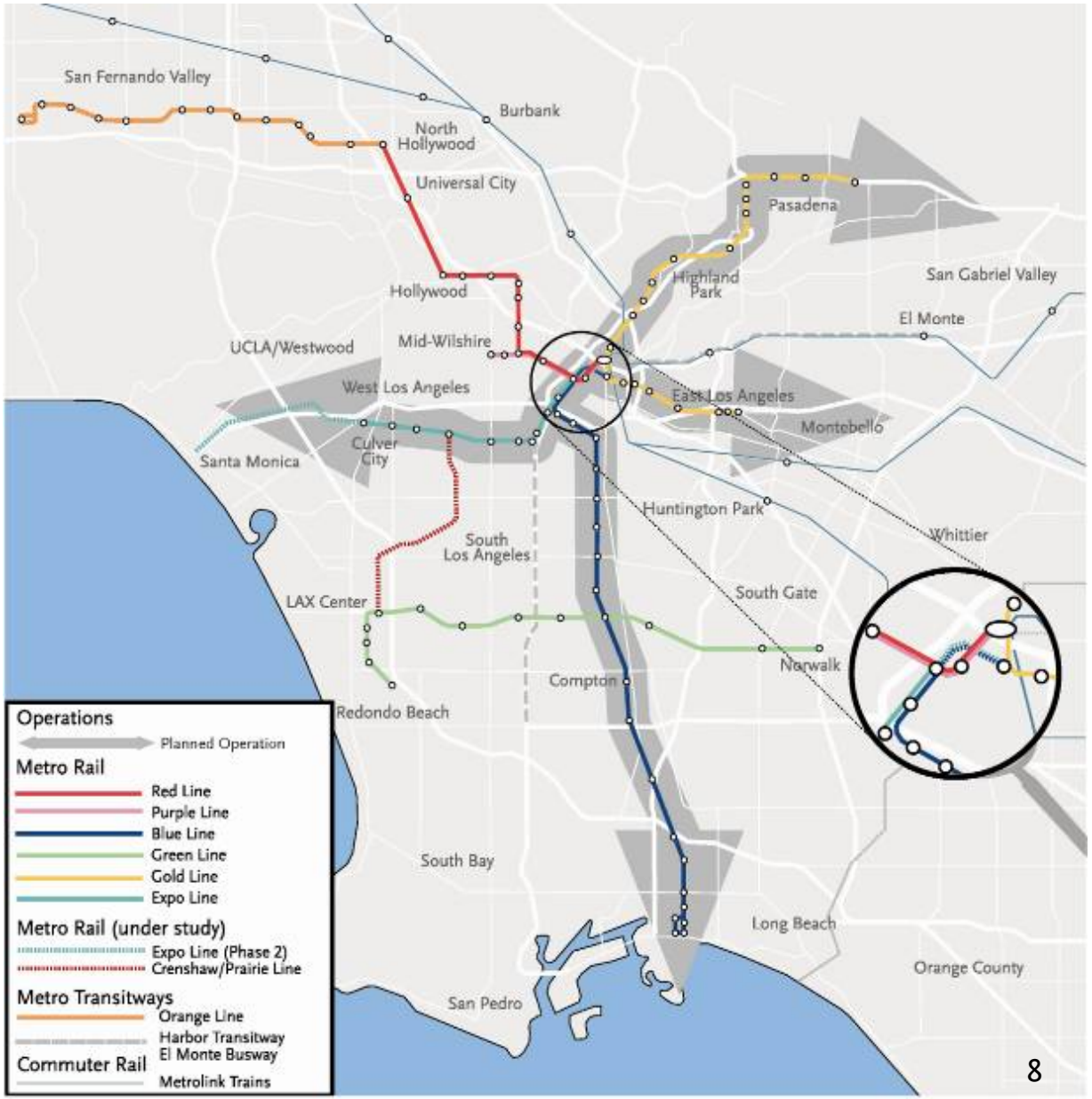
Metro

Project Overview

- **Connect the Metro Gold Line (Pasadena & Eastside), Metro Expo Line, and Metro Blue Line.**

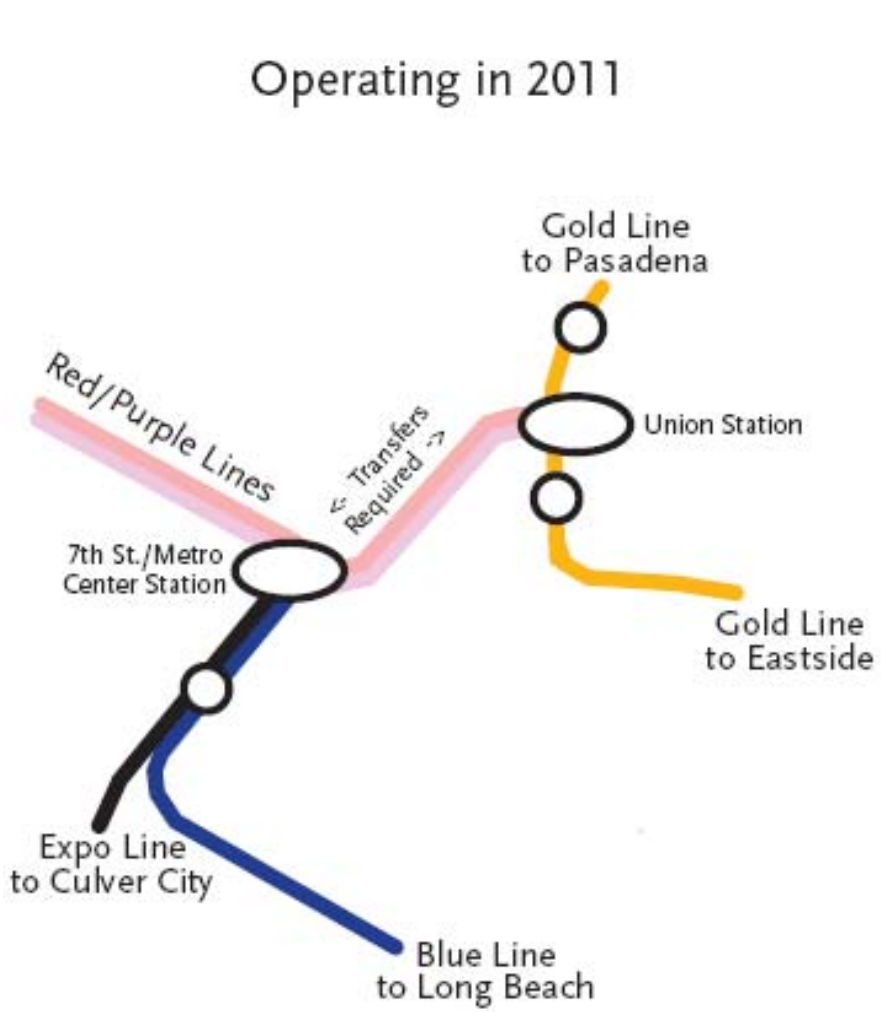
- **Provides a "One Seat Ride" for travel across the county on light rail.**

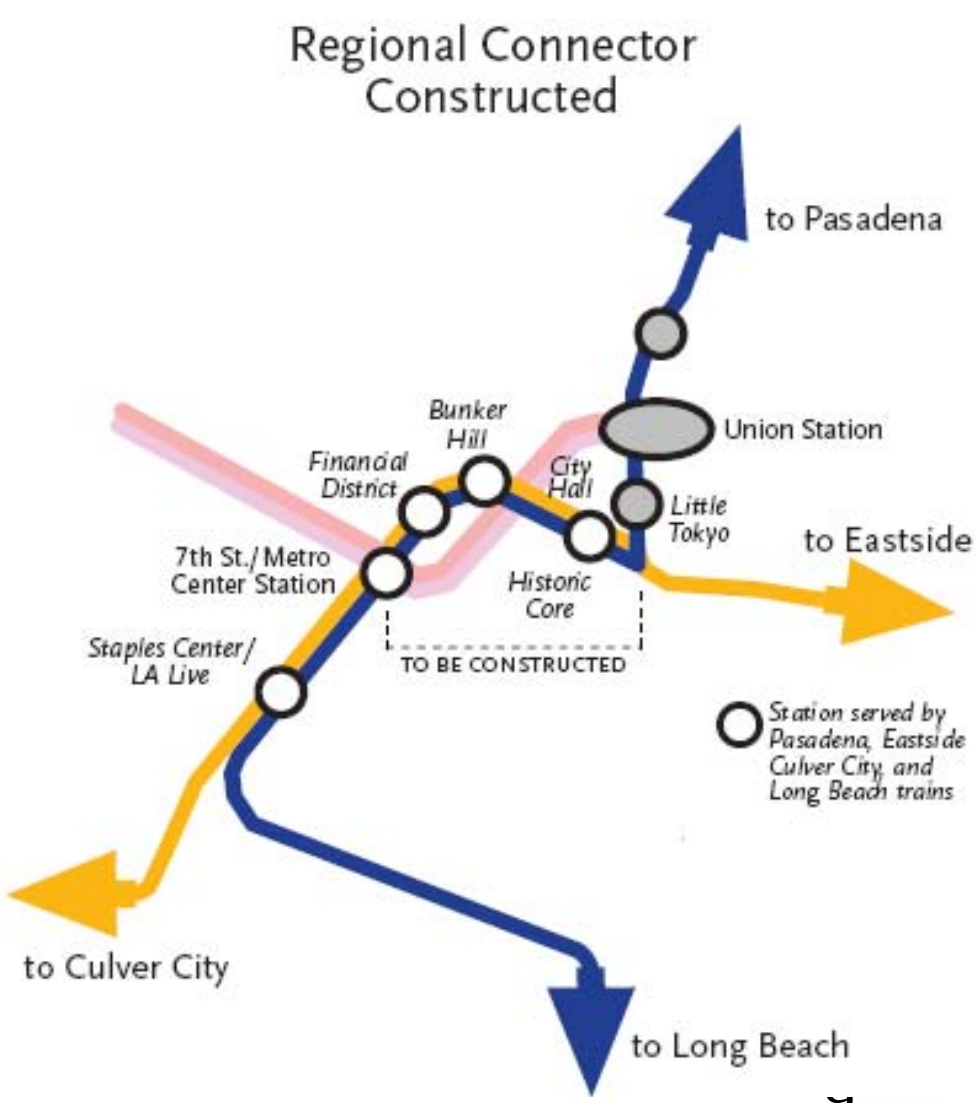
- **Provides for a sustainable mode of transportation, saving people time and money.**



Metro

Project Overview





Project Overview

- Daily Project Trips - approx. 68,000
- Combined Daily Boardings at three new Regional Connector Stations – 15,140
- Approximately 17,000 & 6,000 fewer boardings at Union Station and 7th Street/Metro Center Station

Project Overview

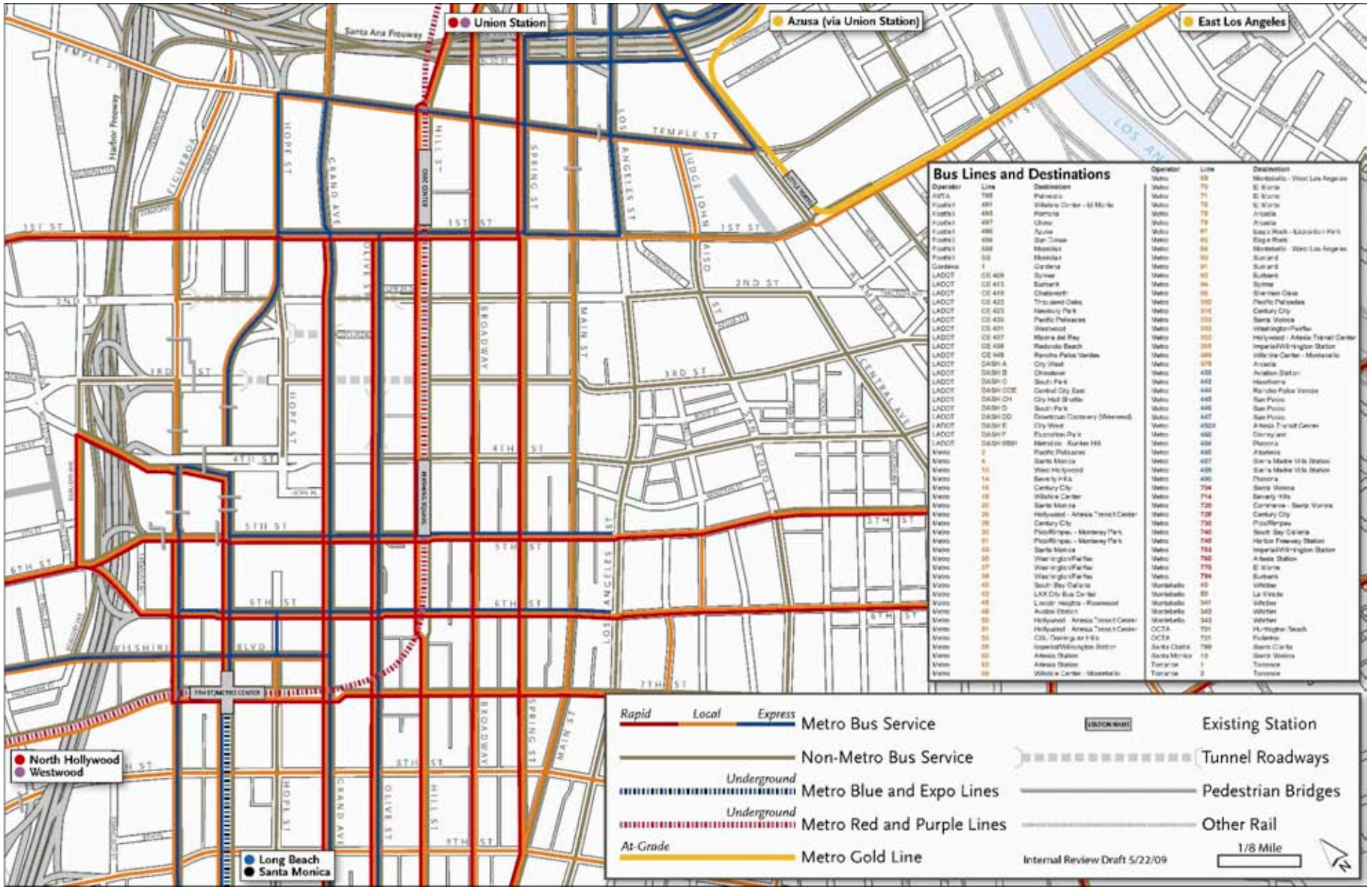
TRAVEL TIMES

	No-Build*	TSM (via Bus)*	At-Grade Alt.	Underground Alt.
Pomona/Atlantic to Exposition/ USC	44 mins	52 mins	36 mins	31 mins or 30% improvement
Pico to Memorial Park	39 mins	47 mins	36 mins	34 mins or 12.8 % improvement
Washington/ National to 2nd Street	34 mins (to Civic Center)	38 mins	33 mins (to 1st/ Los Angeles)	30 mins or 28% improvement

*Assumes 5 mins for each transfer

Metro

Project Alternatives
No Build Alternative



Project Alternatives
Transportation System Management (TSM) Alternative

At-Grade Emphasis LRT Alternative

Project Alternatives
At-Grade Emphasis LRT Alternative

2nd/Hope Station Area
(At-Grade Emphasis LRT Alternative)

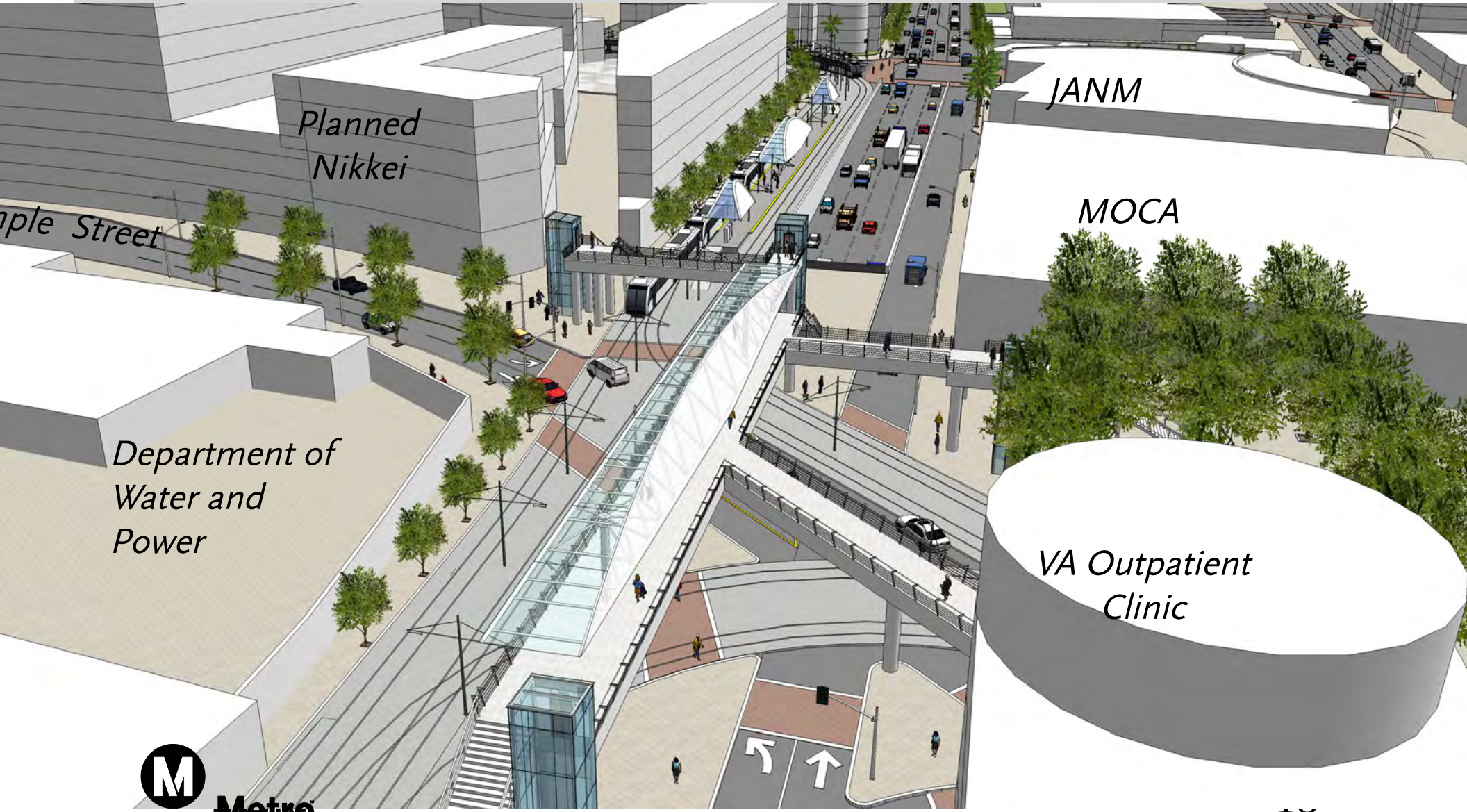
Metro

Main & Los Angeles Stations

(At-Grade Emphasis LRT Alternative)

Temple & Alameda Junction and Underpass

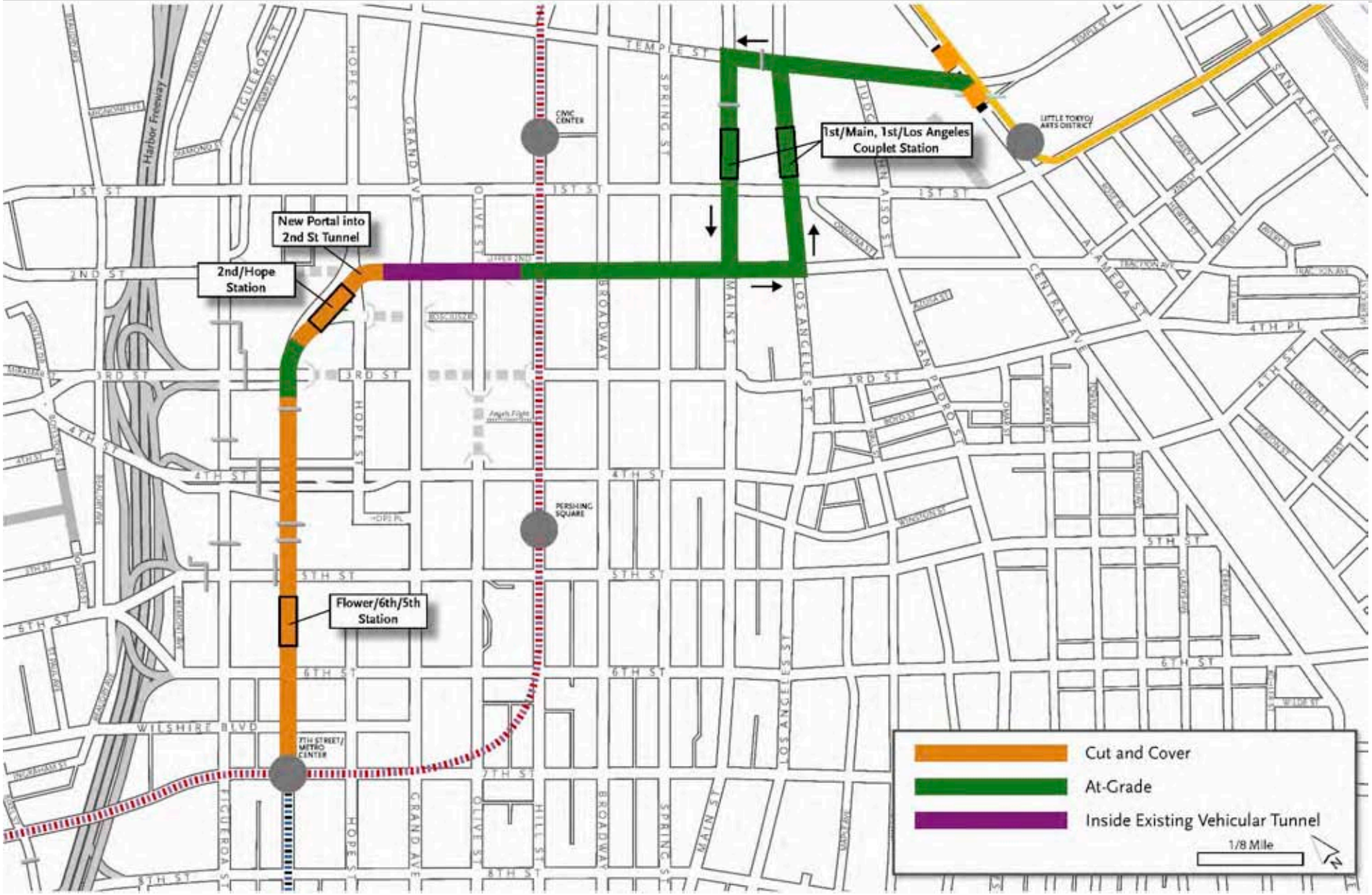
(At-Grade Emphasis LRT Alternative)



Metro

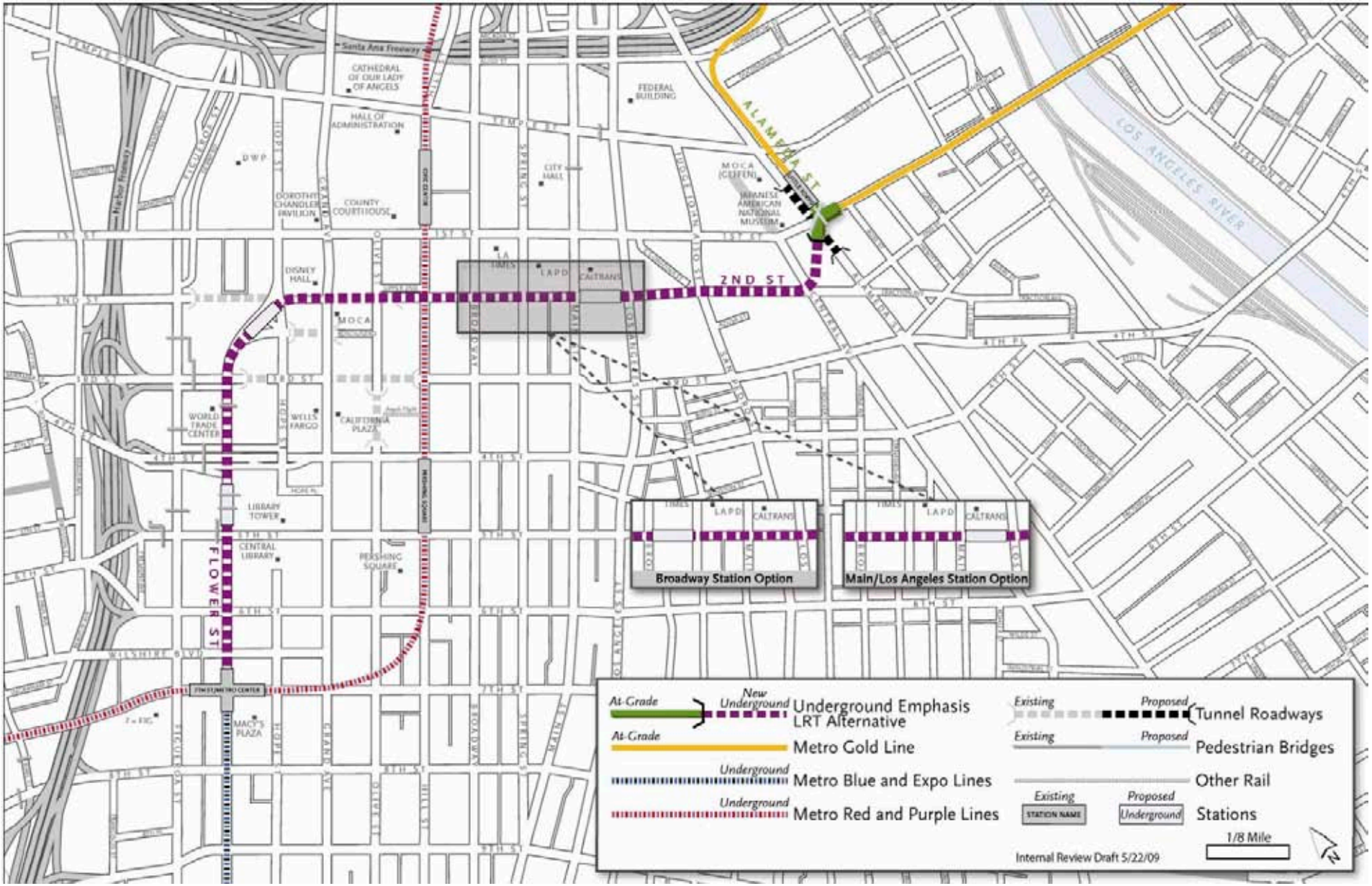
Construction Methods

(At-Grade Emphasis LRT Alternative)



Underground Emphasis LRT Alternative

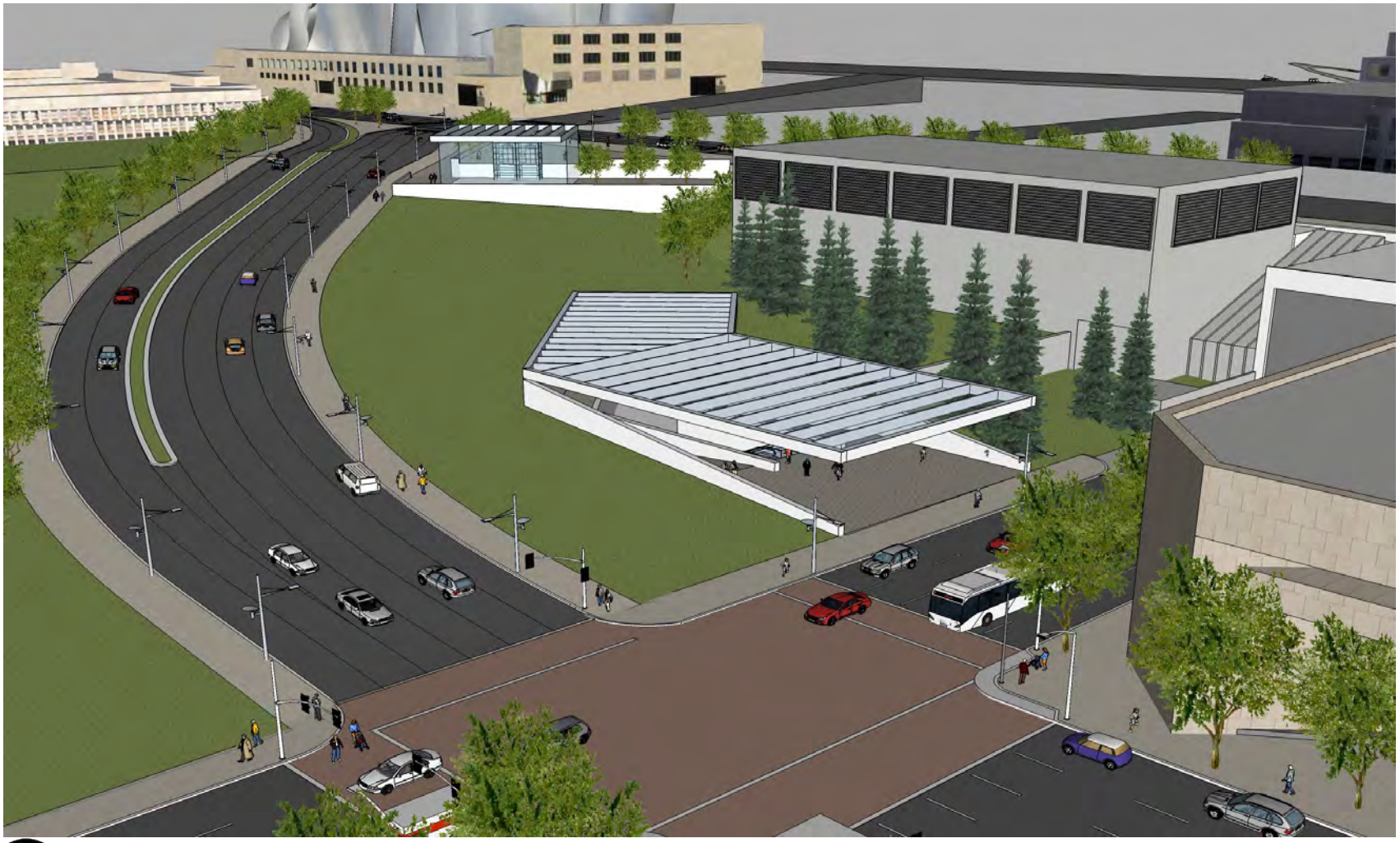
Project Alternatives
Underground Emphasis LRT Alternative



Flower/5th/4th Station Area
(Underground Emphasis LRT Alternative)

Metro

2nd/Hope Station Area
(Underground Emphasis LRT Alternative)



Metro

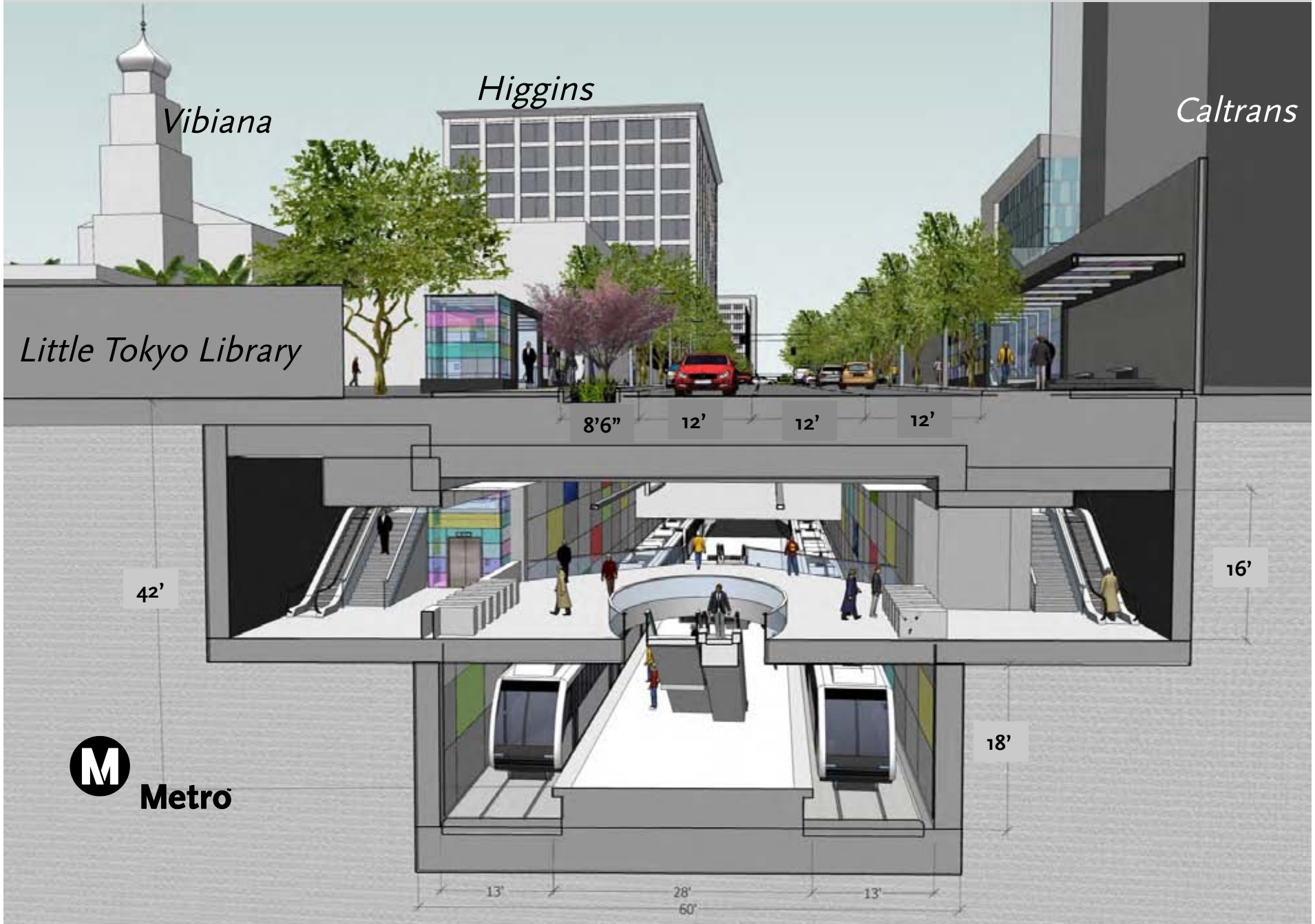
2nd/Broadway Station Area

(Underground Emphasis LRT Alternative – Broadway Station Option)

Metro

2nd Street Station Option

(Underground Emphasis LRT Alternative – Main/Los Angeles Station Option)

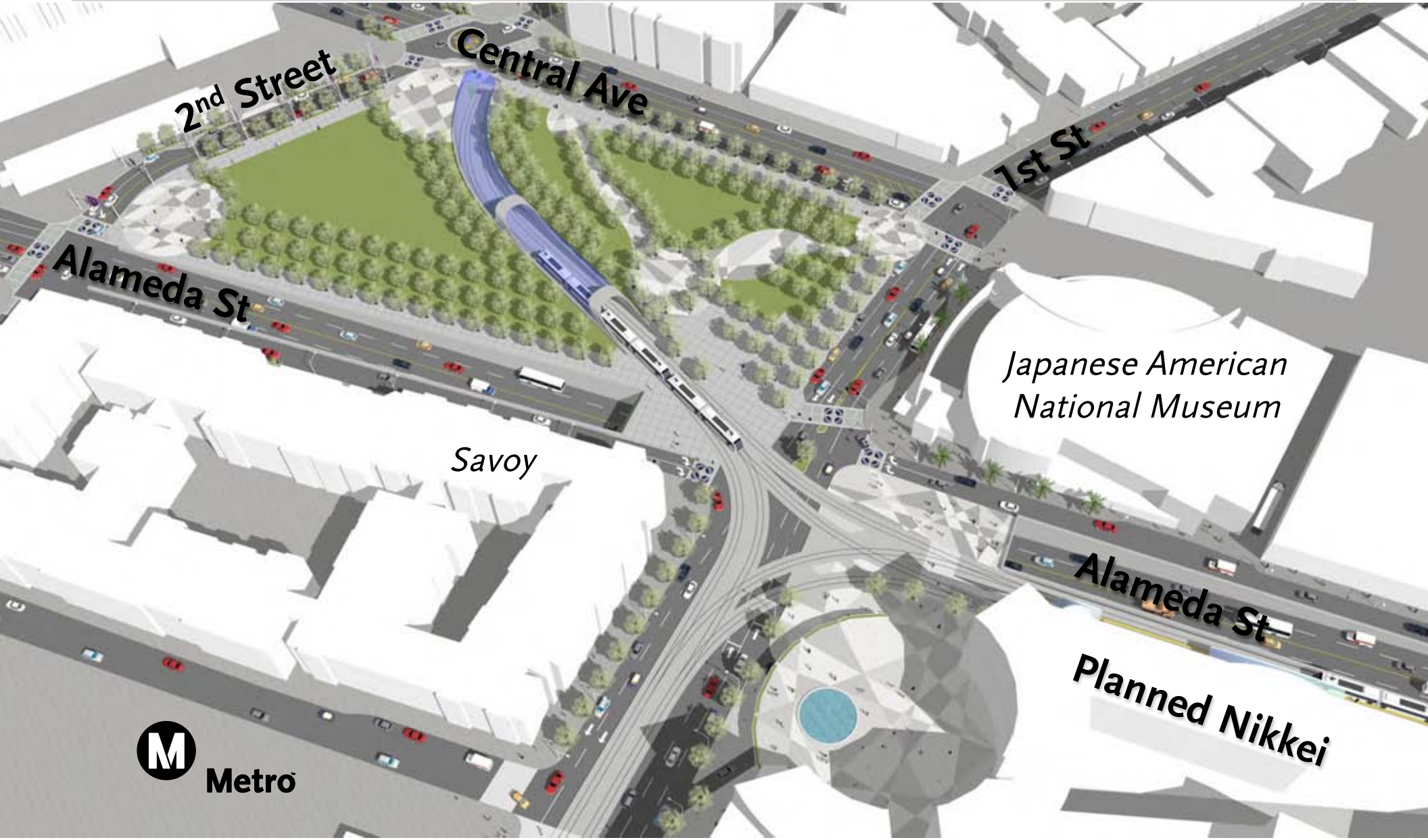


Underground Emphasis LRT Alternative

1st and Alameda Streets (Existing)

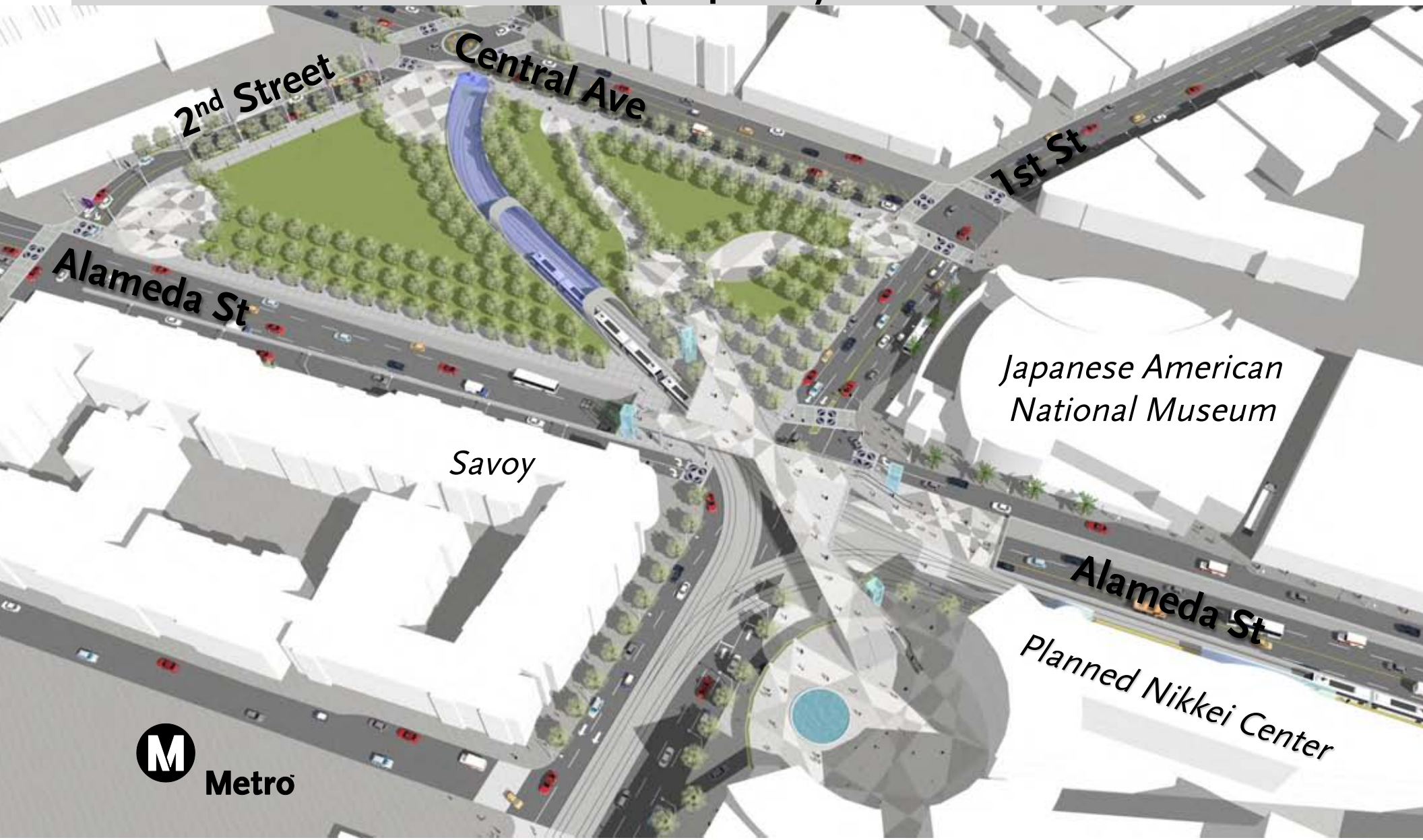
Underground Emphasis LRT Alternative

1st and Alameda Streets (Proposed)



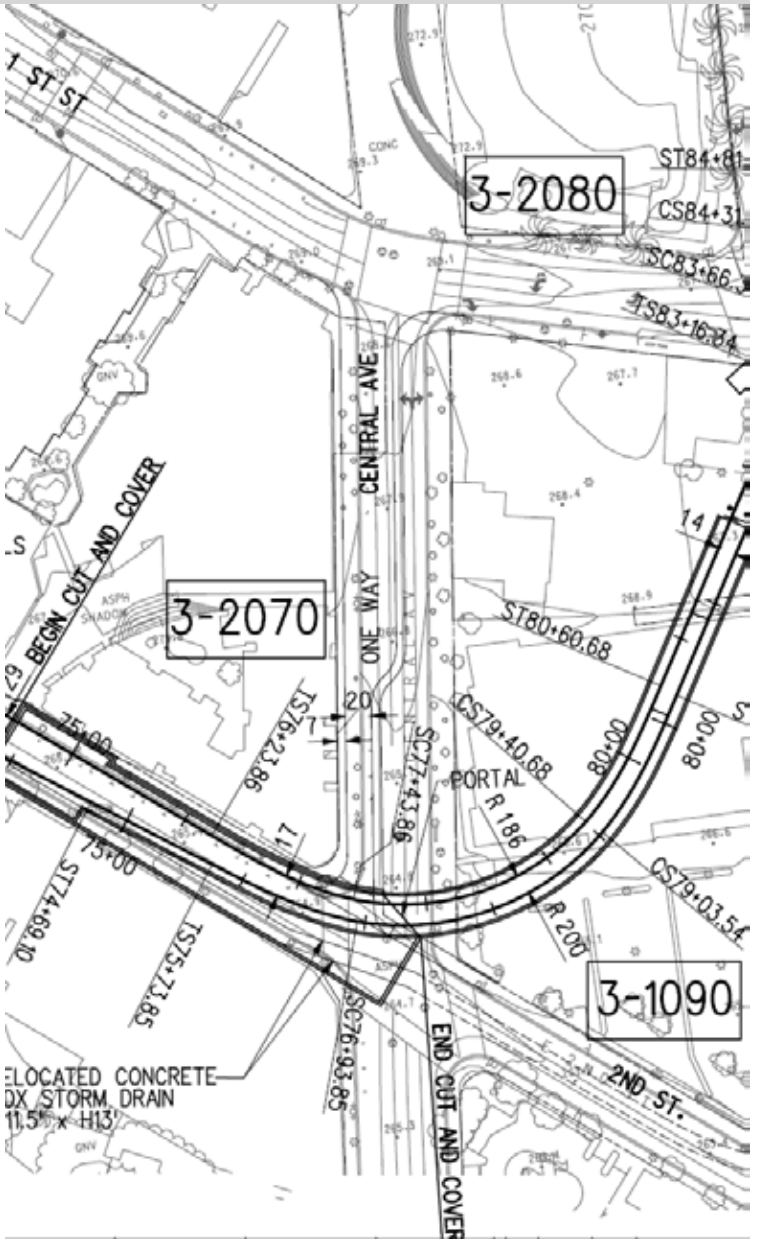
Underground Emphasis LRT Alternative

1st and Alameda Streets (Proposed)



Project Refinements
(Underground Emphasis LRT Alternative)

- Central Avenue Reconfiguration Eliminated
- Metro will pursue modest waiver of track grade requirements to keep portal within the "Office Depot" block
- Number properties identified for acquisition at the "Office Depot" block is reduced
- Continue to study possibility of below surface tracks at 1st and Alameda Street



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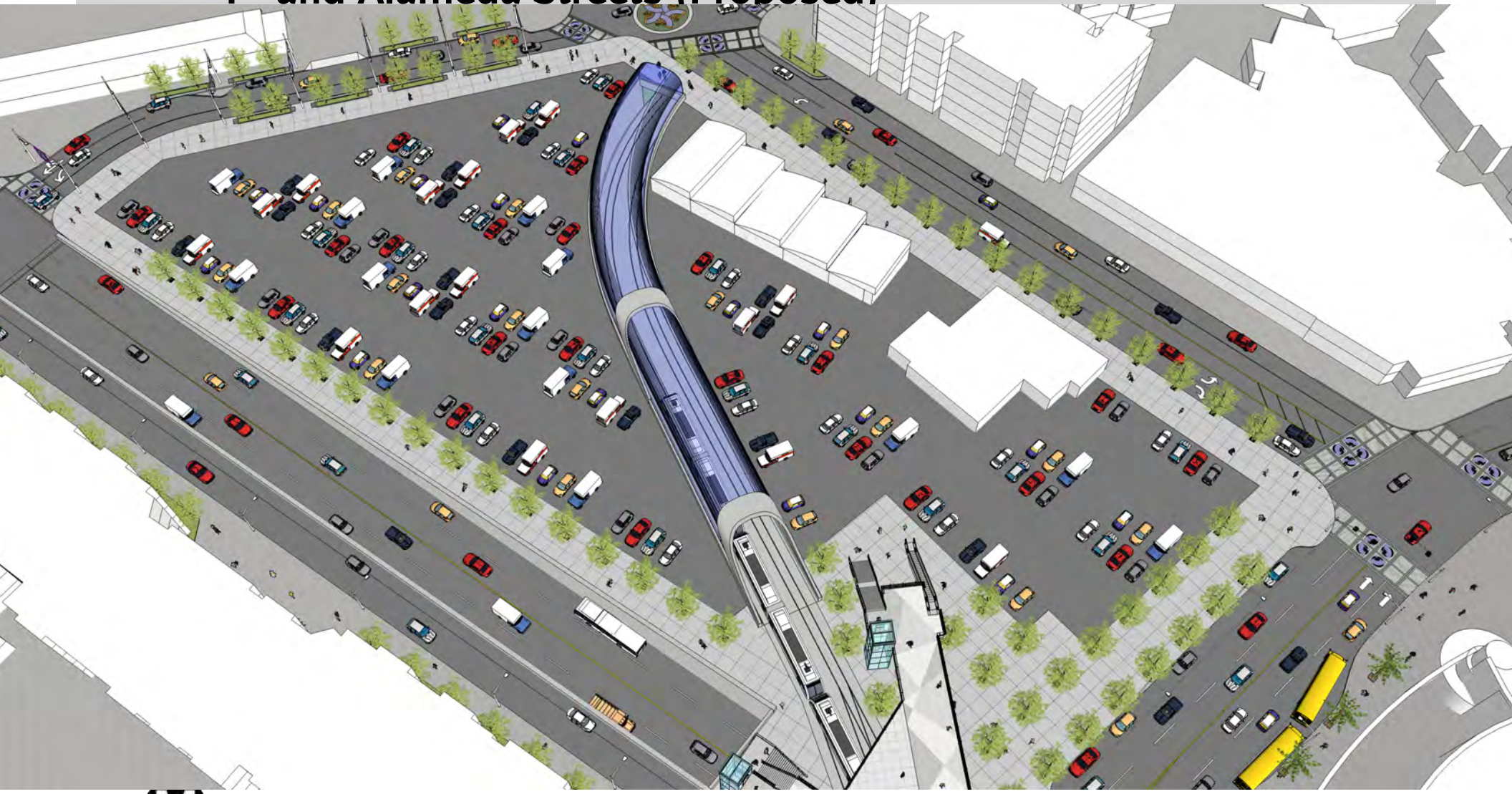
Underground Emphasis LRT Alternative

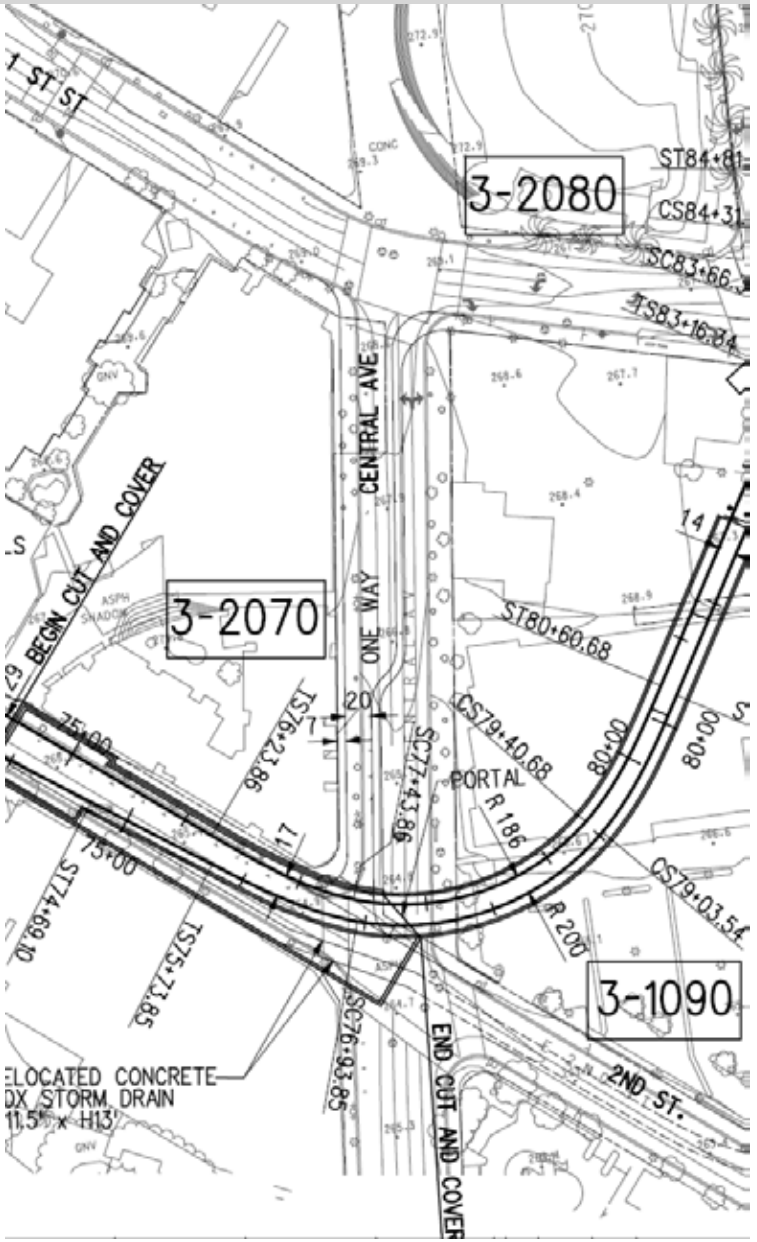
1st and Alameda Streets (Proposed)



Metro

Project Refinements
(Underground Emphasis LRT Alternative)

- Pedestrian bridge an option
- Two options for location of area for tunnel excavation and hauling
  1). 2nd/Hope Street Station site
  2). "Office Depot" Site
- Using cut and cover construction for underpasss
- Continue to study opportunities to reduce construction duration



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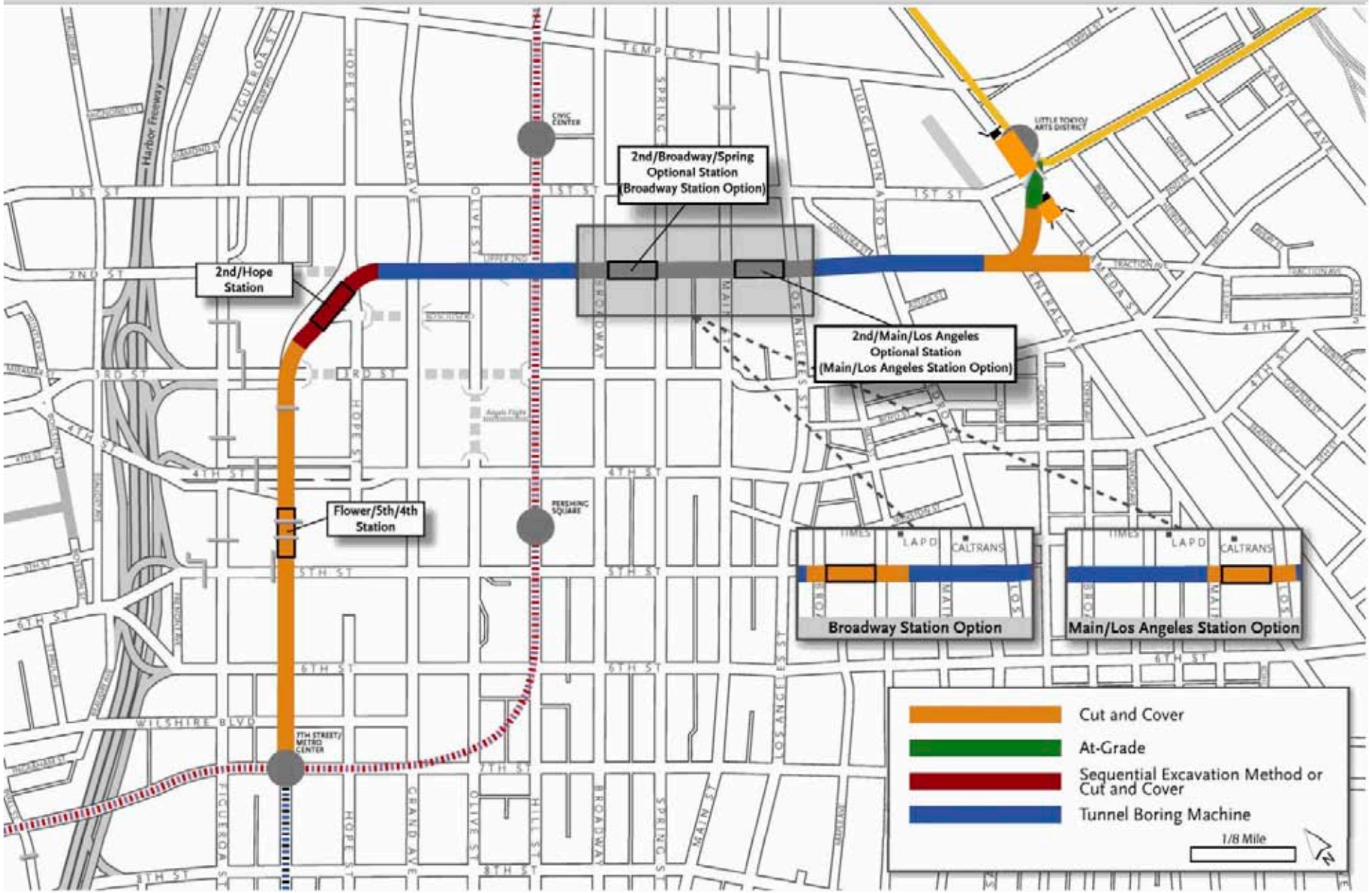
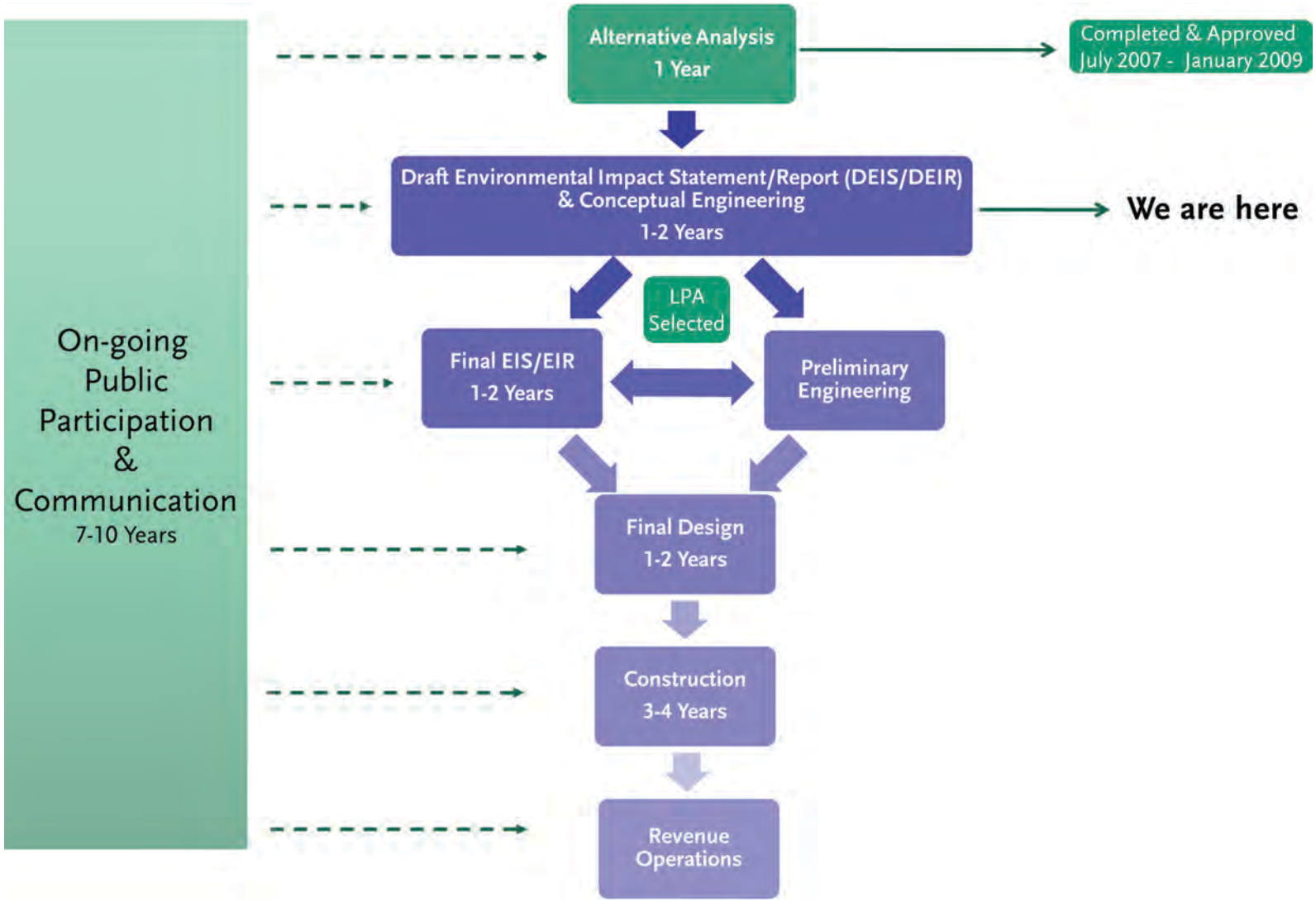
Construction Methods

(Underground Emphasis LRT Alternative)



Project Development Process



Metro

DEIS/DEIR Outreach

- Meetings/Coordination have occurred with local and state agencies
- Stakeholder meetings
- Urban Design workshops
- Working Group meetings

DEIS/DEIR Outreach

- Update meetings
  - November 5, Lake Ave Church, Pasadena
  - November 7, Wurlitzer Building, Los Angeles
  - November 10, Los Angeles Central Library
  - November 12, Japanese American National Museum

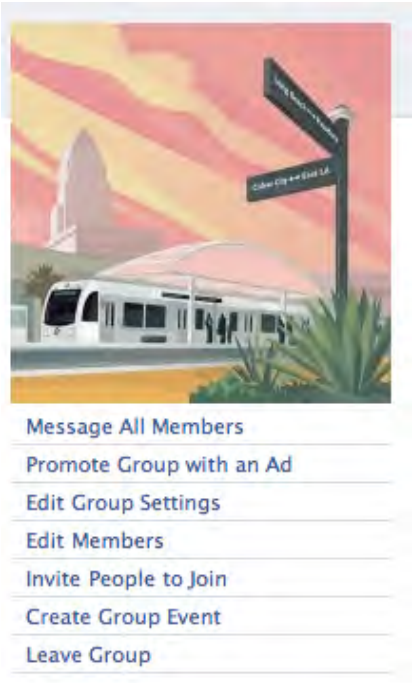
What's Next

- Community Update Meetings, Spring 2010
- Draft EIS/EIR released, Summer 2010
- Public Hearings, Summer 2010
- Presentation to Metro Board, Fall 2010
- Adoption of LPA, Fall 2010
- Final EIS/EIR late Summer 2011

More Information

Metro.net/regionalconnector

Facebook: Regional Connector Transit Corridor Project



Metro

Portions of this appendix have been intentionally left blank. This information is available from Metro upon request.

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Community Update Meeting No. 1
Meeting Announcements, Advertisements, and Notifications

State Clearinghouse Number: 2009031043

Regional Connector Draft EIS/R Project

Community Update Meetings

Save the Date

Metro is currently developing a Draft Environmental Impact Study and Report (Draft EIS/R) for the Regional Connector Transit Corridor project. This project is studying transportation alternatives to connect the Blue Line to the Gold Line, thereby expanding Metro's LRT system, relieving station congestion, and improving transit times. The study began in Spring 2009 with formal Public Scoping meetings to provide the public an opportunity comment as the project proceeds into in-depth analysis of the alternatives. Since then, Metro has been reviewing community feedback received at these meetings, conducting ongoing technical study and analysis, as well as meeting with stakeholders on a regular basis.

The purpose of the upcoming community update meetings is to provide the public with an update on the status of the project, discuss what we heard at the scoping and stakeholder meetings, and to present the findings of the technical studies to date.

Thursday, November 5, 2009; 6:30 p.m. to 8 p.m.
Lake Avenue Church
393 N Lake Ave, Pasadena

Saturday, November 7, 2009; 10 a.m. to Noon
Wurlitzer Building
818 S Broadway, Los Angeles

Tuesday, November 10, 2009; Noon to 1:30 p.m.
Board Room, Los Angeles Central Library
630 W 5th St, Los Angeles

Thursday November 12, 2009; 2 p.m. to 3:30 p.m. AND 6:30 p.m. to 8 p.m.
Japanese American National Museum (JANM)
369 E 1st St, Los Angeles

Identical information will be presented at each meeting. Please plan to attend the meeting that best accommodates your schedule.

For additional information or questions, please visit the Regional Connector Transit Corridor study website at metro.net/regionalconnector or contact the project information line at 213.922.7277. The project is also on Facebook, under Regional Connector Transit Corridor Study.

Thank you for your continued involvement in planning the Regional Connector – a light rail connection through Downtown Los Angeles that will provide mobility benefits to the entire region.

The Regional Connector Transit Corridor Draft Environmental Impact Statement/Report (DEIS/R) is examining potential alternatives to create a Light Rail Transit (LRT) link between the existing Gold and Blue Line systems, the Gold Line Eastside Extension and the Exposition Line. Once completed, transit riders would enjoy increased transit connections throughout the entire LRT system. The DEIS/R includes the review of the possible effects of the project and alternatives on the project study area.

Gracias por su continua participación en la planificación del Conector Regional – una conexión de tren ligero a través del Centro de Los Angeles que proporcionará beneficios de movilidad a la región entera.

El Borrador de la Declaración/Reporte de Impacto Ambiental (DEIS/R) del Corredor de Transporte Conector Regional está examinando alternativas potenciales para crear un enlace de transporte de tren ligero (LRT) entre los sistemas existentes de Metro Gold Line y Metro Blue Line, la Extensión hacia el Este de la Línea de Oro y Exposition Line. Una vez completado, los usuarios disfrutarían de más conexiones de transporte a través del sistema LRT. El DEIS/R incluye la revisión de los posibles efectos del proyecto y alternativas en el área de estudio del proyecto.

Metro
One Gateway Plaza
99-8-2
Los Angeles, CA 90012

metro.net

Help us plan the Regional Connector.

Ayúdenos a planear el Conector Regional
J- Help us plan the Regional Connector

Metro

10-0145CMC ©2009 LACMTA

You are invited to attend a community meeting to update you on Metro's progress with this project.

In March and April, Metro held four Scoping Meetings to obtain public input as part of the DEIS/R. Based on feedback you provided during the scoping process and more detailed technical study, Metro would now like to share some of the results of our ongoing analysis.

For additional information on the Regional Connector, please visit our project website at *metro.net/regionalconnector* or call the project information line at 213.922.7277.

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Tuesday, November 10, 2009, noon-1:30pm
Los Angeles Central Library, Board Room
630 W 5th St, Los Angeles

Thursday, November 12, 2009, 2pm-3:30pm and 6:30-8pm
Japanese American National Museum
369 E 1st St, Los Angeles

Content presented at each meeting will be identical.

All locations are accessible by public transit.

ADA Requirements:
Special accommodations are available to the public for Metro-sponsored meetings. All requests for reasonable accommodations must be made at least 3 working days (72 hours) in advance of the scheduled meeting date. Metro's TDD line is 800.252.9040. The project information line is 213.922.7277.

Metro and the Federal Transit Administration (FTA) will be preparing a joint document that meets the requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Está invitado a asistir a una reunión comunitaria para proporcionarle una actualización sobre el progreso de Metro en este proyecto.

En marzo y abril, Metro llevó a cabo cuatro reuniones de alcance para obtener sugerencias del público como parte del DEIS/R. Basados en las opiniones que proporcionaron durante el proceso de alcance y un estudio técnico más detallado, Metro quisiera compartir ahora algunos de los resultados de nuestro continuo análisis.

Para obtener información adicional sobre el LRT del Conector Regional, por favor visite el sitio Web del proyecto en *metro.net/regionalconnector* o llame a la línea de información del proyecto al 213.922.7277.

jueves 5 de noviembre de 2009, 6:30 a 8pm
Lake Avenue Church
393 N Lake Av, Pasadena

sábado 7 de noviembre de 2009 10am a mediodía
Wurlitzer Building
818 S Broadway, Los Angeles

martes 10 de noviembre de 2009 mediodía a 1:30pm
Los Angeles Central Library, Board Room
630 W 5th St, Los Angeles

jueves 12 de noviembre de 2009 2pm-3:30pm y 6:30-8pm
Japanese American National Museum
369 E 1st St, Los Angeles

El contenido presentado en cada una de las reuniones será idéntico. Se puede llegar a todas las reuniones usando transporte público.

Requerimientos ADA: Comodidades especiales están disponibles para el público asistente a las reuniones patrocinadas por Metro. Peticiones para adaptaciones razonables deben ser sometidas por lo menos 3 días laborables (72 horas) antes de la fecha programada para la reunión. Por favor llame a la línea de información sobre el proyecto al 213.922.7277. Nuestra línea TDD es 800.252.9040.

Metro y la administración de tránsito federal (FTA) estarán preparando un documento en conjunto que cumple con los requerimientos de la ley de política ambiental nacional (NEPA) y la ley de calidad ambiental de California (CEQA).

Thank you for your continued involvement in planning the Regional Connector – a light rail connection through Downtown Los Angeles that will provide mobility benefits to the entire region.

The Regional Connector Transit Corridor Draft Environmental Impact Statement/Report (DEIS/R) is examining potential alternatives to create a Light Rail Transit link between the existing Gold and Blue Line systems, the Gold Line Eastside Extension and the Exposition Line. Once completed, transit riders would enjoy increased transit connections throughout the entire system. The DEIS/R includes the review of the possible effects of the project and alternatives on the project study area.

JAPANESE

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Thursday, November 12, 2009, 2pm-3:30pm and 6:30-8pm
Japanese American National Museum
369 E 1st St, Los Angeles

Content presented at each meeting will be identical.

All locations are accessible by public transit.

ADA Requirements:
Special accommodations are available to the public for Metro-sponsored meetings. All requests for reasonable accommodations must be made at least 3 working days (72 hours) in advance of the scheduled meeting date. Metro's TDD line is 800.252.9040. The project information line is 213.922.7277.

Metro and the Federal Transit Administration (FTA) will be preparing a joint document that meets the requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

JAPANESE

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Help us plan the Regional Connector.

Join us for a community meeting.

Thank you for your continued involvement in planning the Regional Connector – a light rail connection through Downtown Los Angeles that will provide mobility benefits to the entire region.

The Regional Connector Transit Corridor Draft Environmental Impact Statement/Report (DEIS/R) is examining potential alternatives to create a Light Rail Transit link between the existing Gold and Blue Line systems, the Gold Line Eastside Extension and the Exposition Line. Once completed, transit riders would enjoy increased transit connections throughout the entire system. The DEIS/R includes the review of the possible effects of the project and alternatives on the project study area.

You are invited to attend a community meeting to update you on Metro's progress with this project.

In March and April, Metro held four Scoping Meetings to obtain public input as part of the DEIS/R. Based on feedback you provided during the scoping process and more detailed technical study, Metro would now like to share some of the results of our ongoing analysis.

For additional information on the Regional Connector, please visit our project website at *metro.net/regionalconnector* or call the project information line at 213.922.7277.

Thursday, November 5, 2009, 6:30-8pm
Lake Avenue Church
393 N Lake Av, Pasadena

Saturday, November 7, 2009, 10am-noon
Wurlitzer Building
818 S Broadway, Los Angeles

Tuesday, November 10, 2009, noon-1:30pm
Los Angeles Central Library, Board Room
630 W 5th St, Los Angeles

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metro.net

Ayúdenos a planear el Conector Regional.

Japanese: Help us plan the Regional Connector.

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Gracias por su continua participación en la planificación del Conector Regional – una conexión de tren ligero a través del Centro de Los Angeles que proporcionará beneficios de movilidad a la región entera.

El Borrador de la Declaración/Reporte de Impacto Ambiental (DEIS/R) del Corredor de Transporte Conector Regional está examinando alternativas potenciales para crear un enlace de transporte de tren ligero (LRT) entre los sistemas existentes de Metro Gold Line y Metro Blue Line, la Extensión hacia el Este de la Línea de Oro y Exposition Line. Una vez completado, los usuarios disfrutarían de más conexiones de transporte a través del sistema LRT. El DEIS/R incluye la revisión de los posibles efectos del proyecto y alternativas en el área de estudio del proyecto.

Thank you for your continued involvement in planning the Regional Connector – a light rail connection through Downtown Los Angeles that will provide mobility benefits to the entire region.

JAPANESE

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Está invitado a asistir a una reunión comunitaria para proporcionarle una actualización sobre el progreso de Metro en este proyecto.

En marzo y abril, Metro llevó a cabo cuatro reuniones de alcance para obtener sugerencias del público como parte del DEIS/R. Basados en las opiniones que proporcionaron durante el proceso de alcance y un estudio técnico más detallado, Metro quisiera compartir ahora algunos de los resultados de nuestro continuo análisis.

Para obtener información adicional sobre el LRT del Conector Regional, por favor visite el sitio Web del proyecto en *metro.net/regionalconnector* o llame a la línea de información del proyecto al 213.922.7277.

jueves 5 de noviembre de 2009, 6:30 a 8pm
Lake Avenue Church
393 N Lake Av, Pasadena

sábado 7 de noviembre de 2009 10am a mediodía
Wurlitzer Building
818 S Broadway, Los Angeles

martes 10 de noviembre de 2009 mediodía a 1:30pm
Los Angeles Central Library, Board Room
630 W 5th St, Los Angeles

jueves 12 de noviembre de 2009 2pm-3:30pm y 6:30-8pm
Japanese American National Museum
369 E 1st St, Los Angeles

El contenido presentado en cada una de las reuniones será idéntico. Se puede llegar a todas las reuniones usando transporte público.

Requerimientos ADA: Comodidades especiales están disponibles para el público asistente a las reuniones patrocinadas por Metro. Peticiones para adaptaciones razonables deben ser sometidas por lo menos 3 días laborables (72 horas) antes de la fecha programada para la reunión. Por favor llame a la línea de información sobre el proyecto al 213.922.7277. Nuestra línea TDD es 800.252.9040.

Metro y la administración de tránsito federal (FTA) estarán preparando un documento en conjunto que cumple con los requerimientos de la ley de política ambiental nacional (NEPA) y la ley de calidad ambiental de California (CEQA).

You are invited to attend a community meeting to update you on Metro's progress with this project.

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For additional information on the Regional Connector LRT, please visit our project website at *metro.net/regionalconnector* or call the project information line at 213.922.7277.

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Regional Connector Transit Corridor

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Community Update Meeting No. 2

Portions of this appendix have been intentionally left blank. This information is available from Metro upon request.

State Clearinghouse Number: 2009031043

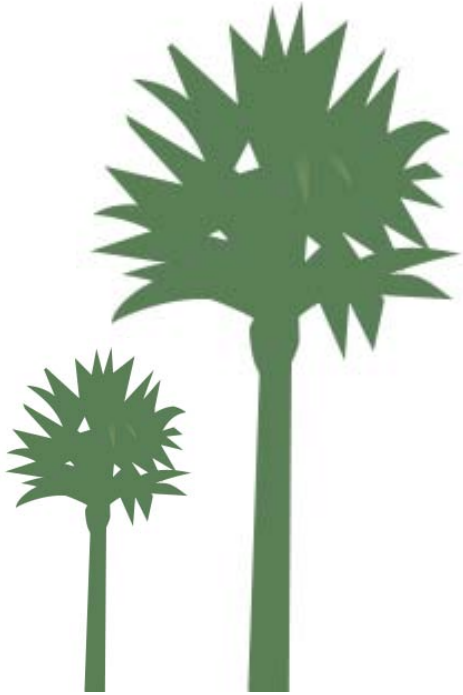
Regional Connector Transit Corridor

Community Update Meetings – April 2010

Metro

Today's Agenda

- Introductions
- Project Update
- What's Next?
- Stay In Touch



Metro

Regional Connector Transit Corridor

Community Update Meetings – April 2010

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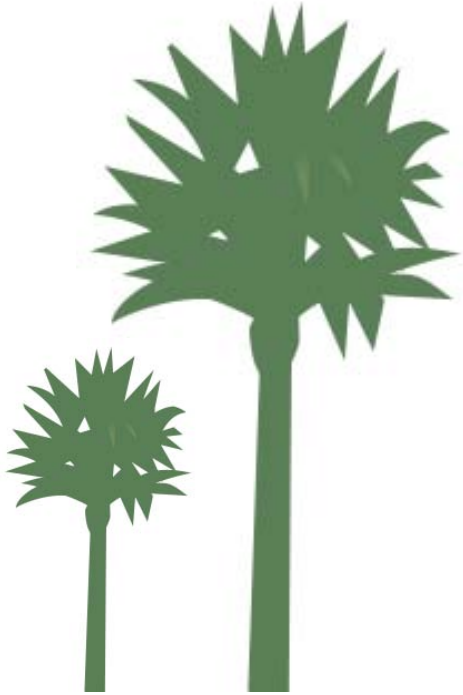
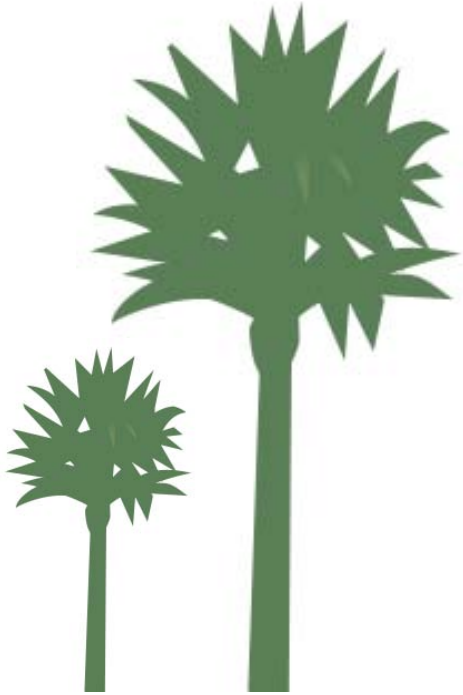


Metro

Community Update Meetings

- April 9, 12 p.m. – Los Angeles Central Public Library, Financial District
- April 13, 6:30 p.m. – Lake Avenue Church, Pasadena
- April 14, 2 p.m. – Japanese American National Museum, Little Tokyo
- April 14, 6:30 p.m. – Japanese American National Museum, Little Tokyo
- April 17, 11 a.m. – Los Angeles Theater Center

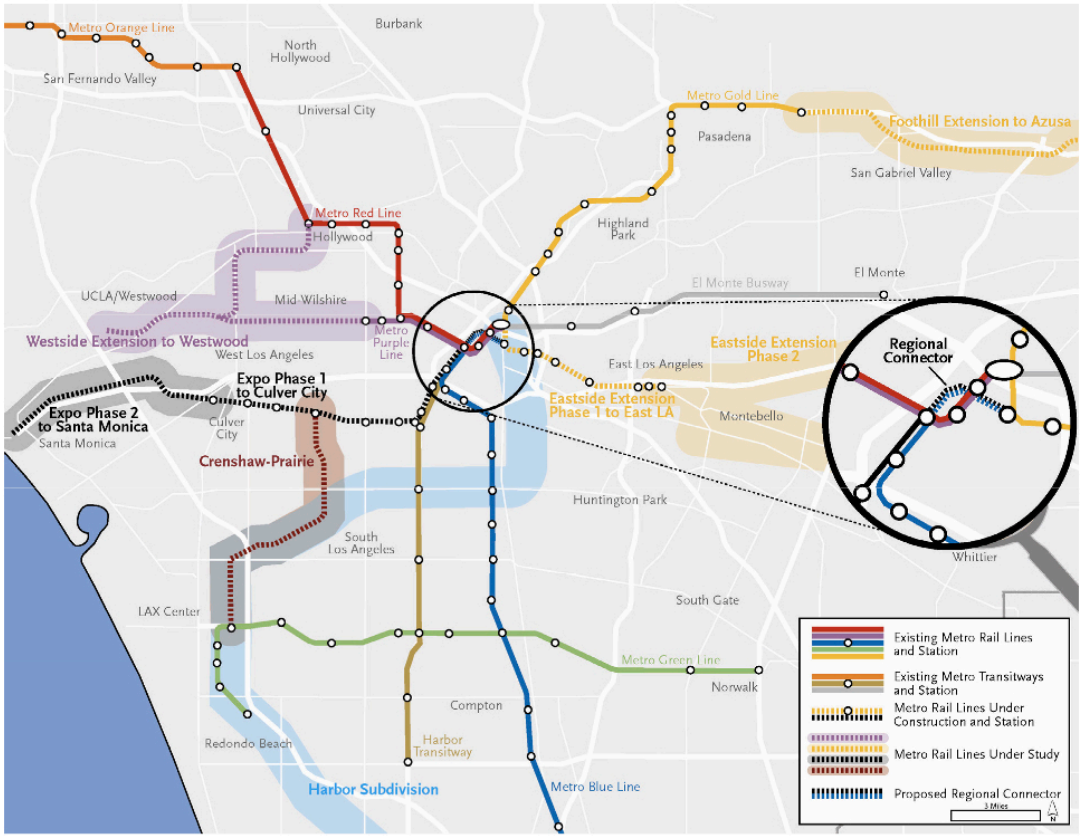


Metro

Rail System Overview

By 2035, the following corridors will have selected projects operational as funded by Measure R and other eligible local, state, and federal funds:

- Regional Connector
- Westside Extension
- Eastside Extension Phase 2
- Crenshaw-Prairie



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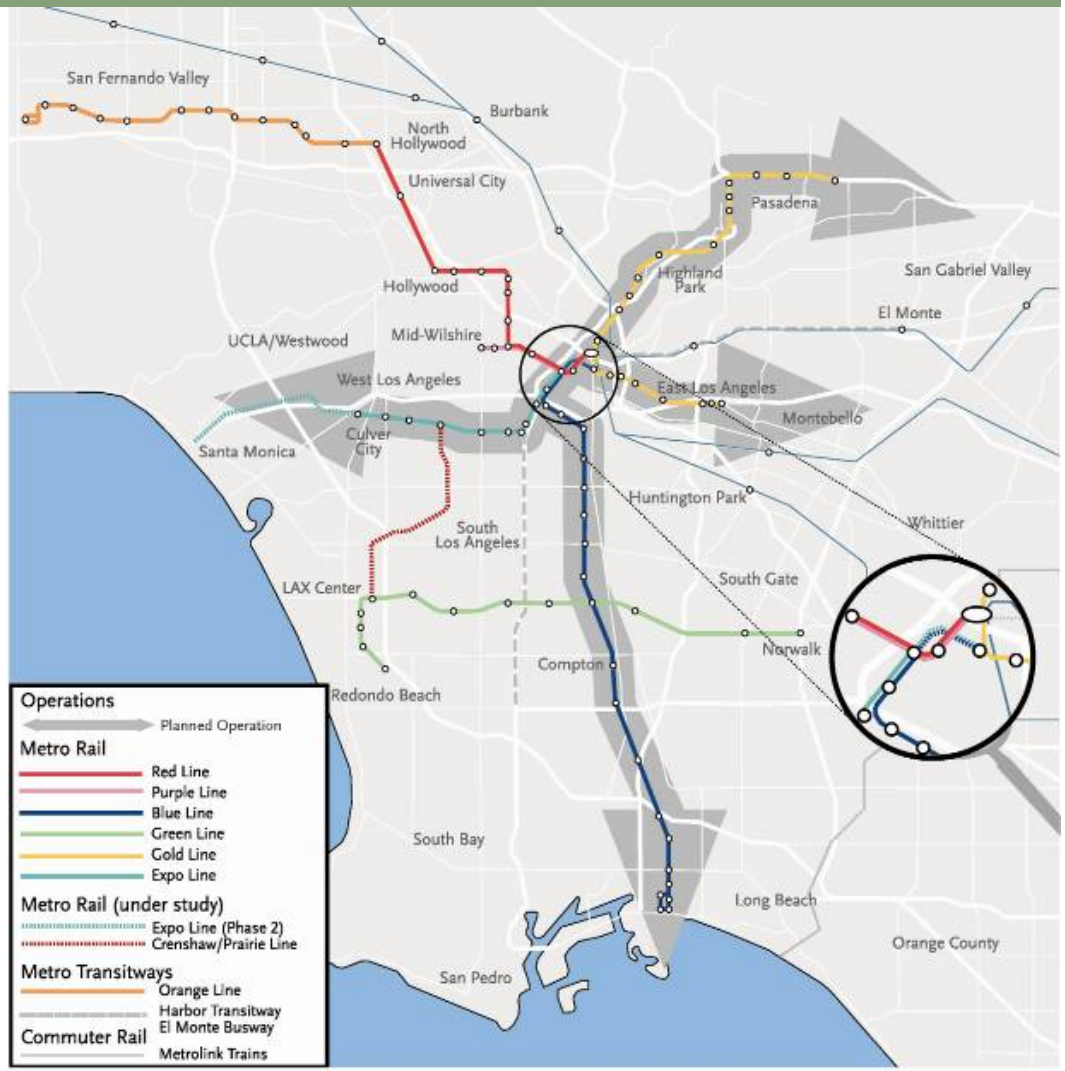
Purpose and Need

- Los Angeles County population growth: nearly 2 million additional people by 2035
- Employment density (jobs/acre projected to 2030)
  - 5th/Flower 390
  - 2nd/Hope 107
  - 2nd/Los Angeles 137
- 5.7 million persons-hours of daily delay
- Transfers at Union Station and 7th/Metro Center add up to 20 additional minutes per trip
- Payment of transfers add costs to riders

Metro

Project Overview

- Connects the Metro Gold (Pasadena and Eastside), Exposition, and Blue Lines
- Provides a "One Seat Ride" for travel across the county on light rail
- Provides for a sustainable mode of transportation, saving people time and money

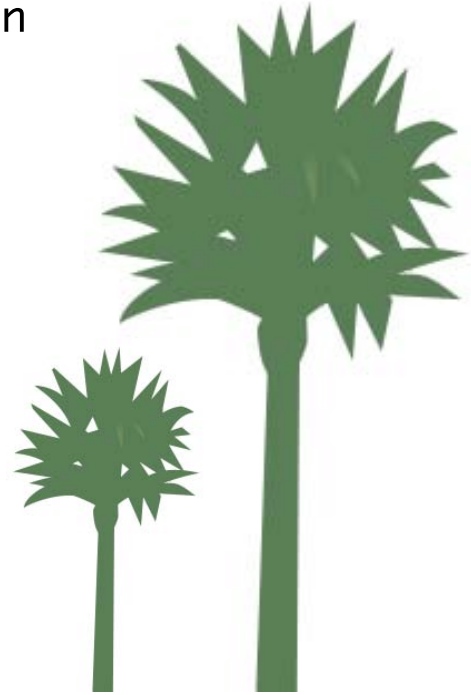


Metro

Project Benefits

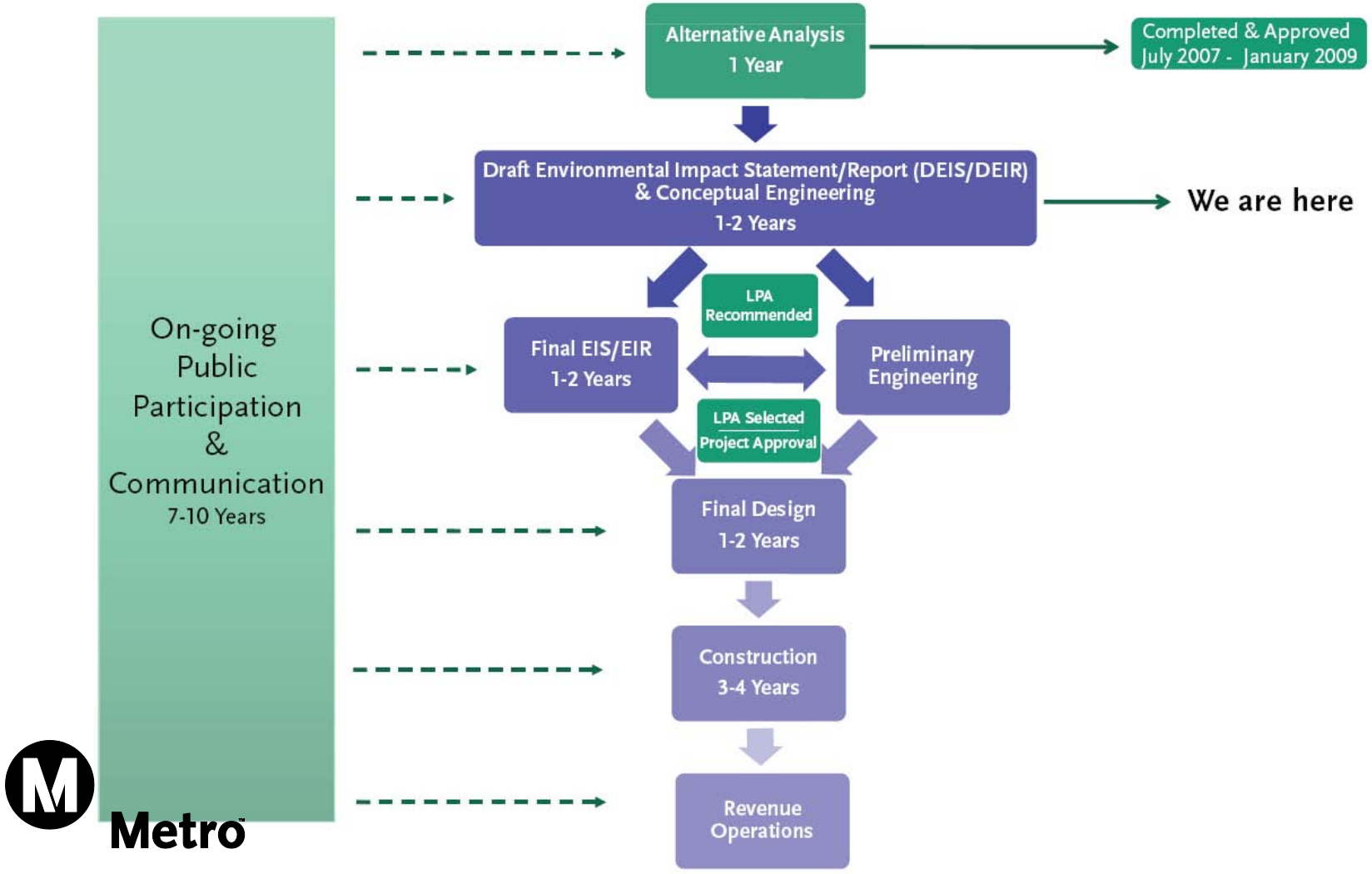
- Regional Connector creates two cross-regional lines for Los Angeles County
  - North to South LRT line (≈50 miles)
  - East to West LRT line (≈25 miles)

- Regional Connector improves ridership across the region
  - Gold Line (1st/Utah to Pomona/Atlantic) 18.4%
  - Gold Line Eastside Phase 2 11.6%
  - Gold Line (Chinatown to Sierra Madre Villa) 10.0%
  - Blue Line (Pico/Flower to Long Beach) 10.9%
  - Expo Line (Pico/Flower to Santa Monica) 4.7%



Metro

Project Development Process



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Project Progress

- November 2008 – Measure R approved by voters
- January 2009 – Alternatives Analysis Study completed, Metro initiates Draft EIS/EIR Process
- May 2009 – Public Scoping period ends
- Summer/Fall 2009 – Refinement of design and continued community outreach
- Fall 2009 – Metro Board approves Long Range Transportation Plan (LRTP)
- January 2010 – Request for Proposal (RFP) for Little Tokyo Mitigation Development released
- February 2010 – Metro authorizes inclusion of a Fully Underground Alternative

Metro

Stakeholder Meetings

- Bringing Back Broadway
- Central City East Association
- Downtown Los Angeles Neighborhood Council
- Go For Broke
- Higgins Homeowners Association
- Japanese American Cultural and Community Center
- Japanese American National Museum
- Japanese Chamber of Commerce of Southern California
- Little Tokyo Business Association
- Little Tokyo CRA CAC
- Little Tokyo Community Council
- Little Tokyo Service Center
- Los Angeles Conservancy
- Los Angeles Nishi Hongwanji Temple
- MOCA
- Savoy Homeowners Association
- Thomas Properties Group
- University of Southern California

Metro

Urban Design Working Group

- Consists of stakeholders from the station areas currently under review
- Initially met as one large group, with three station area meetings
- An additional meeting will be scheduled to discuss the Little Tokyo/Arts District Station
- Expect the final UDWG meeting to take place in the summer to discuss all of the stations
- More urban design planning during the next phase of the project

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Little Tokyo Working Group

- Supports Little Tokyo Community Council (LTCC)
- Gathers community input
- Reviews and discusses project alternatives included in Draft EIS/EIR
- 10 meetings have taken place to dates
  - Provided an overview of the EIS/EIR process
  - Discussed project impacts and candidate mitigations for each alternative
- Provided funding for a consultant to advise the LTCC on candidate mitigation measures specific to the Little Tokyo community

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What We Heard

- > Strong support for the Fully Underground LRT Alternative
- > Locate station entrances within the “Office Depot” site and the proposed Nikkei Center development
- > Where possible, maintain businesses along Central Avenue in Little Tokyo
- > Minimize public right-of-way surface construction activities
- > Minimize environmental and quality-of-life impacts during construction
- > Continue to work with stakeholders on the development of candidate mitigation measures throughout the review of the Draft EIS/EIR and Final EIS/EIR

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Project Alternatives Under Study

- No Build
- Transportation System Management
- At-Grade Emphasis Light Rail Transit (LRT)
- Underground Emphasis LRT
- Fully Underground LRT

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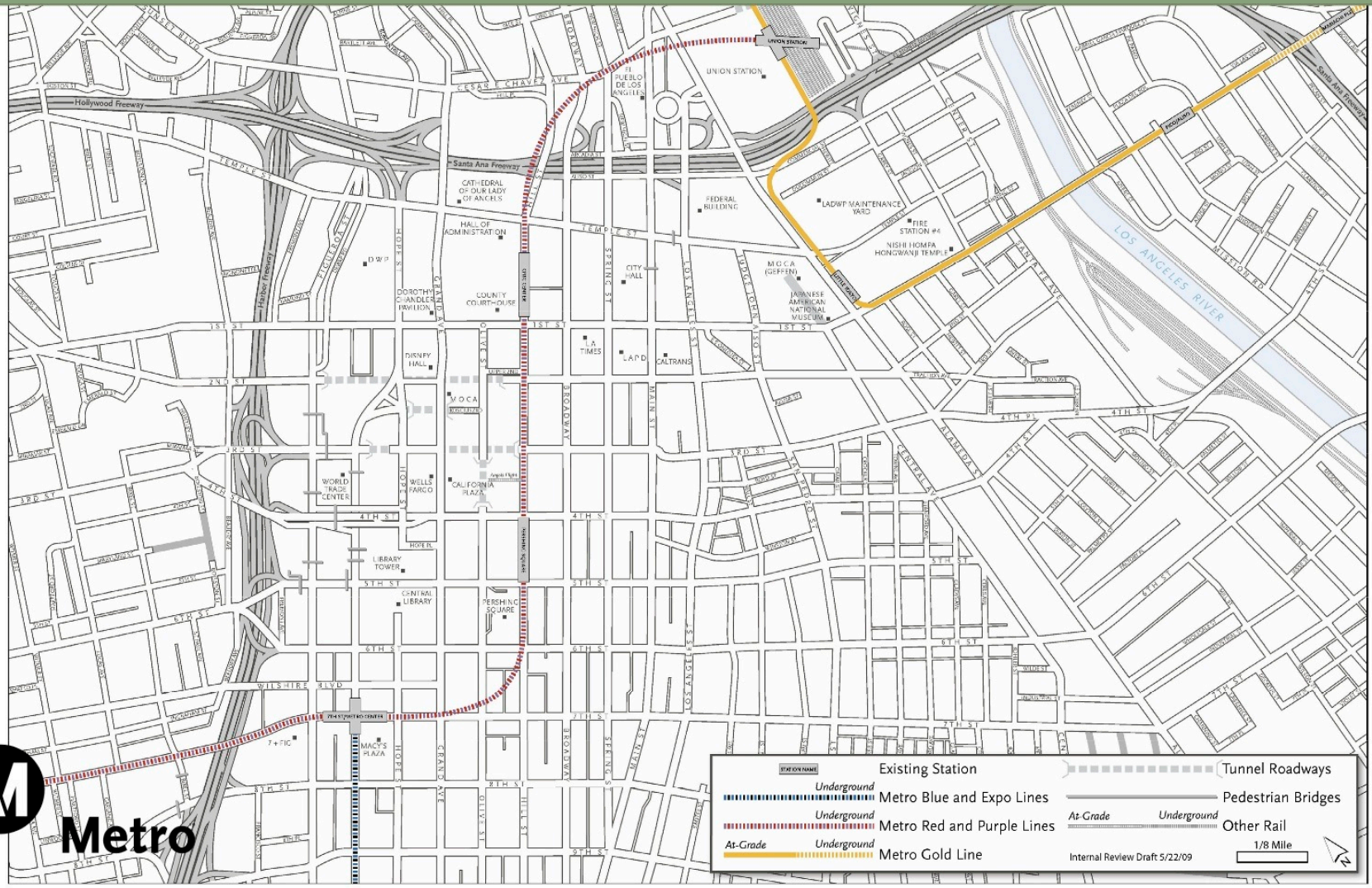
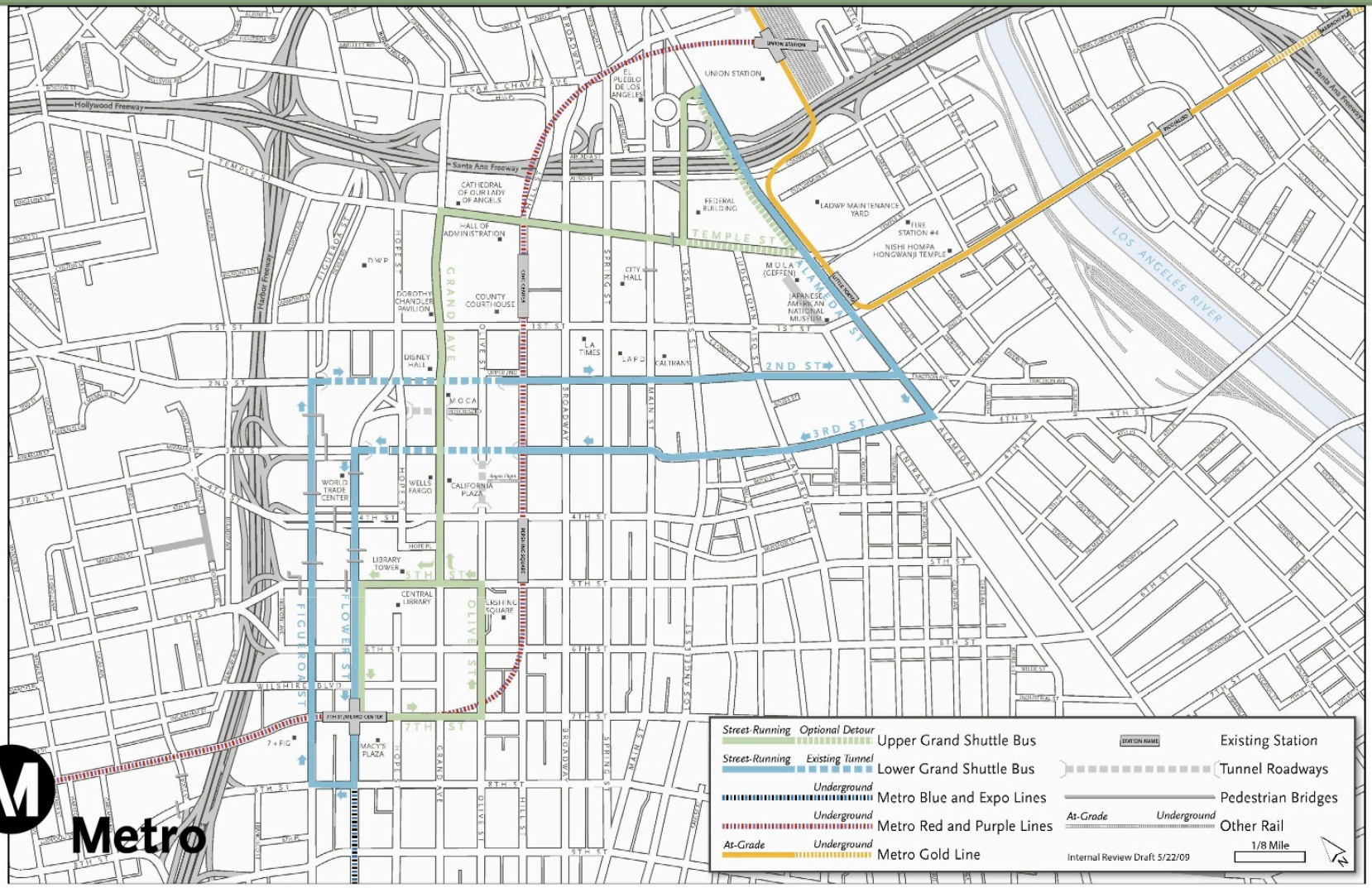
Project Alternative: No Build

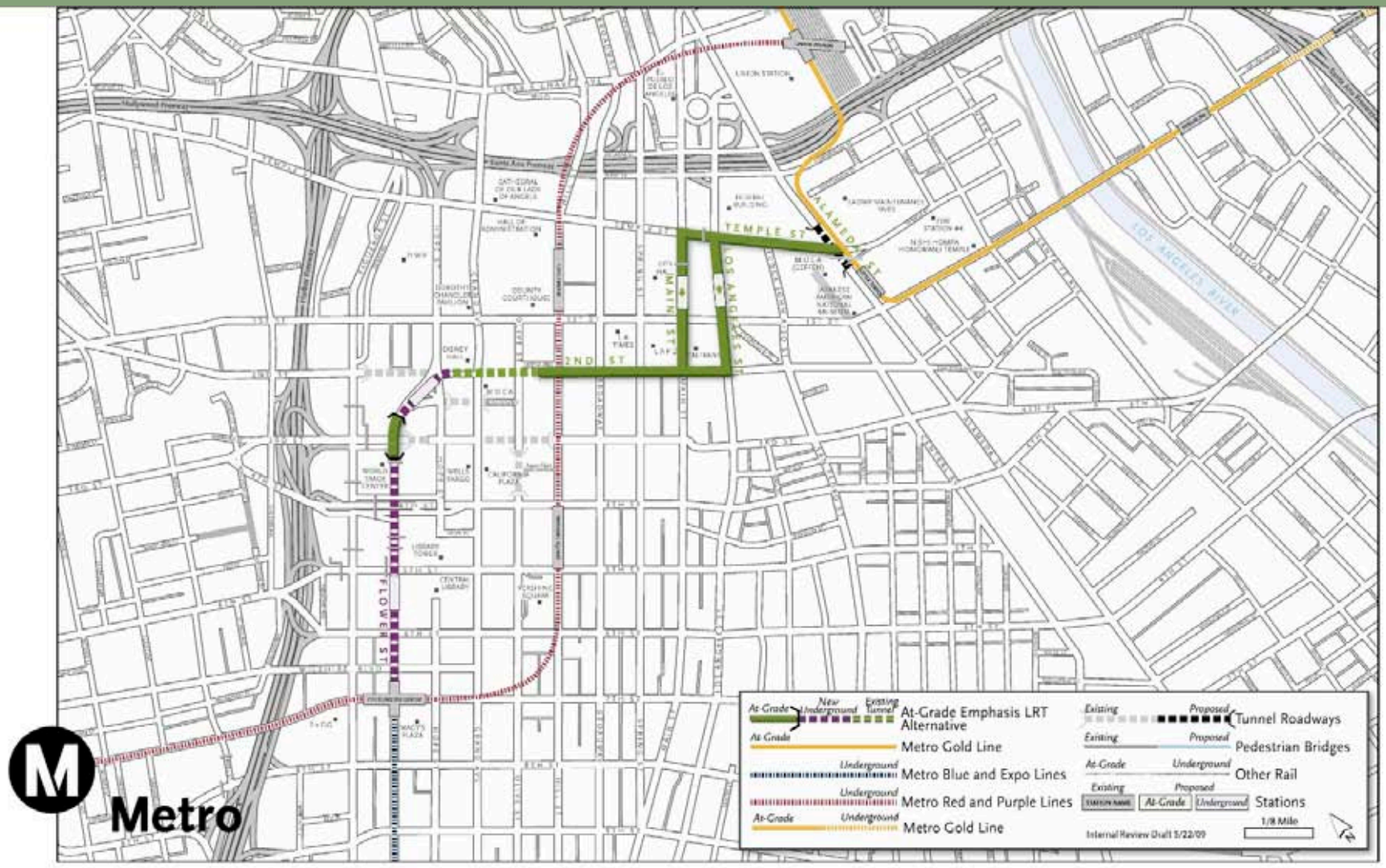


Project Alternative: Transportation System Management

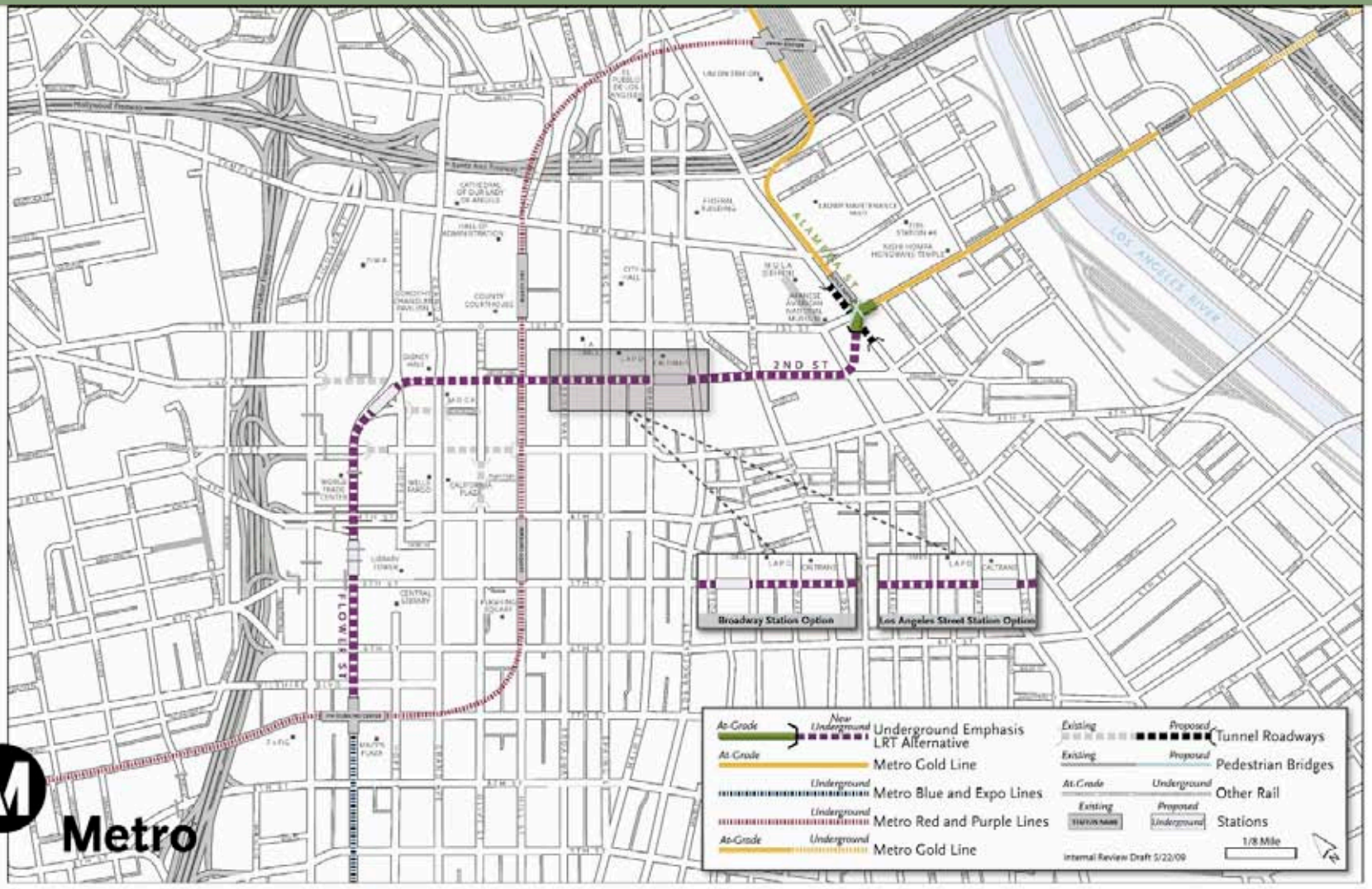


Metro

Project Alternative: At-Grade Emphasis LRT



Project Alternative: Underground Emphasis LRT



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Project Alternative: Fully Underground LRT

Project Alternative: Fully Underground LRT

- Tracks would pass under 1st Street at Alameda Street
- Intersection configuration remains unchanged
- Trains surface through new portals east of 1st and Alameda Streets, and northeast of Temple and Alameda Streets
- Provides a 4th underground station at 2nd Street and Central Avenue to serve the Little Tokyo and Arts District communities
- Commits to an underground station at 2nd Street at Broadway

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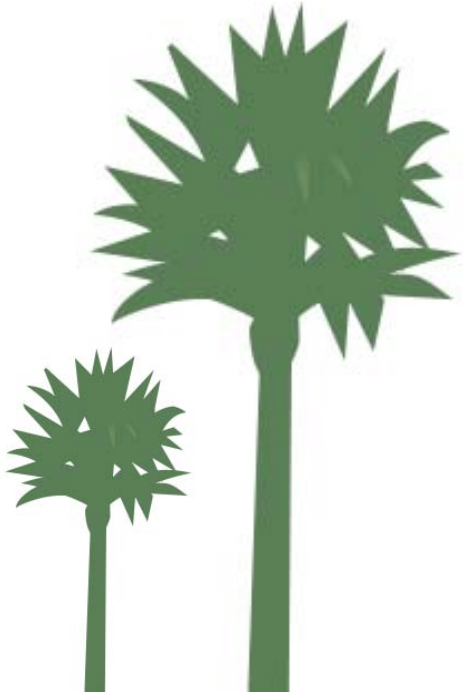
Project Benefits

- Fully Underground LRT Alternative
  - 90,000 passengers would access the Regional Connector daily
  - 20,000+ passengers would ride LRT rather than a bus
  - 17,000 new transit riders
  - Regional Connector saves time and money
    - Reducess travel time by 30%
    - Average travel trip savings assumes 5 minutes for transfer
    - Reduce overall fare cost to riders by eliminating transfers
  - Cost effectiveness at $20.38



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Project Benefits

- Compared to the No Build Alternative
  - Improves performance at up to 11 intersections
    - Including 1st and Alameda Streets
  - Reduces annual greenhouse gas emissions by up to 73,000 metric tons
  - Decreases annual highway Vehicle Miles Travelled (VMT) by 114 million vehicles miles
  - Net annual energy savings of 650 billion BTUs or equivalent to 115,000 barrels of oil

Metro

Project Benefits

> Travel Times

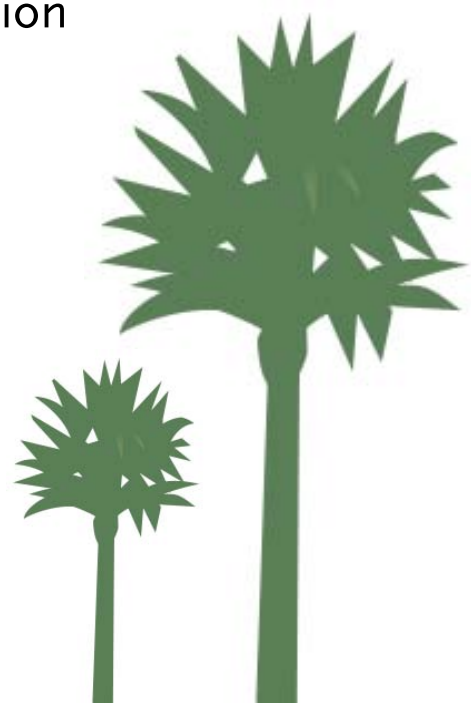
	No Build	TSM *	At-Grade Emphasis	Underground Emphasis	Fully Underground
Pomona/Atlantic to Expo/USC	44 minutes	52 minutes	36 minutes	31 minutes	31 minutes 30% improvement
Pico/Flower to Memorial Park	39 minutes	47 minutes	36 minutes	34 minutes	32 minutes 18% improvement
Washington/ National to 2nd Street	34 minutes to Civic Center	38 minutes	33 minutes to 1st/ Los Angeles Streets	30 minutes	30 minutes 28% improvement

Metro

*Assumes 5 minutes for each transfer

What's Next

- Community Update Meetings – Spring 2010
- Draft EIS/EIR released to public – Summer 2010
- Public Hearings – Summer 2010
- Metro Board of Directors Meeting – Fall 2010
  - Present Locally Preferred Alternative Recommendation
- Could begin Preliminary Engineering – Winter 2010
- Metro staff to refine Draft EIS/EIR based on submitted comments
- Final EIS/EIR released to public – Summer 2011



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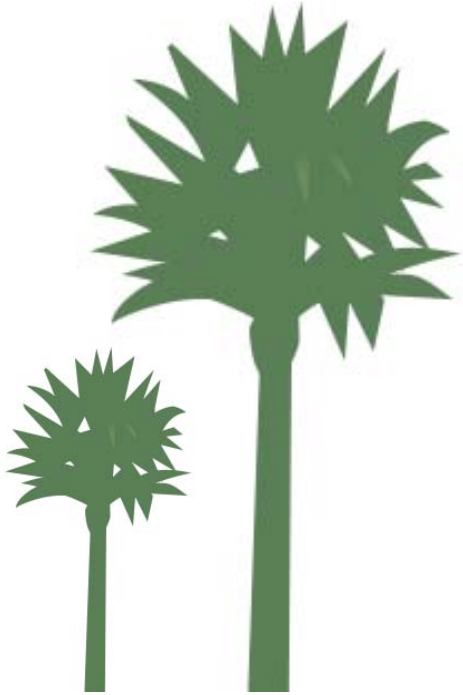
Stay In Touch

- Phone – 213.922.7277
- Email – regionalconnector@metro.net
- Website – www.metro.net/regionalconnector
- Facebook – Regional Connector Transit Corridor Study



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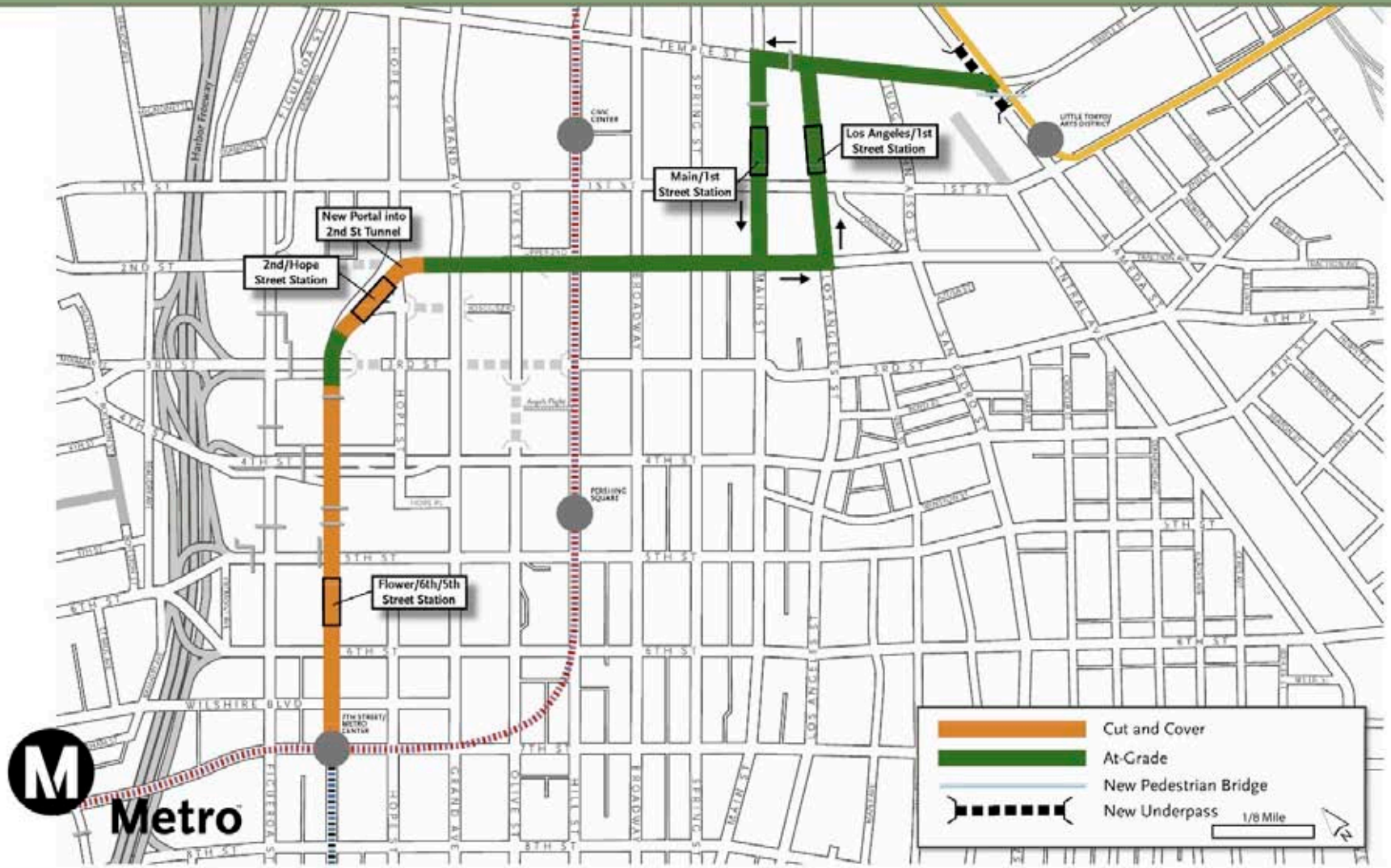
Construction Methods: At-Grade Emphasis LRT



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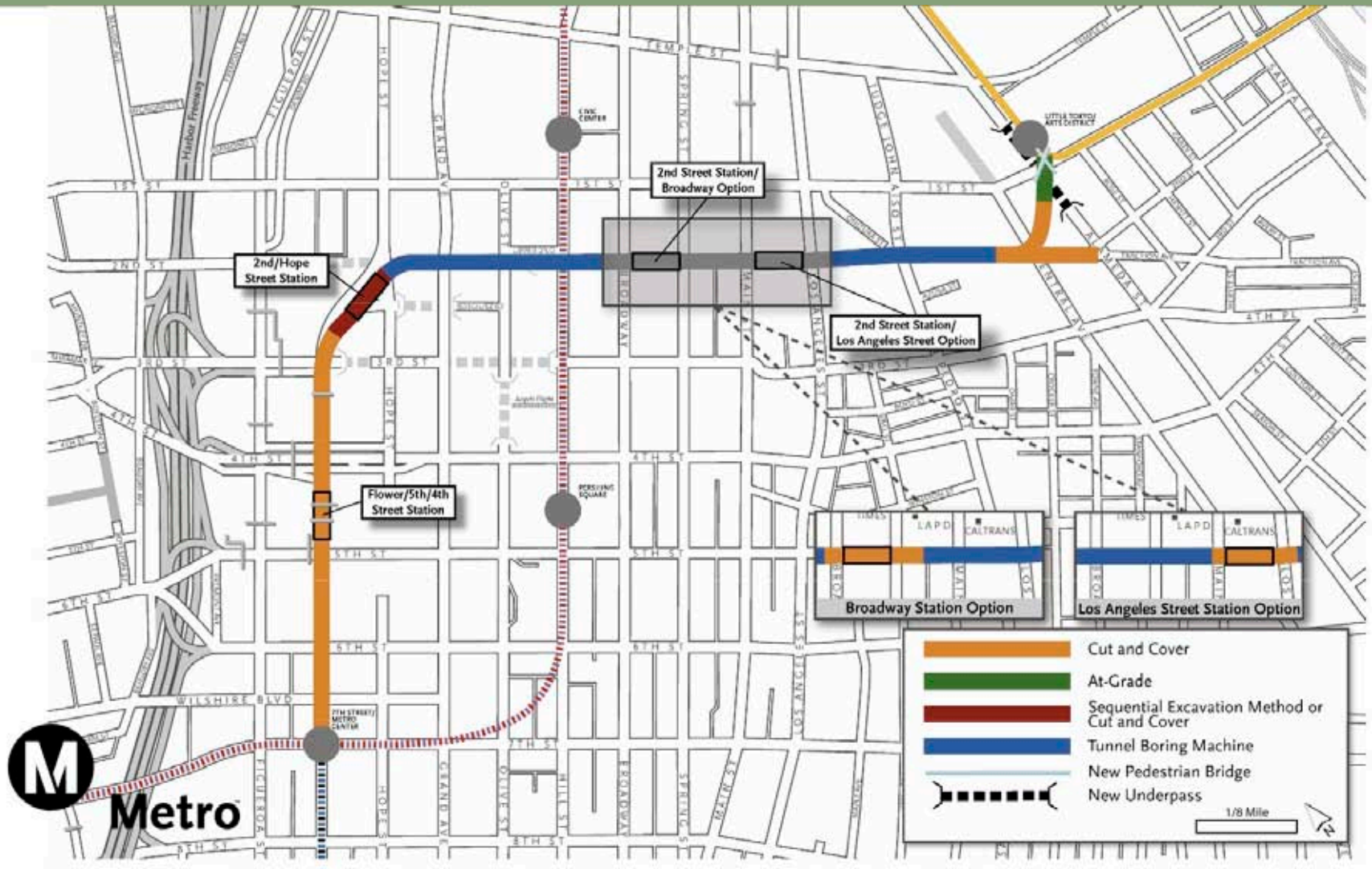

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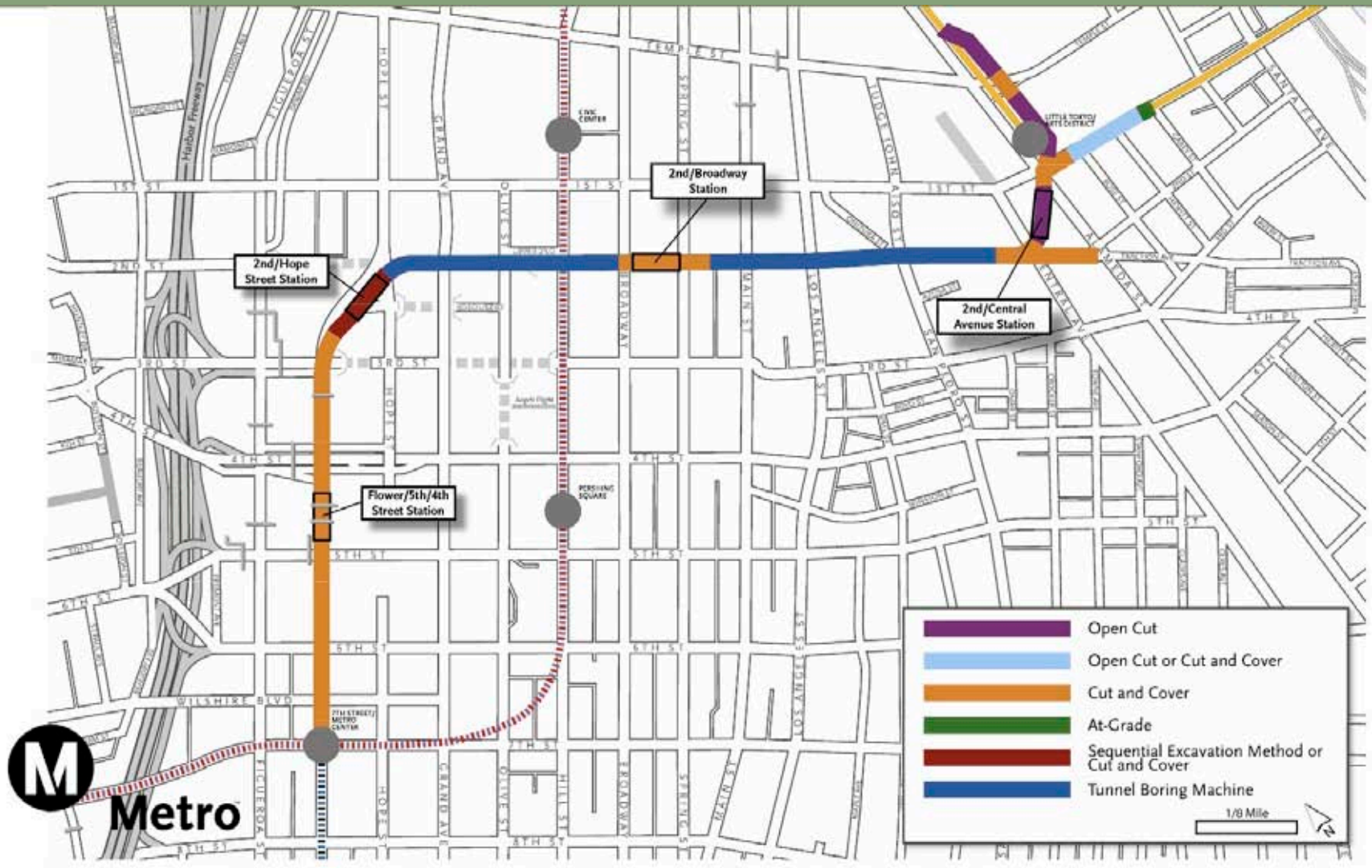

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Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Community Update Meeting No. 2
Meeting Announcements, Advertisements, and Notifications

State Clearinghouse Number: 2009031043

Subject: Regional Connector Announces Spring Meetings
Date: Thursday, April 1, 2010 3:09 PM
From: Ann Kerman <kermana@metro.net>
Conversation: Regional Connector Announces Spring Meetings

Greetings:

Please Join Us

You are invited to attend a community update meeting for the Regional Connector Transit Corridor Project. The meeting will consist of an open house as well as a presentation highlighting the features of the new fully underground build alternative, the benefits of the various alternatives studied and an updated schedule for completion and review of the Draft EIS/EIR.

Please mark your calendar and plan to attend one of the update meetings. (There is no need to attend multiple meetings, as identical information will be presented at each.)

Los Angeles Central Public Library, 630 W 5th St, Los Angeles
Friday, April 9th from 12 p.m. to 1:30 p.m.

This meeting is tentatively scheduled to be broadcast live from www.metro.net/regionalconnector

Lake Avenue Church, 393 N Lake Ave, Pasadena, CA
Tuesday, April 13th from 6:30 p.m. to 8 p.m.

Japanese American National Museum (JANM), 369 E 1st St, Los Angeles
Wednesday, April 14th from 2:00 p.m. to 3:30 p.m. **AND** from 6:30 p.m. to 8 p.m.

Los Angeles Theater Center, 514 S Spring St, Los Angeles
Saturday, April 17th from 11 a.m. to 12:30 p.m.

We hope that you are able to join us for one of the community update meetings. Presentation materials will be posted on the project website at the conclusion of these meetings.

Metro appreciates your continued involvement and participation. Should you have any questions, please do not hesitate to contact us by visiting the Regional Connector Transit Corridor Study website at www.metro.net/regionalconnector or email us at regionalconnector@metro.net.

Best Regards,

The Regional Connector Project Team

This message was sent to ginny@therobertgroup.com by:

Los Angeles County Metropolitan Transportation Authority
1 Gateway Plaza
Los Angeles, CA 90012
(213) 922-6000

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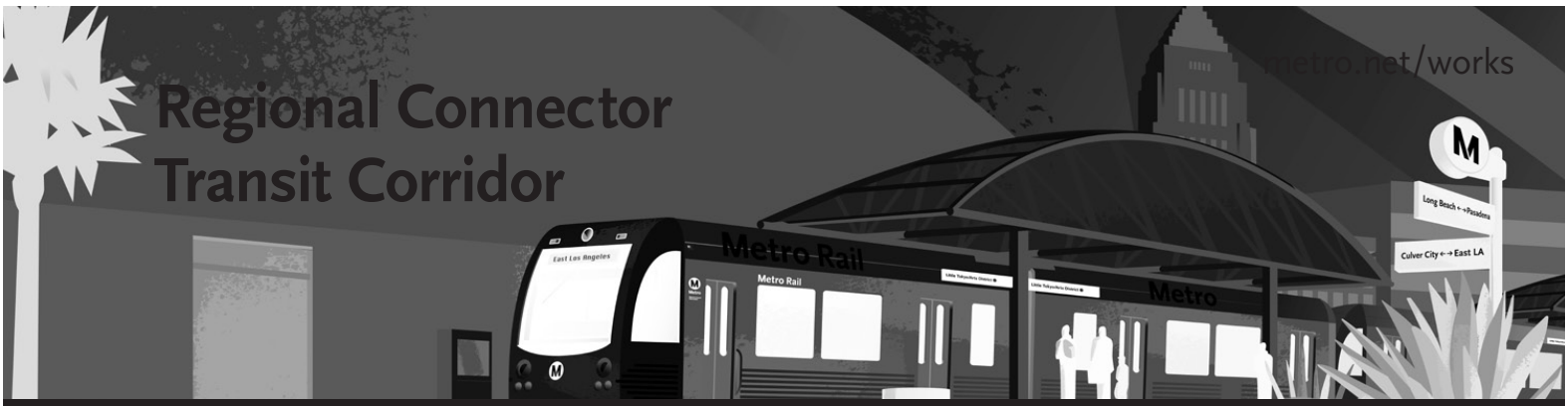

Project Update Meetings

You are invited to a Metro project update meeting on the Regional Connector Transit Corridor Draft EIS/EIR

This study is looking at ways to directly connect the Metro Gold, Blue and Expo Lines through Downtown Los Angeles.

At the upcoming April 2010 meetings, Metro will present information about the new fully grade-separated alternative added to the study by the Metro Board of Directors. The presentation will also include an update on the technical studies and review the project alternatives currently being evaluated.

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All locations are accessible by public transit.
For more information call 213.922.7277
or visit metro.net/regionalconnector.

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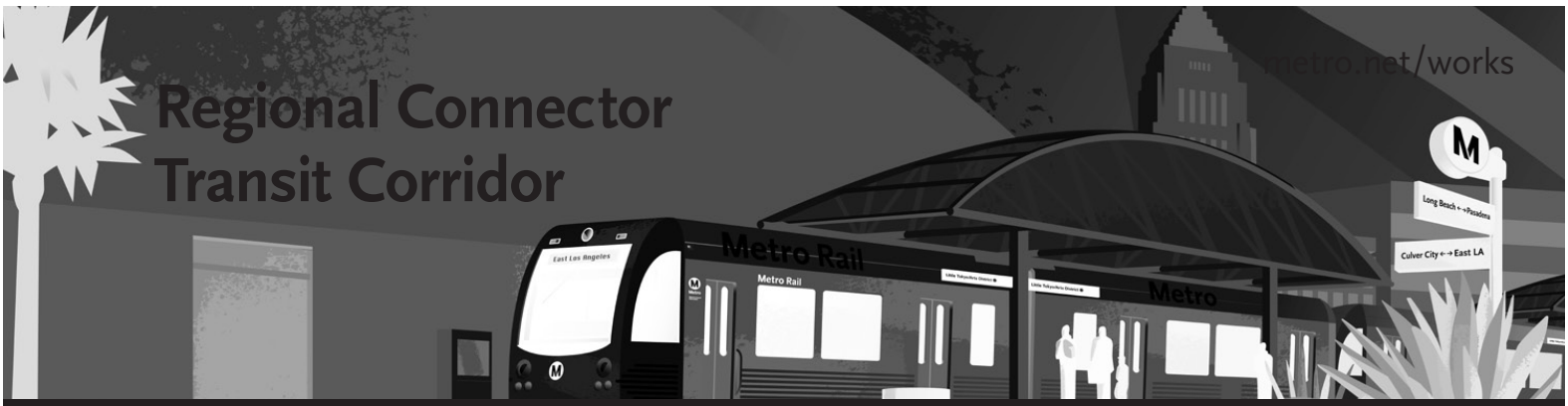

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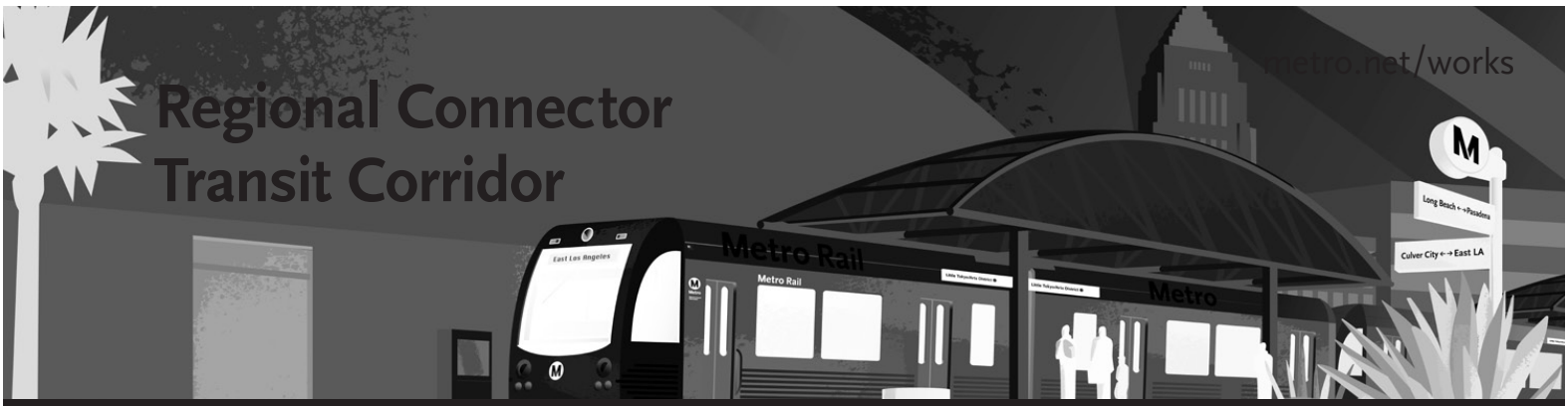

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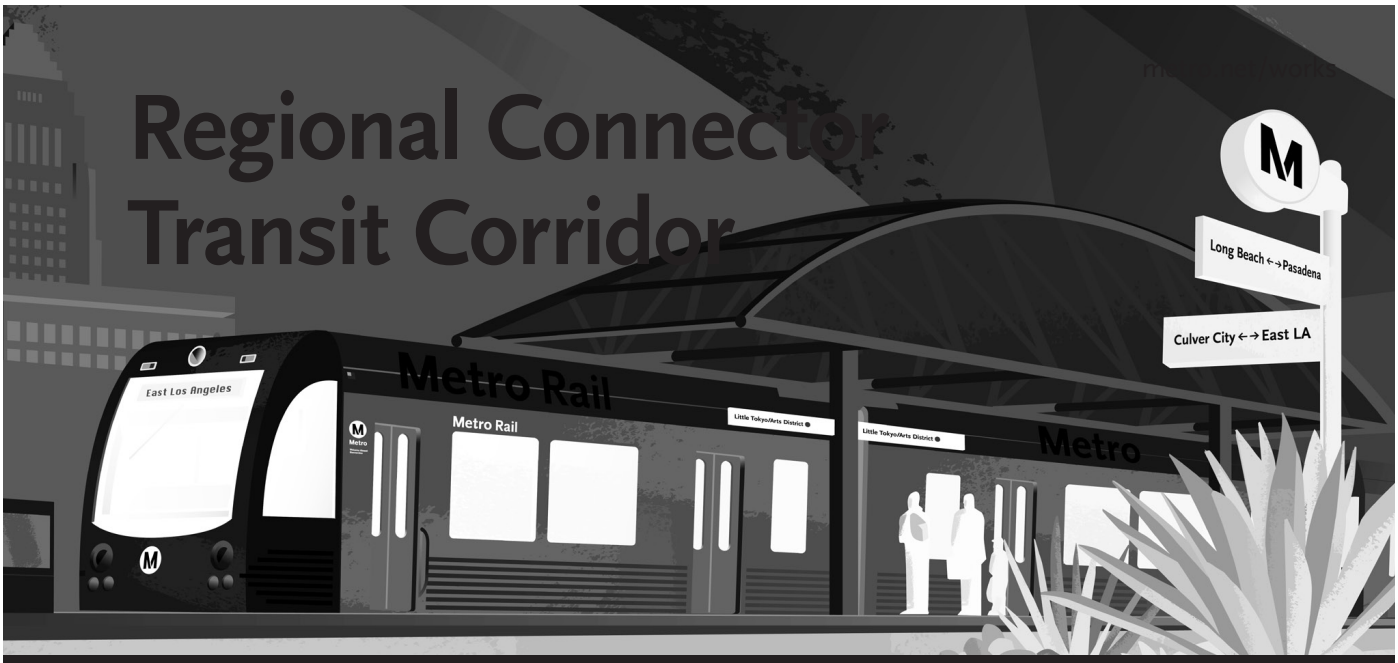

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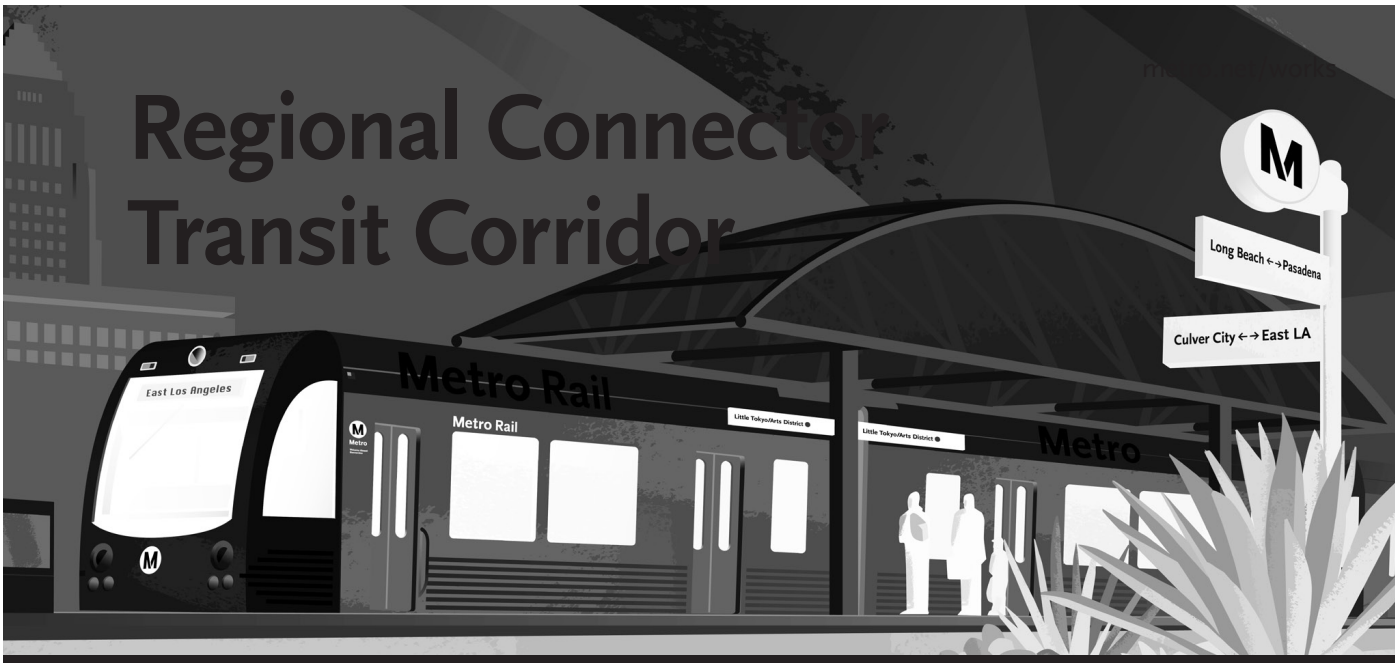

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Gracias por su continua participación en la planeación del Conector Regional – una conexión de tren ligero a través de Downtown Los Angeles que proporcionará beneficios de movilidad a la región entera.

El Borrador de la Declaración/Reporte del Impacto Ambiental (Borrador EIS/EIR) del Corredor de Transporte Conector Regional examinará enlaces potenciales de transporte de tren ligero (LRT) entre los sistemas de Metro Gold Line, Blue Line y Expo Line existentes. Una vez completado, los usuarios disfrutarán de más conexiones de transporte a través de todo el sistema LRT. El Borrador EIS/EIR incluye la revisión de los posibles efectos de las alternativas del proyecto en el área de estudios del proyecto.

Thank you for your continued involvement in planning the Regional Connector – a light rail connection through Downtown Los Angeles that will provide mobility benefits to the entire region.

The Regional Connector Transit Corridor Draft Environmental Impact Statement/Report (Draft EIS/EIR) will examine potential Light Rail Transit (LRT) linkages between the existing Gold, Blue and Expo Line systems. Once completed, transit riders would enjoy increased connections throughout the entire LRT system. The Draft EIS/EIR includes the review of the possible effects of the project alternatives in the project study area.

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Help us plan the Regional Connector.

Ayúdenos a planear el Conector Regional.

地域コネクターの計画にご協力ください。

> **Project Update Meetings**
April 9, 13, 14 & 17, 2010

> ***Reuniones de actualización del proyecto***
9, 13, 14 y 17 de abril de 2010

> **プロジェクトアップデート集会**
2010年4月9、13、14、17日

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You are invited to a community meeting for the Regional Connector Transit Corridor Project.

In February 2010, Metro's Board of Directors voted to include a fully-grade separated alternative in the Draft EIS/EIR. We would like to introduce you to the new project alternative and provide you with an update on the progress of the study to date. Please join us at one of the following locations for the next round of community meetings:

Friday, April 9, 12pm-1:30pm
Los Angeles Central Public Library
630 W 5th St, Los Angeles
This meeting is tentatively scheduled to be broadcast live from *metro.net/regionalconnector.*

Tuesday, April 13, 6:30pm-8pm
Lake Avenue Church
393 N Lake Av, Pasadena

Wednesday, April 14, 2pm-3:30pm and 6:30pm-8pm
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Content presented at each meeting will be identical. All locations are accessible by public transit.

ADA Requirements
Special accommodations are available to the public for Metro-sponsored meetings. All requests for reasonable accommodations must be made at least 3 working days (72 hours) in advance of the scheduled meeting date. Metro's TDD line is 1.800.252.9040.

Information
For additional information on the Regional Connector, please visit our project website at *metro.net/regionalconnector* or call the project information line at 213.922.7277.

Está invitado a una reunión comunitaria para el proyecto del Corredor de Transporte Conector Regional.

En febrero de 2010, la Junta Directiva de Metro votó para incluir una alternativa de grado separado completo en el Borrador EIS/EIR. Nos gustaría presentarle la nueva alternativa del proyecto y proporcionarle una actualización sobre el progreso del estudio. Por favor asista a una de las siguientes reuniones para participar:

Viernes 9 de abril, 12pm-1:30pm
Los Angeles Central Public Library
630 W 5th St, Los Angeles
Esta reunión ha sido tentativamente programada para ser presentada en vivo a través de *metro.net/regionalconnector.*

Martes 13 de abril, 6:30pm-8pm
Lake Avenue Church
393 N Lake Av, Pasadena, CA

Miércoles 14 de abril, 2pm-3:30pm y 6:30pm-8pm
Japanese American National Museum
369 E 1st St, Los Angeles

Sábado 17 de abril, 11am-12:30pm
Los Angeles Theater Center
514 S Spring St, Los Angeles

El contenido presentado en cada una de las reuniones será idéntico. Se puede llegar a todos los lugares de reuniones usando transporte público.

Requerimientos ADA
Comodidades especiales están disponibles para el público asistente a las reuniones patrocinadas por Metro. Peticiones para adaptaciones razonables deben ser sometidas por lo menos tres días laborables (72 horas) antes de la fecha programada para la reunión. La línea TDD de Metro es 1.800.252.9040.

Información
Para obtener información adicional sobre el LRT del Conector Regional, por favor visite el sitio Web del proyecto en *metro.net/regionalconnector* o llame a la línea de información del proyecto al 213.922.7277.

地域コネクター・トランジット回廊地帯プロジェクトのためのコミュニティー集会にご招待します。

Metroの理事会は2010年2月、完全にグレード分けした代替案を草案EIS/EIRに取り入れることを票決しました。この新しい代替案を紹介し、これまでの調査の進捗状況を発表したいと思います。下記の日時に行われる次回のコミュニティー集会にご参加ください。

4月9日金曜日 12pm-1:30pm
ロサンゼルス中央図書館
630 W 5th St, Los Angeles
この集会は暫定的に*metro.net/regionalconnector*を通じて実況中継することになっています。

4月13日火曜日 6:30pm-8pm
レイクアベニュー教会
393 N Lake Av, Pasadena

4月14日水曜日 2 pm-3:30pm および 6:30pm-8pm
日米国立博物館(JANM)
369 E 1st St, Los Angeles

4月17日土曜日 11am-12:30pm
ロサンゼルス・シアターセンター
514 S Spring St, Los Angeles

各集会では同じ内容が発表されます。集会場はすべて公共交通機関で行くことができます。

ADAの要件
Metroの主催する集会では公衆のための特別な便宜を図っています。合理的な便宜のリクエストは、集会の平日3日(72時間)以上前に行って下さい。TDDラインは1.800.252.9040です。

情報
地域コネクターLRTに関する追加の情報は、ウェブサイト*metro.net/regionalconnector*、もしくはプロジェクト情報ライン213.922.7277.に電話でお問い合わせください。

地域コネクター計画に対する継続的なご協力ありがとうございます。ロサンゼルスダウンタウンをを走る軽線路コネクションは地域コネクターは、全地域に交通の便宜を提供します！

地域コネクター・トランジット回廊地帯草案環境インパクト声明書／報告書(Draft EIS/EIR)では、既存のゴールド、ブルー、エキスポ路線システム間をつなぐ軽線路トランジット(LRT) の可能性を検討します。これが完成するとトランジットの使用者は全LRTシステムを通じてより多くのコネクションを利用することができるようになります。草案EIS/EIRには、プロジェクト調査エリアにおいて、プロジェクトの代替案による影響の可能性も含まれています。

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Little Tokyo Working Group

State Clearinghouse Number: 2009031043

MEETING SUMMARY

Project Name: Metro Regional Connector Transit Corridor Project

Organization: Little Tokyo Working Group

Date/Time: September 17, 2009; 6:00 - 8:00 p.m.

Meeting Location: Japanese American Community and Cultural Center, Garden Room
244 S San Pedro St, Los Angeles, CA 90012

Project Team: Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Clarissa Filgioun, Ginny Brideau, Min Cheung, Yojo Kikuchi, Robin Akashi

Attendees:

Bill Watanabe	Mike Okamoto	Evelyn Yoshimura
Kene Kubo	Nao Gunji	Joanne Kumamoto
Craig Ishii	Chris Aihara	Chris Komai
Ron Fong	Lisa Suiki	Satoru Uyeda
June Berk	Andrew Lin	Alan Kumamoto

Summary:

This was the inaugural meeting of the Little Tokyo Working Group (LTWG), a subcommittee of the Little Tokyo Community Council's Planning and Cultural Preservation Committee (PCPC). The LTWG was convened to discuss issues pertinent to the Little Tokyo community as it relates to Metro's Regional Connector Transit Corridor project.

Prior to the start of the meeting, Metro made the at-grade and below grade emphasis models available for the LTWG members to view and informally discuss with staff and consultants. Members of the LTWG had questions about the tunnel surfacing north-east of 2nd Street and Central Avenue, and were interested in receiving more information about landscaping opportunities that would mask the visual impacts of the tunnel and portal at 1st and Alameda Streets. There was also a question about whether a parking garage could feasibly be constructed around the tunnel.

Alan Kumamoto began the meeting with introductions of LTWG members and Metro representatives. Mr. Kumamoto explained the structure and purpose of the LTWG which is intended to address Regional Connector project-related issues specific to Little Tokyo. The LTWG and Metro will work collaboratively to propose mitigation measures that address possible project impacts in this community.

Ann Kerman reminded the LTWG that the Regional Connector is still in its early stages of environmental analysis, there is much work left to be done and emphasized that Metro has not made any decisions regarding this project. It is critical for the LTWG to first review the

results from the technical studies and community feedback in order to be able to fully consider the alternatives.

She added that comments received during the public scoping period have been incorporated into a Scoping Report which will be released during Fall 2009. Metro continues to receive project related comments; these subsequent comments will be addressed and incorporated into the DEIS/R.

Ann then briefly introduced the "Mitigations Matrix," which will be used throughout the effort to track issues and potential mitigations in comparison with each of the four alternatives under consideration. She invited the LTWG to review the categories prior to the October 1 meeting and to provide any changes/additions which will be incorporated at that time.

Dolores Roybal Saltarelli and Ray Sosa then made a detailed presentation about a number of topics. Ms. Saltarelli explained how the four project alternatives were identified as part of the Alternatives Analysis process. Mr. Sosa then followed with an overview of the construction process and clarified various key points, such as refinements to the project since the close of the scoping period. Metro received a number of follow-up comments asking about the size of property needed to construct the portal. After further investigation, Metro believes that it would need to purchase the land under the Office Depot and Señor Fish, and not the other businesses that front Central Avenue if the underground alternative is selected. Businesses along Central Avenue would be able to stay open during the construction of the Regional Connector.

Several questions from the LTWG arose regarding the results of the scoping meeting. Metro clarified that comments submitted during the scoping process are still under review at this time. As additional questions and comments come in, information will be passed along to the technical team for resolution. However, questions and comments received after the close of the scoping period will not appear in the Scoping Report, but will appear in the DEIS/R for the community to review when it is released next summer.

Specific questions surrounding the property bounded by 1st, 2nd and Alameda Streets and Central Avenue focused on the tunnel transitioning from below grade to at-grade as the tracks cross 1st and Alameda Streets. The LTWG requested additional information regarding the construction process, including traffic impacts to Central Avenue and traffic control. Additionally, information regarding the aesthetic treatment of the tunnel walls was also requested.

Andrew Lin, a Savoy resident, stated that he had not received the project and meeting notifications Metro has distributed and asked what outreach to the Savoy had been conducted. He is also seeking additional information regarding the purpose and need for the project. He would like to review the projected ridership, and better understand the need for connecting at the Little Tokyo/Arts District Gold Line station.

Metro responded by promising to present a summary regarding outreach activities at both the Savoy Homeowners Association and next LTWG meeting.

The LTWG will review the at-grade emphasis alternative at the October 1, 2009 meeting. There will be a breakout session dedicated to discussing impacts and potential mitigating activities.

Items to discuss at future meetings:

- Discuss traffic control during construction, focused on Temple/Alameda, 1st/Alameda, 2nd/Alameda, and routing at 2nd/San Petro (at Kyoto Grand Hotel)
- Overall traffic impact of the project and during construction
- Construction timing and process, with particular attention to the Alameda underpass
- Go For Broke: Impacts with the at-grade emphasis alternative
- Outreach approach during AA and DEIS/R process (how meetings were advertised, outreach to Savoy and Little Tokyo)
- Current and future project need, including justification of ridership and station capacity and 2035 transportation needs

3108 Los Feliz Boulevard
Los Angeles, CA 90039
323.669.9100 Phone
323.669.9800 Fax
www.therobertgroup.com
info@therobertgroup.com

Subject: Re: LTWG materials for distribution
Date: Friday, October 9, 2009 12:53 AM
From: Andy Lin <seavu8@yahoo.com>
To: <ltccjb@aol.com>, <ltccjb@aol.com>, Ginny Brideau <ginny@therobertgroup.com>
Cc: Chris Aihara <aihara@jaccc.org>, <wktakashi@aol.com>, <wktakashi@aol.com>, Clarissa Filgioun <Clarissa@TheRobertGroup.com>, Kerman <KERMANA@metro.net>, <lcollmann@savoyhoa.com>

Hello, Ginny,

I just received email from June Berk, and I found the minutes from Sep. 17, 2009 meeting regarding my comments during the meeting. I found what you have written in the minutes regarding my comments misleading, and does not reflect what actually took place. You must remember that I was a little agitated during the meeting because I have only learned of the Regional Connector project in our front yard, about 150 feet, only about two weeks before this meeting, all the time Metro has been doing the study in the past three years. Please make the correction to the minutes regarding my comments. The following is a more correct description of what took place.

Andrew Lin, a Savoy resident, protested during the meeting and said that he did not receive any notification regarding the Regional Connector Project by mail, nor over 300 residents of Savoy owners for the past three years while the Regional Connector Project was under study. "How can this happen?", he questioned. He stated that the "overwhelming majority of comments received supported the project" as stated in Executive Summary Final dated Dec. 2008 was based on 88 people's responses, and questioned how can this happen without notifying the Savoy residents by mails, while he has received Public Hearing Notices by mails to nearby residents within 500 feet radius in the past. He also questioned how can the Executive Summary arrive at the conclusion that Regional Connector is needed without mentioning any ridership from present or past years, and instead used projected figures from year 2030, figures 21 years in the future, to justify it. "The study is not a scientific study", he said.

Dolores Saltarelli stated that she is in contact with Lynne Collmann at Savoy. To which, Andrew Lin replied that he has spoken to Lynne regarding notification by mail, and both confirmed to each other that they have never received any notification by mail from Metro in past three years.

MEETING SUMMARY

Project Name: Metro Regional Connector Transit Corridor Project

Organization: Little Tokyo Working Group

Date/Time: October 1, 2009; 6:00 - 8:00 p.m.

Meeting Location: Japanese American Community and Cultural Center, Garden Room
244 S San Pedro St, Los Angeles, CA 90012

Project Team: Dolores Roybal Saltarelli, Ann Kerman, Henry Gonzales, Gerald Alvares, Eric Carlson, Ray Sosa, Monica Villalobos, Yara Jasso, Helene Kornblatt, Clarissa Filgioun, Ginny Brideau

Attendees:

Ron Fong	Victor Lazo	Evelyn Yoshimura
Chris Aihara	Chris Komai	Goro Endo
Satoru Uyeda	Mary Graybill	Tom Kamei
Kei Nagao	Wilbur Takashima	Alan Nishio
Susie Tae	Bobby Garza	Paul Yeh
Eric Kurimura	Joanne Kumamoto	Alan Kumamoto

Update: Others who attended, with names not appearing on sign in sheet:
Andrew Lim

Summary:

This was the second meeting of the Little Tokyo Working Group (LTWG), a subcommittee of the Little Tokyo Community Council's Planning and Cultural Preservation Committee (PCPC). The LTWG was convened to discuss issues pertinent to the Little Tokyo community as it relates to Metro's Regional Connector Transit Corridor project.

Prior to the start of the meeting, Metro made the at-grade and below grade emphasis models available for the LTWG members to view and informally discuss with staff and consultants.

Chris Aihara and Wilbur Takashima chaired the meeting and led introductions. The meeting notes from the previous meeting were not available at the meeting, but are attached to this report.

Ann Kerman, of Metro, was asked to present information regarding outreach activities that have taken place from the initiation of the Alternatives Analysis study to date. A copy of the memo is attached to this report.

Dolores Roybal Saltarelli briefed the working group on the purpose and need for the Regional Connector. As Metro continues to expand their Light Rail Transit (LRT) system, the 7th/Metro Center and Union Stations will begin to reach capacity. The best way to address station capacity issues, lack of connectivity between the lines is to remove the need to transfer at both stations. By removing the need to transfer and by providing through service through Downtown Los Angeles, the LRT system can serve more transit riders and stations.

The working group then broke into 5 groups to discuss challenges, opportunities, and potential mitigations regarding the at-grade emphasis alternative. The result of this exercise is attached to this report. Each small group presented their findings of their discussion to the working group.

The LTWG will continue their review the at-grade emphasis alternative, and begin the review of the below-grade alternatives at the October 15, 2009 meeting. There will be a breakout session dedicated to discussing impacts and potential mitigating activities.

Items to discuss at future meetings:

- Discuss traffic control during construction, focused on Temple/Alameda, 1st/Alameda, 2nd/Alameda, and routing at 2nd/San Petro (at Kyoto Grand Hotel)
- Overall traffic impact of the project and during construction
- Construction timing and process, with particular attention to the Alameda underpass
- Current and future project need, including justification of ridership and station capacity and 2035 transportation needs

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MEETING SUMMARY

Project Name: Metro Regional Connector Transit Corridor Project

Organization: Little Tokyo Working Group

Date/Time: October 15, 2009; 6:00 - 8:00 p.m.

Meeting Location: Japanese American Community and Cultural Center, 2nd Floor
244 S San Pedro St, Los Angeles, CA 90012

Project Team: Dolores Roybal Saltarelli, Ann Kerman, Henry Gonzales, Gerald Alvarez, Eric Carlson, Ray Sosa, Monica Villalobos, Yara Jasso, Helene Kornblatt, Virginia Jackson, Clarissa Filgioun, Ginny Brideau

Attendees:

In addition to those listed below, 6 people were heard on the tape, but did not sign in

Chris Aihara	Victor Lazo	Evelyn Yoshimura
Kristin Fukushima	Kei Nagao	
Alan Kumamoto	James Okazaki	
Joanne Kumamoto	Susie Tae	
Chris Komai	Wilbur Takashima	

Summary:

This was the third meeting of the Little Tokyo Working Group (LTWG), a subcommittee of the Little Tokyo Community Council's Planning and Cultural Preservation Committee (PCPC). The LTWG was convened to discuss issues pertinent to the Little Tokyo community as it relates to Metro's Regional Connector Transit Corridor project.

Prior to the start of the meeting, Metro made the at-grade and underground emphasis models available for the LTWG members to view. Several members of the Working Group viewed the models and had questions answered by members of the Metro project staff and consultant team.

Wilbur Takashima and Chris Aihara chaired the meeting and led introductions. The written summary from the previous meeting (the At-Grade Emphasis alternative) was briefly reviewed as the meeting began. Wilbur asked whether the LTWG wanted to proceed with discussing the underground emphasis alternative. The LTWG agreed that many questions remained both about the at-grade alternative and also about details related to potential project mitigation activities.

A brief conversation about the at-grade emphasis focused on traffic operations and control after construction specific to the Alameda undercrossing. The LTWG would like to ensure that businesses along Temple, Los Angeles and 2nd Streets are included in the identified impacted area. James Okazaki would also like Metro to identify the impacts to City Hall, the Caltrans building and the new

police station. There were questions regarding construction staging locations and how the street would be "decked" to allow for free-flowing traffic unimpeded by construction activities taking place underground. The LTWG asked for more information about what kind of turn restrictions could be expected along Judge Aiso, Temple, Alameda, 1st and 2nd Streets, and Central Avenue. The Working Group also asked for more information about maintaining freeway access, and which local streets would experience increased traffic as a result of the project.

A discussion about potential mitigation measures, including the Mitigation Monitoring Plan, then followed. There were questions about how this plan would be developed and enforced. Additionally, the Working Group wanted to know if there is a mechanism in place, besides federal monitoring, to ensure that Metro will actually implement the mitigations identified and agreed upon with the community, and what the consequences would be if the mitigation plan were not followed. The LTCC requested a clear written statement identifying the mitigation activities and how monitoring will take place.

Chris Komai was especially concerned that "mitigation" implies only monetary reimbursement when many of the impacts, such as cultural and historical resources, may not be able to be mitigated by money. James Okazaki felt that money could be an "equalizer" and that Metro would need to set aside funding to mitigate impacts. The LTWG agreed that it is important to discuss and identify intangibles (e.g. "sense of community") during the environmental process, and wants to set aside time at a later meeting to identify and discuss such intangibles.

Alan Kumamoto wanted to know whether monetary reimbursements were considered as a part of the mitigation efforts and what would the threshold be for small businesses to access the funding. It was further clarified that while there is a restriction on utilizing federal funds to provide monetary compensation, however there is not such restriction for local funds e.g. through CRA/LA or another City agency.

Metro explained that a mitigation plan would identify the construction activities, when specific construction activities would take place, and the specific mitigating activities to take place in coordination with those construction activities. Metro is required to develop a mitigation monitoring plan with associated milestones for the Draft EIR/S, which will be reviewed with the community for input. The mitigation measures, as they appear in the Draft EIR/S, will become a contractual agreement between Metro and the community.

The LTWG would like examples of how the mitigation plans are developed, approved, and enforced. The LTWG requested an example of a mitigation monitoring program, and Metro will provide this information at the next meeting.

Kei Nagao of the LTWG raised concerns that the Working Group does not have the expertise to make decisions that are based on technical information provided by Metro. The lack of understanding of the overall process and the process to identify mitigations is unsettling to the community. She requested that Metro consider hiring a consultant with expertise in the environmental process to work directly with the group to discuss both the mitigations effort and environmental process. She

would also like Metro to consider scheduling site visits with the community. The LTWG agreed that a consultant to assist the group with understanding the process, and identifying potential impacts and mitigations would be preferable.

June Berk asked to go on record to be sure that none of the project alternatives would impact the "Go For Broke" monument; specifically, she opposes any alternative that would impact the monument. She stressed the cultural and historical importance of the monument is not just to Little Tokyo in Los Angeles, but to every Japanese American who was interned or in military service during World War II. She is sincerely and deeply concerned that Little Tokyo has been forced to give up property for government buildings, and would like to prevent this from happening in the future. She wants to protect the cultural viability of Little Tokyo, and feels like the overall situation is dire. Mr. Takashima acknowledged that this is an emotional issue, and reiterated that the community needs to be educated so it can ask the hard questions.

Metro then proceeded with a presentation of information about the underground emphasis alternative. A member of the LTWG felt that the nomenclature of this alternative was misleading because it implies that it is all below ground.

Metro provided background about the selection of the Build Alternatives. During the earlier Alternatives Analysis portion of the study, several underground alternatives were identified, but were eliminated for a number of reasons. These included uncertainty about future use of the Mangrove property (the City of Los Angeles was still in the Request for Proposals (RFP) process for that project), the Little Tokyo/Arts District station was under construction, and assurances were made to the Buddhist Temple that their property would not further impacted. Since that time, the Mangrove property use has been resolved and is now known as the Nikkei Center development.

Metro announced that new options are being explored to determine if the underground-emphasis alternative can be modified to address community concerns at 1st/Alameda, potentially utilizing property below the Nikkei Center. No further details were available at the time of the meeting as this modification is currently being explored.

Metro representatives then explained the potential benefits of the Alameda underpass, including reducing truck traffic noise, as well as the possibility of extending the length of the underpass, which would create a larger pedestrian plaza. The LTWG was interested in the type of landscaping that could be utilized at the underpass and portal, with many in support of visually appealing landscaping cover.

The Working Group also asked for more information about permanent on-street parking restrictions, location of peak- and off-peak parking, and the identification of new parking opportunities. One opportunity may be to create additional off-site parking for Savoy residents and visitors.

Metro then explained the construction process for the underground emphasis option, starting with the cut and cover process, and how the tunnel boring machine (TBM) would be installed. Staging would take place where Señor Fish and the Office Depot buildings are currently located. Businesses

facing Central Avenue would be able to remain open during construction. Metro would ensure that traffic continues to flow as freely as possible during construction. Traffic control plans will be incorporated into the Draft EIR/S will be available for review by both the community and City of Los Angeles.

In regards to the tunneling, the LTWG asked about existing underground utilities, and what kind of utilities would need to be relocated as a part of the project. Metro explained that the large storm drain located under 2nd Street near Alameda Street would have to be relocated as part of project.

Several questions about the location and depth of the water table in the Little Tokyo area were asked. Members of the LTWG noted that during construction of JANM and the Little Tokyo/Arts District station, the water table was a consideration. If there was considerable water leakage, the tunnel would need to be sealed. This will be further evaluated in the Draft EIR/S.

James Okazaki asked if the project would be bid as a Design/Build contract. Metro explained that its policy is typically to bid the Design and Build contracts separately when a tunnel is involved.

Members of the LTWG wanted clarification of the project time line. Metro stated that the underpass for the Regional Connector would take up to two years to build, and could be the first or last construction element. There will be a staging presence for about four years. High impact construction activities would take place above ground over several weekends after which construction would continue underground with minimal impacts at the surface. It is possible to schedule construction activities to take place when the community would be least impacted. For example, construction in the predominately business area could take place at night and weekends, and in the residential areas during the weekday. The contractor would be required to recognize identified community events and cease operations during this time. This is an extremely important point for Nisei Week activities. A follow-up question was asked comparing the impacts if construction were to start at 1st/Alameda or 2nd/Hope; it was clarified that the latter is a difficult location technically and is close to sensitive residential uses as well as the Disney Hall.

June Berk asked when the Regional Connector's operational schedule would be available. There is concern about the volume of trains that would travel through Little Tokyo, and how off-schedule trains would impact safety. Metro explained that the schedule would not be prepared until after the project is constructed, i.e. close to opening. Modeling information is used to determine how many trains could be expected through the area, but this information is not a substitute for a passenger schedule.

Representatives from The Savoy wanted to understand how traffic on Alameda Street would operate with the Underground Emphasis alternative. Metro explained that automobiles traveling westbound could make a left turn on Alameda Street, but eastbound traffic would not. Vehicles seeking to make a left turn would need use Temple Street to make the turn.

There was a brief discussion about whether construction could compromise the older buildings in this neighborhood. Metro explained that soldier piles are installed prior to construction on the

perimeter of the cut and cover construction area. This strengthens the foundations and the street, and provides the structure for the concrete decks. Grouting is used only if there is settlement. Pre-construction surveys are conducted prior to any construction to determine the existing condition of the buildings. The survey involves taking photographs and making videos of the building foundations located along the alignment. This was the same process successfully used during the construction of the Metro Gold Line Eastside Extension.

Alan Kumamoto asked if Metro was planning on reaching out to any of the international firms to solicit a peer review of the project. Dolores said she was open to this taking place.

Prior to the end of the meeting the LTWG restated their request for a technical consultant to be made available that would work on their behalf. They are seeking more information about typical mitigations that could be employed in Little Tokyo, and what kind of impacts they might expect during construction. Metro undertook to present examples of mitigation plans from other projects at the next meeting, though noted that these may not necessarily apply to Little Tokyo.

The next LTWG meeting is scheduled to take place November 19, 2009 at the Japanese Community and Cultural Center. The agenda will include the continued discussion of the below underground emphasis alternative.

Items to discuss at future meetings:

- Continued discussion about the Underground Emphasis Alternative
- Possible technical consultant to support the LTWG
- Examples of mitigation and mitigation monitoring plans from similar type construction projects
- Discuss traffic control during construction, focused on Temple/Alameda, 1st/Alameda, 2nd/Alameda, and routing at 2nd/San Petro (at Kyoto Grand Hotel)
- Overall traffic impact of the project and during construction
- Construction timing and process, with particular attention to the Alameda underpass
- Current and future project need, including justification of ridership and station capacity and 2035 transportation needs

MEETING SUMMARY

Project Name: Metro Regional Connector Transit Corridor Project

Organization: Little Tokyo Working Group

Date/Time: November 19, 2009; 6:00 - 8:00 p.m.

Meeting Location: Japanese American Community and Cultural Center, 2nd Floor
244 S San Pedro St, Los Angeles, CA 90012

Project Team: Dolores Roybal Saltarelli, Ann Kerman, Arthur Henry, Laura Cornejo, Henry Gonzales, Gerald Alvarez, Eric Carlson, Ray Sosa, Helene Kornblatt, Virginia Jackson, Clarissa Filgioun, Ginny Brideau

Attendees:

Chris Aihara
June Berk
Ron Fong
Kristin Fukushima
Bobby Garza
Mary Graybill
Marc Hentell
Ernest Hida
Craig Ishii
Tom Kamei
Alan Kumamoto
Joanne Kumamoto
Eric Kurimura
Victor Lazo
Andrew Lin
Kei Nagao
Roy Nakahara
Setsuko Nakahara
Alan Nishio
Mike Okamoto
Johnnie Raines
Susie Tae
Wilbur Takashima
Satoru Uyeda
Robert Volk
Sindey Wang
Bill Watanabe
Steven Wechster
Jerard Wright
Paul Yeh
Evelyn Yoshimura

Summary:

This was the fourth meeting of the Little Tokyo Working Group (LTWG), a subcommittee of the Little Tokyo Community Council's Planning and Cultural Preservation Committee (PCPC). The LTWG was convened to discuss issues pertinent to the Little Tokyo community as it relates to Metro's Regional Connector Transit Corridor project.

Wilbur Takashima and Chris Aihara chaired the meeting and led introductions. The written summary from the previous meeting was briefly reviewed as the meeting began. Chris reminded the Working Group members to commit to attending as many meeting as possible in order to have consistency and continuity in the review of all of Metro's project alternatives.

Wilbur asked for clarification regarding the differences between Urban Design Working Group (UDWG) and the LTWG. Dolores Roybal Saltarelli explained that the purpose of the UDWG process was to focus on the urban design of the project as a whole, and noted that there had been a meeting of the group as a whole, as well as separate breakout discussions with

Financial District, Bunker Hill and Little Tokyo area stakeholders as part of that process. The UDWG was formed before the LTWG was convened, and has a different purpose from the LTWG, which has a far broader role in addressing numerous topics as it relates to Little Tokyo exclusively. Wilbur also asked how often Metro meets with individual stakeholders outside of the LTWG meetings. He referenced Metro's recent fact sheet, calling out the numerous groups Metro has met with during the Alternatives Analysis and Draft EIS/R process to date.

Ann Kerman presented a draft scope of work identifying the process for securing a consultant to assist the LTWG during the environmental process. A copy of this memo is attached to this document. Alan Nishio asked that the consultant should report to the LTCC, and not the LTWG. Ann further explained that the consultant would be the choice of the LTCC, but Metro is asking the LTCC to identify a person or firm who has understanding of and expertise in light rail operations, right-of-way requirements, construction impacts, transportation planning, economic and community development, the EIS/R process, urban design, and station area planning. The consultant would work with the LTWG/LTCC until the release of the Draft EIS/R.

Bill Watanabe requested that the consultant should well versed in the understanding and identification of mitigation measures. Alan Kumamoto wanted more clarification regarding the selection process. Kei Nagao requested that as-needed translation and interpretation services be available to support the consultant. Chris then asked about the timeline for bringing a consultant onboard. Ann undertook to come back to the LTWG with a final draft of the scope, which would be presented to the LTWG at its next meeting. Additional comments from the LTWG should be sent to Ann Kerman by December 1, 2009.

Dolores moved on to present the conceptual design for the 3rd Build Alternative, a new alternative that would pass entirely under the 1st/Alameda intersection. This alternative would include a station located at 2nd Street and Broadway, as well as a new shallow station at the Office Depot site; there would no longer be a station at 2nd and Los Angeles Streets. The alternative is similar to the current Underground-Emphasis alternative, with the exception that this alignment would continue to travel below-grade under 2nd Street to a new station under the Office Depot property, and continuing under the street at 1st/Alameda.

Other features of this new alternative include that the tracks would not surface at-grade until north of 1st Street and east of Hewitt Street, and there would be additional turn restrictions from Hewitt, 1st, and Alameda Streets. Further, there would not be an at-grade crossing or a pedestrian bridge at 1st and Alameda Streets, and Alameda would not change grade between Temple and 2nd Streets. In the initial operations of the Regional Connector, there would be north and south bound train service. The project would cost approximately $200 million more than the Underground-Emphasis alternative.

The graphic showing the underground alternative is available for review at http://thesource.metro.net, Metro's transportation blog.

The construction of the new build alternative would involve tunneling under 2nd Street to Central Avenue. From 2nd/Central, Metro would use "cut and cover" construction, excavating to create space for the station, and placing the below-grade crossing at 1st/Alameda. Temporary track would need to be installed on the eastern side of Alameda in order to maintain Gold Line service to East Los Angeles. It is likely that additional property would need to be acquired from the Nikkei development and from an area west of the Nishii Temple in order to make space for both the tracks and 1st Street.

While there would be traffic impacts at 1st/Alameda, Metro is committed to working with both the City of Los Angeles and the community to ensure that impacts are mitigated. Ray and Dolores explained that they have not yet met with the Metro Board of Directors or LADOT about the new alternative, although a meeting is scheduled to take place in the near future.

Robert Volk sees this new alternative as a "real step forward", however he is still concerned with construction impacts at 1st and Alameda Streets. Dolores explained that construction timing and sequencing would be developed with the community input. It is likely that once the intersection is decked, the surface traffic would flow as it does currently.
Robert also asked if John Kaji has been made aware of the additional property needed at the Nikkei development for this new alternative. James Okazaki wanted to know whether a portal could connect with the Nikkei development. Dolores explained that Metro has met with John Kaji, and will meet again with him in December once additional technical details for the new build alternative become available.

Andrew Lin asked about the number of LRT trains that would travel through the 1st/Alameda intersection daily. With the Underground Emphasis Alternative, he estimated 576 trains a day. Dolores noted that with the 100% grade-separated alternative, there would be no at-grade crossings at 1st and Alameda Streets, and because the trains would not travel at grade, there wouldn't be the associated noise impacts.

Chris asked about the tunnel boring process, how the Tunnel Boring Machine (TBM) would be dropped into the ground, and whether this would take place in Little Tokyo at 2nd/Central or at 2nd/Hope near Bunker Hill. Metro will evaluate the potential impacts of TBM placement in the Draft EIS/R. The LTWG's preference is that the TBM be inserted at 2nd/Hope and not at 2nd/Central.

There were questions about the possibility of abandoning the surface track at the Little Tokyo/Arts District station once the Regional Connector is constructed. Metro emphasized that the Gold Line Eastside Extension has only just opened, and that technical and ridership studies have not been completed for the new build alternative.

Evelyn Nishimura asked whether the addition of the 3rd Build alternative would impact the project schedule and Dolores confirmed that it would not. She explained that the next step for the project involves going to the Metro Board of Directors to receive their approval to

include it in the environmental work currently underway. This would be done if the LTWG would support moving forward with analysis of this new alternative.

Alan Nishio made the following motion, which was seconded by Chris Aihara and approved by the LTWG as follows: ***"The LTWG recommends to the LTCC Board to endorse the concept and preliminary design as presented today for the third build alternative."*** The motion was approved with a vote of 23 ayes, and zero "no" votes.

LTWG will continue working to identify potential mitigations for each build alternative. In the meantime, the LTWG asked the Metro technical team to present information about this 3rd Build alternative at the next LTCC meeting. There was a question about the possibility of removing the underground-emphasis alternatives from further environmental review. However, Dolores and Ray explained that removing the alternative at this juncture could threaten future federal funding for the Regional Connector.

The DEIS/R will be released for public review during the summer of 2010 prior to its presentation to the Metro Board of Directors, with staff providing their recommendation for the Locally Preferred Alternative (LPA). Once the LPA has been chosen, additional technical work will be completed. The Regional Connector does not become a "project" until the Metro Board of Directors approves the Final EIS/R. Dolores emphasized that Metro will continue to work with the LTWG to address issues related to the Regional Connector, including developing potential mitigation measures so the document should not contain any surprises.

In response to the LTWG's request at its previous meeting for examples of mitigation plans, Metro distributed a CD containing examples from Seattle and the Metro Gold Line Eastside Extension mitigation programs. The documents will be discussed at a future meeting.

There was a short discussion regarding whom Metro sees as the official representative of Little Tokyo. Metro noted that it continues to meet with stakeholders individually, often at their request, as well as with larger groups. The LTCC represents a number of stakeholders that Metro has met with during the project.

Ann mentioned that she is aware that some Little Tokyo stakeholders who would like to participate in the LTWG, are currently unable to attend meetings because of scheduling conflicts on Thursday evenings Ann wondered whether the LTWG could occasionally meet on Tuesday or Wednesday evenings to accommodate those unable to meet Thursdays.

Items to discuss at future meetings:

- Updates regarding the technical consultant to support the LTWG
- Continued discussion about the 100% grade separated Alternative
- Discussion of examples of mitigation plans
- Discuss traffic control during construction (e.g. on Temple/Alameda, 1st/Alameda, 2nd/Alameda, and routing at 2nd/San Petro at Kyoto Grand Hotel)

- Overall traffic impact of the project and during construction
- Construction timing and process, with particular attention to the underground-emphasis alternative's Alameda underpass
- Current and future project need, including justification of ridership and station capacity, and 2035 transportation needs

Upcoming Schedule

- Next meeting is Thursday, December 17, 2009 at 6 p.m.

Little Tokyo Working Group Consultant

for the

Regional Connector Transit Corridor Draft EIS/R

OVERVIEW

The Little Tokyo Working Group (Working Group), a committee of the Little Tokyo Community Council (Council) seeks to engage the services of a consultant who can assist the Working Group in the development of proposed mitigations for the Regional Connector Transit Corridor Project Draft EIS/R. The Project will connect the Metro Gold Line Pasadena and Eastside segments to the Blue Line and Expo Line. This will place Little Tokyo at the center of a regional rail system, making it one of the most accessible communities in the County. The consultant will work with the Working Group to help them understand the Draft EIR/S process and identify potential impacts and mitigations associated with the development of a new transit link within downtown Los Angeles. The consultant will provide the following functions: (1) provide a technical resource to Little Tokyo community during the development of draft environmental documents for the Regional Connector Transit Corridor Project; (2) help the Working Group identify impacts and potential mitigations for each build alternative that will protect the historical and cultural integrity of Little Tokyo; and (3) extract the concerns of residents, businesses and stakeholders in Little Tokyo and recommend potential mitigations for inclusion in the Draft Environment Impact Statement/Environment Impact Report (Draft EIS/R).

CONTEXT OF REQUESTED WORK: HISTORY OF THE LITTLE TOKYO COMMUNITY

Land use has long been a contentious issue in Little Tokyo. As one of only three remaining official Japantowns in the United States, Little Tokyo has felt continually threatened with development that could eradicate it. At its peak, Little Tokyo had approximately 30,000 Japanese Americans living in an area that covered over one square mile, but the internment of Japanese Americans during WWII emptied Little Tokyo. After the war, Japanese Americans returning from the internment camps moved into other areas surrounding downtown. What is left of the original Little Tokyo can be found in roughly four city blocks today. This sense of an ever-shrinking Little Tokyo and resistance to development in the area is supported by the development of Parker Center at the former site of the Nishi Hongwanji Buddist Temple and the First Street business strip, as well as Weller Court which was developed on property that was formerly a strip of family-owned small businesses. The Regional Connector Transit

Corridor Project is seen by some in the Little Tokyo Community as one more attempt to encroach into Little Tokyo and further reduce its size and viability. However, the investment of transit dollars and siting of the Regional Connector in Little Tokyo may be a rare opportunity to ensure that the historic and cultural identity of Little Tokyo is protected for years to come by the inclusion of specific mitigations in the Draft EIS/R for the Regional Connector Transit Corridor Project. Such mitigations can help take advantage of and leverage the enhanced accessibility to Little Tokyo from all parts of the region and Southern California that would accompany implementation of the Regional Connector project

PROCESS:

Metro is in the process of developing a mechanism to provide funding not to exceed $30,000 for purposes described above. This mechanism with be described in detail in future drafts. Funding must be used exclusively to pay for said consultant. The consultant will be secured through an independent search process subject to Metro's approval that the consultant is qualified in the areas stated below. It is expected that the term of engagement will be no longer than six months or through the release of the Draft EIS/R by Metro. The consultant must commit to a reasonable deadline and to work within a proscribed budget. No changes in the project timeline or schedule will be permitted.

QUALIFICATIONS:

It is expected that the consultant has expertise in the following areas:

- Light Rail operations both street running and underground.
- Right-of-way requirements
- Construction impacts
- Transportation Planning including traffic, parking and pedestrian issues
- Economic Development
- Community Development
- Draft EIS/R Process
- Urban Design and Station Area Planning
- Others as appropriate

CONSULTANT TASKS

1) Communicate with the Little Tokyo community and provide technical assistance to small businesses and residents on how the Project may affect them.
2) Assist the Little Tokyo community in understanding:
    - How the Draft EIS/R works
    - How the environmental process works
3) Assist Little Tokyo in identifying potential impacts and mitigation measures for each build alternative for incorporation into the Draft EIS/R for the Regional Connector Transit Corridor Project.

MEETING REPORT

Project Name:	Metro Regional Connector Transit Corridor Study
Organization:	Little Tokyo Working Group
Date/Time:	December 17, 2009; 6 p.m.
Meeting Location:	Japanese American Community and Cultural Center
Project Team:	Dolores Roybal Saltarelli, Laura Cornejo, Gerry Alvarez, Ann Kerman, Eric Carlson, Ray Sosa, Kansai Uchida, Ginny Brideau
Attendees:	Roy Nakahara, Goro Endo, Robert Volk, Kristin Fukashima, Sean Miura, Wilbur Takashima, Jerard Wright, Yukio Kawaratani, Bill Watanabe, Ron Fong, Chris Komai, Evelyn Yoshimura, Kim Tachiki-Chin, Eric Kurimura, Alan Nishio, Kei Nagao, Chris Aihara, James Okazaki, Jeff Carpenter, Jeff Liu, Satori Uyeda, Mary Graybill, Susie Tae
Action Items:	• Provide Working Group with updated consultant terms • Ann Kerman to provide a list of firms from Metro's "Bench"

Summary:
This was the fifth meeting of the Little Tokyo Working Group (LTWG), a subcommittee of the Little Tokyo Community Council's Planning and Cultural Preservation Committee (PCPC). The LTWG was convened to discuss issues pertinent to the Little Tokyo community as it relates to Metro's Regional Connector Transit Corridor project.

Wilbur Takashima and Chris Aihara chaired the meeting and led introductions. The purpose of the meeting was to discuss the draft consultant agreement and updates to the potential build alternative.

Ann Kerman presented a draft scope of work identifying the process for securing a consultant that would assist the LTWG during the development of the project mitigation measures, and would review the Draft EIS/R on LTCC's behalf. A copy of the draft scope is attached to this document.

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Ann further explained that while the consultant would be the choice of the LTCC, Metro is requesting that the LTCC identify a person or firm who has understanding of and expertise in light rail operations, right-of-way requirements, construction impacts, transportation planning, economic and community development, the EIS/R process, urban design, and station area planning. The consultant would work with the LTWG and LTCC until the release of the Draft EIS/R.

The consultant would submit invoices to the LTCC, which the LTCC would approve and send to Metro for payment. Metro would be responsible for timely payment based on the invoice submitted.

LTCC will decide internally how the consultant will be managed, and who will manage this person/firm. Chris Aihara and Don Watanabe asked if Metro could provide any direction or suggestions on how to best reach out to the professional community. Ann offered to provide a copy of firms listed on Metro's "bench" to Don. Chris wanted to set up a small committee to identify a potential consultant. The committee will meet on the 28th and 29th of December. The committee includes Chris, Alan Nishio, Ron Fong, and Yukio Kawaratani.

The Working Group is concerned they won't have enough time to get the consultant up to speed on the project, and won't be prepared to review the Draft EIS/R. They understand the work of the consultant would conclude by the time the Draft EIS/R is released to the community. Dolores tried to impress upon the Working Group that they would have ample opportunity to provide feedback and fine-tune mitigations, including the review of the station and urban designs.

The LTWG also wanted to be sure that once the consultant's funds are expended that the LTCC would not incur any additional debt. Ann reassured the LTWG they would continue to have the entire Metro consultant team to provide support. The consultant is not intended to replace Metro's consultant team.

Don expressed his appreciation to Metro for working with the LTCC and trusting the council to go through this process.

Dolores provided an update on the third build alternative and provided an overview of the initial operating plan. Metro is continuing to develop the initial concept for this third alternative with the support of its construction and operations departments. Dolores will update the Metro Board of Directors at its February meeting about the new alternative, so that the Board will authorize Metro staff to move forward with adding this

alternative to the full study. Dolores recently provided a briefing to Supervisor Molina's office as well as the City of Los Angeles Department of Transportation.

A short discussion followed regarding the topics for the next meeting. Because of the holidays, the need for Metro to continue developing the conceptual designs for the third build alternative, and time needed for the LTCC to hire the consultant, the next Working Group meeting is anticipated to take place on Thursday, January 21, 2010.

The meeting ended shortly before 7:30.

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MEETING REPORT

Project Name: Regional Connector

Organization: Little Tokyo Working Group

Date/Time: February 18, 2010; 6 to 8 p.m.

Meeting Location: Japanese American Cultural and Community Center

Project Team: Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansi Uchida, Helene Kornblatt, Ginny Brideau

Attendees:

Action Items:

- Metro encourages participation at the upcoming Metro Board of Directors meeting on February 25th
- Metro to provide an update on the study timeline

Summary:
Chris Aihara began by noting this would be the 6th meeting of the LTWG. Once the group introduced themselves, Chris reviewed the previous meeting summary and current meeting agenda.

Chris Aihara presented an update on the hire of Douglas Kim and Associates (DKA). A pre-meeting was held on February 17th to discuss the approach and management of the contract. The working group has identified a task force to manage the contract. Chris feels DKA will effectively represent the Little Tokyo Community during the EIR process.

Jason Yamaguchi asked about the hiring process, the total number of applicants, and who on the LTCC decided to hire DKA. He was supportive of the hiring process, just wanted to be clear on the process itself. Alan responded by noting all of the applicants were very strong, however there were certain characteristics of the firm provided the committee with assurances DKA would be a better fit for the LTCC. Wilbur introduced Jared Jerome of DKA. The firm's website is douglaskimandassociates.com

Dolores began by thanking the LTWG members who had attended the Planning and Programming meeting earlier in the day. The community's turnout was seen as support for the adding the new alternative to the study. The motion unanimously passed both the Measure R and Planning/Programming Committee meetings. She outlined the next steps, and what to expect at the Metro Board of Directors meeting, and what would happen if the new alternative were added to the study.

Dolores provided an update regarding the recent meeting with the Nishi Temple. Metro presented two variations to the Nishi Temple, with the Nishi Temple finding only the first variation (or single tunnel option) to be the only acceptable variation. The Nishi Temple

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liked the treatment with vegetation and the trains as they move by, but did not like the second variation as the portal ended right at the "front door" to the Nishi Temple. The Working Group agreed to support the only variation supported by the Nishi Temple.

Ted Tanaka presented the two variations, highlighting different urban design treatments, and concepts used in the Phoenix Light Rail system.

Chris Aihara noted that no action is needed at this time.

Darryl Garibay asked about the location of the station in the fully grade separated alternative. Dolores explained the only possible location for the station with this alternative is at the Office Depot site. It is not possible to provide access to Union Station and to East Los Angeles, and place the station anywhere else. The station cannot be located at the Nikkei Center development, however it is possible to place a passenger portal directly connecting the station to the Center.

Evelyn Yoshimura asked what would happen if the fully grade separated alternative is not added to the project? She wanted to know if both stations along 2nd Street would continued to be studied, and who would make the final recommendation regarding the location of the station. Dolores explained that with the predominately below-grade alternative would continue to be studied as part of the DEIS/R process. If the predominately below-grade alternative is selected as the LPA, the Metro Board of Directors would make the final recommendation regarding the station location, and there would not be a station at the Office Depot property.

Satoru Uyeda asked if Metro could provide information that would identify businesses that would be impacted by construction. Ray Sosa explained that in the Draft EIR the community would see a large area of identified properties that could be impacted by construction, however it is possible that not all of the properties would be impacted. Metro will know more as Advanced Conceptual Design is completed and enters into Preliminary Engineering.

Ann Kerman discussed the LTWG's next steps. At the March 18th meeting, Doug Kim will be in attendance to begin the mitigations discussion. The LTWG asked Metro to provide an updated timeline for the Draft EIR review and the study's next steps.

The meeting concluded at 7:30 p.m.

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MEETING REPORT

Project Name:	Regional Connector Transit Corridor Project
Organization:	Little Tokyo Working Group (LTWG)
Date/Time:	Thursday, March 4, 2010; 6 to 8 p.m.
Meeting Location:	Japanese American Cultural and Community Center
Project Team:	Dolores Roybal Saltarelli, Eric Carlson, Ann Kerman, Ray Sosa, Kansai Uchida, Ginny Brideau
Attendees:	Chris Aihara, Edwin Barker, June Berk, Ron Fong, Kristin Fukashima, Bobby Garza, Mary Graybill, Yukio Kawaratani, Chris Komai, Alan Kumamoto, Joanne Kumamoto, Kei Nagao, Alan Nishio, Sawako Nita, Mike Okamoto, Susie Tae, Wilbur Takashima, Satoro Uyeda, Robert Volk, Bill Watanabe, Jason Yamaguchi, Vanessa Yee, Evelyn Yoshimura
Action Items:	• The LTWG requested the mitigation measure examples be resent to the group (completed) • Doug Kim to present Mitigations Measures Action Plan at next LTWG meeting

Summary:
Wilbur Takashima called the meeting to order at 6:00 p.m., and led introductions of those in attendance. Wilbur reviewed the agenda with LTWG members; items for discussion included an overview of mitigation measure examples from other rail transit projects in the country.

Dolores Roybal Saltarelli provided the LTWG with background about typical mitigation measures. She explained that mitigation measures for this project are intended to reduce or avoid impacts from construction and operation of the Regional Connector.

Dolores noted that the Draft Environmental Impact Study and Report (DEIS/R) would be available for public review in Summer 2010. Metro is requesting feedback from the Little Tokyo Community Council (LTCC) by April 15, 2010 regarding requested mitigation measures for inclusion in the DEIS/R. Dolores emphasized, however, that April 15th, 2010 is not the final deadline for submission of requested mitigations and that the Final EIS/R (FEIS/R) will be the last opportunity during the project to make changes to the mitigation measures suggested for the Regional Connector. The FEIS/R will become available for public review in Fall 2011. The FEIS/R will include a menu of mitigation measures, which will then become part of the Record of Decision (ROD) and ultimately the contract between the community and Metro.

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The mitigation measures section of the DEIS/R will likely be listed in both paragraph and table form, calling out impacts connected to specific candidate mitigation measures. These measures will be developed by Metro in coordination with the LTWG, which will work with its consultant to recommend additional measures if needed. There will also be other opportunities to add or refine mitigation measures during Preliminary Engineering (PE), the next phase of the project.

Dolores asked the LTWG to refer to the mitigation plans from Sound Transit (located in Seattle, Washington) and the Metro Gold Line Eastside Extension (located in Los Angeles, California), which were distributed at the LTWG meeting on November 19, 2009. The LTWG requested that Metro resend the mitigation measure materials previously distributed.

Dolores then explained the steps needed to draft the environmental document. She clarified that numerous technical reports are still in the process of being drafted and will be submitted to Metro by the consultant. Once Metro completes the review, the draft document will be turned over to the Federal Transportation Administration (FTA). Once the FTA reviews the DEIS/R, the document will be released to the public for comment.

Doug Kim was introduced to the LTWG as the consultant hired by LTCC to support its role working with Metro on issues specific to Little Tokyo-during the DEIS/R phase of the Regional Connector project. Chris Aihara asked that Doug, as part of his scope, specifically address the selection of the Locally Preferred Alternative (LPA), identification of candidate mitigation measures, and his vision for the community process. Doug then discussed the purpose of the Mitigation Monitoring Plan (MMP), which will outline impacts and specific mitigation activities that can be implemented. The MMP identifies Metro's responsibilities and community expectations. Doug added that he would review the technical studies Metro has available prior to the next LTWG meeting. He would also like to lead a roundtable discussion with the LTCC, or community-at-large, by the end of April.

Bill Watanabe asked whether each alternative would have specific sets of mitigation plans. Dolores noted that Metro would identify a full list of mitigation measures for each alternative. Doug added that FTA would require Metro to study each of the build alternatives equally, identify potential impacts, and the associated mitigation measures. To allow the community and Metro greater flexibility once construction begins, Ray asked the LTWG to consider identifying an array of potential mitigations, rather than just one major activity to address individual impacts. .

Dolores pointed out that, in other jurisdictions, LPAs have been identified prior to the completion of the environmental process. Since the Little Tokyo community has identified a preferred alternative, the LTWG could consider focusing its time on identifying mitigation measures specific to the fully-grade separated alternative. The LTWG agreed to focus on the fully-grade separated alternative, but would still continue to evaluate the remaining alternatives.

Wilbur asked about the status of the Advanced Conceptual Engineering (ACE) and Preliminary Engineering (PE). Dolores responded that the ACE is taking place at present, but once the ACE is completed, Metro will ask FTA for permission to enter into PE. The request to enter into PE will be submitted to FTA this summer, once the DEIS/R document has been circulated to the public.

Ron Fong asked about cultural impacts to Little Tokyo, specifically impacts to Nisei week activities, and to minority and low income residents. Ray Sosa clarified that Metro has already identified the impacts to minority and low-income communities, and that mitigation measures will be identified to address project impacts.

Robert Volk asked about the entry point for the Tunnel Boring Machine (TBM). Dolores explained two potential locations (2nd Street and Central Avenue or 2nd and Hope Streets) would be reviewed as part of the study, and that both would be "environmentally cleared" for construction. Metro's Board of Directors would make a recommendation based both on the outcome of the technical reports and staff's recommendation regarding the final location of the entry point of the TBM. Robert stated his concerns about the cut/cover construction activity's impacts to 1st and Alameda Streets, and about the impacts of the TBM. Ray explained that typically turns using a TBM have been gentle, and that the turn needed at 1st and Alameda Streets is too sharp and shallow to safely use a TBM at this location.

Doug asked the LTWG to consider what Little Tokyo would look like once the project is in operation, including prospects for the future of the Office Depot site. He also wanted to know whether Metro has engaged any developers, or has any expectations for the property once construction is completed. Dolores explained that, during the DEIS/R, Metro is focused on the project alternatives and will not entertain any discussions about future development at the site. Ron then enquired about the status of the Office Depot site once construction is completed. Ray explained that any development at 1st and Alameda Streets would be a community-led decision.

Yukio Kawaratani emphasized that the future use of the Office Depot site should fit into the fabric of the neighborhood and specifically requested that the LTCC should have a plan in place once construction is completed. He would prefer to see buildings that meet the needs of the community, and doesn't want "Highest and Best Use" of the property.

A short discussion began regarding timing station construction with construction of any development that would be located at 1st and Alameda Streets. There would be a benefit to the community if the construction of the Regional Connector and any potential development at the current Office Depot site could take place during the same timeframe, rather than have ongoing construction for more than 5 years.

Satoro Uyeda owns a business on 1st Street and is concerned about the long-term construction impacts to Little Tokyo. He pointed out that it isn't just the actual construction, but rather perceptions about construction that impacts the community.

The Little Tokyo Public Safety Association has worked to change the public's perception of the neighborhood by addressing the perceived safety concerns. He observed that if an activity is scheduled to take place at or around City Hall, business that day tends to drop off noticeably. If people routinely hear that construction is taking place in Little Tokyo, or that construction on the Regional Connector has started, he is worried that they will avoid Little Tokyo entirely. He continued by pointing out that, while there may have been no loss of business on the Metro Gold Line Eastside Extension, many businesses are noticing they have new business owners next door.

Jason Yamaguchi wanted to know if more community meetings are scheduled. He's concerned that businesses along 2nd Street are unaware of the project, even though Metro contacted the owners. Chris Aihara reiterated she would like to see more concerted outreach to businesses along 2nd Street and that a community meeting would need to be scheduled for April. This meeting would take place before Metro's currently scheduled Community Update Meeting on April 14th, 2010.

Doug then provided an overview of next steps, including hosting focused stakeholder roundtable discussions, and a schedule of activities. He anticipates holding three roundtable meetings for Businesses, Residents, and Cultural/Religious stakeholder groups. Robert Volk suggested that Doug Kim meet with stakeholders before he reviews Metro's materials in order to make best use of his time. Kei Nagao suggested using the matrix as a starting point. Alan Kumamoto would like the group to complete a survey to understand the "hot topics" of most urgent concern to the LTWG. Doug offered to bring an action plan to the next LTWG meeting, and discuss the best approach to identify mitigation measures. The schedule depends on the availability of Metro's technical reports; there are 23 technical reports, some of which are only available in mid- April. Metro offered to assist Doug in any way with the community outreach effort. Dolores undertook to provide Doug with a copy of the Methodology Approach report, which will help the LTWG identify Metro's assumptions about the project.

The LTWG exchanged ideas about how Doug could best identify community concerns, identify potential mitigation activities, and how to convey information back to Metro. The group wants to be sure that that the schedule, is adequate to cover issues to be discussed so that a clear message can be developed.

Ann Kerman thanked the LTWG and LTCC for the letter sent to the Metro Board of Directors and CEO Art Leahy. The letter recognized Metro staff for their prompt attention and willingness to address Little Tokyo's concerns by adding a new fully-grade separated build alternative through the Little Tokyo community.

The meeting concluded at 8:00 p.m.

The next meeting will take place on March 18, 2010.

MEETING REPORT

Project Name: Regional Connector Transit Corridor Project

Organization: Little Tokyo Working Group (LTWG)

Date/Time: Thursday, March 18, 2010; 6 to 8 p.m.

Meeting Location: Japanese American Cultural and Community Center
222 S San Pedro St, Los Angeles

Project Team: Eric Carlson, Gerry Alvarez, Ann Kerman, Ray Sosa, Virginia Jackson, Helene Kornblatt, Kansai Uchida, Clarissa Filgioun, Ginny Brideau

Attendees: Chris Aihara, Edwin Barker, Kristin Fukashima, Darryl Garibay, Bobby Garza, Yukio Kawaratani, Chris Komai, Diane Tanaka, Alan Kumamoto, Joanne Kumamoto, Kei Nagao, Alan Nishio, Wilbur Takashima, Satoro Uyeda, Robert Volk, Bill Watanabe, Jason Yamaguchi, Evelyn Yoshimura

Action Items:

- Metro to consider extension for receipt of DEIS/R materials from the LTWG to April 29, 2010
- Metro and Doug Kim to provide introductory materials ("EIR 101") to LTWG for review by March 25, 2010 in preparation for the next meeting
- Metro and Doug Kim to present "EIR 101" as a portion of the April 1 LTWG meeting

Summary:
Chris Aihara called the meeting to order at 6:00 p.m., and led introductions of those in attendance. Chris reviewed the agenda, which focused on Doug Kim's presentation of the approach to the action plan and proposed calendar. Two changes were made to the March 8, 2010 meeting summary, correcting the start time to 6:00 p.m. and the FEIR availability date to Fall 2011.

Doug updated the LTWG with his work to date. Doug has reviewed 2 of the 7 technical reports available to Metro. He also anticipates hosting 3 stakeholder workshops prior to the end of April 2010, which would be focused on Business, Residents, and Nonprofit/Cultural/Religious stakeholders respectively. Chris clarified that community members will be encouraged to attend the workshop that best fits their schedule. The first meeting is tentatively scheduled for April 22, 2010.

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Chris discussed the efforts of the Consultant Task Force (CTF), and the amount of time taken to review the first 2 technical reports. She is concerned the LTCC will not have enough time to review, digest, and seek community input regarding the remaining 16 technical reports not yet available from Metro (there are a total of 23 technical reports). On behalf of the LTCC, she requested Metro allow the LTWG an additional two weeks to April 29, 2010 to deliver their document regarding the candidate mitigation measures for the Regional Connector Transit Corridor project. Regardless of Metro's ability to extend the deadline, the LTWG would be unable to have the document approved by LTCC for submission ahead of the April 27, 2010 general meeting.

Doug explained that the final two technical reports would not be available until the week of April 5th and that anticipated community stakeholder meetings would not be held until mid-April, hence the additional time requested. Many of the LTWG asked Metro to identify the potential ramifications of extending the due date by two weeks.

Eric Carlson identified the concern from Metro's perspective that the community stakeholder meetings would not take place until all of the tech reports had been reviewed, noting that the review of the tech reports was intended as supplemental information and not as the main source of information for the mitigations. He provided some background about the current April 15 due date for materials from LTWG to be added to the Draft EIS/R. He explained that Metro is working with the Federal Transit Administration (FTA) to submit an application for funding the Regional Connector Transit Corridor Project. In partnership, Metro and the FTA have agreed to a "roadmap" or schedule by which documents and milestones would need to be completed. Funding for the Regional Connector would be dependent on the completion of the Draft EIS/R. In order to remain eligible for the upcoming funding cycle, Metro must submit the Draft EIS/R for FTA review by June 1, 2010. Working backwards, Metro's technical consultant is scheduled to provide a draft to Metro for internal review by May 1, 2010. To provide enough time for inclusion and review, the technical consultant should receive final comments from Metro and the LTWG by April 15, 2010 so that the current schedule can be maintained.

Eric reiterated Dolores Roybal Saltarelli's comment from the previous LTWG meeting that, should the LTWG be unable to deliver a document prior to April 15, 2010, it is not the final deadline for submission of requested mitigations from this community. He noted that the Final EIS/R (FEIS/R) will be the last opportunity to make changes to the candidate mitigation measures suggested for the project, and that the anticipated availability of the FEIS/R is Fall 2011. The FEIS/R will include a menu of mitigation measures, which will then become part of the Record of Decision (ROD) and ultimately the contract between the community and Metro. If additional mitigations are needed after the ROD is developed, Metro will work with the Little Tokyo community to address specific requests.

Various members of the committee noted that they did not think an additional two weeks was an unreasonable request given the timeline and also asked if it would be possible for Metro to accelerate some of the tech reports that were of greatest interest, such as the Transportation Impacts report and the Land Use report.

Eric said he would inform Dolores, Metro's Project Manager, that the committee needed two additional weeks to prepare mitigations, and that Metro would look to accelerate the key tech reports discussed (Transportation Impacts, Land Use.) It was noted that Dolores would be out of the office until Monday, March 22, 2010, and anticipated that a response from her would likely come later in the week. He also would ask Dolores to give priority to the more anticipated reports, such as those addressing environmental justice and transportation.

Many of the LTWG members were uncertain about the EIS process, and asked if Metro and Doug could develop a short presentation that covered the basics of the environmental process. This presentation would explain how the reports are developed, how EIRs are approved, and the next steps between now and construction. They also requested a short description for each technical report. Ann Kerman agreed that such an overview would be helpful, and that information would be developed and provided to the LTWG prior to the April 1 meeting.

Ahead of the next meeting, the LTWG will continue to review the technical reports as Metro makes them available. The Working Group will also discuss an outreach approach to generate interest for the upcoming stakeholder meetings.

It was also agreed the LTWG would also serve as the Urban Design "sounding board" for the conceptual urban design of the new Little Tokyo/Arts District station included in the Fully Grade Separated build alternative. The discussion for the new station would take place in May 2010.

Jason Yamaguchi asked Ann to check at Metro to ensure the well-being of the new trees located at the current Little Tokyo/Arts District station. He has noticed the trees appear to be dying due to lack of water.

The meeting concluded at 8:00 p.m.

The next meeting will take place at 6:00 p.m. on April 1, 2010.

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MEETING REPORT

Project Name:	Regional Connector Transit Corridor Project
Organization:	Little Tokyo Working Group (LTWG)
Date/Time:	Thursday, April 8, 2010; 6 to 8 p.m.
Meeting Location:	Japanese American Cultural and Community Center 222 S San Pedro St, Los Angeles
Project Team:	Dolores Roybal Saltarelli, Eric Carlson, Gerry Alvarez, Ann Kerman, Ray Sosa, Virginia Jackson, Helene Kornblatt, Kansai Uchida, Clarissa Filgioun, Ginny Brideau
Attendees:	Edwin Barker, Bobby Garza, Mary Graybill, Doug Kim, Chris Komai, Alan Kumamoto, Joanne Kumamoto, Mike Okamoto, Johnnie Raines, Kim Tachiki-Chin, Wilbur Takashima, Satoru Uyeda, Jayson Yamaguchi, Vanessa Yee, Evelyn Yoshimura
Action Items:	• Metro to provide potential meeting dates to discuss the urban design of the new Little Tokyo/Arts District Station. • The Robert Group to contact the Little Tokyo Business Improvement District regarding their membership list.

Summary:
Wilbur Takashima called the meeting to order at 6:00 p.m. and led introductions of those in attendance. Diego Cardoso briefly joined the meeting to thank the LTWG members for their participation at the recent Metro Board meeting in support of the Regional Connector study.

Dolores Roybal Saltarelli, Metro's Project Manager, responded to the LTWG's request to extend the deadline to April 29 for submitting a response about potential mitigation measures in the draft environmental document. She asked the LTWG to submit its materials as soon as possible, and Metro would make every effort to include the group's input in the administrative draft of the document. She outlined the project schedule, noting that the release of the Draft EIS/R would take place between summer and early fall 2010, and would include a staff-recommended Locally Preferred Alternative (LPA).

Dolores then reviewed the operating plans for each project alternative under study. The original and ongoing intent of the Regional Connector is to provide direct access through Downtown Los Angeles respectively East to West from East Los Angeles (and in future the vicinity of I-605 freeway) to Culver City(and in the future Santa Monica) and North to South from Pasadena (and in future Azusa) to

Long Beach. She further explained that the Regional Connector would not provide direct East to South or West to North access.

Wilbur asked about the possible removal of the current Little Tokyo/Arts District station, and what its demolition might entail. Ray Sosa responded that it could take up to 3 months, and that the impacts of station demolition would be considerably less than what was experienced during construction. Dolores emphasized that the Metro Gold Line would remain in operation during construction, and that a final decision regarding the platform would be made separately from the study.

Noting that the Planning Commission had approved the Nikkei Center development plan earlier that day, Wilbur asked if there was an update on any communications that would locate the LT/AD station under that development. Dolores noted that her conversations with Mr. Kaji have focused on providing a station entrance at the Nikkei Center Development, rather than placement of the station box under that site.

Bobby Garza asked about the timing of the decision regarding the Little Tokyo/Arts District Station. Dolores explained that Metro has focused on the study of the project alternatives and will make a decision about this station at a later juncture, likely after the completion of Preliminary Engineering (PE). She reiterated, however, that the station would remain in operation until the opening of the Regional Connector.

Doug Kim, consultant to the LTWG, mentioned his conversation with Mr. Kaji, which took place earlier in the day. While they did not discuss the Planning Commission decision, Doug is aware that Mr. Kaji will meet with the project's investors to discuss the station location and passenger access. Dolores and Ray reviewed the limitations of placing the station box under the Nikkei Center Development, specifically that Metro would be unable to provide the North/South and East/West service should the station box be placed under this site.

Doug Kim presented a summary of the EIR process in the context of the Regional Connector. The primary focus of his presentation addressed the overall environmental process, the importance of this process, and how to provide the best input to Metro regarding the project. His presentation also provided additional background of the Alternatives Analysis, and how Metro could secure funding from the Federal Transit Agency (FTA). A complete copy of the presentation is attached to this meeting summary.

He added that a series of three workshops for the Little Tokyo community, sponsored by the Little Tokyo Community Council, are slated to take place in April. Workshops will provide the community with an opportunity to discuss potential impacts of the construction and operations of the Regional Connector.

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The meetings will take place at the Japanese American Cultural and Community Center, on the following dates and times, and targeted to specific community interests:

- Business focus - April 21 at 3 p.m.
- Non-profit focus - April 22 at 4 p.m.
- Residential focus - April 22 at 6 p.m.

Meetings will be open to all in the community, regardless of the meeting's focus.

At the conclusion of the workshops, the LTCC will receive a recommendation from the LTWG regarding the candidate mitigation measures. The LTCC will meet on April 27, 2010 to hear the workshop report and to consider these candidate mitigation measures.

Ann Kerman informed the LTWG that Metro's outreach team would be available to assist with notifications for the upcoming focus group meetings. Metro is alos available to provide informational materials about the focus groups at the community update meetings taking place in mid-April. Wilbur would like to invite as many Little Tokyo stakeholders as possible to ensure that a wide range of voices are heard.

Ann reminded the group of the dates and times of the community update meetings. She noted that materials have been distributed through postal mail, email, placed on the Gold Line and local buses, and were distributed by hand. Additionally, advertisements were placed in Rafu Shimpo, Pacific Citizen, Downtown News, Garment and Citizen, and Pasadena Star News.

Satoru Uyeda suggested that Metro contact the Little Tokyo BID for their distribution list. Ginny Brideau will follow up.

Jayson asked whether Metro had an update on the status of the cherry trees near the Little Tokyo/Arts District station. Ann had been on jury duty and unable to follow up. She will check on this issue once she has returned to the office.

Ann Kerman noted that the Little Tokyo Urban Design Working Group would be tentatively scheduled for the April 29 LTWG meeting. Dolores needs to confirm the technical consultant's availability.

The next meeting will take place at 6:00 p.m. on April 29, 2010.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Urban Design Working Group Materials

Portions of this appendix have been intentionally left blank. This information is available from Metro upon request.

State Clearinghouse Number: 2009031043

	A	B	C
2	Organization	Fname	Lname
3	213 Ventures	Cedd	Moses
4	Angeles Plaza Senior Housing	Gloria	Caster
5	Angeles Plaza Senior Housing	Jeffrey	Winston
6	Anschutz Entertainment (LA Live)	Ted	Tanner
7	Arcade Theater	Greg	Martin
8	BlogDowntown	Eric	Richardson
9	Bringing Back Broadway	Tara	Jones
10	Bringing Back Broadway	Tom	Steidl
11	Bringing Back Broadway	Jessica	Wethington McLean
12	Bunker Hill Apartments	Richard	Risty
13	California Plaza	Natalie	Park
14	Cathedral of Our Lady of the Angels	Brother	Hillarian
15	CB/Ellis	Ed	Rosenthal
16	Centenary Church	Mark	Nakagawa
17	Central City Association	Justin	Weiss
18	Central City Association	Hal	Bastian
19	Central City Association	Tracey	Chavira
20	Central City Association	Carol	Schatz
21	Central City East Association	Qathryn	Brehm
22	Central City East Association	Estela	Lopez
23	Central Public Market	Adele	Yellin
24	City of Los Angeles: Office of Councilmember Ed Reyes	Ed	Reyes
25	City of Los Angeles: Office of Councilmember Ed Reyes	Jill	Sourial
26	City of Los Angeles: Office of Councilmember Ed Reyes	Susan	Wong
27	City of Los Angeles: Office of Councilmember Jan Perry	Jeff	Catalano
28	City of Los Angeles: Office of Councilmember Jan Perry	Greg	Fischer
29	City of Los Angeles: Office of Councilmember Jan Perry	Jan	Perry
30	City of Los Angeles: Office of Councilmember Jose Huizar	Tara	Devine
31	City of Los Angeles: Office of Councilmember Jose Huizar	José	Huizar
32	City of Los Angeles: Office of Councilmember Jose Huizar	Edel	Vizcarra
33	City of Los Angeles: Office of the Mayor	Michelle	Cervera
34	City of Los Angeles: Office of the Mayor	Jaime	de la Vega
35	Colburn School of Music	Wendy	Carr
36	Colburn School of Music	Michael	Hockett
37	Colburn School of Music	Sandy	Silver
38	Colburn School of Music	Sue	Solomon
39	Disney Hall	Leni	Boorstin
40	Downtown Art Walk	Bert	Green
41	Downtown Art Walk	Sandie	Richards
42	Downtown Art Walk	Richard	Schave
43	Downtown Los Angeles Neighborhood Council	Gunnar	Hand
44	Downtown Los Angeles Neighborhood Council	Shiraz	Tangri
45	Downtown Los Angeles Neighborhood Council	Brady	Westwater
46	Downtown Los Angeles Neighborhood Council	Patti	Berman
47	Downtown Los Angeles Neighborhood Council	Russell	Chan
48	Downtown Los Angeles Neighborhood Council	Anna	Duran
49	Downtown Los Angeles Neighborhood Council	Shane	Guffogg
50	Downtown Los Angeles Neighborhood Council	Stanley	Michaels

	A	B	C
2	Organization	Fname	Lname
51	Downtown Los Angeles Neighborhood Council	Jon	Toktas
52	Downtown Los Angeles Neighborhood Council	Ashley	Zarella
53	Downtown News	Sue	Laris
54	Fashion Institute of Design & Merchandising	Tonian	Hohberg
55	Figueroa Corridor Partnership	Steve	Gibson
56	Film L. A. Inc.	Todd	Lindgren
57	Friends of the Little Tokyo Library	Edwin	Barker
58	Friends of the Little Tokyo Library	T. K.	Nagano
59	Friends of the Los Angeles River	Shelly	Backlar
60	Garment and Citizen	Jerry	Sullivan
61	Gilmore Associates	Suzanne	Ekerling
62	Gilmore Associates	Tom	Gilmore
63	Globe Theater	Ralph	Verdugo
64	Go for Broke National Education Center	Diane	Tanaka
65	Go for Broke National Education Center	Christine	Sato Yamazaki
66	Grand Avenue Committee	Martha	Welborne
67	Grubb & Ellis Management Services	Chuck	Hunt
68	GVA Charles Dunn	Patrick	Conn
69	GVA Daum	David	Freitag
70	Higashi Honganji Buddhist Temple	Rinban Noriaki	Ito
71	Higgins Building Homeowners Association	Debbie	Kim
72	Higgins Building Homeowners Association	Joan	Springhetti
73	Higgins Building Homeowners Association	Victor	Tagle
74	Higgins Building Homeowners Association	Donald	Britton
75	Higgins Building Homeowners Association	Stacie	Chaiken
76	Higgins Building Homeowners Association	Coleman	Engellenner
77	Higgins Building Homeowners Association	Jorge	Montigo
78	Higgins Building Homeowners Association	Raelynn	Napper
79	Higgins Building Homeowners Association	Darren	Roberts
80	Higgins Building Homeowners Association	Anthony	Santana
81	Hines Property Management	Joseph	Tupy
82	Historic Core Business Improvement District	Russ	Brown
83	Historic Cultural Neighborhood Council	Howard	Nishimura
84	Historic Cultural Neighborhood Council	Kelsey	Iino
85	Historic Cultural Neighborhood Council	Tim	Keating
86	Historic Cultural Neighborhood Council	Charles	Woo
87	Historic Cultural Neighborhood Council/Little Tokyo Public Safety	Brian	Kito
88	Historic Cultural Neighborhood Council/Little Tokyo Service Cente	Ron	Fong
89	Historic Cultural Neighborhood Council/Maryknoll Japanese Cath	Alan	Kumamoto
90	IDS Real Estate	Eric	Gutshall
91	Japanese American National Museum	Nancy	Araki
92	Japanese American National Museum	Miyoko	Oshima
93	LA EDC	Jack	Kyser
94	LA Live	Martha	Saucedo
95	LA Live	Lee	Zeidman
96	LA OPERA	Kate	McCallum
97	LA Streetcar Inc	Dennis	Allen
98	LA Times Building	Eddy	Hartenstein

	A	B	C
2	Organization	Fname	Lname
99	LA Trade Tech	Marcy	Drummond
100	Liberty National Enterprises	Shahram	Afshani
101	Little Tokyo Branch Library	Hitoshi	Ohta
102	Little Tokyo Business Association	Frances	Hashimoto
103	Little Tokyo Business Association	Wilson	Liu
104	Little Tokyo Community Council	June	Berk
105	Little Tokyo Community Council	Mike	Okamoto
106	Little Tokyo Recreation Center	David	Nagano
107	Little Tokyo Service Center Community Development Corporation	Evelyn	Yoshimura
108	Little Tokyo Service Center Community Development Corporation	Katayama	Mizue
109	Little Tokyo Service Center Community Development Corporation	Bill	Watanabe
110	Los Angeles Central Public Library	Kyle	Millager
111	Los Angeles Community College District	Diana	Ho
112	Los Angeles Community College District	Marshall	Drummond
113	Los Angeles Conservancy	Flora	Chou
114	Los Angeles Conservancy	Linda	Dishman
115	Los Angeles Convention Center	Pouria	Abbassi
116	Los Angeles Convention Center	C	Villorante
117	Los Angeles County Bicycle Coalition	Kent	Strumpel
118	Los Angeles County Courts	John	Clarke
119	Los Angeles County: Office of Mark Ridley-Thomas	Fernando	Ramirez
120	Los Angeles County: Office of Mark Ridley-Thomas	Dan	Rosenfeld
121	Los Angeles County: Office of Supervisor Gloria Molina	Nicole	Englund
122	Los Angeles County: Office of Supervisor Gloria Molina	Suzanne	Manriquez
123	Los Angeles Fashion Business Improvement District	Kent	Smith
124	Los Angeles Public Library System	Julie	Cheng
125	Los Angeles River Artists and Business Association	John	Saslow
126	Los Angeles Theater	Nick	Latimer
127	Los Angeles Theatre	Frank	Schultz
128	Los Angeles Times	Russ	Compton
129	Los Angeles Visitors and Conventions Bureau	Mark	Liberman
130	LTCC/JACCC	Chris	Aihara
131	Maguire Properties	Ted	Bischak
132	Maguire Properties	Espie	Gutierrez
133	Maguire Properties	Lalo	Diaz
134	Maguire Properties	Pat	McRoskey
135	Maguire Properties	Rachael	Vitale-Modrich
136	Maguire Properties	Josh	Wrobel
137	Melendrez	Melani	Smith
138	Meruelo Maddox Properties	Richard	Meruelo
139	Metropolitan News	Vahn	Babigian
140	Metropolitan Water District of Southern California	Jeffrey	Kightlinger
141	Million Dollar Theater	Robert	Voskanian
142	MOCA	Michael	Nauyok
143	Morlin Asset Management	Tim	Moore
144	Museum and Grand Tower Apartments	Aaron	Bazile
145	Music Center	Leticia	Rhi Buckley
146	Nisei Week	Joanne	Kumamoto

	A	B	C
2	Organization	Fname	Lname
147	Nisei Week	James	Okazaki
148	Oak Tree Equities	Mark	Farzan
149	Omni Hotel	David	Shahriari
150	Orpheum Theater	Steve	Needleman
151	Promenade West Management Office	Lorna	Leviste
152	Rafu Shimpo	Ryoko	Onishi
153	Related Companies	Beatrice	Hsu
154	Related Companies	Rick	Westberg
155	Related Companies	Gino	Canori
156	Related Companies	Vince	Michaels
157	Rialto Theater	Tyler	Murphy
158	Savoy Homeowners Association	Paul	Yeh
159	SCI-ARC Architectural College	Eric	Owen Moss
160	Shammas Group	Darryl	Holter
161	South Park Stakeholders	Mike	Pfeiffer
162	State of California: State Assembly	Richard	Ryan
163	State of California: State Senator Gilbert Cedillo	Arturo	Chavez
164	State of California: State Senator Gilbert Cedillo	David	Meza
165	State of California: State Senator Gilbert Cedillo	Christy	Wolfe
166	State Theatre	Michael	Delijani
167	Stuart Ketchum YMCA	Laurie	Goganzer
168	Thomas Properties Group	Glen	Berryhill
169	Thomas Properties Group	Kent	Handelman
170	Thomas Properties Group	Charlie	Smith
171	Thomas Properties Group	James	Thomas
172	Thomas Properties Group		
173	United States: Office of Congresswoman Lucille Roybal-Allard	Kim	Tachiki
174	United States: Office of Senator Barbara Boxer	Aldolfo	Bailon
175	United States: Office of Senator Barbara Boxer	Gina	Semenza
176	United States: Office of Senator Diane Feinstein	Molly	O'Brien
177	University of Southern California	Carolyn	Webb de Macias
178	Volk Properties	Darryl	Garibay
179	Volk Properties	Robert	Volk
180	Weller Court		
181	World Trade Center	Vance	Baugham
182		Saied	Isaac

SCOPING INFORMATION PACKET

Project Description

The proposed Regional Connector Transit Corridor project would provide a direct link connecting several light rail lines in operation or in construction, including the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line to Long Beach, and the Metro Expo Line to Culver City. The proposed project would create a connection through downtown Los Angeles that would link the Metro Blue and Expo Lines termini at 7th Street/Metro Center Station (7th Street and Flower Street) to the Metro Gold Line at the Little Tokyo/Arts District Station at 1st Street and Alameda Street. With the implementation of the project, these four lines would share tracks and stations in downtown Los Angeles. The project corridor length varies slightly by alternative and is approximately 1.8 miles long.

Project Purpose and Need

The purpose of this project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

Additional considerations supporting the need for the Regional Connector Transit Corridor project include: increased travel times and station overcrowding occurring due to multiple transfers required to traverse the project area; a project area that has many transit dependent residents; poor system connectivity that results in reduced system schedule reliability as current system expansions are completed; and investments within the project area could improve system-wide operations in regards to travel times and safety issues.

Proposed Alternatives

The Regional Connector Transit Corridor Final Alternatives Analysis Report (2009) prepared by the Los Angeles County Metropolitan Transportation Authority (Metro) identified four alternatives for further consideration in the DEIS/DEIR. The four alternatives include: a No-Build Alternative, Transportation System Management (TSM) Alternative, At-Grade Emphasis Light Rail Transit (LRT) Alternative, and Underground Emphasis LRT Alternative.

No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2030. No new transportation infrastructure would be built within the project area aside from projects currently under construction, or funded for construction and operation by 2030 by the recently

approved Measure R sales tax. Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. By the projection year of 2030, some bus service would have been reorganized and expanded to provide connections with the new rail lines; however, the transit network within the project area would largely be the same as it is now.

Transportation Systems Management (TSM) Alternative

The TSM Alternative would include the provisions of the No Build Alternative and add two shuttle bus routes from 7th Street/Metro Center station to Union Station, providing a link between the region's unconnected LRT services. One route would run along Grand Avenue and 1st Street, and one along Figueroa, Flower, 2nd, and 3rd Streets. The shuttle buses would use existing bus-only lanes, where available, and would be fitted with transit-priority signalization devices similar to those used on Metro Rapid. Stops would be located every few blocks so as to provide full coverage of the area. Each shuttle route would be one and one-half to two miles in length.

At-Grade Emphasis LRT Alternative

This alternative (**Figure 1**) would extend from the underground 7th Street/Metro Center Station, head north under Flower Street, surface to at-grade north of 5th Street, cross 3rd Street, enter Bunker Hill, and turn northeast through a new entrance to the existing 2nd Street tunnel. The alignment would continue along 2nd Street where it would split into an at-grade couplet configuration on Main and Los Angeles Streets (one track on each roadway) to Temple Street. Then it would head east on Temple Street and realign into a dual track configuration east of Los Angeles Street and join the Metro Gold Line just north of Little Tokyo/Arts District Station on Alameda Street. Due to the high volume of trains that would traverse the Regional Connector, an automobile underpass and pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to eliminate pedestrian-train and automobile-train conflicts.

There are two options for the configuration on Flower Street. For Option A, trains would transition to underground tracks after crossing 3rd Street and continue to a new underground station just south of 5th Street, then proceed to the 7th Street/Metro Center Station and arrive at the existing Metro Blue Line platform. For Option B, trains would arrive at an at-grade station after crossing 3rd Street, then transition to underground tracks near 4th Street to reach the existing Metro Blue Line platform at 7th Street/Metro Center station. In total, the At-Grade Emphasis LRT Alternative would add 1.8 miles of new double track to the light rail system.

In addition to the Option A and Option B Station configurations, other station locations would include a station adjacent to Bunker Hill, south of 2nd Street and Hope Street, and a split station using Main and Los Angeles Streets between 1st and Temple Streets.

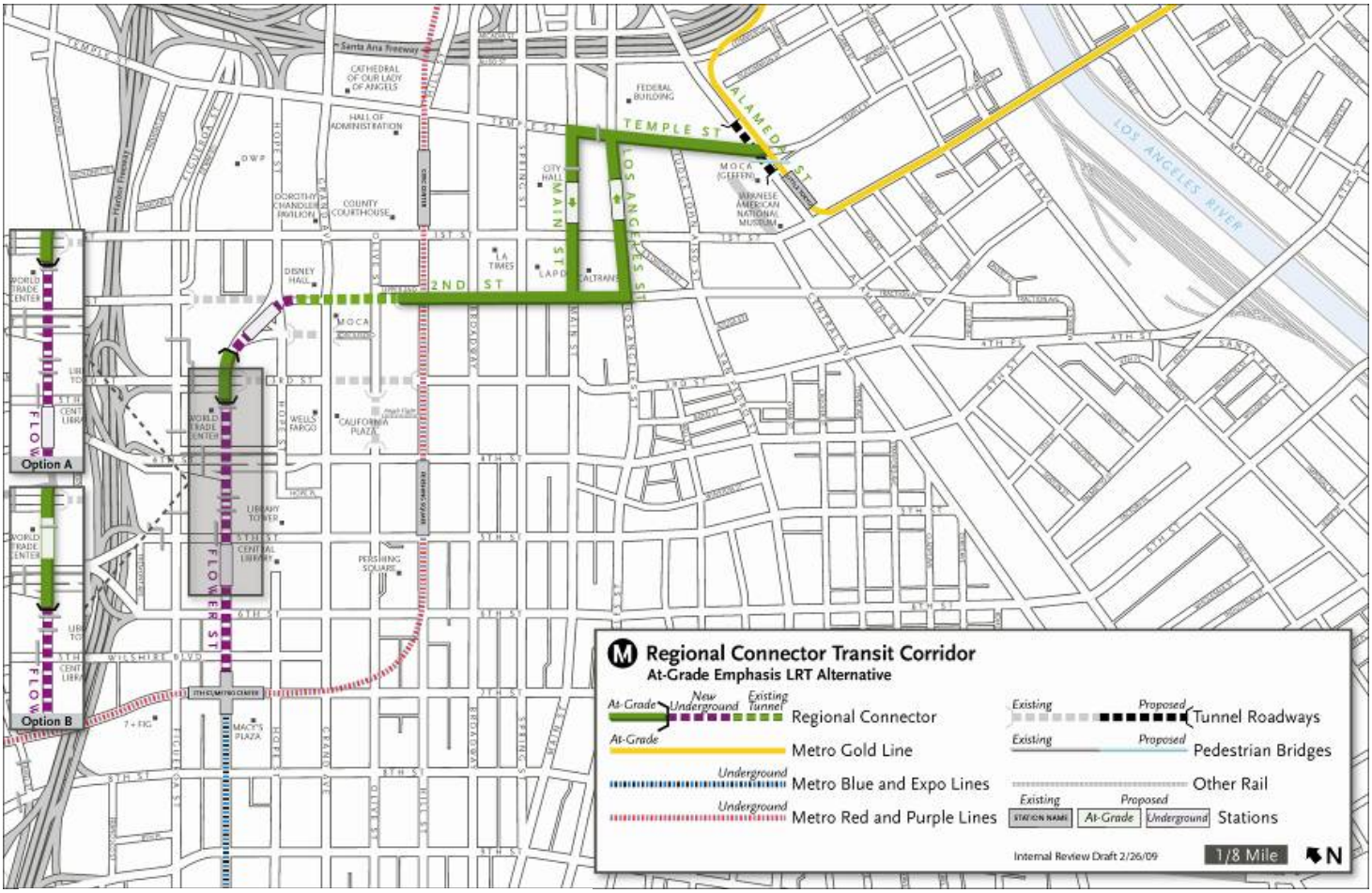


Figure 1: At-grade Emphasis LRT Alternative

Underground Emphasis LRT Alternative

From the 7th Street/Metro Center Station, this alternative (**Figure 2**) would extend north along Flower Street with a new underground station north of 5th Street. At 2nd Street, the underground tunnel would extend east with new underground stations to provide access to Bunker Hill and to the area between Los Angeles Street and Broadway. The tunnel would emerge to at-grade connections with the Metro Gold Line just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a new overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This

alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets. The rest of the route would be underground. The length of this proposed route would be 1.6 miles.

Station locations for this alternative would all be underground and include the area north of 5th Street on Flower Street, adjacent to Bunker Hill just south of 2nd Street and 2nd Street between Los Angeles and Main Streets.

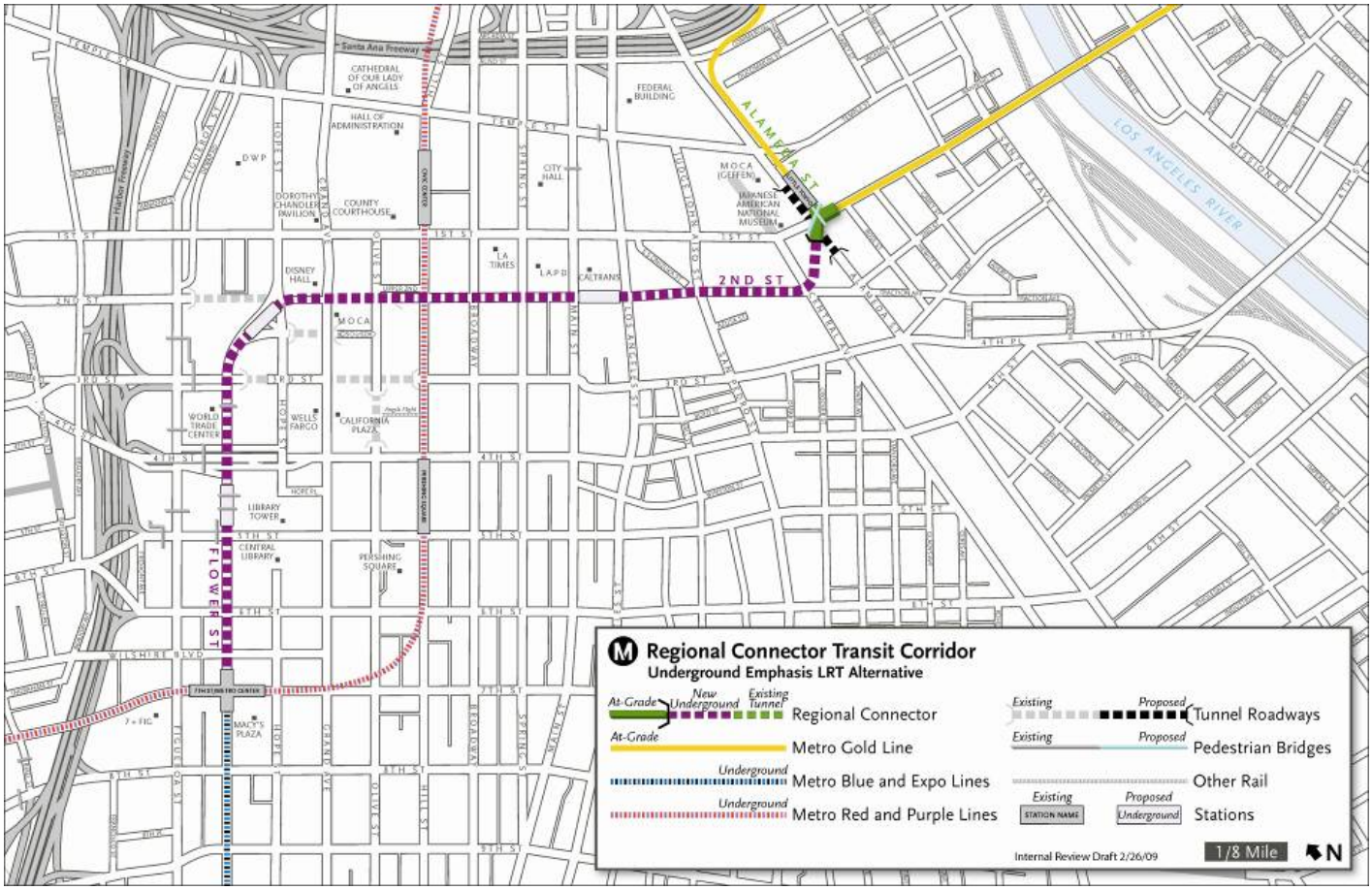


Figure 2: Underground Emphasis LRT Alternative

Preliminary Schedule

The preliminary schedule is provided below for discussion at the agency scoping meeting.

Action	Date
Agency Scoping Meeting	March 26, 2009
Public Scoping Meetings	March 30, 2009 to April 2, 2009 (see below for specific dates)
Scoping Comment Period Ends	May 11, 2009
Development of DEIS/DEIR	Spring – Winter 2009
Public Hearings/Comment on DEIS/DEIR	Spring 2010
Adoption of Locally Preferred Alternative	Summer 2010

What is an EIS/EIR?

An Environmental Impact Statement/Environmental Impact Report (EIS/EIR) must be prepared for all major projects that may significantly affect the environment. The EIS is prepared in compliance with the National Environmental Policy Act (NEPA) and the EIR is prepared in compliance with the California Environmental Quality Act (CEQA). The purpose of the EIS/EIR is to provide full an open evaluation of environmental issues and alternatives, and to inform decision-makers and the public of reasonable alternatives that could avoid or minimize adverse impacts and enhance the quality of the environment.

Scoping Meeting Schedule

Four public scoping meetings will be conducted by FTA and Metro for the public to learn more about the project and provide comments. The scoping meetings will be held at the following locations:

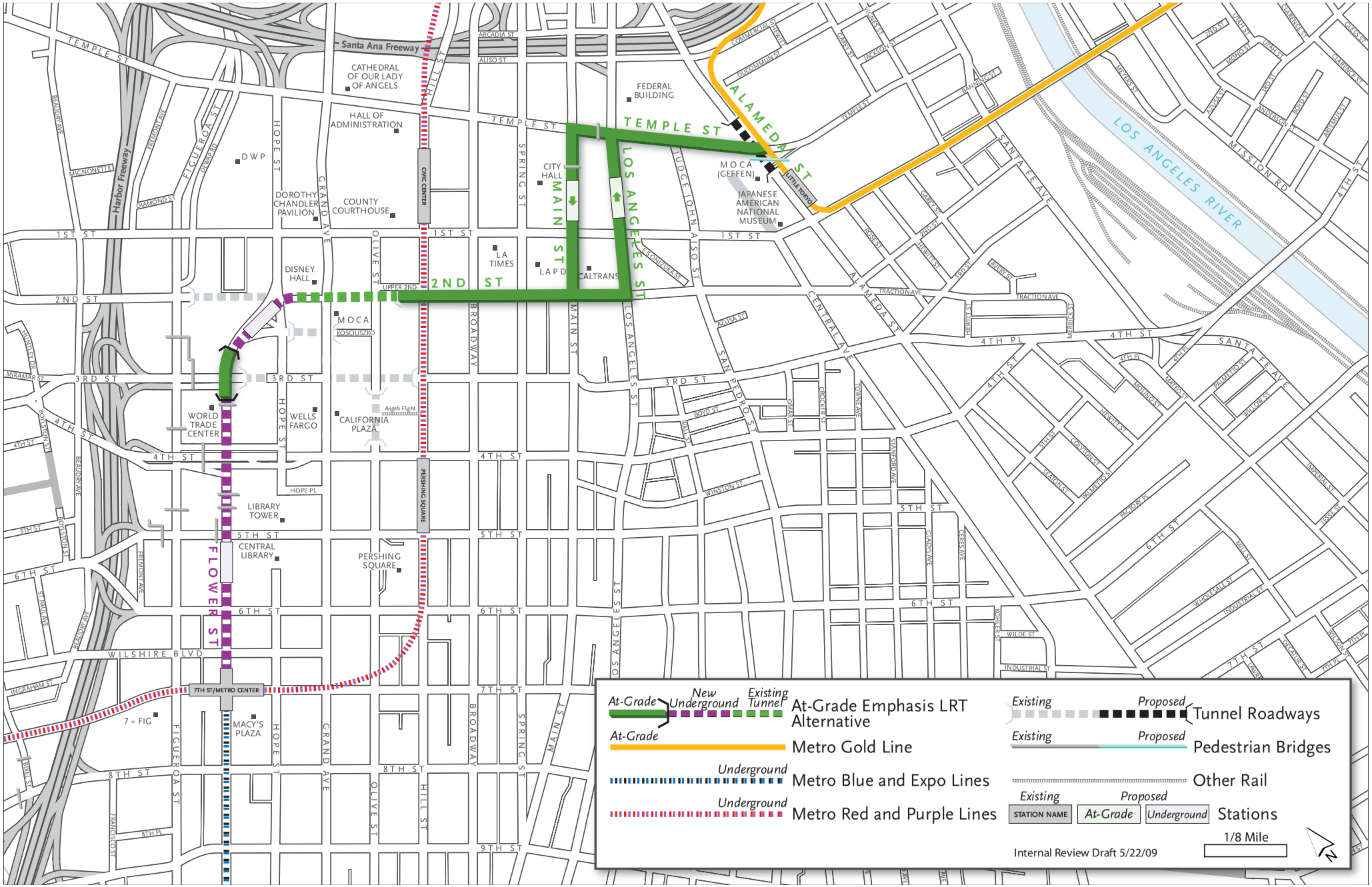
- Monday, March 30, 2009 from 4:30 p.m. to 6 p.m. at the University of Southern California (USC), Alumni Room, Davidson Conference Center, 3415 S Figueroa St, Los Angeles, CA 90007.
- Tuesday, March 31, 2009 from 6:30 p.m. to 8 p.m. at the Lake Avenue Church, 393 N. Lake Ave, Pasadena, CA 91101.
- Wednesday, April 1, 2009 from 6:30 p.m. to 8 p.m. at the Japanese American National Museum (JANM), 369 E 1st St, Los Angeles, CA 90012.
- Thursday, April 2, 2009 from Noon to 1:30 p.m. at the Los Angeles Central Library, Board Room, 630 W 5th St, Los Angeles, CA 90071.

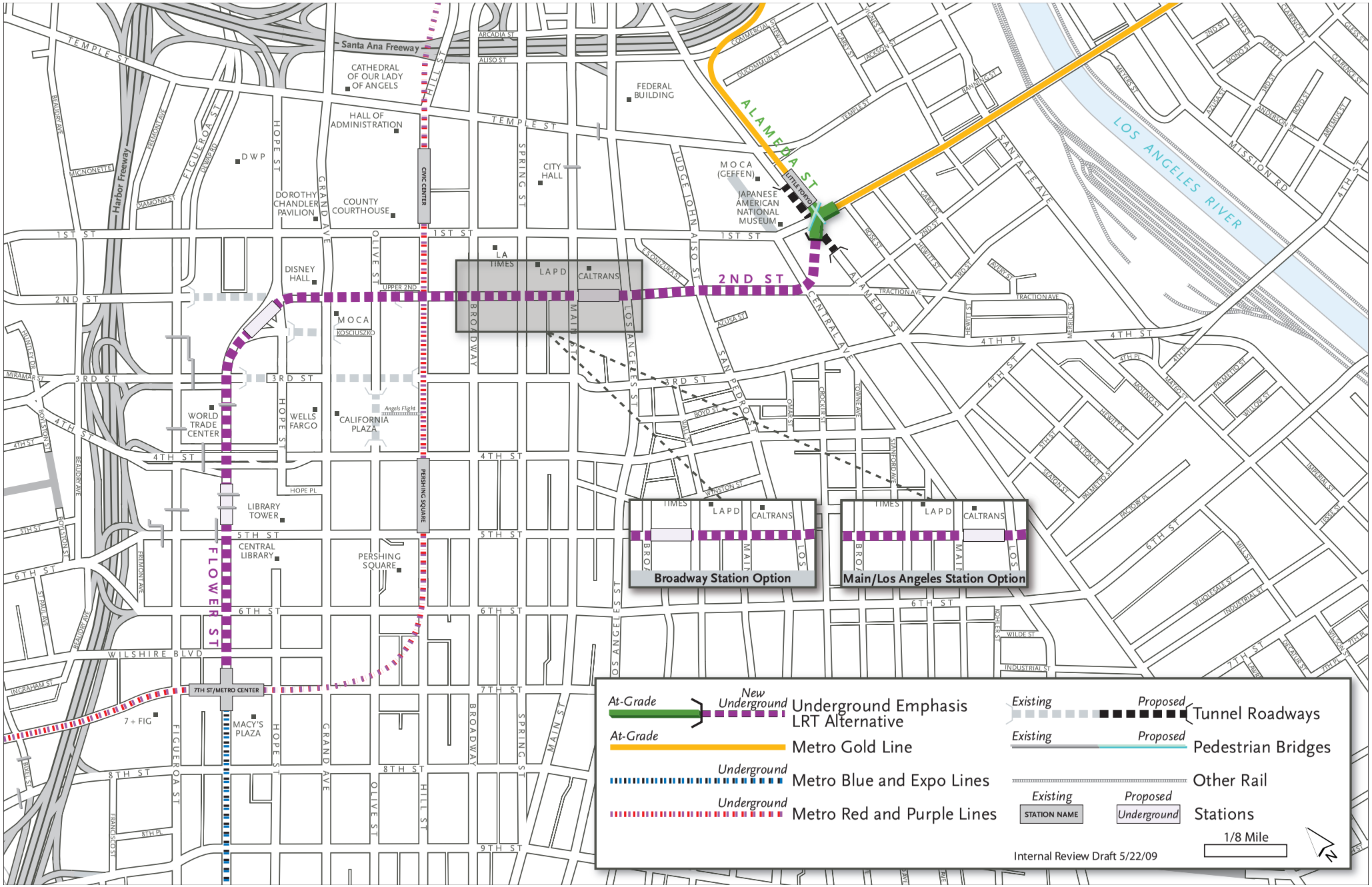
Written comments will be accepted until May 11, 2009. Comments may also be submitted at the scoping meetings, sent via email to regionalconnector@metro.net, or mailed to:

Ms. Dolores Roybal Saltarelli, AICP, Project Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Los Angeles, CA 90012

Project Information

Additional information may be found on the project website at:
http://www.metro.net/projects_studies/connector


TEMPLE ST
Santa Ana Freeway
ARCADIA ST
ALISO ST
HILL ST
CATHEDRAL OF OUR LADY OF ANGELS
FEDERAL BUILDING
HALL OF ADMINISTRATION
TEMPLE ST
ALAMEDA ST
COMMERCIAL ST
DUPONT MIN ST
JACKSON ST
BANNING ST
LOS ANGELES RIVER
MISSION RD
4TH ST
BEAUDRY AVE
MIGNONETTE
FREMONT AVE
FIGUEROA ST
DWP
HOPE ST
GRAND AVE
DOROTHY CHANDLER PAVILION
COUNTY COURTHOUSE
CIVIC CENTER
SPRING ST
CITY HALL
MAIN ST
LOS ANGELES ST
LUDGE JOHN ASO ST
MOCA (GEFFEN)
LITTLE TOKYO
JAPANESE AMERICAN NATIONAL MUSEUM
SANTA FE AVE
Harbor Freeway
DIAMOND ST
1ST ST
OLIVE ST
DISNEY HALL
LA TIMES
LAPD
CALTRANS
UPPER 2ND
2ND ST
MOCA
KOSCIUSZKO
BROADWAY
MAIN ST
LOS ANGELES ST
ALAMEDA ST
CENTRAL AV
TRACTION AVE
HEWITT ST
MERCANTILE PL
4TH PL
SAN PEDRO ST
3RD ST
MIRAMAR ST
HUNTLEY DR
BOSTON ST
WORLD TRADE CENTER
WELLS FARGO
CALIFORNIA PLAZA
Angels Flight
HOPE ST
PERSHING SQUARE
TOWNE AVE
OMAR ST
BOYD ST
WILLOW ST
MOLINO ST
PALMETTO ST
IMPERIAL ST
ISSEI ST
HOPE PL
LIBRARY TOWER
WINSTON ST
STAFFORD AVE
5TH ST
6TH ST
CENTRAL LIBRARY
FLOWER ST
PERSHING SQUARE
GLADYS AVE
CERES AVE
MILL ST
WHOLESALE ST
INDUSTRIAL ST
WILSHIRE BLVD
7TH ST/METRO CENTER
MACY'S PLAZA
7 + FIG
INGRAHAM ST
ST PAUL AVE
PIXLEY ST
8TH ST
9TH ST
FRANCIS ST
8TH PL
WILDE ST
HOOVER ST
7TH PL
DECATUR ST
WILSON ST
At-Grade
New Underground
Existing Tunnel
At-Grade Emphasis LRT Alternative
At-Grade
Metro Gold Line
Underground
Metro Blue and Expo Lines
Underground
Metro Red and Purple Lines
Existing
Proposed
Tunnel Roadways
Existing
Proposed
Pedestrian Bridges
Other Rail
Existing
Proposed
STATION NAME
At-Grade
Underground
Stations
1/8 Mile
Internal Review Draft 5/22/09
N


Broadway Station Option
Main/Los Angeles Station Option
At-Grade
New Underground
Underground Emphasis LRT Alternative
At-Grade
Metro Gold Line
Underground
Metro Blue and Expo Lines
Underground
Metro Red and Purple Lines
Existing
Proposed
Tunnel Roadways
Existing
Proposed
Pedestrian Bridges
Other Rail
Existing
STATION NAME
Proposed
Underground
Stations
1/8 Mile
Internal Review Draft 5/22/09

Portions of this appendix have been intentionally left blank. This information is available from Metro upon request.

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Community Meeting Matrix

State Clearinghouse Number: 2009031043

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
Metropolitan News	04/28/10	Metro Headquarters One Gateway Plz Los Angeles	Dolores Roybal Saltarelli, Laura Cornejo, Ann Kerman, Ginny Brideau, Kansai Uchida	Jo-Ann Grace, Vahn Babigian
Japanese American National Museum	04/22/10	JANM 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Kansai Uchida, Ginny Brideau	Akemi Kikumura, Chris Komai, Miyoko Oshima
Central City East Association	04/07/10	CCEA Offices 725 S Crocker St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau	CCEA Board members and Estela Lopez
Metropolitan News	03/23/10	Metro Headquarters One Gateway Plz Los Angeles	Laura Cornejo, Ginny Brideau, Ann Kerman	Jo-Ann Grace, Vahn Babigian
Jay Chen, property owner	03/17/10	Metro Headquarters One Gateway Plz Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau	Jay Chen
City of Los Angeles: Department of Transportation	03/16/10	City of Los Angeles: Department of Transportation 100 S Main St, Los Angeles	Farid Naguib, Dolores Roybal Saltarelli, Helene Kornblatt, Kansai Uchida, Sean Skehan	Kang Hu, John Fisher, Calvin Cho
Nishi Temple	02/12/10	Nishi Temple 815 E 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson	Complete list attached to report
Nishi Hongwanji Buddist Temple	02/11/10	Nishi Hongwanji Buddist Temple 815 East First Street Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Kansai Uchida, Ann Kerman	
Central City East Association	02/03/10	CCEA – Arts District Office 948 E 2nd St Los Angeles	Ginny Brideau	Arts District Committee and Estela Lopez
Higgins Building Homeowners	01/25/10	Higgins Building 108 W 2nd St Los Angeles	Eric Carlson, Ann Kerman, Kansai Uchida, Ginny Brideau	Higgins Building Homeowners Association Board members and property owners

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
Higgins Building Homeowners	01/20/10	Office of Lambert Giessinger City of Los Angeles, Offices of Historic Resources 200 N Spring St Rm 620 Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau, Helene Kornblatt, Kansa Uchida	Stacey Chaiken, Lambert Giessinger, Joan Springhetti, Martin Berg
City of Los Angeles: Chief Legislative Analyst	01/19/10	Los Angeles City Hall 200 N Spring St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa	
Central City East Association	01/12/10	CCEA Offices 725 S Crocker St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ann Kerman, Ginny Brideau	Estela Lopez
Nikkei Development	01/12/10	Metro Headquarters One Gateway Plz Los Angeles	Diego Cardoso, Roger Moliere, Dolores Roybal Saltarelli	Jonathon Kaji
Councilman Jose Huizar	01/07/10	Los Angeles City Hall 200 N Spring St Los Angeles	Diego Cardoso, Ann Kerman, Ginny Brideau	Jessica Wethington McLean
Central City Association	01/05/10	CCA Offices 626 Wilshire Blvd Los Angeles	Dolores Roybal Saltarelli, Ann Kerman	Complete list attached to report
Japanese American National Museum	12/16/09	JANM 369 W 1st St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Helene Kornblatt, Kansai Uchida	Akemi Kikumura, Chris Komai, Nancy Araki
Little Tokyo Business Association	12/10/09	Oiwake Restaurant 122 Japanese Village Plz Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Kansai Uchida, Ginny Brideau	Elizabet Viray, Akira Yuhara, David Kudo, Wilson Liu, Shigeko Katjiya, Yuriko Shikai, Joanne Kumamoto, Frances Hashimoto
Thomas Properties Group	12/10/09	Thomas Properties Group Offices 515 S Flower 6th Floor Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau	Thomas Ricci, Glen Berryhill, Jeanet Babauta, Ayahlushim Hammond, Alix Wisnher, Paul Rutter, Steve Achorn, Kent Handleman
Downtown Los Angeles Neighborhood Council	12/07/09	Los Angeles Theater 615 S Broadway Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Helene Kornblatt, Kansai Uchida, Ginny Brideau	DLANC Board of Directors

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
Nikkei Development	12/02/09	Ted T. Tanaka Offices 11307 Hindry Ave Los Angeles	Dolores Roybal Saltarelli, Diego Cardoso, Ray Sosa, Ann Kerman	Jonathon Kaji
City of Los Angeles: Department of Transportation	12/01/09	City of Los Angeles: Department of Transportation 100 S Main St Los Angeles	Farid Naguib, Dolores Roybal Saltarelli, Helene Kornblatt, Kansai Uchida, Sean Skehan	Kang Hu, John Fisher, Calvin Cho
Savoy Homeowners Association	11/30/09	Savoy Clubhouse 100 S Alameda St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Virginia Jackson, Kansai Uchida, Ginny Brideau	Bobby Garza, Paul Yeh, Susie Tae, Sidney Wang, Lynne Collmann, Alfred Chang, Andrew Lin
Congresswoman Lucille Roybal-Allard's Office	11/18/09	Roybal Federal Bldg. 255 E. Temple St. Los Angeles	Dolores Roybal Saltarelli, Marisa Yeager, Ann Kerman	Ana Figueroa, Kim Tachiki
Councilwoman Jan Perry	11/17/09	LA City Hall	Dolores Roybal Saltarelli, Ann Kerman, Arthur Henry,	Greg Fischer
Nishi Hongwanji Buddist Temple	11/17/09	Nishi Hongwanji Buddist Temple 815 East First Street Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Kansai Uchida, Ann Kerman	Reverend Briones, Eric Kurimura
Nikkei Development	10/21/09	Ted T. Tanaka Offices 11307 Hindry Ave Los Angeles	Dolores Roybal Saltarelli, Diego Cardoso, Ray Sosa, Ted Tananka, Ann Kerman	Jonathon Kaji
Little Tokyo Service Center and JACCC Boards	10/13/09	JACCC 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Monica Villalobos, Clarissa Filgioun	Complete list attached to report
Nikkei Development	10/05/09	Ted T. Tanaka Offices 11307 Hindry Ave Los Angeles	Dolores Roybal Saltarelli, Diego Cardoso, Ray Sosa, Ted Tananka, Ann Kerman	Jonathon Kaji

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
Savoy Homeowners Association	09/29/09	Savoy Clubhouse 100 N Alameda St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Savoy Homeowners Association members, including Paul Yeh, Susan Tae, Bobby Garza, and Lynne Collmann
Little Tokyo Community Council	09/22/09	JANM 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa,	Complete list attached to report
Little Tokyo CAC	09/16/09	JACCC 244 S San Pedro St Los Angeles	Eric Carlson, Ann Kerman, Ray Sosa, Ginny Brideau	Complete list attached to report
MOCA Senior Staff	09/15/09	MOCA Offices 250 S Grand Ave Los Angeles	Dolores Roybal Saltarelli, Diego Cardoso, Ray Sosa, Ginny Brideau	Complete list attached to report
Japanese American National Museum	09/04/09	JANM 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa	Complete list attached to report
City of Los Angeles: Cultural Affairs	09/02/09	City of Los Angeles 200 S Spring St Los Angeles	Dolores Roybal Saltarelli	Edgar Garcia
Little Tokyo Community Council	08/25/09	JANM 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Complete list attached to report
Central City East Association	08/19/09	St. Xavier Catholic Church 222 S Hewitt St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Monica Villalobos, Chris Robert, Ginny Brideau	Complete list attached to report
Japanese Chamber of Commerce of Southern California	08/18/09	JACCC 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Terry Handa, President of JCCSC, Lee Aoki, Mike Okamoto, Shinji Abe
Higgins Building Homeowners	8/17/09	Groundworks	Ann Kerman	Stacie Chaken, Marty Berg
Councilwoman Jan Perry	8/13/09	LA City Hall	Dolores Roybal Saltarelli, Ann Kerman, Arthur Henry, Diego Cardoso, Lynda Bybee	Greg Fischer

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
Little Tokyo Community Council	08/13/09	LTSC 231 E 3rd St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Ray Sosa, Ginny Brideau	Bill Watanabe, Lee Aoki, Ron Fong
LAPD, LAFD, LASD	08/06/09	Metro Headquarters One Gateway Plz Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Ann Kerman	Vance Bjorkland
Little Tokyo Community Council: Parking, Planning, and Cultural Preservation	07/22/09	JACCC 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa	Parking, Planning, and Cultural Preservation Committee of the Little Tokyo Community Council
Los Angeles Conservancy	07/22/09	CDM Los Angeles Offices 523 W 6th St, Ste 400 Los Angeles	Dolores Roybal Saltarelli, Gerardo Alvarez, Ray Sosa, Monica Villalobos, Kansai Uchida, Helene Kornblatt	Jim Steely, SWCA Francesca Smith, SWCA Cara Corsetti, SWCA Mike Buhler, Los Angeles Conservancy
Japanese American National Museum	07/14/09	JANM 369 W 1st St Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Miyoko Oshima, Nancy Araki, June Burke, Chris Komai
Central City East Association	07/13/09	CCEA Offices 725 S Crocker St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Estela Lopez, Qathryn Brehm
Little Tokyo Community Council	07/13/09	JACCC 244 S San Pedro St Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Ann Kerman, Ginny Brideau	Chris Aihara
Thomas Properties Group	07/07/09	Thomas Properties Group Offices 515 S Flower 6th Floor Los Angeles	Robin Blair, Dolores Roybal Saltarelli, Ray Sosa, Monica Villalobos, Yara Jasso, Ann Kerman, Ginny Brideau	Thomas Ricci, Glen Berryhill, Jeanet Babauta, Stephen Achorn, Dennis Watsabaugh
Los Angeles County: Public Works Los Angeles County: Flood Control	07/01/09	Los Angeles County Department of Public Works 900 S Fremont Ave Alhambra	Gerardo Alvarez, Eric Carlson, Girish Roy, Ray Sosa, Amanda Elioff, Zafer Mudar	Tsujii, Masashi Tsujii (LACDPW); Allen Ude (LACDPW); Ed Torran (LAC Flood Control); Amir Zandig (LACDPW); Bill Bowers (LACDPW)

Metro Regional Connector LRT
Additional Community Briefings

Organization	Date	Location	Project Team Attendance	Attendees
City of Los Angeles: Public Works: Bureau of Engineering	06/18/09	Metro Headquarters One Gateway Plz Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Gerardo Alvarez, Monica Villalobos, Virgina Wade, Lana Terry, Zafer Mudar	Curtis Tran, Calvin Chow, Farid Naguib
City of Los Angeles: Transportation	06/10/09	Metro Headquarters One Gateway Plz Los Angeles	Dolores Roybal Saltarelli, Girish Roy, Gerardo Alvarez, Ray Sosa, Monica Villalobos	Kang Hu, Calvin Chow, Tom Carranza
University of Southern California	05/22/09	USC 665 Exposition Blvd Los Angeles	Diego Cardoso, Dolores Roybal Saltarelli, Ray Sosa	David Roberts, David Galaviz, Bing Cherrie
Go For Broke	05/11/09	HMC Architects 633 W 5th St 3rd Fl Los Angeles	Dolores Roybal Saltarelli, Ray Sosa, Zapher Mudar	Raymond Pan, Diane Tanaka, Edward Avila
Little Tokyo Community Council	05/05/09	JANM 369 W 1st St Los Angeles	Dolores Roybal Saltarelli, Ann Kerman, Yvette Rapose, Gerry Alvarez, Laura Conejo, Ray Sosa, Monica Villalobos, Yara Jasso, Clarissa Filgioun	Executive Board of LTCC
Bringing Back Broadway	05/04/09	CCA Offices 626 Wilshire Blvd Los Angeles	Ginny-Marie Case	Bringing Back Broadway Streetcar Committee
Little Tokyo Community Council	04/28/09	JANM 369 W 1st St Los Angeles	Ann Kerman, Dolores Roybal Saltarelli, Ray Sosa	Little Tokyo Community Council

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
2009 Community Response (Post Scoping)

State Clearinghouse Number: 2009031043

Subject: FW: Regional Connector Transit Corridor
Date: Wednesday, May 13, 2009 4:38 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Clarissa Filgioun clarissa@therobertgroup.com, Ginny-Marie Brideau ginny@therobertgroup.com

fyi

From: Massicci, Lou [mailto:Lou.Massicci@hmhpub.com]
Sent: Wednesday, May 13, 2009 10:08 AM
To: 'regionalconnector@metro.net'; Roybal, Dolores
Subject: Regional Connector Transit Corridor

To whom it may concern:

As I am unable to attend the numerous “public scoping” meetings to give input on the proposed Corridor, I’d like to provide my perspective.

As a businessman who frequently travels in Los Angeles County I oppose any surface transportation being added to the already congested streets.

The corridor is not only essential; it is most welcome, and long overdue!

However, let’s keep in mind that the already overstressed streets and freeways cannot support any added transportation and that includes the Connector.

The Connector must be built underground.

Let’s keep the noise, the congestion away from our already congested streets and freeways.

Thanks for your careful attention to my input.

Lou Massicci, District Manager, K-12
Houghton Mifflin Harcourt / Holt Mc Dougal
(559) 324-8101
Please note my email has changed to lou.massicci@hmhpub.com

Subject: FW: Regional Connector Scoping Comment
Date: Tuesday, May 19, 2009 2:41 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Monica Villalobos villalobosma@cdm.com, Ginny-Marie Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

A late comment....

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central LA/San Fernando Valley/North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net <mailto:KermanA@metro.net>

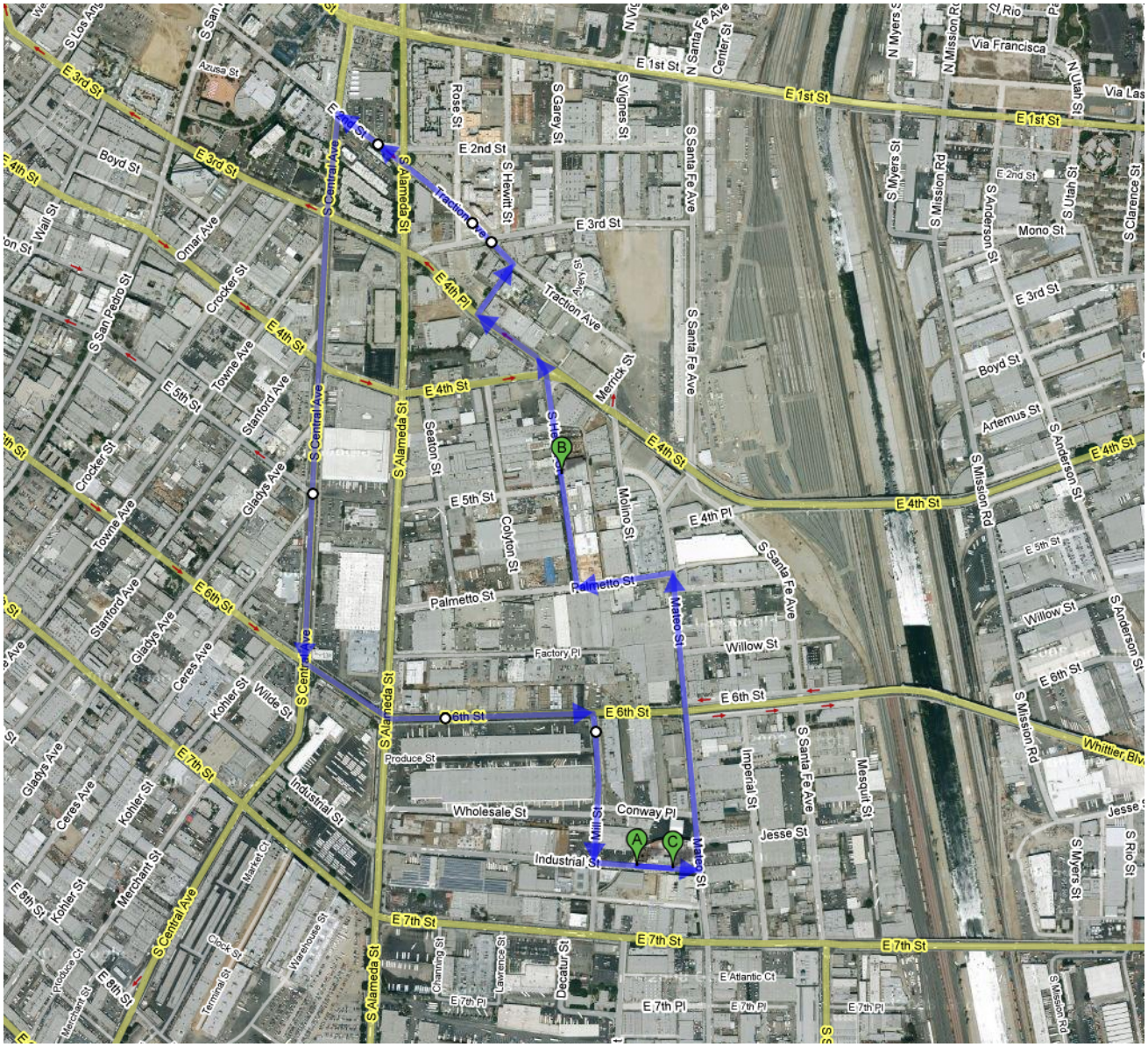
Please consider the environment before printing this e-mail

From: Daveed Kapoor [mailto:daveedkapoor@gmail.com]
Sent: Thursday, May 14, 2009 1:36 PM
To: Regional Connector
Subject: Regional Connector

Regional Connector Proposal does not adequately serve the south and east edges of the plan area.

Increase Frequency of service on the 60 and 760 Bus line. No wait more than 12minutes 24/7.
This will serve 7th street, the south edge of the plan area.

Small, Frequent Shuttle Service from 7th to 1st should be studied. Attached is a quick sketch using google maps. Some arrows are incorrectly oriented. This blue loop, with 3 or 4 small shuttles running 24/7 would be an economic stimulus to the city.


A
B
C
E 1st St
E 2nd St
E 3rd St
E 4th St
E 4th Pl
E 5th St
E 6th St
E 7th St
E 7th Pl
E Atlantic Ct
S Alameda St
S Central Ave
Traction Ave
S Hewitt St
Merrick St
Molino St
Palmetto St
Mateo St
Mill St
Conway Pl
Wholesale St
Produce St
Factory Pl
Willow St
Jesse St
Industrial St
6th St
Seaton St
Colyton St
Avery St
S Santa Fe Ave
S Mission Rd
S Anderson St
Artemus St
Mono St
Boyd St
Via Francisca
Whittier Blvd
Omar Ave
Crocker St
Towne Ave
Stanford Ave
Gladys Ave
Ceres Ave
Kohler St
Wilde St
Merchant St
Market Ct
Clock St
Warehouse St
Terminal St
Channing St
Lawrence St
Decatur St
Imperial St
Mesquit St
S Myers St
S Rio St
S Utah St
S Clarence St
Rose St
S Garey St
S Vignes St
Center St
N Santa Fe Ave
N Myers St
N Mission Rd
N Utah St
Via Las
Azusa St
S Los Angeles St
S San Pedro St
Wall St

Subject: FW: I have a question/comment about the Regional Connector Transit Corridor Study
Date: Friday, October 9, 2009 2:37 PM
From: Kerman, Ann <KERMANA@metro.net>
To: Ginny Brideau ginny@therobertgroup.com

Please add to mailing list.

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central L.A. ~ San Fernando Valley ~ North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net <mailto:KermanA@metro.net>

Please consider the environment before printing this e-mail

From: Webmaster
Sent: Thursday, August 13, 2009 1:37 PM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

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firstName:      George
lastName:       Takayama
organization:
emailAddress:   george_takayama@yahoo.com
streetAddress:
city:
state:
zipCode:
Date:           Thursday, August 13, 2009
Time:           01:36:57 PM

comments:

Please update your website with the meetings that you have been
having with the communities.  Also as promissed during your meetings
with the communities, upload the presentations so it would be
```

available to view on the website. I'm sure you have had numerous meetings from the last updated May 2009.

Subject: FW: I have a question/comment about the Regional Connector Transit Corridor Study
Date: Friday, November 6, 2009 4:25 PM
From: Ann Kerman <kermana@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

Please check if we have him on the mail list.
Thanks!

Ann Kerman

Constituent Program Manager
Regional Communications
Metro
Central L.A. ~ San Fernando Valley ~ North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net <mailto:KermanA@metro.net>

Please consider the environment before printing this e-mail

From: Webmaster
Sent: Monday, August 31, 2009 7:03 PM
To: Kerman, Ann
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

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```
firstName:     Kenneth
lastName:      Hsu
organization:
emailAddress:  kthsu@earthlink.net
streetAddress: 100 S. Alameda St., 315
city:          Los Angeles
state:         CA
zipCode:       90012
Date:          Monday, August 31, 2009
Time:          07:03:25 PM

comments:

To whom it may concern:
```

I am a resident at the Savoy Condominium Complex located on Alameda Street and 1st Street. As a resident, I am deeply concerned about the impact that the Regional Connector Project will have on our property and on our neighborhood. We who live in the Little Tokyo area have been enjoying a period of revival and development. It is area characterized by residential developments, small restaurants, shops, and speciality stores. It attracts people from across Southern California. However, the Regional Connector Project, in removing the businesses in the Office Depot block area and replacing it instead with heavy construction, and later continually running trains endangers the character of the neighborhood we live in and enjoy. Please inform me if I am wrong and take this view into consideration. Thank you.

DANIEL K. INOUYE
HAWAII

COMMITTEE ON APPROPRIATIONS, CHAIRMAN
SUBCOMMITTEE ON DEFENSE, CHAIRMAN
COMMITTEE ON INDIAN AFFAIRS
DEMOCRATIC STEERING AND COORDINATION COMMITTEE
COMMITTEE ON RULES AND ADMINISTRATION
JOINT COMMITTEE ON PRINTING

United States Senate
SUITE 722, HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510-1102
(202) 224-3934
FAX (202) 224-6747

PRINCE KUHIO FEDERAL BUILDING
ROOM 7-212, 300 ALA MOANA BOULEVARD
HONOLULU, HI 96850-4975
(808) 541-2542
FAX (808) 541-2549

101 AUPUNI STREET, NO. 205
HILO, HI 96720-4221
(808) 935-0844
FAX (808) 961-5163

September 18, 2009

The Honorable Ara Najarian
Chairman
Board of Directors
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Dear Chairman Najarian:

It has come to my attention the Los Angeles County Metropolitan Transportation Authority (Metro) has initiated an environmental process associated with development of a proposed "Regional Connector" project.

My office has been informed that the proposed route for the project includes the Los Angeles Little Tokyo community with the transit project potentially constructed adjacent to the Japanese American National Museum and the proposed Nissei Center project. The purpose of this letter is to state my strong interest in this environmental process being conducted by Metro, and its direct relationship to the integrity of the Little Tokyo community and the operational future of the Museum.

The Japanese American National Museum is the first museum in the United States dedicated to sharing the experience of Americans of Japanese ancestry as an integral part of the United States history. In addition, the National Museum was established in Los Angeles to preserve the rich heritage and cultural identity of Japanese Americans.

Currently, I have the honor to serve as a member of the Board of Governors of the National Museum. My close friend, The Honorable Norman Y. Mineta, former Secretary of Transportation is currently the Chairman of the Board of Governors. We both view the Museum as a national icon and a cultural cornerstone of the Little Tokyo community.

As Metro moves forward with the environmental process for the Regional Connector, I strongly urge the Authority to be responsive to concerns and ideas of both residents and businesses located in Little Tokyo. At the same time, please consider the unique characteristics and compelling historic significance of the Japanese American National Museum.

Further, I would greatly appreciate it if you would keep me fully informed regarding key milestones of this Metro managed project development process. If you have any questions about this communication or my request, please contact Lori Hamamoto of my staff at (202) 224-6628.

Thank you very much for your time and consideration.

Aloha,

DANIEL K. INOUYE
United States Senator

cc: The Honorable Dianne Feinstein
The Honorable Barbara Boxer
The Honorable Lucile Roybal-Allard
The Honorable Ray LaHood, Secretary, U.S. Department of Transportation
The Honorable Peter Rogoff, Administrator, Federal Transit Administration
Mr. Arthur Leahy, CEO, LACMTA

DKI:lh

Subject: FW: regional connector
Date: Wednesday, September 30, 2009 4:29 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net, Ray Sosa sosara@cdm.com

fyi

Ann Kerman
Constituent Program Manager
Metro Regional Communications
Central L.A. ~ San Fernando Valley ~ North County
Tel: 213-922-7671 ~ fax: 213-922-8868
Email: KermanA@metro.net

-----Original Message-----
From: .mac account [mailto:erictooley1@mac.com]
Sent: Saturday, September 19, 2009 11:39 AM
To: Regional Connector
Subject: regional connector

regional connector

I support the regional connector Underground Emphasis design and think it would greatly enhance the area of Little Tokyo by making it the crossroads for the entire Los Angeles light rail system. While construction may be disruptive to local business during construction, the outcome will be expanded opportunities for the Little Tokyo area, one of my favorite parts of Los Angeles.

Eric Tooley
1741 Maltman Ave.
Los Angeles, CA 90026

firstName: Daniel
lastName: Delboy
organization:
emailAddress: dan@dandelboy.com
streetAddress:
city: Los Angeles
state: CA
zipCode: 9012
Date: Sunday, September 27, 2009
Time: 07:50:22 PM

comments:

This is the biggest waste of time, effort, and (potentially) money I have ever seen, especially seeing as Union Station is just around a mile up Alameda Street. The city of Los Angeles already has some significant money problems. If you are going to spend what we do not have, then how about you people get your collective head out of the clouds, get more train lines rolling and deal with our serious gridlock and traffic problems so as to create some actual PROGRESS?

Subject: FW: I have a question/comment about the Regional Connector Transit Corridor Study
Date: Thursday, October 8, 2009 1:39 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Roybal, Dolores ROYBALD@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun Clarissa@TheRobertGroup.com

FYI

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central L.A. ~ San Fernando Valley ~ North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net <mailto:KermanA@metro.net>

Please consider the environment before printing this e-mail

From: Webmaster
Sent: Saturday, October 03, 2009 1:28 PM
To: Regional Connector
Subject: I have a question/comment about the Regional Connector Transit Corridor Study

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firstName:     MARK
lastName:      JOHNSTON
organization:  TRAC, NARP
emailAddress:  CANAMMJ@YAHOO.COM
streetAddress: 4185 VN BUREN ST
city:          CHINO
state:         CA
zipCode:       91710
Date:          Saturday, October 03, 2009
Time:          01:28:19 PM

comments:

THE UNDERGROUND IS PERFECT IN MY MIND EXCEPT FOR 3 THINGS=
1/ WHY NOT PUT THE ENTIRE 1ST/ALAMEDA INTERSECTION DEPRESSED AND LET
```

THE LIGHT RIGHT COME UP OUT OF THE TUNELL AND OVER THE ROADWAYS? KEEPS THE CARS AND PEDESTRIANS TOTALLY SEPARATED
2/ NEED A KNOCK OUT PANEL AT 2ND AND CENTRAL-- THIS PROVIDES A ROUTE SOUTH ON CENTRAL TOWARDS THE BLUE LINE. ALAMEDA TOO BUSY AND CENTRAL IS WIDE GOING SOUTH FOR THE FIRST MILE OR TWO
3/ LOS ANGELES/2ND STREET STATION IS BETTER FOR SPACING PURPOSES AND SERVING LITTLE TOKYO.. JUST PUT THE BOX ON THE WEST SIDE OF LOS ANGELES STREET WITH A EXTENDED UNDERGROUND PASAGE TOWARDS BROADWAY OR, ITS EASIER TO HAVE THE STREETCAR JOG A BLOCK OR TWO THAT TO MEET UP WITH THE LIGHT RAIL THAN TO MOVE AN ENTIRE LIGHT RAIL TUNNEL

TOO BAD THE DOWNCONNECTOR WAS NOT DONE FIRST, LOTS OF THESE PROBLEMS WOULD HAVE BEEN ELIMINATED !
-THANKS AND BUILD IT SOONER THAN LATER

Subject: Re: LTWG materials for distribution
Date: Friday, October 9, 2009 12:53 AM
From: Andy Lin <seavu8@yahoo.com>
To: ltccjb@aol.com, ltccjb@aol.com, Ginny Brideau ginny@therobertgroup.com
Cc: Chris Aihara aihara@jaccc.org, wktakashi@aol.com, wktakashi@aol.com, Clarissa Filgioun Clarissa@TheRobertGroup.com, Kerman KERMANA@metro.net, lcollmann@savoyhoa.com

Hello, Ginny,

I just received email from June Berk, and I found the minutes from Sep. 17, 2009 meeting regarding my comments during the meeting. I found what you have written in the minutes regarding my comments misleading, and does not reflect what actually took place. You must remember that I was a little agitated during the meeting because I have only learned of the Regional Connector project in our front yard, about 150 feet, only about two weeks before this meeting, all the time Metro has been doing the study in the past three years. Please make the correction to the minutes regarding my comments. The following is a more correct description of what took place.

Andrew Lin, a Savoy resident, protested during the meeting and said that he did not receive any notification regarding the Regional Connector Project by mail, nor over 300 residents of Savoy owners for the past three years while the Regional Connector Project was under study. "How can this happen?", he questioned. He stated that the "overwhelming majority of comments received supported the project" as stated in Executive Summary Final dated Dec. 2008 was based on 88 people's responses, and questioned how can this happen without notifying the Savoy residents by mails, while he has received Public Hearing Notices by mails to nearby residents within 500 feet radius in the past. He also questioned how can the Executive Summary arrive at the conclusion that Regional Connector is needed without mentioning any ridership from present or past years, and instead used projected figures from year 2030, figures 21 years in the future, to justify it. "The study is not a scientific study", he said.

Dolores Saltarelli stated that she is in contact with Lynne Collmann at Savoy. To which, Andrew Lin replied that he has spoken to Lynne regarding notification by mail, and both confirmed to each other that they have never received any notification by mail from Metro in past three years.
Oct. 9, 2009

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

October 9, 2009

Hon. Daniel K. Inouye
United States Senator
722 Hart Senate Office Building
Washington, DC 20510

Dear Senator Inouye:

On behalf of the Los Angeles County Metropolitan Transportation Authority (MTA), I greatly appreciate your interest in the Regional Connector Transit Corridor Study and welcome the opportunity to respond to your specific concerns about the project's impact on the Japanese American National Museum and the Little Tokyo community.

The intent of our efforts is to improve the environment around the Museum, as well as public access to the Museum and Little Tokyo. In your position as a Board member of the Museum, your knowledge and sensitivities regarding the Museum and the Little Tokyo community are invaluable as we move forward in this transit planning process. Please be assured that MTA will continue to engage the Little Tokyo community in the planning process and be responsive to the concerns raised. Over the past six months alone, we have held 14 meetings/sessions with community leaders in Little Tokyo. We understand that that the Japanese American National Museum is not only a cornerstone of the Little Tokyo community, but also plays a vital role in the preservation of the rich heritage and cultural identity of Japanese Americans.

On January 22, 2009 the MTA Board reviewed and approved the Regional Connector Alternatives Analysis study and also authorized staff to enter the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/R) phase of the project. Four alternatives are currently undergoing an extensive environmental review, and the benefits/impacts of the alternatives are being evaluated. We are still in the formative stages of the planning and outreach process, and expect to have the DEIS/R completed by the summer of 2010. As we move forward toward that objective, we continue to engage in community participation efforts with all stakeholders throughout the project area.

Community participation is a key foundation of the DEIS/R phase. In addition to urban design workshops, ongoing stakeholder meetings and community update meetings, MTA has established a Little Tokyo Working Group to specifically address concerns from the community. Working with the Planning and Cultural Preservation Committee (PCPC), a subcommittee of the Little Tokyo Community Council, MTA has developed a framework to discuss cultural preservation, parking, the Alameda crossing and physical barriers,

construction phasing and methodology and exploring creative opportunities to support business during construction.

In closing, we believe strongly that in this challenging economy this transit project has the potential to reinvigorate Little Tokyo as a world class tourist destination, highlighting the continued relevance of this unique community as an integral part of the cultural and business fabric of Los Angeles County. I am pleased that MTA representatives had the opportunity to meet with your aide Lori Hamamoto on September 30, 2009 at your office in Washington, D.C. to discuss the concerns outlined in your correspondence and we look forward to continuing a close dialogue with you and your staff as the project progresses.

Sincerely,

Ara Najarian

Ara Najarian
Chairman

cc:

The Honorable Dianne Feinstein
The Honorable Barbara Boxer
The Honorable Lucille Roybal-Allard
The Honorable Ray LaHood, Secretary, U.S. Department of Transportation
The Honorable Peter Rogoff, Administrator, Federal Transit Administration
Arthur T. Leahy, Chief Executive Officer, LACMTA
MTA Board of Directors

Subject: re: Meeting Summary of Sep. 17, 2009 and Oct. 1, 2009
Date: Monday, October 12, 2009 3:41 PM
From: Andy Lin <seavu8@yahoo.com>
To: Ginny Brideau ginny@therobertgroup.com
Cc: rdv@volkproperties.com, dagaribay@sbcglobal.net, stsuyeda@gmail.com, naraki@janm.org, ckomai@janm.org, moshima@janm.org, akikumura@janm.org, awiseman@moca.org, arlene@levyaffiliated.com, hinishimura@msn.com, ltmanjuman@msn.com, Cazspaz@aol.com, handatoshio@gmail.com, mnauyok@moca.org, aol.com Paul Yeh paulyehster@gmail.com, Linda Blakeman linda@emseminars.com, Lynne Collmann lcollmann@savoyhoa.com, salumassoc@aol.com, Jaime Altamirano j.altamirano.jr@gmail.com, Alfred Chang alfred.chang@gmail.com, nicsinger eric enicsinger@yahoo.com, Lawrence Ng lawrence@oversee.net, june berk juneaochiberk@aol.com, Andy Lin seavu8@yahoo.com, mjs00CA@yahoo.com

Ginny,

I just read the Meeting Summary of Oct. 1, 2009, at Little Tokyo's JACC building. You have mentioned that I have requested Government guidelines regarding sending out notices. However, I also asked a question in the meeting which you seem to have missed. I said that according to my experience as a real estate broker for over 30 years, and involved in various development projects, I believe that it is a legal requirement to send out written notice by mails to the immediate community of the project. And I asked the question to Mr. Ray Sosa to confirm, but he said that he did not know.

Again, the following is a more accurate description of what took place during the meeting. Please make corrections. (I have copied a portion of the Summary regarding me. I am resending Sep. 17, 2009 Meeting Summary response to concerned people, including copy from the Summary regarding me.)

Andrew Lin stated that he is a real estate broker over 30 years, and is familiar with zone changes and legally required public hearings to nearby community of the project. He has worked with Goldrich and Kest, and other development projects. He read from the Public Hearing notice on one of the projects that was sent to Savoy owners from Los Angeles City Planning Department. The notice read, “TO PROPERTY OWNERS AND OCCUPANTS WITHIN A 500 FOOT RASIUS”. He said he believes that since the proposed project would generate about 22 trains per hour crossing the property, or 220 trains per day, that will constitute a major zone change, and requires written public hearing notices to be sent out by mails to the immedeate community, as required by laws. He asked the question to Mr. Ray Sosa because he has Urban Study degree, but Mr. Sosa said that he did not know. Other traffic count is as high is 44 trains per hour, or 440 trains per day, but Mr. Lin said he is not sure which is the accurate figure.
Oct. 12, 2009

Comments as typed by Ginny
Environmental Impact Report/Statement to date, including outreach to the Savoy. Andrew Lin requested information regarding NEPA and CEQA guidelines as it relates to public notifications.

Dolores Roybal Saltarelli, Metro Project Manager, briefed the Working Group on the purpose and need for the Regional Connector. She noted that the Red Line has historically been considered by Metro as an interim connector through Downtown Los Angeles, with the Regional Connector as a longer term solution. Further, as Metro continues to expand the Light Rail Transit (LRT) system, the 7th/Metro Center and Union Station will begin to reach capacity. The best way to address station capacity issues as well as the lack of connectivity between light rail lines is to remove the need to transfer at both stations. By removing transfers and by providing uninterrupted service through Downtown Los Angeles, the LRT system can serve more transit riders and station

Hello, Ginny,

I just received email from June Berk, and I found the minutes from Sep. 17, 2009 meeting regarding my comments during the meeting. I found what you have written in the minutes regarding my comments misleading, and does not reflect what actually took place. You must remember that I was a little agitated during the meeting because I have only learned of the Regional Connector project in our front yard, about 150 feet, only about two weeks before this meeting, all the time Metro has been doing the study in the past three years. Please make the correction to the minutes regarding my comments. The following is a more correct description of what took place.

Andrew Lin, a Savoy resident, protested during the meeting and said that he did not receive any notification regarding the Regional Connector Project by mail, nor over 300 residents of Savoy owners for the past three years while the Regional Connector Project was under study. "How can this happen?", he questioned. He stated that the "overwhelming majority of comments received supported the project" as stated in Executive Summary Final dated Dec. 2008 was based on 88 people's responses, and questioned how can this happen without notifying the Savoy residents by mails, while he has received Public Hearing Notices by mails to nearby residents within 500 feet radius in the past. He also questioned how can the Executive Summary arrive at the conclusion that Regional Connector is needed without mentioning any ridership from present or past years, and instead used projected figures from year 2030, figures 21 years in the future, to justify it. "The study is not a scientific study", he said.

Dolores Saltarelli stated that she is in contact with Lynne Collmann at Savoy . To which, Andrew Lin replied that he has spoken to Lynne regarding notification by mail, and both confirmed to each other that they have never received any notification by mail from Metro in past three years.
Oct. 9, 2009

Comments as typed by Ginny
Andrew Lin, a Savoy resident, stated that he had not received the project and meeting notifications Metro has distributed and asked what outreach to the Savoy had been conducted. He is also seeking additional information regarding the purpose and need for the project. He would like to review the projected ridership, and better understand the need for connecting at the Little Tokyo/Arts District Gold Line station.

3108 Los Feliz Boulevard 323.669.9100 Phone www.therobertgroup.com <http://www.therobertgroup.com>
Los Angeles, CA 90039 323.669.9800 Fax info@therobertgroup.com

Metro responded by promising to present a summary regarding outreach activities at both the Savoy Homeowners Association and next LTWG meeting.
The LTWG will review the at-grade emphasis alternative at the October 1, 2009 meeting.
There will be a breakout session dedicated to discussing impacts and potential mitigating activities

Subject: FW: Downtown Connector Inquiry
Date: Monday, October 12, 2009 1:27 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: 'Clarissa Filgioun' Clarissa@TheRobertGroup.com, Ginny Brideau ginny@therobertgroup.com

fyi

Ann Kerman

Constituent Program Manager
Metro Regional Communications
Central L.A. ~ San Fernando Valley ~ North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net <mailto:KermanA@metro.net>

Please consider the environment before printing this e-mail

From: Damien Goodmon [mailto:damienwg@gmail.com]
Sent: Monday, October 12, 2009 6:41 AM
To: Roybal, Dolores
Cc: Leahy, Arthur; Cannell, Mike; Regional Connector
Subject: Downtown Connector Inquiry

Hello Ms. Roybal Saltarelli:

I have a few questions regarding the Downtown Connector project, specific to the "underground emphasis" alternative:

1. Please specify which portions of the guideway are currently envisioned to be cut-and-cover, bored tunnel and at-grade.

2. Please explain the justification for constructing the WYE at-grade as opposed to underground.

3. Please explain the justification for not considering moving the Little Tokyo from at-grade on the northeast corner of 1st/Alameda to underground on the southwest corner of 1st/Alameda.

4. What are the speed restrictions from Chinatown to Union Station, and Union Station to Little Tokyo.

5. What is the anticipated travel time between the Chinatown Station to Little Tokyo station, given the speed restrictions from Chinatown to Union Station, and Union Station to Little Tokyo.

6. Please provide the FTA standard cost categories breakdown.

Your prompt response is greatly appreciated.

All the best,
Damien Goodmon
damienwg@gmail.com
323.845.2003

Citizens' Campaign to Fix the Expo Rail Line: Safety - Community - JUSTICE!
www.FixExpo.org <http://www.FixExpo.org>

Subject: Savoy participation?
Date: Wednesday, October 14, 2009 11:57 PM
From: Andy Lin <seavu8@yahoo.com>
To: Ginny Brideau ginny@therobertgroup.com
Cc: Kerman KERMANA@metro.net, Lynne Collmann lcollmann@savoyhoa.com, Paul Yeh paulyehster@gmail.com, Jaime Altamirano j.altamirano.jr@gmail.com, Alfred Chang alfred.chang@gmail.com, nicsinger eric enicsinger@yahoo.com, Lawrence Ng lawrence@oversee.net, june berk juneaochiberk@aol.com, Andy Lin seavu8@yahoo.com, mjs00CA@yahoo.com, Linda Blakeman linda@emseminars.com, salumassoc@aol.com, rdv@volkproperties.com, dagaribay@sbcglobal.net, stsuyeda@gmail.com, naraki@janm.org, ckomai@janm.org, moshima@janm.org, akikumura@janm.org, awiseman@moca.org, arlene@levyaffiliated.com, hinishimura@msn.com, ltmanjuman@msn.com, Cazspaz@aol.com, handatoshio@gmail.com, mnauyok@moca.org

Hello, Ginny,

Please do not use the phrase “Savoy Participation” in your Regional Connector writings. The only meeting with Metro that Savoy ever had was on Sep. 29, 2009, all the time Metro was doing the Regional Connector project study since 2006. You were conducting study behind our back during the past three years, and you did not notify us in written mails all this time, when you should have done so from the very beginning of the study you are conducting. Yet, you have already conducted three “Public Meetings” in past three years.

The Savoy community found out about the project basically by chance and rumors recently. To show you how outraged we the Savoy community are, we collected more than 200 signatures opposing the project, within one month’s time. And I am sure you remember the master of ceremony, Mr. Alfred Chang, said at the end of the meeting in quiet and polite, yet resolute way that unless you, Metro, cancel the plan of First and Alameda, we will fight you all the way till the end. I believe that the community who can afford to buy such condominiums are all successful professionals in their businesses and experiences, and resourceful. I protest to the use of phrase “Savoy Participation”. Please do not try to mislead the public, and Washington DC.

You mentioned here that you dropped off 310 copies of flyers to Savoy Management Office on Oct. 26, 2007. However, I am curious, that is this the way you at Metro communicate with other people? Come and get it, and if you happened to miss to pick up the flyer, that is your problem, tough luck, because I already communicated with you? Savoy’s office is more than busy enough to handle daily chores for over 300 units. Besides, are you so simple minded to think that just simply dropping 310 copies of flyers means that you have communicated with all the Savoy community, and it becomes Savoy office’s responsibility to make sure that everyone gets the copy? So that you are relieved of your own responsibility?

The sure way is to send the notice by mails. It was, and still is, your responsibility to notify the immediate community of the project. Especially when you call the project of “Regional” magnitude, it is your responsibility to make sure that all the immediate community receive notices specifying Who, What, How, Why, Where, and When. When you consider more than 220 trains, or more, are going to traverse the property, don’t you think that you should alert the entire community to this fact? This project you call it a subway exchange HUB. Or maybe it is better to keep it a secret, for whatever the reason?

Can you tell us how may trains pass through Union Station each day? I am sure that Metro has an accurate account of the traffic.

Savoy condominiums building is more than four stories high, about 50 feet high building covering the entire city block, since 2005. One can not miss such a huge building unless one is blind, or does not wish to acknowledge its existence. Considering especially when it is about the same land size of the Project site, right across the street on Alameda Street, how could you, and all Metro staffs, miss the Savoy community all these years? The Project is your work day in and day out for over three years. You have chosen not to notify Savoy Community all these years. You have chosen to circumvent Savoy owners.

Ann Kerman apologized during the Sep. 29, 2009, meeting and said that she did not know how it happened this way that none of the Savoy owners received any notices. However, the damages you have already caused, and continuing to cause, to Savoy community is not something that you, Metro, can simply excuse yourself by saying that I didn't know what happened. This project is your work day in and day out, and you should know what is happening. And if you did not know, you should have known.

Please consider this fact. The project is your work, but this is our home, and so is to Little Tokyo.

Andrew Lin Oct 14, 2009

Subject: Re: Mailing Address for Gold Line Opening Day
Date: Monday, October 19, 2009 4:54 PM
From: Andy Lin <seavu8@yahoo.com>
To: Ginny Brideau ginny@therobertgroup.com
Cc: roybald@metro.net, Kerman KERMANA@metro.net, Lynne Collmann lcollmann@savoyhoa.com, Paul Yeh paulyehster@gmail.com, Jaime Altamirano j.altamirano.jr@gmail.com, Alfred Chang alfred.chang@gmail.com, nicsinger eric enicsinger@yahoo.com, Lawrence Ng lawrence@oversee.net, june berk juneaochiberk@aol.com, Andy Lin seavu8@yahoo.com, mjs00CA@yahoo.com, Linda Blakeman linda@emseminars.com, salumassoc@aol.com, rdv@volkproperties.com, dagaribay@sbcglobal.net, stsuyeda@gmail.com, naraki@janm.org, ckomai@janm.org, moshima@janm.org, akikumura@janm.org, awiseman@moca.org, arlene@levyaffiliated.com, hinishimura@msn.com, ltmanjuman@msn.com, Cazspaz@aol.com, handatoshio@gmail.com, mnauyok@moca.org

Hello, Ginny,

Thank you, but an invitation to Gold Line ceremony will not be necessary. I am more concerned about the Regional Connector and its damaging impact it will bring to the community. I wished you have sent notice to me and all of the Savoy residents, and Little Tokyo community, about the Regional Connector when you started study about three years ago, just like you are sending me notice about the Gold Line.

I am just curious that when Metro built Gold Line, why have they not thought of connecting the Gold Line to what Metro is proposing now in the Regional Connector? If it is only 1.8 miles distance, why Metro did not Mater Plan it three years ago and synchronized everything before they built Gold Line? So why are you studying the Regional Connector for the past three years, while you are building Gold Line, and trying to connect Gold Line now through Regional Connector? And now you have just finished the Gold Line Extension. You could have done that three years ago altogether, is it not? It tells me that something is not right. It is either Metro made a big mistake in the Mater Plan, or the Master Plan was not a good one to start with. In either case, now you want us the local community to take the blunt of your mistakes.

How is the local community's response? We the local community is so outraged that Savoy community collected over 200 signatures against the project within one month's times since we learned of the project recently. And Little Tokyo collected over 300 signatures against the project within two months' time since they learned of the project recently. So there are over 500 people opposing the project, as of one months ago. Little Tokyo's signatures were presented to Metro's Board at the Metro's Board meeting on Sep. 24, 2009.

1. You wanted me to confirm to you that I have received two government guidelines when we were on the phone. So I acknowledged the receipt by email. Since then you have sent out Meeting Summary for Sept. 17, 2009 and Oct. 1, 2009 at Little Tokyo Cultural Center, and I have responded to those two summaries about what it said about my part, but you have not replied to me. Please send me the corrected summaries, as they were filled with mistakes the way they were written about my part.

2. Also please remove the phrase "Savoy Participation" from your writings, because there were never any Savoy Participation in past three years. It is obvious that Savoy owners could not have participated at all, even if we wanted to, because none of us were ever notified by mails, and we never knew that you were conducting study for the past three years,

until we learned of the project from rumors.

3. I also requested statistics on Union Station's daily train traffic, as I am curious to know how those number will compare with the Regional Connector HUB that you are trying to build. You are trying to sell to us that it is a very nice project. But we must politely say to you, "Thanks, but no thanks." More than 500 people have spoken, so far.

4. Also I am not able to find Mr. Ray Sosa's email. I tried to find his address in the Regional Connector internet site, but I don't see it. Can you please send me his email address?

Thank you for your attention to these matters.

Andrew Lin 10-19-09

From: Ginny-Marie Brideau <Ginny@TheRobertGroup.com>
To: Andy Lin <seavu8@yahoo.com>
Sent: Mon, October 19, 2009 1:30:28 PM
Subject: Mailing Address for Gold Line Opening Day

Mailing Address for Gold Line Opening Day I am looking to get your mailing address so that I can send you an invitation for the opening day of the Metro Gold Line Eastside Extension. Could you send this to me?

Thanks!

Ginny-Marie Brideau
Project Manager
The Robert Group
ginny@therobertgroup.com

(o) 323.669.7654
(f) 323.669.9800
(m) 213.248.0698

Subject: FW: Regional Connector
Date: Tuesday, November 3, 2009 10:43 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

Regional Connector email:

From: Gilbert Garcia [mailto:Gilbert.Garcia@zionsbancorp.com]
Sent: Wednesday, October 28, 2009 8:39 AM
To: Regional Connector
Subject: Great

This is a great idea. This should absolutely get done ASAP.

The light rail from 1st to blue line on washington is a good idea.

gil Garcia

Subject: FW: Regional Connector : 1st/Alameda-Nikkei Center
Date: Tuesday, November 3, 2009 10:43 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

Regional Connector Email:

From: Jerard Wright [mailto:wrightconcept@gmail.com]
Sent: Friday, October 30, 2009 8:37 AM
To: Roybal, Dolores
Cc: Kerman, Ann; Regional Connector
Subject: Regional Connector : 1st/Alameda-Nikkei Center

Dolores,

Can you give me a confirmation if the project team has in fact re-introduced Underground Alternative 6 or 8 from the Alternatives Analysis into the study, per the request of the Nikkei Center developer? There are a couple of blogs that are reporting this as fact yet there has been no reply from any of the Regional Connector project team, It would be nice if this is the case, however some actual confirmation would be nice.

Here's the links:

http://blog.littletokyounplugged.org/2009/10/5th-option.html

http://blogdowntown.com/2009/10/4806-little-tokyo-asks-metro-to-study-gradeseparated

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The Wright Concept
Jerard Wright
wrightconcept@gmail.com

Subject: FW: [Regional Connector]
Date: Tuesday, November 3, 2009 10:42 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

Regional Connector email:

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Monday, November 02, 2009 9:07 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Lisa
Last Name: Pease
Email: lpease@gte.net
Phone: 213-221-7746
URL: http://beta.metro.net/admin/feedback/comment/3/

As someone who rides Metro everyday from Union Station to downtown, I really wish you wouldn't put the connector so close to the existing lines.

Why not run from 7th and metro via 9th to the Garment/Flower district, have ONE stop there, and then continue on to the Little Tokyko station?

There is no shopping in downtown, save a couple of hotel shops and the Macys Plaza on 7th. But if people at the hub of 7th and Metro could hop over to the Garment District during lunch, the city's businesses would profit dramatically.

There just isn't enough to draw one to the other areas - it's all bars and restaurants, or nothing.

Please, please give us some shopping access!

And please - run a line out to Glendale. I can get to Pasadena by Metro, but have to take Metrolink to get to Glendale, and even then, not to shopping. It's sad what I can't get to, and I'm a huge fan of Metro. Please, give us access to shopping places with CLOTHES, not FOOD.

Subject: FW: [Metro.net] customer comment
Date: Thursday, November 5, 2009 1:27 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

From Regional Connector email

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Tuesday, November 03, 2009 7:11 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Lisa
Last Name: Vasquez
Email: Okifille@yahoo.com
Phone: 213-621-0447
URL: http://beta.metro.net/admin/feedback/comment/4/

I strongly urge the MTA to avoid displacing the existing businesses and decreasing the quality of life for those of us who live at the Savoy Condominiums. I think it would be cheaper and less disruptive to route the regional connector on/through the Parker Center property that will be vacated soon. The MTA could even consider creating a transportation village/retail center in tandem with the connector on that property instead.

Thank you for considering this opinion.

Subject: FW: Letter: Little Tokyo light rail
Date: Thursday, November 5, 2009 1:26 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

fyi

-----Original Message-----
From: James Fujita [mailto:jim61773@yahoo.com]
Sent: Wednesday, November 04, 2009 5:01 PM
To: online@rafu.com
Cc: Regional Connector; aihara@jaccc.org; bw@ltsc.org; cishii@jaclpsw.org
Subject: Letter: Little Tokyo light rail

To the editor:

I am very concerned about some NIMBY attitudes that I have recently noticed in Little Tokyo.

In just a few days, the much-needed Metro Gold Line Eastside Extension will open. At the same time, the MTA has been planning a Regional Connector light rail line, which will also help Little Tokyo. These two projects will help Little Tokyo remain a vibrant neighborhood by drawing in visitors to the area.

Unfortunately, this won't happen if NIMBYs prevail in the ongoing discussions with the MTA over rail transit. Already, the Japanese American National Museum and the Japanese American Citizens League have come out against the project. The Little Tokyo Community Council recently voted to oppose both of the MTA's options for the Regional Connector.

This decision makes no sense. It is quite reasonable to negotiate with the MTA and ask for changes to be made to the existing plans. There is nothing wrong with proposing new options.

However, to take a hard-line stance against the project forces the Little Tokyo community into adversarial position. It is close-minded and eliminates any chance for a compromise.

I would support an underground station at First and Alameda if it could be done without adversely affecting the Nikkei Center or the Nishi Hongwanji temple. However, I hope that Little Tokyo residents would be willing to consider the at-grade crossing if the underground route turns out to be not possible.

- James Fujita

Subject: FW: JACL-PSW Board Resolution on Metro Regional Connector
Date: Friday, November 6, 2009 12:44 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ray Sosa <sosara@cdm.com>, "'JacksonVF@CDM.com'" <JacksonVF@CDM.com>, Helene Kornblatt <kornblatthb@cdm.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

Here's the resolution from the JACL-PSW

Ann Kerman

Constituent Program Manager
Regional Communications
Metro
Central L.A. ~ San Fernando Valley ~ North County
*Tel: 213-922-767*1 ~ fax: 213-922-8868
Email: KermanA@metro.net

Please consider the environment before printing this e-mail

From: Kristin Fukushima [mailto:kfukushima@jaclpsw.org]
Sent: Thursday, November 05, 2009 6:42 PM
To: Regional Connector; Kerman, Ann
Subject: JACL-PSW Board Resolution on Metro Regional Connector

Dear Dolores and Ann,

Hello, this is Kristin Fukushima from the Japanese American Citizens League Pacific Southwest District. I believe I have met both of you a few times at the various LTCC meetings and working group sessions, and I'm sure you know my supervisor, Craig Ishii (Regional Director).

Our Board met about a month ago and passed a resolution regarding our position on the Regional Connector. It occurred to us that while many people in Little Tokyo have seen it, MTA might also be interested in hearing the thoughts and concerns of some of the community members. The aforementioned resolution is attached on this email for your perusal. If you are interested in pursuing further conversation regarding the resolution, please feel free to contact myself, either at this email or at

our office telephone (213.626.4471).

Thank you so much for your time! I look forward to continued dialogue with you all.

Best,
Kristin

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Kristin Fukushima
Public Policy Coordinator
Japanese American Citizens League - Pacific Southwest District
244 S. San Pedro St. Suite 406
Los Angeles CA, 90012
kfukushima@jaclpsw.org **Note the Change of Email
tel. (213) 626-4471
fax (213) 626-4282

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JACL PSW October/November News Bytes

JACL-PSW Honors Individuals Who Have Worked to Bridge Communities <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=107&Itemid=27>
The 2010 JACL Pacific Southwest District Annual Report <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=54&Itemid=37>
PSW Welcomes Kristin Fukushima as the new Public Policy Coordinator <http://www.jaclpsw.org/index.php?option=com_content&view=article&id=78&Itemid=2>

Visit www.jaclpsw.org <http://www.jaclpsw.org> for more information on upcoming programs in the JACL Pacific Southwest District!

Visit www.jacl.org <http://www.jacl.org> for news and updates about National JACL.

A resolution of the Pacific Southwest District Board of the Japanese American Citizens League opposing the current Build Options presented by the Los Angeles County Metropolitan Transportation Authority for a Metro Regional Connector Build in Little Tokyo for the interest of community preservation.

WHEREAS, JACL's mission includes work to preserve the heritage and legacy of the Japanese American community; and

WHEREAS, the Pacific Southwest District is committed to community preservation for Little Tokyo; and

WHEREAS, Little Tokyo is a recognized historical Japanese enclave, and one of the last three remaining Japantowns in the United States; and

WHEREAS, the Pacific Southwest District find all the current build options proposed by Metro for a Regional Connector to be built in Little Tokyo unacceptable in their impact on small businesses, residents, community events, parking, and the longevity of construction; and

WHEREAS, the Pacific Southwest District recognizes and understands the importance of mass-transit, particularly for the county of Los Angeles, and therefore is interested in finding the best possible solution for both Los Angeles as well as Little Tokyo; and

WHEREAS, it is vital that a build option is offered that significantly contributes and promotes a prosperous and thriving Little Tokyo, particularly if Little Tokyo is asked to give up already scarce property; and

NOW, THEREFORE, BE IT RESOLVED that the Pacific Southwest District Board of JACL considers all options as put forth by Metro for a Regional Connector in Little Tokyo to be inadequate or a threat to the sustainability of Little Tokyo; and

BE IT FURTHER RESOLVED that should Metro proceed with a Regional Connector build in Little Tokyo, we understand that disruptions will occur, and therefore to diminish the burden of construction and its aftermath on the Little Tokyo community, there must be appropriate mitigations mandated such as:

a) Minimal disruption to businesses;
b) Minimal disruption to residents;
c) Minimal disruption to parking;
d) Minimal disruption to community events;
e) In the event of an underground or at-grade line built, an accompanying Little Tokyo station;
f) Minimal disruption to the Go For Broke monument,
g) Minimal disruption to the Japanese American National Museum;
h) Transparency from Metro throughout the process particularly around perceived disruptions, and for Metro to then work with community groups to find the best solution; and

BE IT FINALLY RESOLVED that the Pacific Southwest District Board of JACL believes it is imperative that there is a build option that would preserve a historical Little Tokyo and promote a vibrant and thriving community – be it a new one or a current option with proper mitigations.

Subject: Fw: Meeting Summary of Sep. 17, 2009 and Oct. 1, 2009
Date: Friday, November 6, 2009 5:44 PM
From: Andy Lin <seavu8@yahoo.com>
To: Ginny Brideau ginny@therobertgroup.com
Cc: Robert Volk rdv@volkproperties.com, Darryl Garibay dagaribay@sbcglobal.net, stsuyeda@gmail.com, Nancy Araki naraki@janm.org, ckomai@janm.org, Miyoko Oshima moshima@janm.org, akikumura@janm.org, awiseman@moca.org, arlene@levyaffiliated.com, Howard Nishimura hinishimura@msn.com, Brian Kito LTMANJUMAN@MSN.COM, Cazspaz@aol.com, Toshio Handa handatoshio@gmail.com, Michael Nauyok mnauyok@moca.org, Lynne Collmann lcollmann@savoyhoa.com, Paul Yeh paulyehster@gmail.com, Jaime Altamirano j.altamirano.jr@gmail.com, Alfred Chang alfred.chang@gmail.com, nicsinger eric enicsinger@yahoo.com, Lawrence Ng lawrence@oversee.net, june berk juneaochiberk@aol.com, Andy Lin seavu8@yahoo.com, mjs00CA@yahoo.com, Linda Blakeman linda@emseminars.com, salumassoc@aol.com, smrkuo@gmail.com, heera heera heera0608@hotmail.com, Masao Okamoto m.okamoto@moainc.net, Dolores Roybal Saltarelli roybald@metro.net

Hello, Ginny,

I have sent my responses to what you wrote on the Meeting Summary minutes, and requested that you send me corrected minutes. However, despite my repeated requests, you have refused to do so. Since the letter I sent to you Oct. 12, 2009, a copy is attached belor, it has been almost one month already. I do not understand why you refuse to write minutes to reflect what took place during the meetings, actually a simple straight forward matter. Instead, you are using creative writing, and omissions, to paint totally erroneous pictures. This is misrepresentation of reality, and in addition it is done intentionally. When you consider that there were 60 to 70 people present at the meetings to witness what happened, your behavior is quite daring. This is a practice of deception, and a campaign of distributing misinformation.

It is somewhat like that of False Advertisement. However, in case of trying to raise money using these false and intentionally deceptive information, I think there are more serious terms for this kind of practice.

I have communicated with you long enough, and waited long enough. I have asked you face to face, again, at Japanese Museum on Oct. 27, 2007, when Little Tokyo Community Council voted on their resolution. Yet, to this date, you have not respected my requests. So I think that your intention is clear.

If I do not receive corrected minutes within a few days, I have no choice but to report the misconduct to higher authorities. I am sure that you are prepared to be accountable for your actions and take it consequences. It is not a small matter to present false information to Federal Government, and in addition trying to raise money from these false information.

Also, please tell me, tell us, where do you send these minutes to? In this day of financial turmoil on Wall Street, and resulting Great Recession we are in because of false figures and information Wall Street institutions gave, Congress, Treasury, and Federal Reserve Board are all calling for transparency in financial dealing and individual accountability. Shouldn't you at Metro do the same thing to us tax payers?

Andrew Lin Nov. 6, 2009

Ps 4. Also what happened to the minutes of Metro presentation at Savoy HOA meeting

on Sep. 29, 2009? It has been over one month but Ginny has not sent us anything. Of course you know there was a heated discussion during the meeting and Savoy community. It was more like a community outrage because Metro has circumvented Savoy, and Little Tokyo, for the past three years. This was the first, and the only presentation by Metro about the Regional Connector to over 300 owners at Savoy, during all these years of Metro's study. Nevertheless, minutes are to reflect what took place during the meetings. Nothing more. The lack of this Savoy minutes is conspicuous.

----- Forwarded Message ----
From: Andy Lin <seavu8@yahoo.com>
To: Ginny Brideau <ginny@therobertgroup.com>
Cc: rdv@volkproperties.com; dagaribay@sbcglobal.net; stsuyeda@gmail.com; naraki@janm.org; ckomai@janm.org; moshima@janm.org; akikumura@janm.org; awiseman@moca.org; arlene@levyaffiliated.com; hinishimura@msn.com; ltmanjuman@msn.com; Cazspaz@aol.com; handatoshio@gmail.com; mnauyok@moca.org; aol.com Paul Yeh <paulyehster@gmail.com>; Linda Blakeman <linda@emseminars.com>; Lynne Collmann <lcollmann@savoyhoa.com>; salumassoc@aol.com; Jaime Altamirano <j.altamirano.jr@gmail.com>; Alfred Chang <alfred.chang@gmail.com>; nicsinger eric <enicsinger@yahoo.com>; Lawrence Ng <lawrence@oversee.net>; june berk <juneaochiberk@aol.com>; Andy Lin <seavu8@yahoo.com>; mjs00CA@yahoo.com
Sent: Mon, October 12, 2009 3:41:34 PM
Subject: re: Meeting Summary of Sep. 17, 2009 and Oct. 1, 2009

Ginny,

I just read the Meeting Summary of Oct. 1, 2009 , at Little Tokyo's JACC building. You have mentioned that I have requested Government guidelines regarding sending out notices. However, I also asked a question in the meeting which you seem to have missed. I said that according to my experience as a real estate broker for over 30 years, and involved in various development projects, I believe that it is a legal requirement to send out written notice by mails to the immediate community of the project. And I asked the question to Mr. Ray Sosa to confirm, but he said that he did not know.

Again, the following is a more accurate description of what took place during the meeting. Please make corrections. (I have copied a portion of the Summary regarding me. I am resending Sep. 17, 2009 Meeting Summary response to concerned people, including copy from the Summary regarding me.)

Andrew Lin stated that he is a real estate broker over 30 years, and is familiar with zone changes and legally required public hearings to nearby community of the project. He has worked with Goldrich and Kest, and other development projects. He read from the Public Hearing notice on one of the projects that was sent to Savoy owners from Los Angeles City Planning Department. The notice read, "TO PROPERTY OWNERS AND OCCUPANTS WITHIN A 500 FOOT RASIUS". He said he believes that since the proposed project would generate about 22 trains per hour crossing the property, or 220 trains per day, that will constitute a major zone change, and requires written public hearing notices to be sent out by mails to the immedeate community, as required by laws. He asked the question to Mr. Ray Sosa

Little Tokyo Community Council
369 East First Street
Los Angeles, California 90012
213 **625.0414** ext **5720**
Fax 213 **625.1770**
http://ltcc.janet.org

November 9, 2009

The Honorable Ara Najarian
Chairman
Board of Directors
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Re: Downtown Regional Connector
Second Motion from LTCC

Dear Mr. Najarian:

After further review of the options that have been presented to the Little Tokyo community on the Downtown Regional Connector by the Metro Planners, the Little Tokyo Community Council adopted the following resolution at the LTCC meeting on November 3, 2009:

MOTION

While supporting improving the public transit system for the City and County of Los Angeles, the Little Tokyo Community Council opposes the two build options as currently proposed by the MTA for the Downtown Regional Connector. We urge that MTA explore other options.

This motion is in addition to the motion that was approved by the Little Tokyo Community Council at the October 27, 2009 meeting:

MOTION

The Community Council is in favor of the further exploration of continuing the Underground Emphasis Option, which currently tunnels underground at 2nd Street by continuing tunneling under 1st and Alameda and providing Little Tokyo with a station under the present Gold Line Little Tokyo/ Arts District Station, subject to the approval of the Nikkei Center, LLC, and the Nishi Hongwanji Buddhist Temple, and protecting the integrity and property of the Nishi Hongwanji Temple.

"The Little Tokyo Community Council is a nonprofit 501(c)(3) which has 90+ member organizations whose mission is to ensure that Little Tokyo would be a viable center for the Japanese American community and the Los Angeles Downtown community. The Council shall work to create a vision of what Little Tokyo should be in the future and serve as an advocate on behalf of the Little Tokyo community."

The Little Tokyo Community Council, an organization of over 90+ businesses, nonprofit community based organizations, religious, educational and resident associations, hopes to continue working with the MTA in identifying a solution for the Downtown Regional Connector that would not only benefit the Greater Los Angeles area, but would also continue to grow Little Tokyo to be an economically viable partner in the City's future plans.

The Little Tokyo Community Council respectfully urges the Metropolitan Transit Authority to consider the above motions of the Little Tokyo Community Council

Thank you very much for your consideration.

Sincerely,

Bill Watanabe,
Chair, Little Tokyo Community Council

cc:
The Honorable Daniel K. Inouye, Chairman, Senate Appropriations Committee
The Honorable Norman Mineta, former Secretary of Transportation
The Honorable Dianne Feinstein, Member, U.S. Senate
The Honorable Barbara Boxer, Member, U.S. Senate
The Honorable Lucile Roybal Allard, Member, U.S. House of Representatives
The Honorable Ray LaHood, Secretary, U.S. Department of Transportation
The Honoralbe Peter Rogoff, Administrator, Federal Transit Administration
The Honorable Antonio Villaraigosa, Mayor, City of Los Angeles
The Honorable Gloria Molina, Supervisor, Los Angeles County
The Honorable Jose Huizar, Council Member, Los Angeles City Council
The Honorable Jan Perry, Council Member, Los Angeles City Council
The Honorable Don Knabe, Supervisor, Los Angeles County
The Honorable Michael Antonovich, Supervisor, Los Angeles County
The Honorable Mark Ridley-Thomas, Supervisor, Los Angeles County
The Honorable John Lopez, Member, State Assembly, California
The Honorable Gil Cedillo, Member, State Assembly, California
Mr. Arthur T. Leahy, CEO, Metropolitan Transportation Authority
Members of the MTA Board of Directors

cc: LTCC Board of Directors:
Alan Kumamoto, 1st Vice Chair, Kumamoto Associates
Frances Hashimoto, 2nd Vice Chair, Mikawaya Inc.
Mike Okamoto, Co-Secretary, Asian American Architects & Engineers Assoc.
Kei Nagao, Co-Secretary, J-Town Voice
Eric Kurimura, Nishi Hongwanji Buddhist Temple
Chris Aihara, Past Chair, Japanese American Cultural & Community Center
Tom Kamei, Past Chair, Japanese Chamber of Commerce of So. CA
Noriaki Ito, Past Chair, Higashi Honganji Buddhist Temple
Howard Nishimura, Past Chair, Tokyo Villa Homeowners Association
Craig Ishii, Japanese American Citizens League
Goro Endo, Union Church of Los Angeles
Little Tokyo Community Council Board of Directors (continued)

Ken Kasamatsu, Pacific Commerce Bank
Brian Kito, Fugetsu-do and Little Tokyo Public Safety Association
Jeff Liu, Visual Communications
Tatsushi Nakamura, Japanese Prefectural Association
Wilbur Takashima, Little Tokyo Teramachi Owners Association
Satoru Uyeda, SK Uyeda Investments
Hiroshi Yamaguchi, Japanese Community Pioneer Center
Akemi Kikumura Yano, Japanese American National Museum
Evelyn Yoshimura, Little Tokyo Residents Association

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Anthony T. Materna, Ph.D.	
Organization/ Organización/団体名: ACODA Technology & Investments, LLC	
Address/Dirección/住所・所在地: 820 W. 10L St. Suite 903	
Telephone/Teléfono/電話: (213) 626-0927	Fax: /
Email/電子メール: tmaterna@pacbell.net	

Comments/Comentarios/コメント:

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: DAN GARCIA	
Organization/ Organización/団体名: DOWNTOWN RESIDENT	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: DANGINCHINA@GMAIL.COM	

Comments/Comentarios/コメント:

I STRONGLY SUPPORT YOUR UNDERGROUND OPTION. I THINK THIS IS A MUCH NEEDED PROJECT AND APPRECIATE YOUR WORK. (I ALSO SUPPORT THE 2ND ST BROADWAY STATION)

THANKS, DAN

Return comment form to: **Favor de regresar formulario a:** **コメント用紙の送付先:**
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: DAN GARCIA	
Organization/ Organización/団体名: DOWNTOWN RESIDENT	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: DANGINCHINA@GMAIL.COM	

Comments/Comentarios/コメント:

I STRONGLY SUPPORT YOUR UNDERGROUND OPTION. I THINK THIS IS A MUCH NEEDED PROJECT AND APPRECIATE YOUR WORK. (I ALSO SUPPORT THE 2ND ST BROADWAY STATION)

THANKS, DAN

Return comment form to: **Favor de regresar formulario a:** **コメント用紙の送付先:**
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: LAWRENCE ALDAVA	
Organization/ Organización/団体名:	
Address/Dirección/住所・所在地:	
Telephone/Teléfono/電話:	Fax:
Email/電子メール: LAWRENCE.ALDAVA@GMAIL.COM	

Comments/Comentarios/コメント:

I SUPPORT THE UNDERGROUND ALTERNATIVE. I AM VERY EXCITED ABOUT THIS PROJECT! PLEASE BUILD IT SOON AND BEGIN RESHAPING LOS ANGELES.

THANK YOU!

Return comment form to: **Favor de regresar formulario a:** **コメント用紙の送付先:**
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

11-5-09
Pasadena Mtg

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Sonia E. McIntosh	
Organization/ Organización/団体名: Self & The Public	
Address/Dirección/住所・所在地: 2725 Mimosa St. Alhambra, Calif. 91803	
Telephone/Teléfono/電話:	Fax:
Email/電子メール:	

Comments/Comentarios/コメント: We need more buses & safety there.
You can carry more items, children, etc. with you
You are near the place you took the bus for.
Elevators Escalators Steps 80+ are too
exhausting. Seniors don't travel as much as
Subway & rail lines used to, because of MTA problems as above &
surly drivers.
The money is extravagant. Every govt.
entity is broke (almost every city, etc.).
Stop spending. Taxpayers can't pay.
Thanks.

Return comment form to: **Favor de regresar formulario a:** **コメント用紙の送付先:**
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

Subject: FW: [Metro.net] customer comment
Date: Monday, November 23, 2009 1:49 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Friday, November 20, 2009 8:18 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: James
Last Name: Fujita
Email: jim61773@yahoo.com
Phone:
URL:

I'm glad to see that the MTA was able to find a way to build the regional connector underground at First and Alameda.

While I am concerned about the cost, I think that the newest proposal will provide Little Tokyo supporters with an alternative that we can stand behind.

I like the idea of an underground station at the "Office Depot" block and I am curious to see what, if anything will be built there. The neighborhood lacks open space and perhaps a pocket park can be placed there.

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: MIKA LUND	
Organization/ Organización/団体名: -	
Address/Dirección/住所・所在地: 523 W. SIXTH ST. STE. 1200 LOS ANGELES 90014	
Telephone/Teléfono/電話:	Fax: 213-943-4680
Email/電子メール: lund@nakadapartners.com	

Comments/Comentarios/コメント:

- The underground alternative should incorporate a new development that would redefine the block, provide more parking and other street level uses.
- Why is it not possible to surface the tracks after the intersection (Alameda/1st.)
- Locate station where existing pedestrian activity is heavy.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Mona Samimi	
Organization/ Organización/団体名: Savoy	
Address/Dirección/住所・所在地: 100 S. Alameda St. #464	
Telephone/Teléfono/電話: —	Fax: —
Email/電子メール: —	

Comments/Comentarios/コメント: I live at the savoy and would not have purchased this condo 3 years ago if I knew there would be 4 years of construction and a train running in front of my condo ≈900 times a day. If, however, an underground station will be built at 1st & Alameda, I prefer for there to be a park or park and shops on the metro station instead of a parking lot.

Also, It would be much better if the underground section (on Alameda) would extend through, passed 2nd street so that it would maintain a calmer atmosphere for the residents of Savoy and put more of the truck traffic in the tunnel as opposed to partially at grade.

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

METRO REGIONAL CONNECTOR

COMMENT FORM FORMULARIO PARA COMENTARIOS コメント用紙

Name/Nombre/氏名: Seena Sumini	
Organization/ Organización/団体名: Sway	
Address/Dirección/住所・所在地: 100 S. Alameda St. #464	
Telephone/Teléfono/電話:	Fax:
Email/電子メール:	

Comments/Comentarios/コメント: (UNDERGROUND EMPHASIS) Alternative

I would prefer that IF the Office Depot is replaced with a Metro, it be replaced with either a PARK or a development (with shops, etc) or BOTH. But I would not like to have a parking lot.

Also, I prefer that the N/S underground tunnel doesn't come above ground between 1st & 2nd. It should stay underground between 1st and 2nd the whole

Return comment form to: Favor de regresar formulario a: コメント用紙の送付先:
Dolores Roybal Saltarelli, Project Manager; Metro, MS 99-22-2; One Gateway Plaza, Los Angeles, CA 90012
Email: regionalconnector@metro.net Website: www.metro.net/regionalconnector

Metro

SAVOY

Attention:

Antonio R. Villaraigosa, Mayor, City of Los Angeles
Gloria Molina, Los Angeles County Supervisor, 1st District
Michael D. Antonovich, Los Angeles County Supervisor, 5th District
Don Knabe, Los Angeles County Supervisor, 4th District
Zaev Yaroslavsky, Los Angeles County Supervisor, 3rd District
Mark Ridley-Thomas, Los Angeles County Supervisor, 2nd District
MTA Board of Directors

We, the residents of Savoy in Little Tokyo, represented by the Savoy Homeowners' Association, hereby oppose the MTA Regional Connector underground alignment crossing 1st and Alameda St. As a community of 500+ property owners and residents in 303 units facing this intersection, we stand to lose much because of this project: depressed property values during construction, permanent loss of businesses, increased traffic, and increased air and noise pollution from construction and trains, respectively. The extreme designs for the surfacing of the train and the intersection threaten our property and quality of life. We have already sustained three years of road closures and construction for the Gold Line Extension. We applaud the conventional and unobtrusive design of the Gold line route and welcome the addition of a new Metro station to our neighborhood.

The proposed underground alignment for the Regional Connector, on the other hand, would surround the building in yet another round of heavy construction and place trains running on TWO sides of our building, forcing residents to use a bridge just to cross the street. Our residents facing Alameda will see their views of LA street life forever altered by the presence of a hole going into the ground and trains surfacing every 1.30 minutes. Finally, the Regional Connector will create an artificial boundary effectively isolating us from the historic and significant LA community we are so proud to be a part of.

We understand the need for the Regional Connector, but we simply cannot accept this development in its present form; the impact on our community is too severe. We implore you and the MTA to find another way.

Sincerely,

The Residents of the Savoy

	Signature	Name	Unit #
1.		Pei Yun Chiang	355
2.		Kenneth Tan	~~365~~ 361
3.		Eileen Tan	365
4.		Eveline Lee	234
5.		Lauren Frank	347
		SIDNEY WANG	#408

OPPOSITION LETTER

Attention: Antonio R. Villaraigosa, Mayor, City of Los Angeles
Michael D. Antonovich, Los Angele County Supervisor, 5th District
Don Knabe, Los Angeles County Supervisor, 4th District
Zaev Yaroslavsky, Los Angeles County Supervisor, 3rd District
Mark Ridley-Thomas, Los Angeles County Supervisor, 2nd District
Gloria Molina, Los Angeles County Supervisor, 1st District

We, the patrons, businesses and community members of Little Tokyo, hereby list our signatures below to oppose Metro Regional Connector's underground, or light rail project, which will run through our beloved community. The Metro Regional Connector is only a thoroughfare along 2nd Street and emerges onto 1st and Alameda. It offers no stops along the way. This will threaten long time established businesses, forcing closures and loss of jobs, due to 3-5 years of construction; as well as visitors and tourists seeking accessibility elsewhere. Many Japanese senior citizens who reside in Little Tokyo will not be able to cross the street safely. The Metro line will delineate resident's from their current lifestyle, which will segregate them from everyday shopping, community centers and temples/churches of worship. 2nd Street is very narrow and should not be allowed for Metro's proposed commuter transportation.

We ask that you and your constituents reconsider this project and find other routes that will not destroy our community.

We hereby oppose this project as presented below:

Print Name	Signature	Date	Phone No.
ANDREW LIN		9/10/09	310-766-4206

Subject: FW: Comments on regional connector
Date: Thursday, November 19, 2009 3:09 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

Fyi - do we have a response??

Ann

-----Original Message-----
From: Allon Percus [mailto:allon.percus@cgu.edu]
Sent: Thursday, November 12, 2009 12:01 PM
To: Regional Connector
Subject: Comments on regional connector

I wish I were able to make one of the recent public meetings about the Regional Connector, but unfortunately my schedule hasn't allowed it. Hopefully, comments by e-mail are acceptable as well.

As a Westside resident whose commute involves passing through downtown, I'm obviously a great supporter of having this kind of connection.

But I was aghast when I looked at the project website and saw that the vision is to have Expo lines trains just miss passing through Union Station. This reminds me a little bit of the Monty Python sketch where someone is about to be executed by a firing squad. The commander gives the order to shoot, the guards shoot, and...in the next scene, you see the commander yelling at the guards "How could you miss?!!"

I can't think of a better way of subtracting value from the Expo line than to have it just miss downtown's main transit hub! You plan to spend $800 million to have trains from the Westside pass just near Union Station but not stop there? Is this for real???

Best wishes,
Allon Percus

--
Allon G. Percus
Associate Professor, School of Mathematical Sciences
Claremont Graduate University

Subject: FW: [Metro.net] customer comment
Date: Friday, November 20, 2009 9:30 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, "Sosa, Ray" <Ray.Sosa@aecom.com>, "'Jackson, Virginia'" <JacksonVF@CDM.com>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Thursday, November 19, 2009 11:54 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Joseph
Last Name: Eisenberg
Email: joseph.eisenberg@gmail.com
Phone: 562-221-5437
URL:

I want to express my gratitude to Metro for quickly working out a new, underground solution to the connection of the Regional Connector with the Gold Line in Little Tokyo. The previous plans would work, but I think the new option would be worth the added expense for those of us in Long Beach and along the Blue Line.

I would further suggest that Metro study rebuilding the freeway bridge (limited to 15 mph speeds due to tight curves) with a new straight bridge over toward Hewitt Street, with the portal in the empty alley on the east side of the Dept of Water & Power lot. This will save two minutes of travel time for everyone going from the Expo Line or Blue line to Union Station or areas north. Over the next 50 years, those 2 minutes per person will add up to over a billion minutes of time saved, worth a couple hundred million dollars in my estimation. We should straighten the bridge.

This project could also be combined with the necessary run-thru tracks for Metrolink and High Speed Rail, which will have the be built in the same area anyway. The old curvy bridge could be retained for use by the new downtown street cars, for when new lines are extended north toward Union Station and Chinatown.

Subject: FW: [Metro.net] customer comment
Date: Friday, November 20, 2009 9:31 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, "Sosa, Ray" <Ray.Sosa@aecom.com>, "'Jackson, Virginia'" <JacksonVF@CDM.com>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Thursday, November 19, 2009 6:10 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: John
Last Name: Gove
Email: gove01@gmail.com
Phone:
URL:

Hello, I was reading The Source blog about the regional connector and saw the revised concept for a wholly underground connection and station in Little Tokyo. First, let me say the concept is immediately more attractive and less cumbersome for the community. I understand the intent is to connect Long Beach with Pasadena and Culver City with East LA, so couldn't the existing Little Tokyo station be removed from the concept? I realize it may seem silly to remove a newly built station, but that is simply due to Measure R accelerating the regional connector construction. The current station was designed for the current route but becomes superfluous with a new underground station serving reconfigured routes. Wouldn't eliminating the current station reduce the width of the right of way and allow the portal to shift westward, reducing the need to acquire additional real estate? Wouldn't eliminating the current station then help reduce the overall cost of the updated connector concept? I look forward to your response. Thank you.

Subject: FW: [Metro.net] customer comment
Date: Friday, November 20, 2009 3:33 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Friday, November 20, 2009 2:02 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: David
Last Name: Bailey
Email: davito88@hotmail.com
Phone: 505-263-0896
URL:

Hey,

After looking at the map here: http://thesource.metro.net/2009/11/19/new-regional-connector-concept-proposed-for-1st-and-alameda-intersection/ I got an idea that should save a lot of money. Why not have all trains coming from the blue/aqua lines stop at the little tokyo station. Then lines heading for Union Station will continue in their current direction and lines heading to east LA can reverse direction after making the stop. I understand you will need to have the engineer move to the other side of the train, but he should be able to do that while the train is stopped. Seems like it would cost a lot less to only build one junction instead of 2 and not have to make another underground station less than a block away. Thanks.

Subject: FW: [Metro.net] customer comment
Date: Friday, November 20, 2009 3:33 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Friday, November 20, 2009 2:02 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: David
Last Name: Bailey
Email: davito88@hotmail.com
Phone: 505-263-0896
URL:

Hey,

After looking at the map here: http://thesource.metro.net/2009/11/19/new-regional-connector-concept-proposed-for-1st-and-alameda-intersection/ I got an idea that should save a lot of money. Why not have all trains coming from the blue/aqua lines stop at the little tokyo station. Then lines heading for Union Station will continue in their current direction and lines heading to east LA can reverse direction after making the stop. I understand you will need to have the engineer move to the other side of the train, but he should be able to do that while the train is stopped. Seems like it would cost a lot less to only build one junction instead of 2 and not have to make another underground station less than a block away. Thanks.

Go For Broke
NATIONAL EDUCATION CENTER

November 20, 2009

The Honorable Ara Najarian, Chairman, and
Board of Directors
Los Angeles Metropolitan Transit Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

RE: Go For Broke National Education Center opposes Metro's
Regional Connector options through Little Tokyo as proposed

Dear Chairman Najarian and Metro Board:

Go For Broke National Education Center (GFBNEC) is a 501(c)(3) established by second-generation Japanese American or Nisei veterans of World War II. We have created and continue to add to a Hanashi Oral History archive, a collection of more than 1,000 interviews with Nisei veterans. Using these video oral histories as real-life examples for students, we have developed a curriculum for history and social studies classes and provide teacher training to a growing constituency nationwide, including California, Hawaii, Maryland, Washington, D.C. and Virginia. Our symbol is the Go For Broke Monument, a lasting reminder of the U.S. Constitution's guarantees of civil liberties to Americans of all races and ethnic backgrounds that stands in Little Tokyo off of Temple Street at Alameda near the Geffen Contemporary Museum.

GFBNEC has invested millions, including funding from Congress and the State of California, in the development and planning of a new Go For Broke National Education Center to be built adjacent to the Go For Broke Monument on Temple Street in the Little Tokyo area of Downtown Los Angeles.

The veterans and GFBNEC Board of Directors respectfully ask that the Los Angeles Metropolitan Transit Authority explore and develop a 5th Regional Connector option that will not irreparably damage the historic Little Tokyo Community. The veterans and GFBNEC Board of Directors also oppose both of Metro's preferred options as they have been proposed:

- Option 1 - underground to 2nd & Central, rising to cross Alameda at 1st Street, and
- Option 2 – traveling at grade or street level on Temple, crossing Alameda Street.

In community meetings, it has appeared that Metro prefers the 2nd Street underground Option 1. These options are two of four that Metro is examining through the Environmental Impact Report process but the project supervisor has publicly said he does not consider the other options to be viable alternatives because they are both no-build. As we understand it, the completed connector will carry a train every 2.5 minutes, one going in each direction every 5 minutes. Every other train would stop at the Alameda and 1st station.

HEADQUARTERS
370 Amapola Ave. Ste 110
Torrance, CA 90501
ph: 310-328-0907
fax: 310-222-5700

HAWAII REGIONAL OFFICE
Pacific Guardian Center
735 Bishop St. Ste 417
Honolulu, HI 96813
ph/fax: 808-585-8484

www.GoForBroke.org

As it has been presented, Option 1 would enter Little Tokyo under 2nd Street and continue to Central Avenue where it would steadily rise to grade level on a diagonal track across the current Office Depot parking lot, crossing Alameda at 1st and connecting to the new Gold Line Eastside Extension. An elevated pedestrian walkway could be built over 2nd Street. Construction for four years or longer would have a tremendous impact on Little Tokyo businesses that are already struggling, residents in the Savoy apartments, the Japanese American National Museum (JANM), the Museum of Contemporary Art's (MOCA) Geffen Contemporary, Go For Broke National Education Center and countless other organizations and institutions. Little Tokyo has already experienced the negative impacts of Eastside Extension construction and by the end of November, will have regular train traffic along 1st to Alameda Street from East Los Angeles. This option would also cost the City of Los Angeles income by reducing the sales tax increment from the Office Depot, Starbucks and other retail affected by construction and Metro rail operations.

Option 2 at street level on Temple Street to Alameda would consume most of the parking lot area north of the Geffen at the corner of Temple and Alameda Streets for tracks and an elevated pedestrian walkway. The two sets of tracks would curve inward to the east from Temple toward the Go For Broke Monument, encroaching into the planned GFBNEC building site by 10 – 20 ft. Metro staff has said the LA City Department of Transportation could require more right-of-way for safety reasons but planners will not present connector plans to LADOT until an option is selected. The tracks would migrate into the middle of Temple Street before reaching the tinker toy parking structure and Judge Aiso Street. This street-level option would have detrimental effects on GFBNEC's plans as well as on the Museum of Contemporary Arts and its Geffen Contemporary, East West Players, the Japanese American National Museum, Art Park and more. Trains every two and a half minutes would make it impossible to hold concerts, movies or children's performances in the long-awaited Art Park and make it unlikely that buses filled with school children or 80 and 90-year-old veterans would be able to enter or exit from our new Go For Broke National Education Center on Temple Street.

Metro representatives have also said that Union Station is crowded now and the 7th Street station will become crowded when the Subway to the Sea is completed. Metro will then need an alternative station to accommodate its passengers. The time to plan for that is also now.

GFBNEC and other members of the Little Tokyo community have been advised that developers of Nikkei Center on the Mangrove property are open to discussion and negotiation with Metro for a 5th option that could involve extending Option 1 underground from 2nd Street and Central to the new Nikkei Center on the east side of Alameda, eliminating the need for two sets of rails crossing Alameda at 1st, and leaving the Office Depot block intact. With this option, Metro would build an underground station at 1st & Alameda under the new Nikkei Center rather than have trains exit a tunnel in front of Office Depot.

We support a transit link between the existing Gold and Blue Lines, the new Gold Line Eastside Extension and the Exposition Line, and we believe there are alternatives that will not irreparably damage our Little Tokyo Community. GFBNEC officials and members, like many residents and business owners in the Little Tokyo community, have traveled by rail in such cities as Tokyo, Osaka, Taipei, Singapore, Shanghai and other cities that have world-class transit systems. Japan's light-rail system is state-of-the-art. We urge the Los Angeles Metropolitan Transit Authority to move forward with a system that is as good as or better than the world's best rail

transit systems without destroying communities, dreams and generations of sacrifice and hard work in the process.

Sincerely,

Kevin Tamaki
Chairman of the Board
GFBNEC

Christine Sato-Yamazaki
President & CEO
GFBNEC

CC:
U.S. Senator Daniel Inouye, Chairman, Senate Appropriations Committee
U.S. Senator Dianne Feinstein
U.S. Senator Barbara Boxer
U.S. Representative Lucille Roybal-Allard (CA-34)
U.S. Representative Adam Schiff (CA-29)
U.S. Representative David Dreier (CA-26)
U.S. Representative Judy Chu (CA-32)
U.S. Representative Grace Napolitano (CA-38)
U.S. Representative Jerry Lewis (CA-41), Ranking Member, House Appropriations Committee
U.S. Representative Mary Bono Mack (CA-45)
U.S. Representative Diane Watson (CA-33)
U.S. Representative Maxine Waters (CA-35)
U.S. Representative Gary Miller (CA-42)
U.S. Representative Ken Calvert (CA-44)
U.S. Representative Jane Harman (CA-36)
U.S. Representative Joe Baca (CA-43)
U.S. Representative Linda Sanchez (CA-39)
The Honorable Norman Mineta, former Secretary of Transportation
The Honorable Ray LaHood, Secretary, U.S. Department of Transportation
The Honorable Peter Rogoff, Administrator, Federal Transit Administration
LA City Councilmember Jan Perry
LA City Councilmember Bill Rosendahl
LA City Councilmember Tom LaBonge
LA City Councilmember Richard Alarcon
LA City Councilmember Paul Koretz
LA City Councilmember Bernard Parks
LA City Councilmember Herb Wesson
LA City Councilmember Ed Reyes
LA City Councilmember Dennis Zine
LA City Councilmember Janice Hahn
LA City Councilmember Greig Smith
LA City Councilmember Tony Cardenas
LA City Council President Eric Garcetti
MTA Chief Executive Officer Arthur T. Leahy
MTA Deputy Chief Executive Officer Paul C. Taylor
MTA General Manager of Rail Operations Mike Cannell
MTA Chief Operating Officer Carolyn Flowers
MTA Chief Planning Officer Carol Inge
MTA Chief Real Property Management & Development
Bill Watanabe, Chair, Little Tokyo Community Council and Board of Directors

Subject: FW: [Metro.net] customer comment
Date: Friday, November 20, 2009 9:29 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, "Sosa, Ray" <Ray.Sosa@aecom.com>, "'Jackson, Virginia'" <JacksonVF@CDM.com>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Friday, November 20, 2009 8:41 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Joel
Last Name: Covarrubias
Email: joelcov@gmail.com
Phone: 562.257.8142
URL:

Metro Planning Staff:

I wish to commend you on your recent efforts with the Little Tokyo community to create the new proposal for crossing First/Alameda. The new proposed underground alternative(with rail in a tunnel under First/Alameda) is much better than the previous underground alternative, and it deserves to be included in the environmental process. The new proposal is superior because it results in fewer impacts on the area.

I live in Long Beach, and I am a dedicated user of (M) Rail. The Regional Connector is possibly the most important and critical project Metro can build. It is crucial that the Regional Connector be built soon and built right, for the success of the entire system.

Thank You,

Joel Covarrubias
Long Beach

Subject: FW: [Metro.net] customer comment
Date: Monday, November 23, 2009 1:49 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>, Dolores Roybal Saltarelli <roybald@metro.net>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Friday, November 20, 2009 9:31 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Yusef
Last Name: Shafi
Email: shafi.s.y@gmail.com
Phone:
URL:

I am writing in strong support of the recent full-underground option for the regional connector recently posted in the MTA blog The Source. A fully underground connection in Little Tokyo will provide an invaluable transit connection while preserving local business and the pedestrian scale of the neighborhood. Also, having an underground station to complement the existing Little Tokyo/Arts District Station will undoubtedly help to handle the large crowds that will pass through the regional connector, and provide for more train arrivals and departures in the same amount of time by effectively adding a second platform to the station. An excellent example of the convenience of multiplatform and timed transfer systems can be found in downtown Oakland at 12th St, 19th St, and MacArthur Stations, and a similarly convenient station structure for this vital inter-regional link will be highly efficient.

As an affiliate of the Centenary United Methodist Church just three blocks away, I look forward to the potential for a well-designed, convenient, and neighborhood-strengthening transit line to help continue to transform Little Tokyo in amazing ways. Thank you for responding to the concerns of the community and please keep up the great work in transforming our city and county for the benefit of all.

Little Tokyo Community Council
369 East First Street
Los Angeles, California 90012
213 **625.0414** ext **5720**
Fax 213 **625.1770**
http://ltcc.janet.org

November 24, 2009

The Honorable Ara Najarian
Chairman
Board of Directors
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Re: Downtown Regional Connector

Dear Mr. Najarian:

The Little Tokyo Community Council (LTCC) would like to thank the Metropolitan Transportation Authority's for its response to the Little Tokyo community by presenting for consideration a concept for the Third Build Alternative for the Downtown Regional Connector.

The LTCC adopted the following motion at its November 24, 2009 meeting:

MOTION

The Little Tokyo Community Council supports the further exploration of the concept of the Third Build Alternative as presented by the Metro Planners.

We respectfully urge the Metropolitan Transit Authority Board of Directors to adopt the Third Build Alternative as one of the options for the Metro Planners to further explore for the Downtown Regional Connector, as part of the EIR study.

We thank the Metropolitan Transit Authority for their consideration of the concerns of the Historic Little Tokyo. We look forward to working with the Metro Planners as they further explore the Third Build Alternative.

Sincerely,

Bill Watanabe,
Chair, Little Tokyo Community Council

"The Little Tokyo Community Council is a nonprofit 501(c)(3) which has 90+ member organizations whose mission is to ensure that Little Tokyo would be a viable center for the Japanese American community and the Los Angeles Downtown community. The Council shall work to create a vision of what Little Tokyo should be in the future and serve as an advocate on behalf of the Little Tokyo community."

cc:
The Honorable Daniel K. Inouye, Chairman,
The Honorable Norman Mineta,
The Honorable Dianne Feinstein, Member, U.S. Senate
The Honorable Barbara Boxer, Member, U.S. Senate
The Honorable Lucile Roybal Allard, Member, U.S. House of Representatives
The Honorable Ray LaHood, Secretary, U.S. Department of Transportation
The Honoraibe Peter Rogoff, Administrator, Federal Transit Administration
The Honorable Antonio Villaraigosa, Mayor, City of Los Angeles
The Honorable Gloria Molina, Supervisor, Los Angeles County
The Honorable Jose Huizar, Council Member, Los Angeles City Council
The Honorable Jan Perry, Council Member, Los Angeles City Council
The Honorable Don Knabe, Supervisor, Los Angeles County
The Honorable Michael Antonovich, Supervisor, Los Angeles County
The Honorable Mark Ridley-Thomas, Supervisor, Los Angeles County
The Honorable John A. Perez, Member, State Assembly, California
The Honorable Gil Cedillo, Member, State Assembly, California
Mr. Arthur T. Leahy, CEO, Metropolitan Transportation Authority
Members of the MTA Board of Directors
Mr. Arthur T. Leahy, CEO, Metropolitan Transportation Authority

cc: LTCC Board of Directors:
Alan Kumamoto, 1st Vice Chair, Kumamoto Associates
Frances Hashimoto, 2nd Vice Chair, Mikawaya Inc.
Mike Okamoto, Co-Secretary, Asian American Architects & Engineers Assoc.
Kei Nagao, Co-Secretary, J-Town Voice
Eric Kurimura, Nishi Hongwanji Buddhist Temple
Chris Aihara, Past Chair, Japanese American Cultural & Community Center
Tom Kamei, Past Chair, Japanese Chamber of Commerce of So. CA
Noriaki Ito, Past Chair, Higashi Honganji Buddhist Temple
Howard Nishimura, Past Chair, Tokyo Villa Homeowners Association
Irene Hirano, Founding Chair, Japanese American National Museum
Craig Ishii, Japanese American Citizens League
Goro Endo, Union Church of Los Angeles
Ken Kasamatsu, Pacific Commerce Bank
Brian Kito, Fugetsu-do and Little Tokyo Public Safety Association
Jeff Liu, Visual Communications
Tatsushi Nakamura, Japanese Prefectural Association
Wilbur Takashima, Little Tokyo Teramachi Owners Association
Satoru Uyeda, SK Uyeda Investments
Hiroshi Yamaguchi, Japanese Community Pioneer Center
Akemi Kikumura Yano, Japanese American National Museum
Evelyn Yoshimura, Little Tokyo Residents Association

Subject: FW: [Metro.net] customer comment
Date: Monday, November 30, 2009 6:17 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

fyi

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Thursday, November 26, 2009 3:22 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: richard
Last Name: Schumacher
Email: schumach@texas.net
Phone:
URL:

The new fully underground concept is clearly superior. Make it so.

Someday you will have to do something about the tight radius curves at the 101 crossing. That will become a bottleneck.

Subject: FW: little tokyo/art rail project vote
Date: Tuesday, December 1, 2009 12:28 PM
From: Ann Kerman <kermana@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: Mountain Spring [mailto:mtn_ssshupring7@hotmail.com]
Sent: Tuesday, December 01, 2009 11:42 AM
To: Kerman, Ann
Subject: little tokyo/art rail project vote

hi!

i vote for underground railing for above project. the project should be done
so the business shops's income from clients would be minimally affected.

good secruity system against usage of rail as a get away means from the low income
generated theives/criminals from area of east LA et. al must be also put in place regardless
of the rail passage chosen.

i like the idea of using an economical and modern rail to little tokyo from sierra madre
gold line station. the parking fee + gasoline costs $10 now to get there from my home
and i would go there more often with my mother for shoppings.

dorian nakamoto
a recident from
temple city, calif

Subject: FW: Go For Broke National Education Center's comments on Metro Connector 3rd build option
Date: Wednesday, December 2, 2009 12:30 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli <roybald@metro.net>, Clarissa Filgioun <clarissa@therobertgroup.com>, Ginny Brideau <ginny@therobertgroup.com>

From: Mary Graybill [mailto:mary@graybillcom.com]
Sent: Tuesday, December 01, 2009 12:43 PM
To: Regional Connector
Subject: Go For Broke National Education Center's comments on Metro Connector 3rd build option

Dear MTA Planners:

Continuing the connector line underground through the intersection at 1st and Alameda is a step in the right direction. But there are still significant concerns with the plan and its impacts on the Little Tokyo Community. To revisit our vote, we did not approve this option as presented but rather, we approved encouraging Metro to develop it.

First, we believe it would be better long-term, and demonstrate greater vision and better planning for future transit needs, to locate the station on a lower level of Nikkei Center instead of on the Office Depot parking lot. Construction on this now vacant parcel will have less impact. A station there would be more convenient to City Hall and the Federal Building. It's close to the Arts District. And it's an easy walk for all of Little Tokyo.

Second, the taking of the Office Depot property and the years of construction on that parcel will not only impact residents of the Savoy but also all the surrounding businesses and organizations, including those across the street on 2nd and those to the west on Central. Elimination of the parking creates access problems for people wanting to go to one of the affected businesses. Ray explained the boring machine

constraints but I expect that another solution can be found.

Third, cut-and-cover construction through the 1st and Alameda intersection will again create a traffic nightmare. It will seriously impact Savoy residents, JANM and nearby businesses. And logistically, one wonders how the contractor is going to cut and cover under the new Eastside Gold Line tracks.

Fourth, the City of LA needs the sales-tax increment from the impacted businesses. The City and its services are already suffering. The economy may be improving but no government agency can afford to lose funding.

Most of us involved in the Little Tokyo Community are very comfortable with public transit and appreciate its convenience. Our experience is not limited to New York or Washington, DC, but rather, the majority of people in the community have traveled on systems in other countries, including Japan, the benchmark for public transit; Taiwan with its new high-speed rail running the length of the island nation and train stations under office towers and shopping centers; Bangkok where an elevated system runs above old, established parts of the City; Singapore where everything is bright, shiny and easy to use; and/or fast-developing Shanghai. In addition, may of us have also used public transit in Paris and other European capitals with old, established subway and rail systems.

We want to thank Metro for bring this option forward and for continuing to develop it.

Very best regards,

Mary Graybill

for Go For Broke National Education System

Subject: FW: METRO Regional Connectors
Date: Tuesday, December 1, 2009 12:28 PM
From: Ann Kerman <kermana@metro.net>
To: Ginny Brideau <ginny@therobertgroup.com>, Clarissa Filgioun <clarissa@therobertgroup.com>

From: okalax@gmail.com [mailto:okalax@gmail.com] On Behalf Of Masao "Mike" Okamoto, AIA
Sent: Tuesday, December 01, 2009 12:16 PM
To: Kerman, Ann
Subject: METRO Regional Connectors

Ann,

I am very pleased with the outcome of all the community discussions which are condensed into your 3rd Build Alternative.
At the same time, I hope you would keep this on-going dialog with us throughout the whole project.
As we keep saying, our community is not so large and trying to put a big foot into small shoe could literally destroy our community.
Please advise your engineering team to bring all issues to us if any deviation from originally presented design may require.

Regards,
Mike Okamoto

Little Tokyo Community Council
SVP/Japanese Chamber of Commerce
--
****
Masao "Mike" Okamoto, AIA, LEED AP.
M. Okamoto & Associates, Inc. (MOA, Inc.)
919 S. Fremont Ave., Suite #338
Alhambra, CA 91803-4742
Phone 626 943-8800 Fax 626 943-8883
Google Voice (626) 872-5652
http://www.moainc.net
****
THINK GREEN
****
Japanese Chamber of Commerce
of Sothern California
and JCC Foundation

244 South San Pedro Street Suite 504
Los Angeles, CA 90012 USA

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
2010 Community Response (Post Scoping)

State Clearinghouse Number: 2009031043

Subject: FW: [Metro.net] customer comment
Date: Friday, January 22, 2010 10:18 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Clarissa Filgioun clarissa@therobertgroup.com, Ginny Brideau ginny@therobertgroup.com

-----Original Message-----
From: noreply@metro.net [mailto:noreply@metro.net]
Sent: Tuesday, January 19, 2010 6:02 PM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Peter
Last Name: Ricci
Email: Pricci@yahoo.com
Phone: 3104979088
URL:

Hello

I am a huge fan of the metro and love seeing the city get connected. I submitted in the past (aka The Crenshaw line years back) Glad to see my vision is coming to life.

I have drawn up a couple more lines to connect the city - making it more commutable by foot and transit. First off it would great to see the old rail that connected downtown LA to Hollywood again. Maybe now from Staples Center to Hollywood above ground would be great, but if NOT. I have two Future idea's for rails: starting from the Blue line as seen below:

Metro Regional (Optional Line) - Concept by Peter Ricci
This line is very needed in Los Angeles

Northbound Baby Blue Rail Line Extension: (Future Line Silver Lake/Los Feliz/Glendale)

Stations in order:

1. Can Start From Conceptualized Regional Connector (Map)
2. Grand Ave/3rd St (Courthouse, Moca)
3. Grand Ave/ Caesar Chavez
4. Elysian Park/Stadium Way (Dodgers Stadium)
5. Echo Park/Sunset Blvd. (Echo Park)
6. Glendale Blvd. /Sunset Blvd. (Echo Park)
7. Coronado St. /Sunset Blvd.
8. Silver Lake Blvd. /Sunset Blvd. (Central Silver Lake)
9. Santa Monica Blvd. /Sunset Blvd. (Echo Park)
10. Hollywood Blvd. /Sunset Blvd. (Los Feliz Theatre)
11. Vermont. /Sunset Blvd. (Connector to red line)
12. Vermont./Franklin Ave. (Central Los Feliz)
13. Los Feliz Blvd./Hillhurst Ave. (Shuttle to Greek Theatre)
14. Los Feliz Blvd. /Riverside Dr. (Griffith Park/Tennis courts/Pony rides)
15. Zoo Dr. (Zoo/Museum)
16. Colorado/Pacific Ave (Glendale)

17. Colorado/Brand Blvd. (Americana/Glendale Galleria)
18. Brand Blvd /Wilson Ave. (Downtown Glendale, Theatres, Shops)
19. E. Doran St. /N. Glendale Blvd. (Glendale Plaza Shops)
20. M. Verdugo Rd. /E. Glenoaks Ave (Glendale Plaza Shops)
21. M. Verdugo Rd. /E. Mountain St. (Glendale Community College)

Baby Blue/Orange Phase 2 Rail Line (Future Line Glendale/Burbank)

Stations in order:

Starting at:

1. Colorado/Brand Blvd. (Americana/Glendale Galleria)
2. Brand Blvd /Wilson Ave. (Downtown Glendale, Theatres, Shops)

Phase 2 Begins Here:

1. Brand Blvd /Milford St. (Downtown Glendale, Theatres, Shops)
2. Brand Blvd. /E. Glenoaks Ave (Glendale Plaza Shops)
3. Brand Blvd. / Pacific Ave (Glendale Plaza Shops)
4. Brand Blvd. /E. Grandview Ave (Glendale)
5. San Fernando Rd. /Sonora Ave. (Disney Studios/DreamWorks Studios)
6. San Fernando Rd. /Western Ave. (Disney Studios/DreamWorks)
7. San Fernando Rd. /E. Alameda Ave. (Shopping/Burbank)
8. San Fernando Rd. /E. Verdugo Ave. (Shopping/Burbank)
9. San Fernando Rd. /E. Magnolia Ave. (Downtown Burbank/Theatres/Mall)
10. San Fernando Rd. /Grinnell Dr. (N. Downtown Burbank/Theatres/Mall/high school)
11. San Fernando Rd. /Amherst Dr. (Downtown Burbank/Theatres/Mall)
12. N. Victory Place/W. Empire Dr. (W Burbank/Outlet Mall)
13. N. Buena Vista St /W. Empire Dr. (W Burbank)
14. N. Hollywood Way/Thorton Ave. (Yahoo/Burbank Airport)
15. N. Hollywood Way/Victory Blvd. (Burbank/Bus Connector)
16. Burbank Blvd. /Victory Blvd. (Burbank)
17. Burbank Blvd. /Cahunga Blvd. (Burbank)
18. Vineland Ave/Chandler Blvd. (Connector to Red line/Orange line)

Hope this helps in your planning: look forward to seeing this come to life as well in the NEXT 5 years or less.

Subject: FW: regional connector
Date: Monday, February 1, 2010 1:56 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

---

From: Steven Axelrod [mailto:steven.axelrod@gmail.com]
Sent: Saturday, January 30, 2010 3:54 PM
To: Regional Connector
Cc: Rise Axelrod; J.B.C. Axelrod
Subject: regional connector

Dear Ms. Roybal Santorelli:

As a resident living on 2nd Street with his wife, and with a family member living on Santa Fe Avenue, I can tell you that we all three strongly support the subway option for the regional connector.

We very strongly oppose the grade level option. That would slow down the train to the degree that it would be next to useless. Why not just continue on the red or purple line all the way to Union Station and switch there to the Gold Line? It would be simpler and faster, and it would require only one wait for a train instead of two. The grade level option simply doesn't work.

In addition the grade level option will snarl traffic on 2nd even more than it already is snarled. And it is often gridlocked as is. If traffic is diverted, then the parallel streets will be snarled.

The grade level option is absolutely a non-starter. It would further alienate the public from public transit and from city government. A grade level train would predictably be underused and seen by everyone as a colossal waste of money and another governmental mistake.

The subway, on the other hand, will be a civic boon and amenity, and it will be much beloved. The added expense will be forgotten immediately. The amenity will be appreciated forever.

Please--a subway only for the regional connector.

Sincerely,

Steven Axelrod

--
Steven Gould Axelrod
President, The Robert Lowell Society
Co-editor, The New Anthology of American Poetry, Vols. 1-3
Professor of English
University of California
Riverside, CA 92521

108 West 2nd Street, Unit 609

Los Angeles, CA 90012

213 880 2522

From: daveedkapoor@gmail.com [mailto:daveedkapoor@gmail.com] On Behalf Of daveed kapoor
Sent: Monday, February 01, 2010 3:47 PM
To: Regional Connector
Subject: Fwd: Metro Regional Connector Update

got the newsletter. great work. i love the LT station being relocated to office depot property much better link to neighborhood

thank you.
daveed kapoor
323 252 8510
utopiad.org

Subject: FW: Metro Regional Connector Update
Date: Thursday, February 4, 2010 10:23 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com
Conversation: Metro Regional Connector Update

From: daveedkapoor@gmail.com [mailto:daveedkapoor@gmail.com] On Behalf Of daveed kapoor
Sent: Monday, February 01, 2010 3:47 PM
To: Regional Connector
Subject: Fwd: Metro Regional Connector Update

got the newsletter. great work. i love the LT station being relocated to office depot property much better link to neighborhood

thank you.
daveed kapoor
323 252 8510
utopiad.org

---------- Forwarded message ----------
From: **Ann Kerman** <kermana@metro.net>
Date: Mon, Feb 1, 2010 at 3:29 PM
Subject: Metro Regional Connector Update
To: "daveedkapoor@gmail.com" <daveedkapoor@gmail.com>

PDA/HANDHELD DEVICES - TO VIEW WITH GRAPHICS CLICK HERE

Regional Connector E-Bulletin – February 2010
Inside:
Latest News
Next Steps
Stay in Touch
Thank You

Happy 2010! We appreciate your valuable input in the Regional Connector Transit Corridor project thus far. We look forward to your ongoing participation so that we can continue to address issues in a timely way and consider project refinements that are supported by the community.

Latest News

As we move into the second month of 2010, we would like to share some project updates with you. You may recall that Metro has, to date, studied four alternatives as part of the Draft Environmental Impact Statement and Report (Draft EIS/R): the required No Build and Transportation Systems Management (TSM) alternatives, as well as an at-grade emphasis alternative via Flower and; 2nd Streets with a couplet on Main and Los Angeles Streets, and an underground emphasis alternative under Flower and 2nd Streets crossing 1st and Alameda

From: Grein, George O. [mailto:GOGrein@lasd.org]
Sent: Tuesday, February 02, 2010 8:04 AM
To: Kerman, Ann
Subject: RE: Metro Regional Connector Update

Ann,

Your changes to the options were understandable. From a law enforcement perspective we are completely supportive of changing the layout at 1st Street & Alameda to an underground station, with no at-grade crossing or underground passage of traffic on Alameda Street. Your challenge will of course be how to minimize disruption to the existing Little Tokyo operation and I am very interested in hearing how that will be phased into the construction schedule.

Thank you for the update,

George
Lt. George Grein (Ret.)
Law Enforcement Liaison
Los Angeles County Sheriff's Department
Transit Services Bureau HQ
(213) 922-3687 (Office)
(213) 219-6327 (Mobile)
(323) 415-3362 (Fax)
gogrein@lasd.org
greing@metro.net
Palman qui meruit ferat

Subject: FW: Metro Regional Connector Update
Date: Tuesday, February 2, 2010 2:48 PM
From: Ann Kerman <kermana@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

-----Original Message-----
From: Smith, Howard A. [mailto:hasmith@lan-inc.com]
Sent: Tuesday, February 02, 2010 8:54 AM
To: Kerman, Ann; Regional Connector
Subject: RE: Metro Regional Connector Update

"Metro anticipates releasing the Draft EIS/R document during Summer 2010. The Draft EIS/R analysis will include a description of construction processes and potential mitigation measures. A set of public hearings will be scheduled to solicit feedback from the community regarding the findings of the study. The Final EIS/R will be available for community review during Fall 2011, where Metro will again solicit community feedback. The Final EIS/R will designate a Locally Preferred Alternative."

1. With formal addition of a new build alternative scheduled for later this month, do you think there's sufficient time to incorporate all required analyses of that alternative into the Draft EIS/R in time for a summer 2010 release? That seems optimistic.
2. If you're anticipating a Final EIS/R with designation of LPA to be released during Fall 2011, when would you look at the Metro Board formally approving the LPA? When would you look at engineering design commencing for the selected build alternative (the LPA)?

Howard A. Smith, AICP, FITE
National Transit Planning Director

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY
1050 20th Street, Suite 200 * Sacramento, CA 95811
C 510.363.6454
www.lan-inc.com<http://www.lan-inc.com/> * HASmith@lan-inc.com<mailto:HASmith@lan-inc.com>

Subject: FW: Comment on Regional Connector
Date: Friday, February 5, 2010 9:34 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Clarissa Filgioun clarissa@therobertgroup.com, Ginny Brideau ginny@therobertgroup.com

fyi

From: RICHARD STANGER [mailto:stangerr@verizon.net]
Sent: Wednesday, February 03, 2010 5:54 PM
To: Regional Connector
Subject: Comment on Regional Connector

Dear Metro Staff --

The decision to include a fully grade-separated alternative is a very good one considering that most of Metro's light rail services will use that connector well into the future. It is money well spent.

The underground light rail stations can be made much more user-friendly by dropping the mezzanine level. Patrons will need to go half the distance down to catch the train, day-in, day-out, for decades. The "no mezzanine" design will require side platforms with ticketing at the same level, but outside the faregate array. The streets and sidewalks appear wide enough to allow this. There would also be construction savings from not having to go so deep (as much as 30% per station). This type of design is common in older US systems and in some cities in Europe. The only drawback is that people will have to use the entrance on the other side of the street to travel in the opposite direction, but that would be better, I believe, than having to drop down another level each trip.

Richard Stanger

2409 Clark Avenue
Venice, CA 90291
310-823-0744

Subject: FW: Email list
Date: Friday, February 5, 2010 9:32 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

-----Original Message-----
From: Sarah Hays [mailto:sirrahh@sbcglobal.net]
Sent: Friday, February 05, 2010 9:16 AM
To: Regional Connector
Subject: Email list

Hello Regional Connector staff -

Can you please put me on your email list to learn about upcoming meetings, etc? With the approval yesterday of the FEIR for Expo Phase II, I am more and more interested in the progress of your project which will make Expo work so much better.

Thank you.

-- Sarah Hays
10509 Blythe Avenue, Los Angeles CA 90064
310/558-3538 - sirrahh@sbcglobal.net

Subject: FW: Fully grade-separated alternative
Date: Tuesday, February 16, 2010 12:57 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

fyi

-----Original Message-----
From: Yuri Popov [mailto:yopopov@gmail.com]
Sent: Monday, February 08, 2010 3:06 PM
To: Regional Connector
Subject: Fully grade-separated alternative

This is a formal public comment on the inclusion of the fully grade-separated alternative.

I would like to express my strong support of the fully grade-separated alternative for the Regional Connector. I also fully support its formal inclusion into the Draft EIS/R. The connector should be completely underground - for the sake of safety, for the sake of efficient train operation, and for the sake of non-disruption of pedestrian and vehicular traffic at the ground level. We are building our city's future, and we should not build badly and cheaply.

Sincerely yours,
Yuri Popov, Ph.D.

Subject: FW: RegionalConnector:NewAlternative
Date: Tuesday, February 16, 2010 12:56 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

fyi

From: Estela Lopez [mailto:elopez@centralcityeast.org]
Sent: Wednesday, February 10, 2010 1:11 PM
To: Regional Connector; Jackson, Michelle
Cc: Kerman, Ann
Subject: RegionalConnector:NewAlternative

The Arts District Business Improvement District (BID) spans 53 blocks of eastern Downtown Los Angeles, between Alameda Street and the Los Angeles River. Within its boundaries are 398 businesses employing 5,322 workers representing $611 million in annual sales. The BID is administered by the Central City East Association (CCEA), representing Downtown property owners for the past 25 years.

The Arts BID Board of Directors has been advised of the potential of a new conceptual alternative for the Regional Connector's First and Alameda Streets crossing, one that would be fully grade-separated. We urge Metro's Planning and Programming Committee to support this alternative so that it can be comprehensively studied as part of the upcoming environmental process.

Thank you for your consideration.

Estela Lopez, Executive Director

Central City East Association

725 S. Crocker Street

Los Angeles, CA 90021

213 228 8484 - tel

213 228 8488 - fax

elopez@centralcityeast.org

Subject: FW: RegionalConnector:NewAlternative
Date: Tuesday, February 16, 2010 12:56 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

fyi

-----Original Message-----
From: richard schumacher [mailto:r_a_schumacher@sbcglobal.net]
Sent: Wednesday, February 10, 2010 5:38 PM
To: Regional Connector; Jackson, Michelle
Subject: RegionalConnector:NewAlternative

The new fully-separated alternative is quite superior and should be adopted.

If possible, when the Connector is being constructed the radius of the curve at the E Commercial crossing should be increased to allow faster operation.

Richard Schumacher

Subject: FW: Connections downtown
Date: Tuesday, February 16, 2010 12:55 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

Dolores... do you want to respond or should we?
Thanks!
Ann

-----Original Message-----
From: john@ [mailto:johnwsmart.com smartmonkey@att.net]
Sent: Friday, February 12, 2010 12:29 PM
To: Regional Connector
Subject: Connections downtown

I am not a clear about one thing re: the regional connector If i get on the blue line on long beach will i be able to go all the way to little tokyo without switching trains?

It's never clearly stated if the MTA will build an extension of the expo and blue lines to little tokyo or an entirely separate entity.

If people in culver city and long beach have to switch at 7th street AND little tokyo to get to pasadena then i see no reason to build the regional connector. It's as annoying as the Green line then.

I am John Smart
http://johnwsmart.com/

Subject: FW: Underground is the way to go..Comments on Regional Connector plan
Date: Tuesday, February 16, 2010 12:54 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Dolores Roybal Saltarelli roybald@metro.net, Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com
Conversation: Underground is the way to go..Comments on Regional Connector plan

fyi

From: Matt Gunter [mailto:fighterjock1000@yahoo.com]
Sent: Saturday, February 13, 2010 2:54 PM
To: Regional Connector
Subject: Underground is the way to go..Comments on Regional Connector plan

I could not imagine there would be any alternative that DIDNT have it completely underground. First, there are so many segments of it that would be underground anyways, including its starting point at 7th/Metro. Second, this is a downtown area, there is enough congestion as it is, keeping it underground would keep the streets clear for cars and pedestrians without slowing both of them down including the trains. Third, it would make the trains run slower if above ground. Fourth, it would require running powerlines overhead (ugly in a downtown setting). Fifth, its more dangerous. Sixth and finally, think of the future...downtown will become more dense and populated eventually and an above ground line would make it worse. I am in full support of this line, but please please please keep it fully underground. About the additional price tag for it?...Dont worry about it, this is well worth it, because im sure that there would be so many complaints about an above ground system in the future during and after construction that it would have to be changed anyways.

Matt Gunter

Subject: FW: Regional Connector, New Alternative
Date: Tuesday, February 23, 2010 5:12 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com

From: Bobby Garza Jr [mailto:bobbygarzajr@yahoo.com]
Sent: Wednesday, February 17, 2010 10:28 PM
To: Regional Connector; Jackson, Michelle
Subject: Regional Connector, New Alternative

Hello,

I will not be able to attend the Planning and Programming meeting tomorrow (Feb. 18), so I wanted to express my support for the new fully underground alternative and reject the at-grade options, especially at 1st Street and Alameda.

I am a resident of Little Tokyo and a frequent rail/bus rider and I completely understand the need for the Regional Connector, I just hope we can do it without destroying the Little Tokyo neighborhood, which, I believe, the at-grade options will do.

Please approve and implement the fully underground alternative into the Draft Environmental Impact Statement/Report.

Bobby Garza, Jr.

Savoy Homeowner

Metro Rider

Subject: FW: Regional Connector Comment
Date: Tuesday, February 23, 2010 5:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net
Conversation: Regional Connector Comment

From: Mark Johnston [mailto:canammj@yahoo.com]
Sent: Wednesday, February 17, 2010 7:48 PM
To: Regional Connector; Jackson, Michelle
Subject: Regional Connector Comment

This is what I have been saying all along that has been needed. You can not have the most important link in the whole light rail system have a very big deficiency- grade cross at Alameda.. Thank you for finally seeing the light...
-
The moving of the other station closer to Broadway is good, but remember , a street car line can jog a block or two...
-
THERE IS ONE ITEM I WOULD LIKE YOU TO CONSIDER=
Build a knock out panel at the new Little Tokio station at the Staples site so that a line can proceed down Central Ave to an eventually link to the Blue Line.. yes , I know it may be many years, but its so easy to build the knock out now for future use, as opposed to coming back years from now and try to figure out how to tie this line in. We do this too often and all the hassels of trying to get the ELA line to tie into the Downtown Connector is a good example of poor prior planning.. Don't make another mistake.This would allow trains from LAUS would stop at the new 2nd street/Alamdea station, then can head down Central (which is better than Alameda (too many trucks) and Central is wide as far down at 7 or 8th.. you could stop at 2nd, 7th, Olympic, then on to the Washington Street Blue Line Station...

Subject: FW: RegionalConnector:NewAlternative
Date: Tuesday, February 23, 2010 5:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

-----Original Message-----
From: Martha Porter [mailto:mporter_6@yahoo.com]
Sent: Wednesday, February 17, 2010 8:10 PM
To: Regional Connector; Jackson, Michelle
Subject: RegionalConnector:NewAlternative

Dear Planners,

I am unable to attend the Regional Connector Mtg. on 2/18/2010, but I would like to share some ideas/ suggestions about its structure and alternatives.

1) I vote for the proposed alternative; it allows LRT trains to continue to travel underground from under 2nd and Central through the intersection of First/ Alameda Streets, keeping the LRT fully grade separated

2) My first (1st) suggestion: Allow the Regional Connector to stretch from 'Tokyo/Arts Station' to the corner of 'Alameda/101 Fwy Station' and 'Alameda/Cesaer Chavez'. (That's the front entrance of Union Station Building/ and Foothill Transit signs).

3) My second (2nd) suggestion: Allow the Regional Connector to stretch from Alameda/101Fwy Station,>> then to Ceasar Chavez/Alameda Street,>> then to CasaerChavez/Main & Los Angeles intersection,>> then to Main/ 1st, >> then to RedLine-Civic Center Station, >> then to 5th & 6th/Flower LA Library Station. Thereby creating several new station and connections to other transportation vehicles.

4) My third (3rd) suggestion: Build aerial-lanes on freeway systems for LRT train only.

SIncerely,
*M. Porter
mporter_6@yahoo.com

Subject: FW: RegionalConnector:NewAlternative
Date: Tuesday, February 23, 2010 5:13 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

-----Original Message-----
From: paul yeh [mailto:pyeh99@yahoo.com]
Sent: Wednesday, February 17, 2010 5:22 PM
To: Regional Connector; Jackson, Michelle
Cc: ginny@therobertgroup.com
Subject: RegionalConnector:NewAlternative

To the MTA,

I'm writing this email in regards to tomorrow's Planning and Programming Committee meeting on February 18th at 2pm. Unfortunately, I cannot attend because of my schedule. However, I would like to comment and express my support for the new fully-underground alternative as a resident of Little Tokyo.

I want to impress upon the committee how much the community has come together on this new alternative. In our eyes, the two original build options are simply NOT acceptable to the long-term planning of Little Tokyo. The size and scale of the project would tear this small community apart and have permanent affects on the surrounding area. We've worked very hard with Ann Kerman and the MTA project team the past several months because we recognize the need for the Regional Connector but don't believe it has to destroy Little Tokyo in the process. Having trains go BENEATH 1st and Alameda, a key intersection, would not only meet the needs of the Regional Connector but also minimize disruption to Little Tokyo businesses, cultural institutions, and residents.

I strongly urge that MTA moves forward with the community in mind. Please approve the inclusion of the fully-underground alternative to the DEIS.

Sincerely,

Paul Yeh
Chairman, Savoy Homeowner's Association MTA Committee
Member of GetFit Little Tokyo
Member of Little Tokyo Community Council

Subject: FW: Regional Connector Comment
Date: Tuesday, February 23, 2010 5:14 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

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From: Yusef Shafi [mailto:shafi.s.y@gmail.com]
Sent: Wednesday, February 17, 2010 1:28 PM
To: Regional Connector; Jackson, Michelle
Subject: Regional Connector Comment

I am writing to express strong support for the full-underground option for the regional connector being considered as a build alternative for the DEIR. A fully underground connection in Little Tokyo will provide an invaluable transit connection while preserving local business and the pedestrian scale of the neighborhood. Also, having an underground station at First and Alameda to upgrade or replace the existing Little Tokyo/Arts District Station will undoubtedly help to handle the large crowds that will pass through the regional connector, and provide for more train arrivals and departures in the same amount of time by effectively adding a second platform to the station. An excellent example of the convenience of multiplatform and timed transfer systems can be found in Oakland at the 12th St, 19th St, and MacArthur BART Stations, and a similarly efficient and convenient station structure for this vital inter-regional link is essential.

I look forward to the potential for a well-designed, convenient, and neighborhood-strengthening transit line to help continue to transform Little Tokyo and Downtown as well as the greater Los Angeles area in efficient and environmentally-friendly ways that look after the community as well. Thank you for responding to the concerns of the community and please keep up the great work in transforming our city and county for the benefit of all.

Yusef Shafi

Subject: FW: Regional Connector Comment
Date: Tuesday, February 23, 2010 5:12 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com

-----Original Message-----
From: John Gove [mailto:johnpgove@gmail.com]
Sent: Thursday, February 18, 2010 12:48 AM
To: Regional Connector; Jackson, Michelle
Subject: Regional Connector Comment

Hello,

I regret that I cannot make the meetings scheduled for Thursday, February 18, but I was called in to work at the last minute. I have been following the RC for quite some time, and metro has promptly responded to my inquiries. Thank, you.

I strongly recommend that the completely underground station and connection to the Goldline be included in the DEIS/R. As a resident of the Pasadena area, I believe the complete grade separation at the intersection of 1st and Alameda is most sensible and will bear out to be more practicable, even if at increased expense. The long-term benefits of grade separation will manifest in the near future as traffic at that intersection continues to increase with residential development. Little Tokyo will be saddled with neither a monstrous at-grade transfer station compromising the pedestrian character of the neighborhood nor the traffic delays and the associated increased pollution resulting from having too many vehicles of various modes share the surface plane of traffic. Existing and future storefront activity facing the street at ground level will not be hamstrung by confining sidewalk limitations. Commuters may be able to shave a few seconds off their commute by not having to slow at an at-grade street crossing and may be able to shave minutes by not having to walk as much distance in the transfer process, a byproduct of turning two separate surface platforms into one underground platform. It's a good idea. Let's run with it.

Sincerely,

John Gove
P.O. Box 2081
Irwindale, CA 91706

PS - Please start finding funding for that Hollywood to Westwood phase of the Subway. That segment will pay for itself in spades.

Subject: FW: Sadly, I will not be able to attend the Regional Connector Meeting
Date: Tuesday, February 23, 2010 5:11 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com

-----Original Message-----
From: Linda Blakeman [mailto:linda.blakeman@gmail.com]
Sent: Thursday, February 18, 2010 3:04 AM
To: Regional Connector
Subject: Sadly, I will not be able to attend the Regional Connector Meeting

Hi,
I am very happy about this change in your plans for the Metro in
Little Tokyo.
I would attend the meeting but I have a jury duty commitment.
Thank you for listening to the community and for your consideration.
Sincerely,
Linda Blakeman
100 S. Alameda Street #302
Los Angeles, CA 90012

Subject: FW: Regional Connector in Downtown LA (Little Tokyo)
Date: Tuesday, February 23, 2010 5:11 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

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From: S. N. Shafi [mailto:nshafi@pacbell.net]
Sent: Thursday, February 18, 2010 10:00 AM
To: Regional Connector; Jackson, Michelle
Subject: Regional Connector in Downtown LA (Little Tokyo)

To the Concerned Persons,

I urgently propose that a fully grade-separated alternative at the Little Tokyo Station, be formally added to the Draft EIS/R at the Metro Planning and Programming Committee Meeting today, February 18, 2010. I regret that I will not be able to make this plea in person due to work commitments and obligations.

As an administrator, planner and architect of several decades standing, I have the good fortune to be part of teams charged with the planning, proposal, design and realization of numerous public serving building projects in Los Angeles, San Francisco and San Diego and other locations outside the US. In these past decades, I have lived in and traveled to many locations and my passion and admiration for rail transit always leads me to utilize this whenever and wherever this is available.

In my experience with rail transit, whether in Washington DC, in New York City or in London and Paris, a grade separated hub is proven to be the most efficient option in solving the problem of moving large volumes of people through rail transit hubs. Timed transfers and multiple platforms typically increase the attractiveness of the rail transit option for people looking to use their travel time effectively and spend their travel dollars for the best return on investment. It has the added benefit of not causing negative secondary effects, such as congestion, on the station surrounding areas.

It is essential that this option be the one selected in order to accomodate the character, the narrow streets and the expected crowds of travellers transiting thorough or otherwise utilizing the Litlle Tokyo station. It will also serve as an apt counterpart to the multi-level facility available at the other end of downtown LA, at Figueroa.

Thank you for your consideration of my suggestion.

Nadeem Shafi
POB 881183
Los Angeles, CA 90009

Subject: FW:
Date: Thursday, February 25, 2010 11:28 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

-----Original Message-----
From: Bauza, Barbara [mailto:bbauza@lausd.net]
Sent: Wednesday, February 24, 2010 10:52 PM
To: Regional Connector
Subject:

My name is Barbara Bauza, owner at the Savoy Homeowners Association located at 1st and Alameda Street. My unit is #425 facing the swimming pool and every day we hear the metro going through even though we are on the inside of the Savoy complex.

I fully support the Little Tokyo Community Council in demanding to add the only community acceptable alternative to the study: a fully grade separated alternative that would put the tracks underground, removing the trains traveling at grade through our neighorhood, put the Little Tokyo station underground, and give us the opportunity for more park space.

In addition, take the other build alternatives out of the study and finally, have Metro staff to continue their close relationship with the Savoy Homeowners Association in order to address the construction and operations impacts of the Regional Connector project.

Thank you,

Barbara Bauza
(213) 718-6149
bbauza@lausd.net

Subject: FW: Regional Connector Project
Date: Thursday, February 25, 2010 11:28 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

-----Original Message-----
From: Kenneth Hsu [mailto:kennthsu@gmail.com]
Sent: Wednesday, February 24, 2010 6:23 PM
To: Regional Connector
Subject: Regional Connector Project

To whom it may concern:

I am a resident of Little Tokyo. Since 2006, I have lived in the Savoy located on Alameda and 1st. I have enjoyed living in this area very much especially since it has been developing. It continues to draw businesses and residents. Before, I remember this area to be very run down and barren. I am writing to express my deep concern that the regional connector project will put all this development in peril. The alternative which places above ground trains through First Street into the current Office Depot parking lot is a threat, not only to the community in general, especially to fellow homeowners who have put their hard earned life savings into the Savoy condominium complex. For many like myself, who purchased their unit at the height of the housing bubble, the investment has been very difficult to sustain in the face of the current economic environment. Many fear that the years of construction that the connector would require will further destroy our investment. Furthermore, the neighborhood is developing into a nice, relatively quiet area where pedestrians can walk and enjoy shopping and eating in the Little Tokyo stores and restaurants. The regional connector threatens this character of the community by putting high volume train traffic through the heart of the neighborhood.

I implore you, PLEASE FULLY CONSIDER ALTERNATIVES WHICH WOULD NOT PUT TRAINS THROUGH THE HEART OF LITTLE TOKYO. I hear that there is a new alternative being considered which would be underground. While this may cost more to build, it would save money by saving a quickly developing community and Los Angeles attraction.

Sincerely,

Kenneth Hsu

Subject: FW: RegionalConnector:NewAlternative
Date: Wednesday, February 24, 2010 12:43 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

fyi

From: Patti DLANC [mailto:patti.berman@dlanc.com]
Sent: Wednesday, February 24, 2010 11:46 AM
To: Regional Connector; Jackson, Michelle
Subject: RegionalConnector:NewAlternative

To whom it may concern:

My name is Patti Berman And I am the VP of Outreach for the Downtown Los Angeles Neighborhood Council.

I appreciate the invitation to your meeting tomorrow, but I will be unable to attend. So, I just wanted to put in my two cents.

I want to put support strongly in favor of the fully grade-separated alternative for the Regional Connector. We are working hard to make downtown pedestrian and bike friendly. Keeping the trains below grade as much as possible fits into this model.

Thank you for keeping DLANC informed.

Patti Berman

Subject: Letter of Commendation & Appreciation from LTCC
Date: Wednesday, February 24, 2010 1:21 PM
From: June Berk <Ltccjb@aol.com>
To: Arthur Leahy LEAHYA@metro.net
Cc: Ann Kerman kermana@metro.net, Ginny Brideau ginny@therobertgroup.com

To: Arthur Leahy
cc: Ann Kerman, Metro
cc: Ginny-Marie Brideau, The Robert Group

Dear Mr. Leahy,
Attached is a scanned copy of the letter that was sent to you in the mail today. Please note that the date on the scanned copy is not correct.
The original letter is dated February 24, 2010, which is correct.

Thank you very much.
Sincerely
June Berk
818-400-3273

Little Tokyo Community Council
369 East First Street
Los Angeles, California 90012
213 **625.0414** ext **5720**
Fax 213 **625.1770**
http://ltcc.janet.org

November 24, 2009

Mr. Arthur T. Leahy
Chief Executive Officer
Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, California 90012

Re: Commendation & Appreciation

Dear Mr. Leahy:

On behalf of the Little Tokyo community, the Board of Directors of the Little Tokyo Community Council, an organization of over 100+ businesses, resident associations, religious and educational institutions and community-based organizations, would like to commend and thank the Metro Team for their hard work and efforts to develop the concept of the Fully Underground Alternative plan for consideration by the Metropolitan Transportation Authority Board of Directors for the Metro Regional Connector.

At today's meeting, the following motion was adopted by the Board of Directors:

MOTION

The Board of Directors commend and applaud the efforts of the Metro staff and the consultants for developing the concept plans of the Fully Integrated Alternative for the Regional Connector, for consideration by the Metropolitan Transit Authority Board of Directors.

The LTCC Board of Directors thank the Metro staff for listening to the concerns of the community; for creating the option specifically in response to the community's concerns by developing a conceptual plan that would clearly eliminate the at-grade train crossings at First Street and Alameda Street.

"The Little Tokyo Community Council is a nonprofit 501(c)(3) which has 90+ member organizations whose mission is to ensure that Little Tokyo would be a viable center for the Japanese American community and the Los Angeles Downtown community. The Council shall work to create a vision of what Little Tokyo should be in the future and serve as an advocate on behalf of the Little Tokyo community."

We wish to express our deep appreciation for the Metro Team's hard work and sensitivity to the community. In particular:

Dolores Roybal Saltarelli, Metro Project Manager
Ann Kerman, Metro Constituent Project Manager
Ray Sosa, CDM Consultants
Virginia Jackson, CDM Consultants
Ginny-Marie Brideau, Project Manager, The Robert Group
Clarissa Filgioun, The Robert Group

We are looking forward to continuing to work with the Metro Team on this option, which we hope will be added to the Draft Environmental Impact Statement/Report (Draft EIS/R) by the MTA Board of Directors.

Sincerely,

Bill Watanabe
Chair, Little Tokyo Community Council

cc: Dolores Roybal Saltarelli
Ann Kerman
Ray Sosa
Virginia Jackson
Ginny-Marie Brideau
Clarissa Filgioun

cc: LTCC Board of Directors:
Alan Kumamoto, 1st Vice Chair, Kumamoto Associates
Frances Hashimoto, 2nd Vice Chair, Mikawaya Inc.
Mike Okamoto, Co-Secretary, Asian American Architects & Engineers Assoc.
Kei Nagao, Co-Secretary, J-Town Voice
Eric Kurimura, Nishi Hongwanji Buddhist Temple
Chris Aihara, Past Chair, Japanese American Cultural & Community Center
Tom Kamei, Past Chair, Japanese Chamber of Commerce of So. CA
Noriaki Ito, Past Chair, Higashi Honganji Buddhist Temple
Howard Nishimura, Past Chair, Tokyo Villa Homeowners Association
Craig Ishii, Japanese American Citizens League
Goro Endo, Union Church of Los Angeles
Ken Kasamatsu, Pacific Commerce Bank
Brian Kito, Fugetsu-do and Little Tokyo Public Safety Association
Jeff Liu, Visual Communications
Tatsushi Nakamura, Japanese Prefectural Association
Wilbur Takashima, Little Tokyo Teramachi Owners Association
Satoru Uyeda, SK Uyeda Investments
Hiroshi Yamaguchi, Japanese Community Pioneer Center
Akemi Kikumura Yano, Japanese American National Museum
Evelyn Yoshimura, Little Tokyo Residents Association

Subject: FW: RegionalConnector:NewAlternative
Date: Thursday, February 25, 2010 11:27 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

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From: Darryl Garibay [mailto:dagaribay@sbcglobal.net]
Sent: Thursday, February 25, 2010 9:04 AM
To: Regional Connector; Jackson, Michelle
Subject: RegionalConnector:NewAlternative

MTA:

I will be unable to attend the Board meeting this morning, but wanted to make a brief statement for the record as a business person in Little Tokyo.

I am in support of the MTA continuing on with their study of the "All Underground/3rd Build Alternative" alternative for the Regional Connector. I am hopeful that the Board will vote to allow that study to move forward and become an official part of the options that are being considered by the MTA.

Thank you,

Darryl Garibay, President
Advanced **P**arking **S**ystems
544 Mateo Street, Third Floor
Los Angeles, CA 90013
P: 213-628-9500
F: 213-628-9600

Subject: FW: RegionalConnector:NewAlternative
Date: Thursday, February 25, 2010 11:27 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

-----Original Message-----
From: Linda Blakeman [mailto:linda@emseminars.com]
Sent: Thursday, February 25, 2010 10:00 AM
To: Regional Connector; Jackson, Michelle; Kerman, Ann
Subject: RegionalConnector:NewAlternative

Hi Ann,

We spoke awhile back about the need for green space in the Little Tokyo area that would include a park for children. As you know, there are many young, growing families at the Savoy, Mura, and other condo complexes in the area. As an educator with over 20 years experience, I am concerned that the needs of children have been overlooked in the redevelopment of Little Tokyo and the Arts District.

Currently, many young couples who invested in this area (especially at Savoy) are now upside down in their mortgages; and are having to live longer in their units until the market turns again. This means that for the next 10 years, we will be seeing more young children in the area. This is good for the growth of the community, but with that growth, adjustments need to be made.

We need a safe place where children can play and young parents can congregate in the community. It should have green space, but could be carefully designed to include shopping and eateries. All parking should be underground. A japanese garden would enhance the area and create a welcoming place for the community to walk to. Efforts in design must be made to modernize and enhance the feel of the Little Tokyo/ Arts District community, and not distract from it.

I would be happy to get signatures, as there is growing interest and excitement about this proposal. We may also want to consider space for a preschool and/or creative arts charter school.

I would be happy to do the necessary preliminary work and present this request to the board meeting next month.
(I could come today, too, if necessary.)

Thank you for all that you are doing to listen to the concerns and needs of the community.

Respectfully,

Linda Blakeman
Savoy, Unit 302
100 S. Alameda Street,
Los Angeles, CA 90012
213-447-0044

Subject: FW:

Date: Tuesday, March 16, 2010 5:28 PM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com

---

From: Ochoa, Harold [mailto:HOchoa@mednet.ucla.edu]
Sent: Tuesday, March 09, 2010 1:31 PM
To: Regional Connector
Subject:

I think the plans are great , once the phase that goes to ucla, I won't be needing my car any longer, the gold line its away from my home. Thanks metro.

Harold Ochoa

Adm. Assistant.

UCLA- **Patient Business Services**
10920 Wilshire, Blvd. suit: 1600
Los Angeles, California. 90024.
email: hochoa@mednet.ucla.edu
tel: 310-794-8480.
fax: 310-794-8426.

Please consider the environment before printing this e-mail.

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Subject: FW: [Metro.net] customer comment
Date: Monday, April 19, 2010 9:51 AM
From: Regional Connector <RSC_RegionalConnector@metro.net>
To: Ginny Brideau ginny@therobertgroup.com, Clarissa Filgioun clarissa@therobertgroup.com, Dolores Roybal Saltarelli roybald@metro.net

fyi

-----Original Message-----
From: feedback@metro.net [mailto:feedback@metro.net]
Sent: Saturday, April 17, 2010 11:49 AM
To: Regional Connector
Subject: [Metro.net] customer comment

Comment from

First Name: Elisabetta
Last Name: Taffoni-Burke
Email: elisabettataffi@yahoo.com
Phone: 626 975-2607
URL:

Previously I attended one of your meeting regarding the metro system and the regional connector transit corridor. I still feel that it is highly unwise to have a rail system to run on surface. With a higher density population in downtown the metro it will worsen the traffic. In Pasadena where I live the decision to have railroad crossing on street level it is worsen traffic backing up lines of cars on the boulevards and creating more pollution from the cars exhaustion. Reconsider your decision looking at the future.

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX I

AGENCY COORDINATION AND PUBLIC INVOLVEMENT
Public Agency Meeting Matrix (Post Scoping)

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Post-Scoping Agency Meetings

Date	Agency Meeting
June 10, 2009	Los Angeles Department of Transportation
June 18, 2009	City of Los Angeles Bureau of Engineering
June 30, 2009	Technical Advisory Committee
July 1, 2009	Los Angeles County Department of Power and Water and Flood Control
July 22, 2009	Little Tokyo Planning and Cultural Preservation Committee
July 22, 2009	Los Angeles Conservancy
August 6, 2009	Los Angeles Police Department, Los Angeles Fire Department, Los Angeles County Sheriff's Department
August 13, 2009	Central City East Arts District
September 2, 2009	Los Angeles Department of Historic Resources
October 22, 2009	Technical Advisory Committee
November 4, 2009	Elected Officials Briefing
December 1, 2009	Los Angeles Department of Transportation
February 8, 2009	MTA Operations
March 16, 2010	Los Angeles Department of Transportation
March 24, 2010	Elected Officials Briefing
April 8, 2010	Technical Advisory Committee

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX II

CONCEPTUAL DRAWINGS FOR BUILD ALTERNATIVES ANALYZED IN THE DRAFT EIS/EIR

State Clearinghouse Number: 2009031043

APPENDIX II: CONCEPTUAL ENGINEERING DRAWINGS

Plans and Profiles

Construction Staging Sites

Station Site Footprints

Right – of – Way

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX II

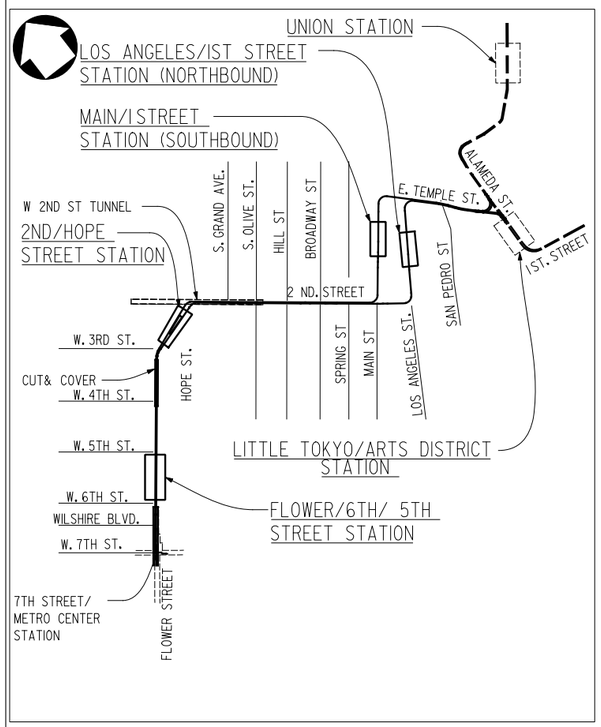
CONCEPTUAL ENGINEERING DRAWINGS
Plans and Profiles

State Clearinghouse Number: 2009031043

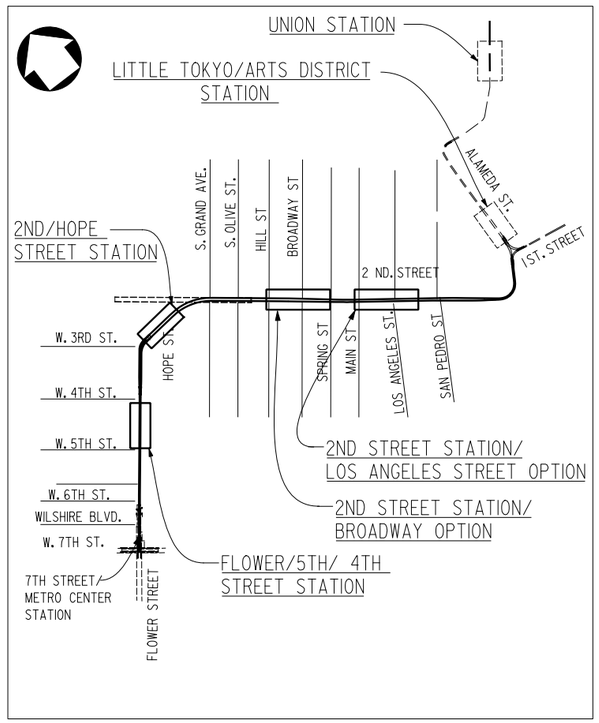
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

REGIONAL CONNECTOR TRANSIT CORRIDOR
DRAFT CONCEPTUAL PLANS AND PROFILES

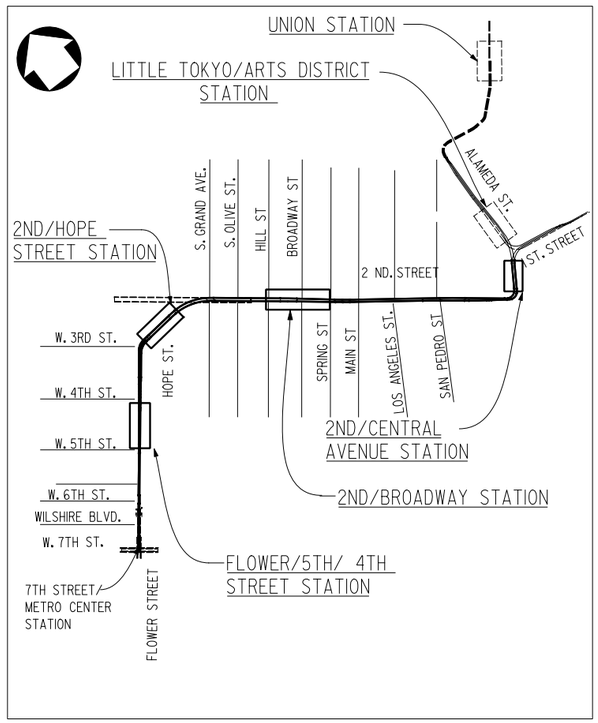
DECEMBER 18, 2009



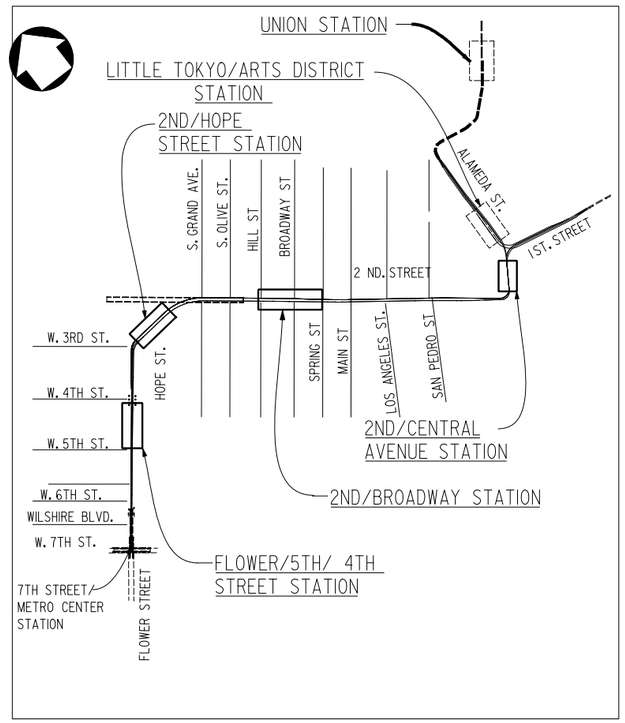
AT-GRADE EMPHASIS
LRT ALTERNATIVE



UNDERGROUND EMPHASIS
LRT ALTERNATIVE



FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1



FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro CDM PB

INDEX OF DRAWINGS

DWG NUMBER	NAME
GC-000	COVER SHEET
GC-001	INDEX OF DRAWINGS, SHEET 1 OF 2
GC-002	INDEX OF DRAWINGS, SHEET 2 OF 2
GC-003	KEY MAP FOR AT-GRADE EMPHASIS LRT ALTERNATIVE
GC-004	KEY MAP FOR UNDERGROUND EMPHASIS LRT ALTERNATIVE
GC-005	KEY MAP FOR FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 1
GC-006	KEY MAP FOR FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 2

AT-GRADE EMPHASIS LRT ALTERNATIVE

C-101	PLAN AND PROFILE STA 0+00 TO STA 25+00
C-102	PLAN AND PROFILE STA 25+00 TO STA 45+00
C-103	PLAN AND PROFILE STA 40+00 TO STA 65+00
C-104	PLAN AND PROFILE STA 65+00 TO STA 78+00
C-105	PLAN AND PROFILE STA 78+00 TO STA 101+00
C-106	ALAMEDA ST. UNDERPASS AT TEMPLE ST. PLAN AND PROFILE

UNDERGROUND EMPHASIS LRT ALTERNATIVE

C-301	PLAN AND PROFILE STA 0+00 TO STA 24+00
C-302	PLAN AND PROFILE STA 24+00 TO STA 40+00
C-303	PLAN AND PROFILE STA 40+00 TO STA 65+00
C-304	PLAN AND PROFILE STA 65+00 TO STA 86+00
C-305	TEMPORARY CONSTRUCTION SHAFT CUT AND COVER STRUCTURE
C-306	ALAMEDA ST. UNDERPASS AT 1ST. ST. PLAN AND PROFILE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE DEC 2009

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

INDEX OF DRAWINGS

CONTRACT NO

DRAWING NO GC-001 REV

SCALE

SHEET NO

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INDEX OF DRAWINGS (CONTINUATION)

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	FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 1
C-401	PLAN AND PROFILE STA 0+00 TO STA 24+00
C-402	PLAN AND PROFILE STA 24+00 TO STA 40+00
C-403	PLAN AND PROFILE STA 40+00 TO STA 65+00
C-404	PLAN AND PROFILE STA 65+00 TO STA 87+00
C-405	PLAN AND PROFILE STA 87+00 TO STA 99+70.38

DWG NUMBER	NAME
	FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 2
C-501	PLAN AND PROFILE STA 0+00 TO STA 24+00
C-502	PLAN AND PROFILE STA 24+00 TO STA 40+00
C-503	PLAN AND PROFILE STA 40+00 TO STA 65+00
C-504	PLAN AND PROFILE STA 65+00 TO STA 87+00
C-505	PLAN AND PROFILE STA 87+00 TO STA 99+75.01

DRAFT

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INDEX OF DRAWINGS
SHEET 2 OF 2

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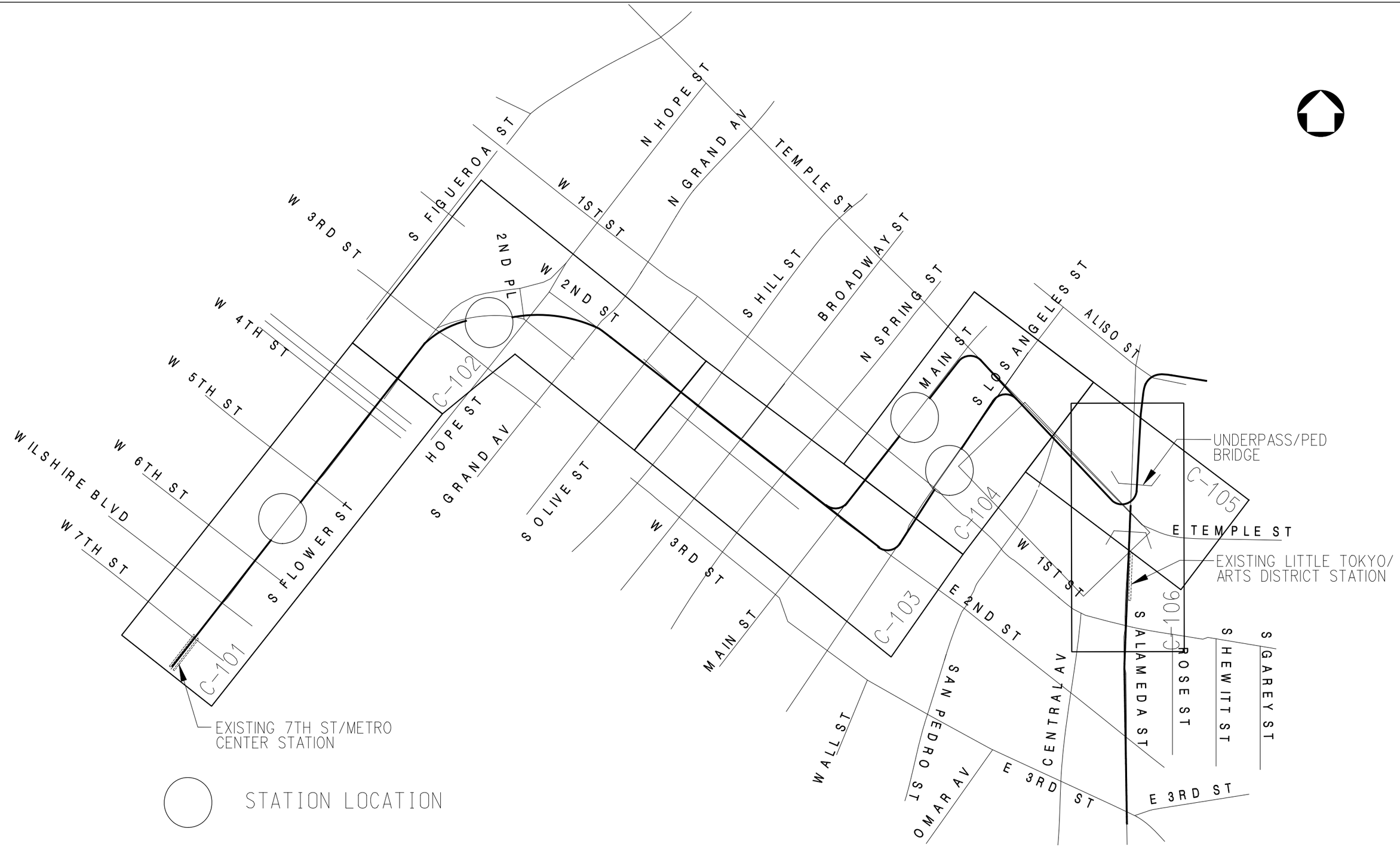

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ADV. CONCEPTUAL ENGINEERING

KEY MAP FOR AT-GRADE EMPHASIS
LRT ALTERNATIVE

CONTRACT NO
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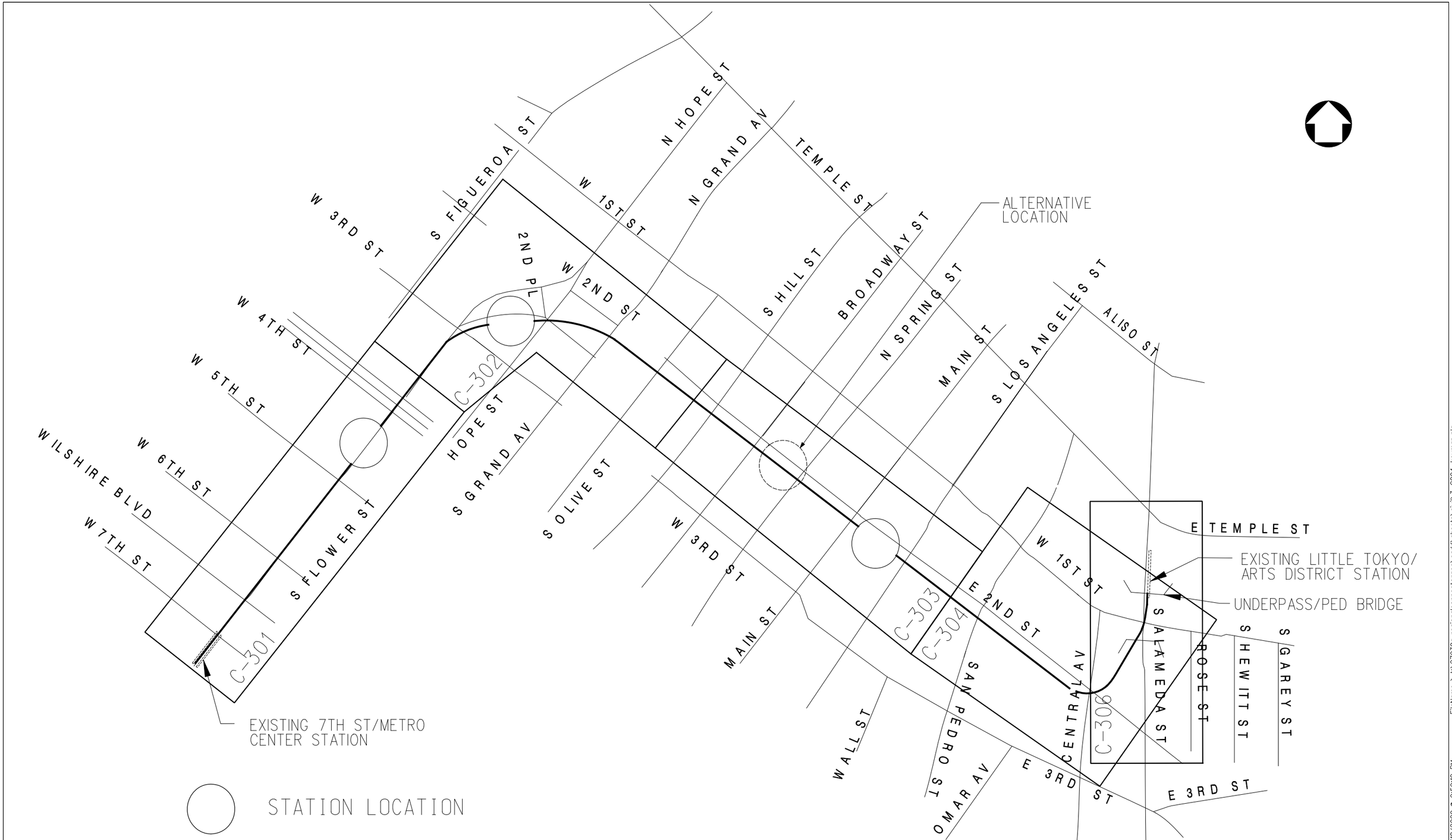

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KEY MAP FOR UNDERGROUND EMPHASIS LRT ALTERNATIVE

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W 3RD ST
S FIGUEROA ST
W 1ST ST
N HOPE ST
N GRAND AV
TEMPLE ST
2ND PL
W 2ND ST
S HILL ST
BROADWAY ST
N SPRING ST
MAIN ST
S LOS ANGELES ST
ALISO ST
W 4TH ST
W 5TH ST
C-402
HOPE ST
S GRAND AV
S OLIVE ST
W 6TH ST
WILSHIRE BLVD
W 7TH ST
S FLOWER ST
C-401
C-405
E TEMPLE ST
W 1ST ST
E 2ND ST
W 3RD ST
MAIN ST
C-403
C-404
S ALAMEDA ST
ROSE ST
S HEWITT ST
S GAREY ST
VIGNES ST
WALL ST
SAN PEDRO ST
CENTRAL AV
E 3RD ST
OMAR AV
E 3RD ST

EXISTING 7TH ST/METRO CENTER STATION

EXISTING LITTLE TOKYO/ ARTS DISTRICT STATION

STATION LOCATION

DRAFT

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KEY MAP FOR FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1

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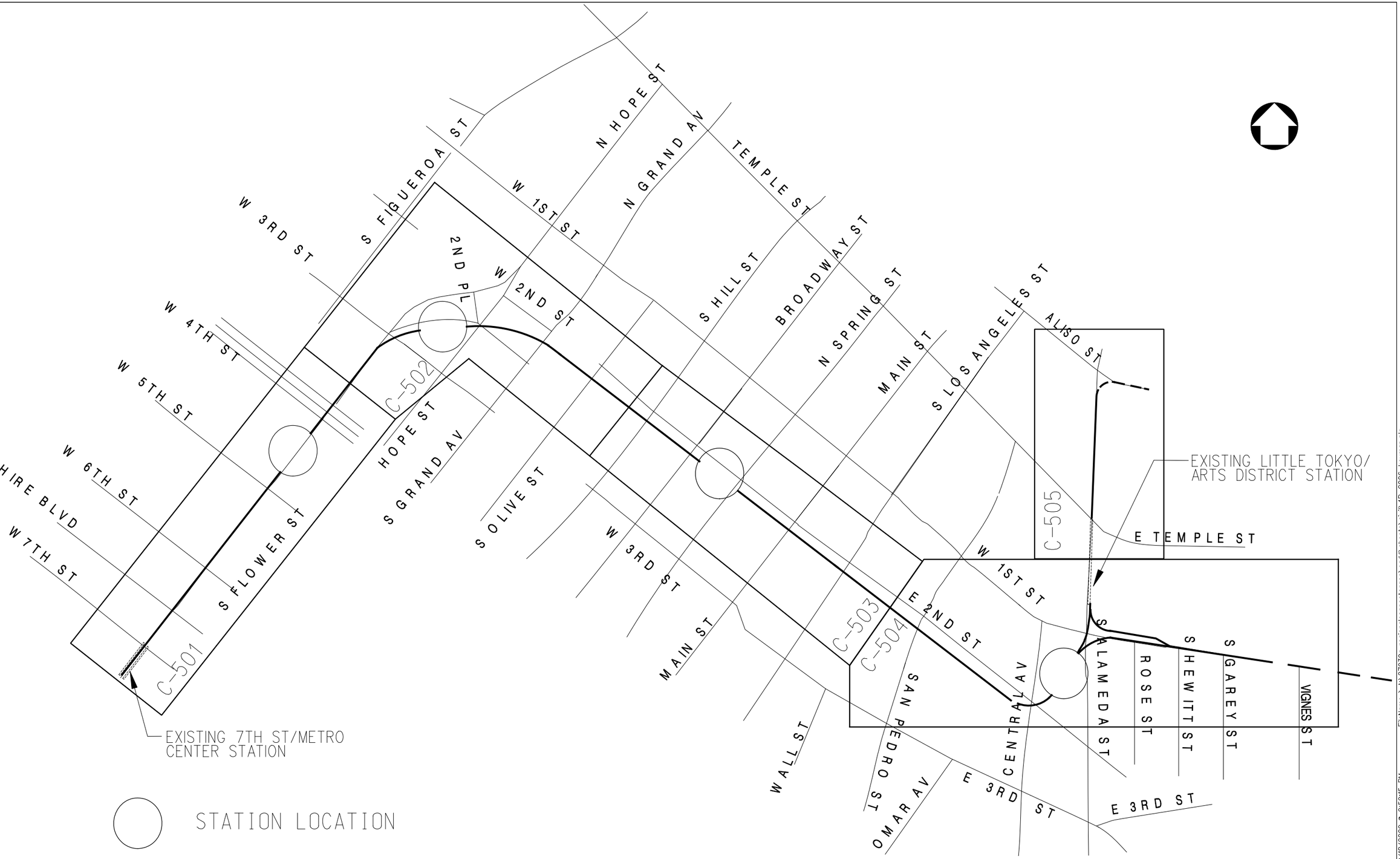

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DATE DEC 2009

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ADV. CONCEPTUAL ENGINEERING

KEY MAP FOR FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2

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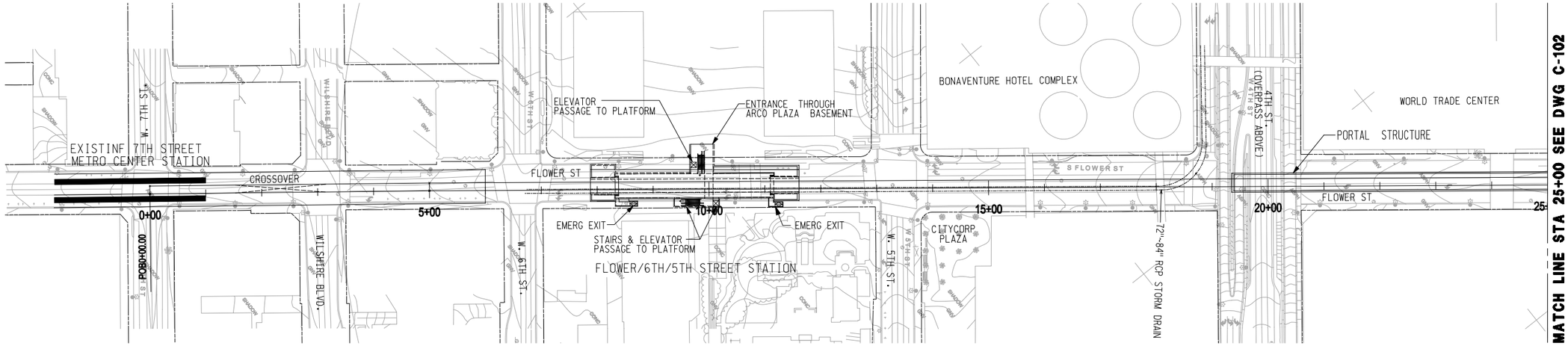

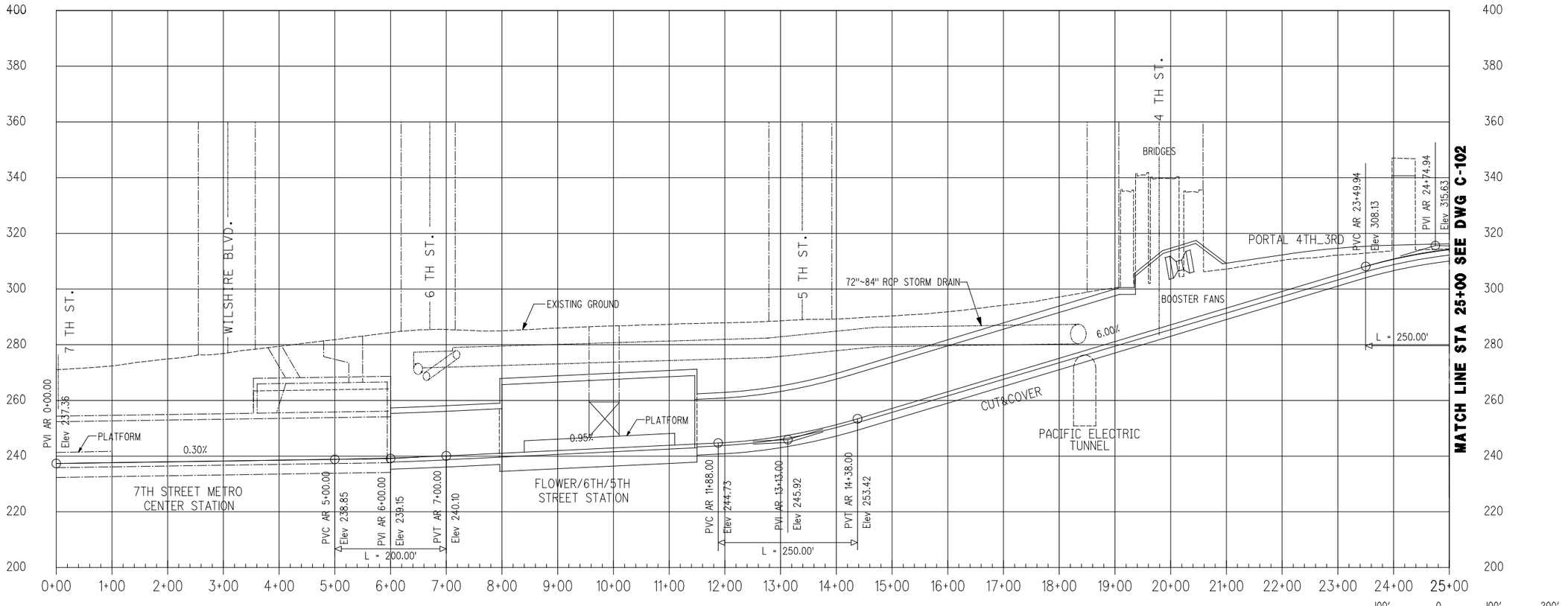

NOTES:
1. FOR LINE CUT&COVER SECTIONS SEE DWGS. C-130, C-131, C-132, C-133 & C-134
2. FOR FLOWER/6TH_5TH STATION SEE DWG. A1-001

HORIZ 100' 0 100' 200'
VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
Metro
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PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 0+00 TO STA 25+00

CONTRACT NO
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REV
SCALE 1"=100
SHEET NO

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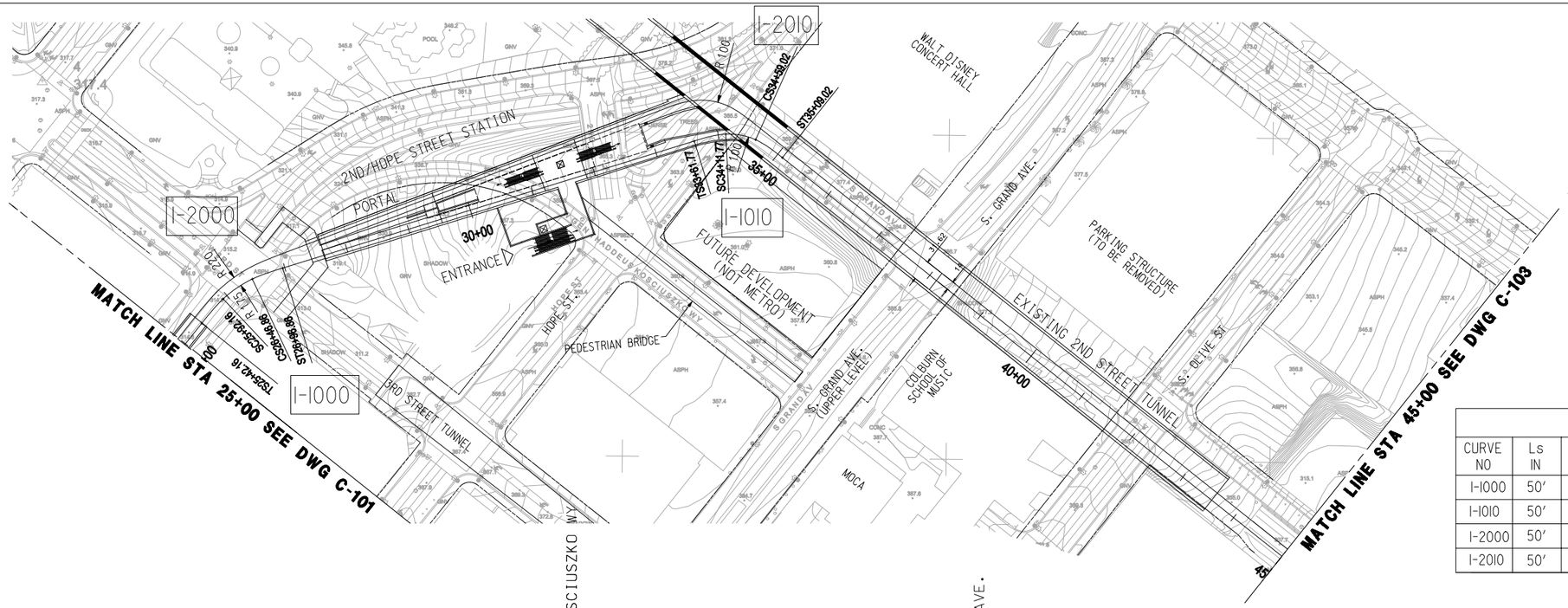

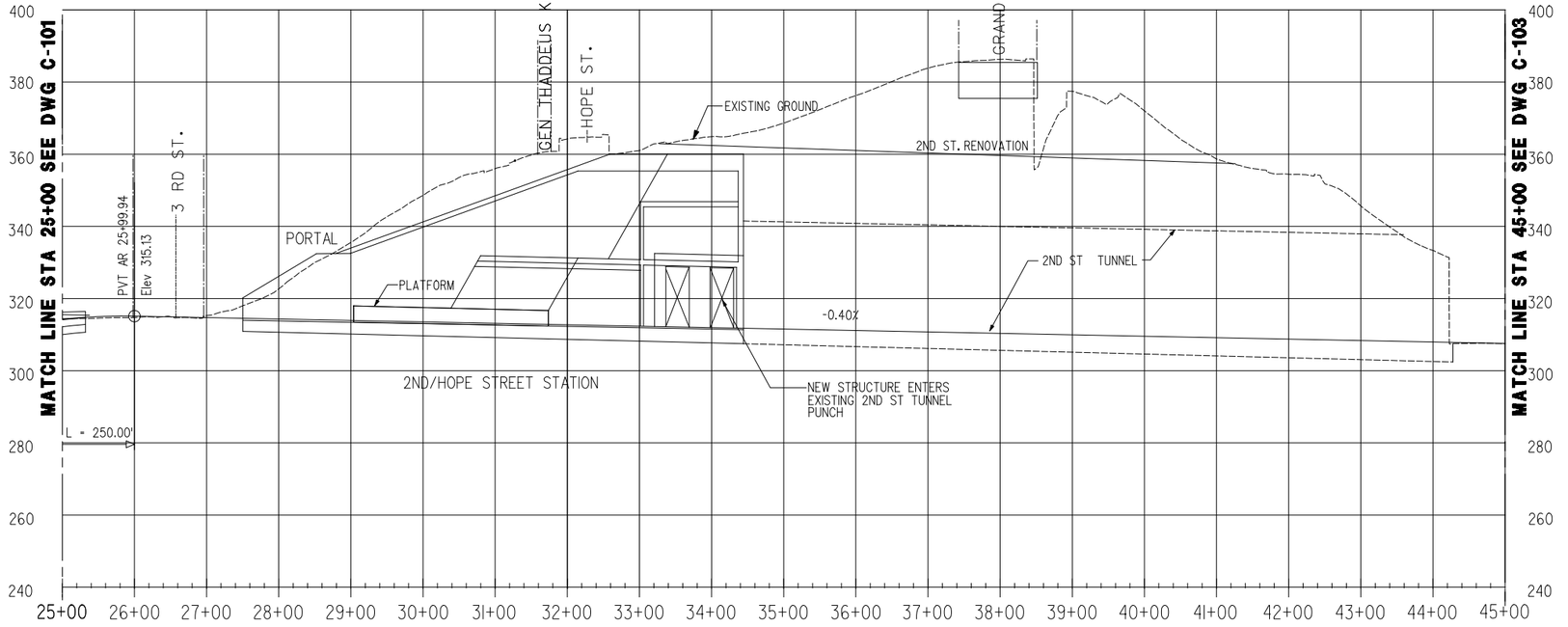

CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
I-1000	50′	50′	17°54′32"	175′	54.70′	2.19"	0"	2.19"	10
I-1010	50′	50′	27°17′45"	100′	47.25′	3.83"	1"	2.83"	10
I-2000	50′	50′	17°38′53"	220′	67.76′	2.51"	0"	2.51"	12
I-2010	50′	50′	30°41′03"	100′	53.55′	3.83"	1"	2.83"	10

NOTES:

1. FOR CONNECTION OF EXISTING 2ND ST. TUNNEL AND BUNKER HILL STATION SEE DWGS. S-106 & S-108

100′ 0 100′ 200′
HORIZ
20′ 0 20′ 40′
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 25+00 TO STA 45+00

CONTRACT NO
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SCALE 1"=100
SHEET NO

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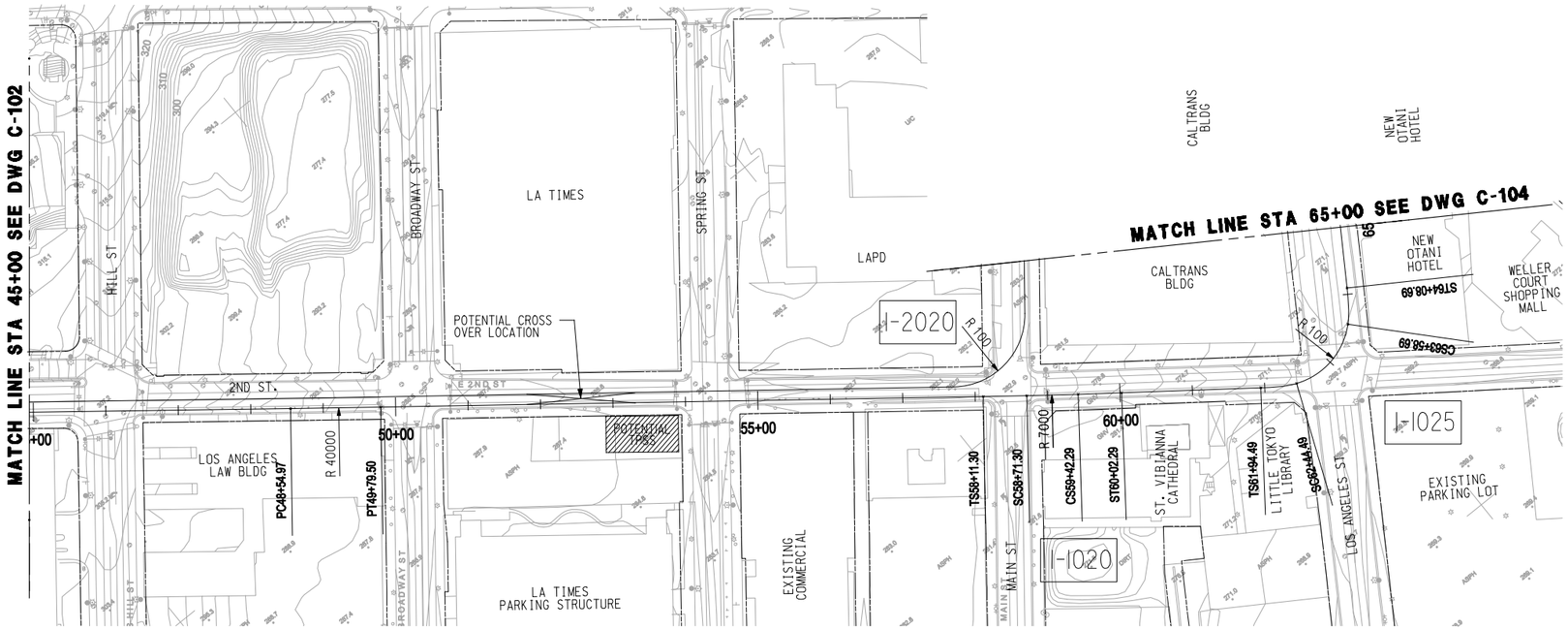

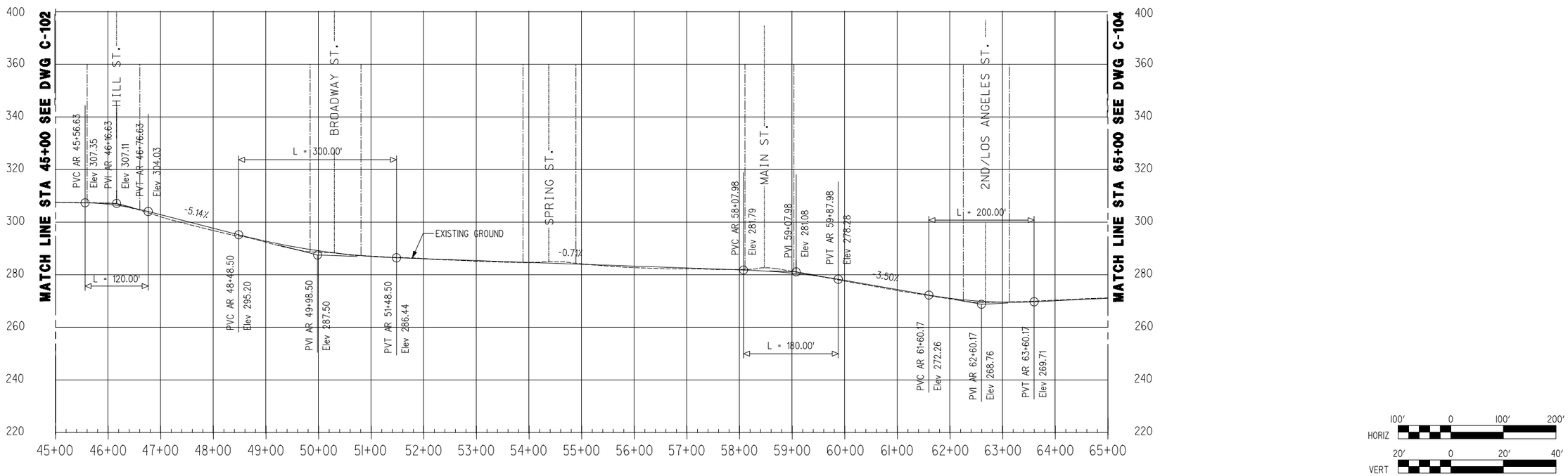

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I-2025	50′	50′	89°41′523″	100′	114.20′	3.83″	0″	3.83″	10

HORIZ 100′ 0 100′ 200′

VERT 20′ 0 20′ 40′

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 45+00 TO STA 65+00

CONTRACT NO
DRAWING NO C-103
REV
SCALE 1"=100
SHEET NO

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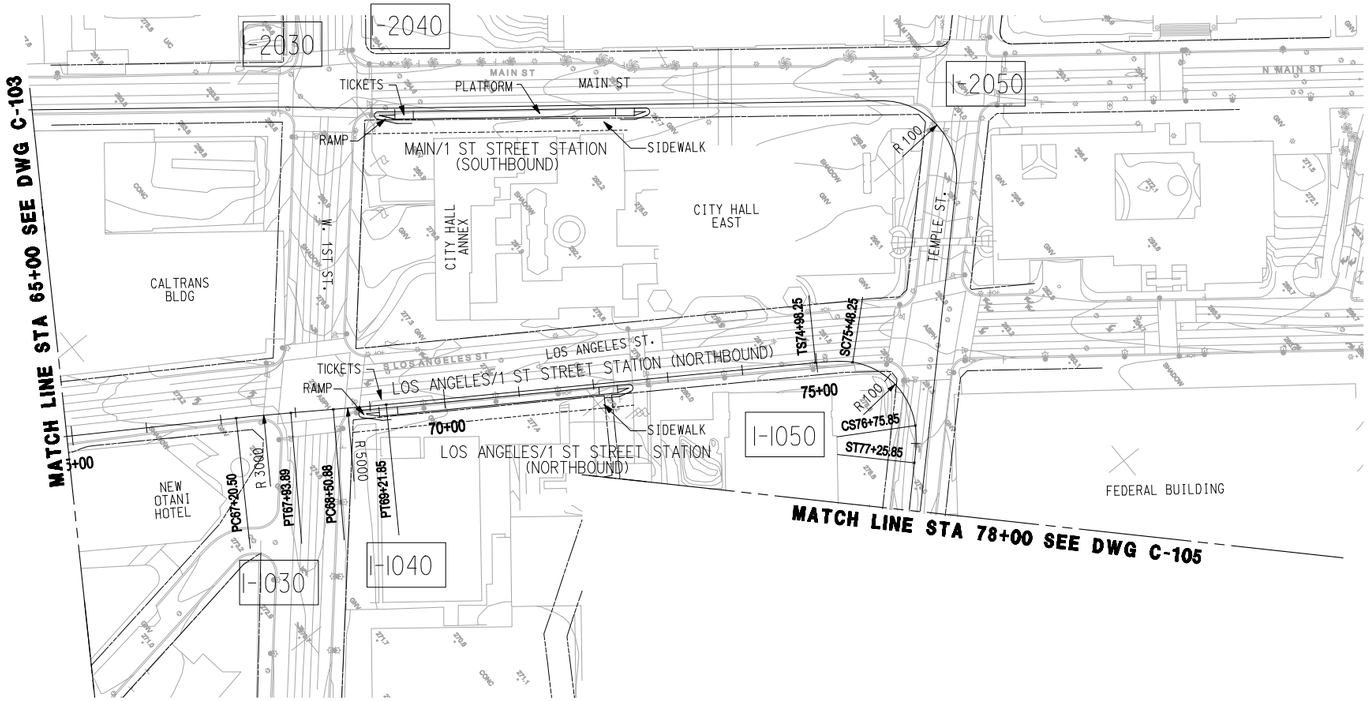

CURVE DATA									
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I-1040	—	—	0°48'47"	5000'	70.96'	0.48"	0"	0.48"	25
I-1050	50'	50'	101°45'24"	100'	127.60'	3.89"	1"	2.89"	10
I-2030	—	—	1°45'15"	2500'	76.55'	0.95"	0"	0.95"	25
I-2040	—	—	1°55'13"	2200'	73.73'	1.09"	0"	1.09"	25
I-2050	—	—	97°10'11"	100'	169.59'	3.89"	1"	2.89"	10

100' 0 100' 200'
HORIZ
20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 65+00 TO STA 78+00

CONTRACT NO
DRAWING NO C-104 REV
SCALE 1" = 100'
SHEET NO

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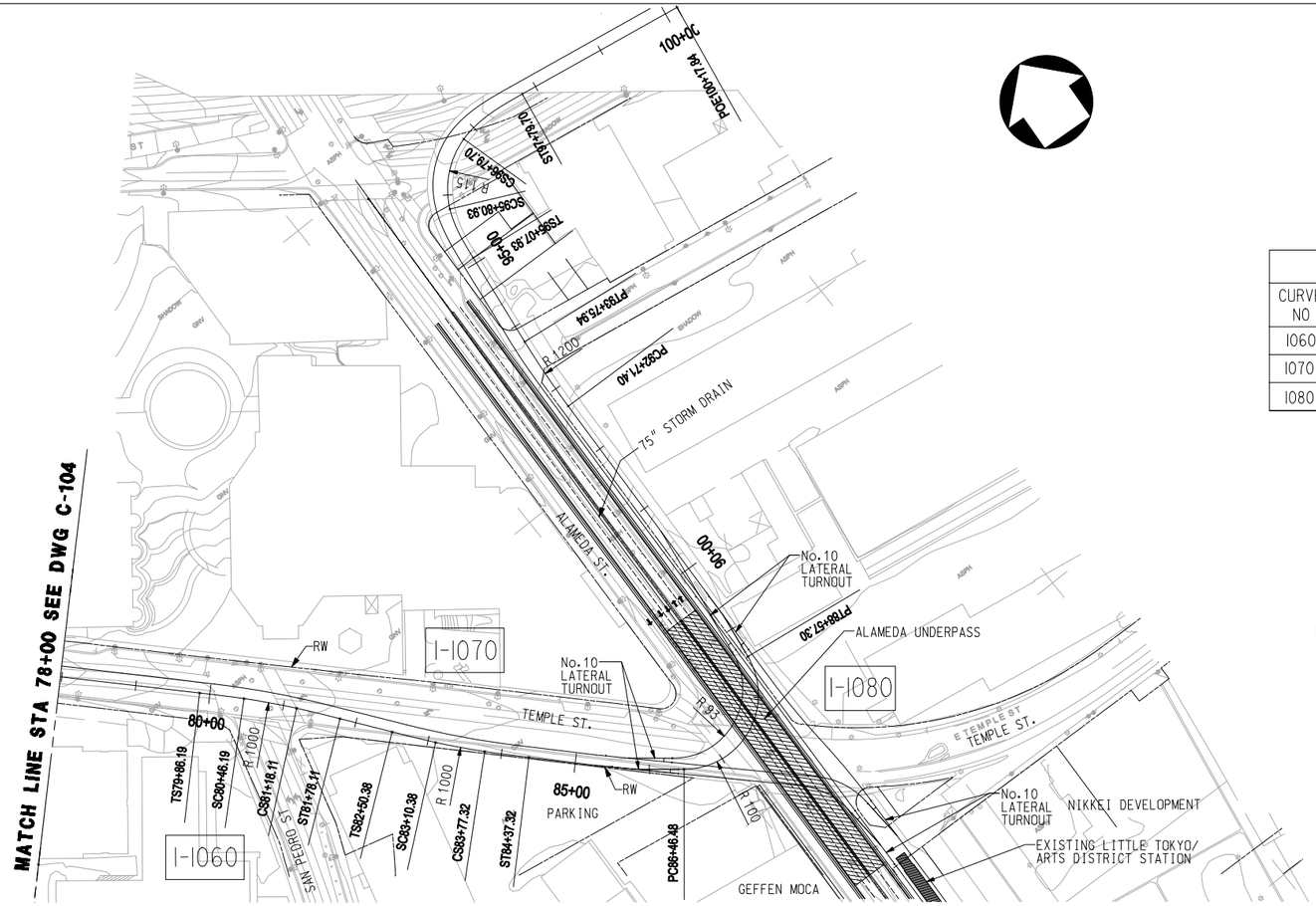
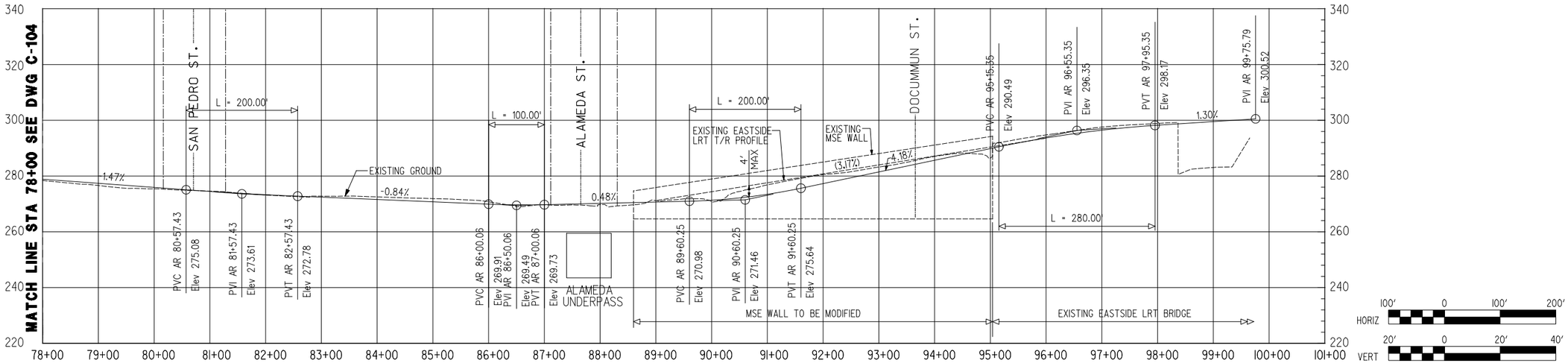


CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
1060	60′	60′	7°26′52″	1000′	155.99′	2.39"	0"	2.39"	25
1070	60′	60′	7°16′22"	1000′	152.32′	2.39"	0"	2.39"	25
1080	—	—		100′	210.82′	3.84"	0"	3.84"	10

NOTES:

1. FOR TEMPLE/ALAMEDA UNDERPASS SEE DWG. C-106



HORIZ 100′ 0 100′ 200′

VERT 20′ 0 20′ 40′

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DRAFT

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 78+00 TO STA 101+00

CONTRACT NO
DRAWING NO C-105
REV
SCALE 1"=100′
SHEET NO

UserName: USER-gr1ff1th
12/08/2009 @ 8:58:27 PM
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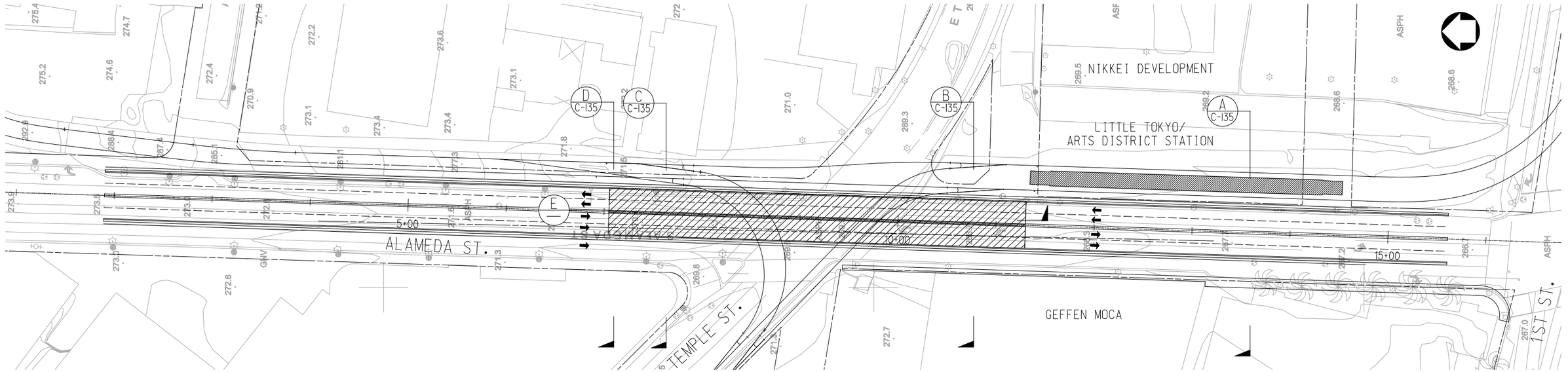
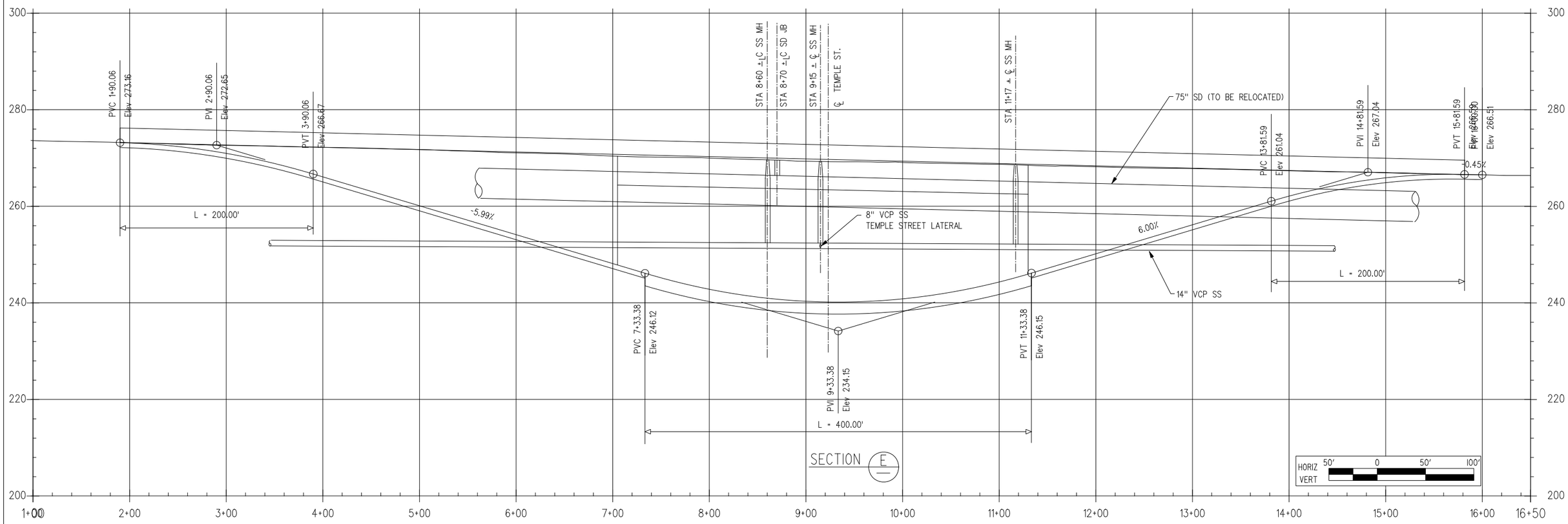




DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

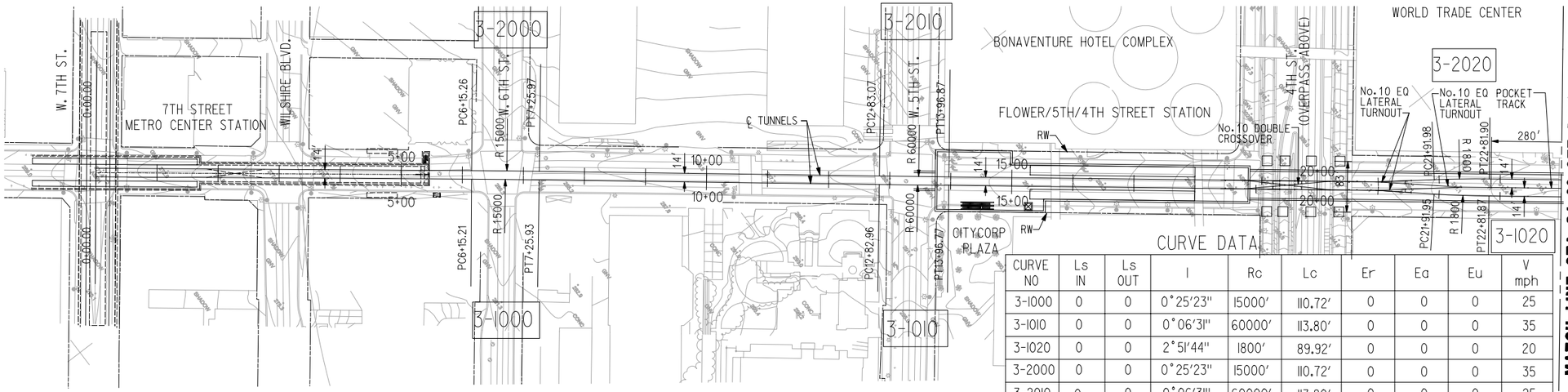
PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
ALAMEDA ST. UNDERPASS AT TEMPLE ST.

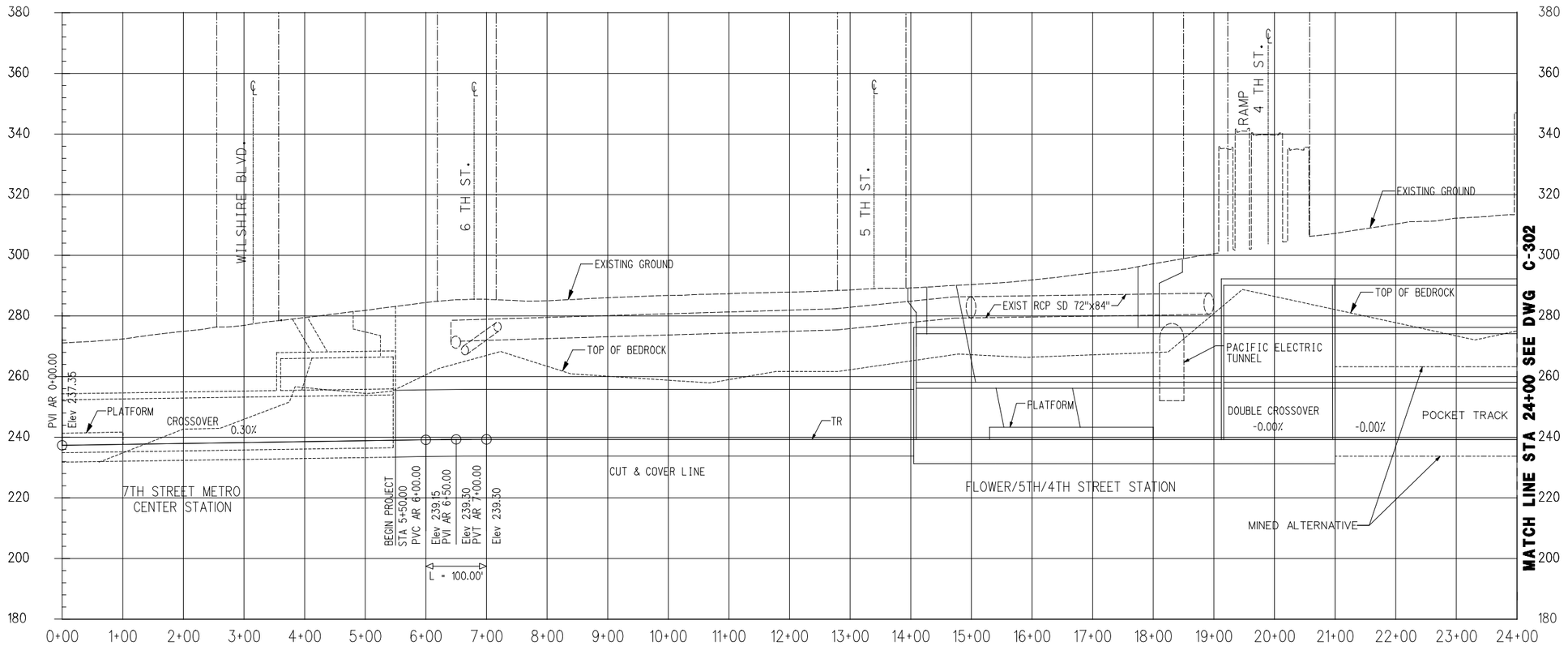
CONTRACT NO
DRAWING NO C-106
REV
SCALE 1"=50'
SHEET NO

UserName: USER-griffith2 Date: 8/6/2009 @ 8:56:29 PM FileName=> h:\27939a-regionalconnector\ace\cadd\sheets\civil\alternative lN\C-106.plg



CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1000	0	0	0°25'23"	15000'	110.72'	0	0	0	25
3-1010	0	0	0°06'31"	60000'	113.80'	0	0	0	35
3-1020	0	0	2°51'44"	1800'	89.92'	0	0	0	20
3-2000	0	0	0°25'23"	15000'	110.72'	0	0	0	35
3-2010	0	0	0°06'31"	60000'	113.80'	0	0	0	25
3-2020	0	0	2°51'44"	1800'	89.92'	0	0	0	20



NOTES:

1. FOR FLOWER/ 5TH_4TH STATION SEE DWG. A3-001
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-330 & C-331 C-332, C-333 & C-334

HORIZ 100' 0 100' 200'

VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

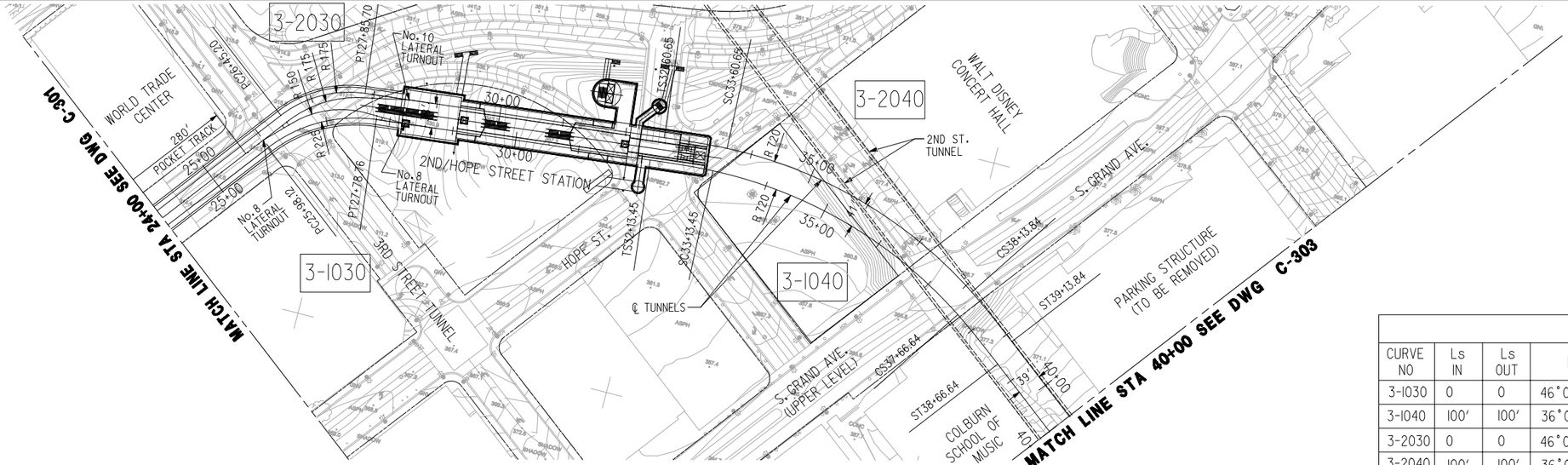
CDM PROJECT MANAGER

PB

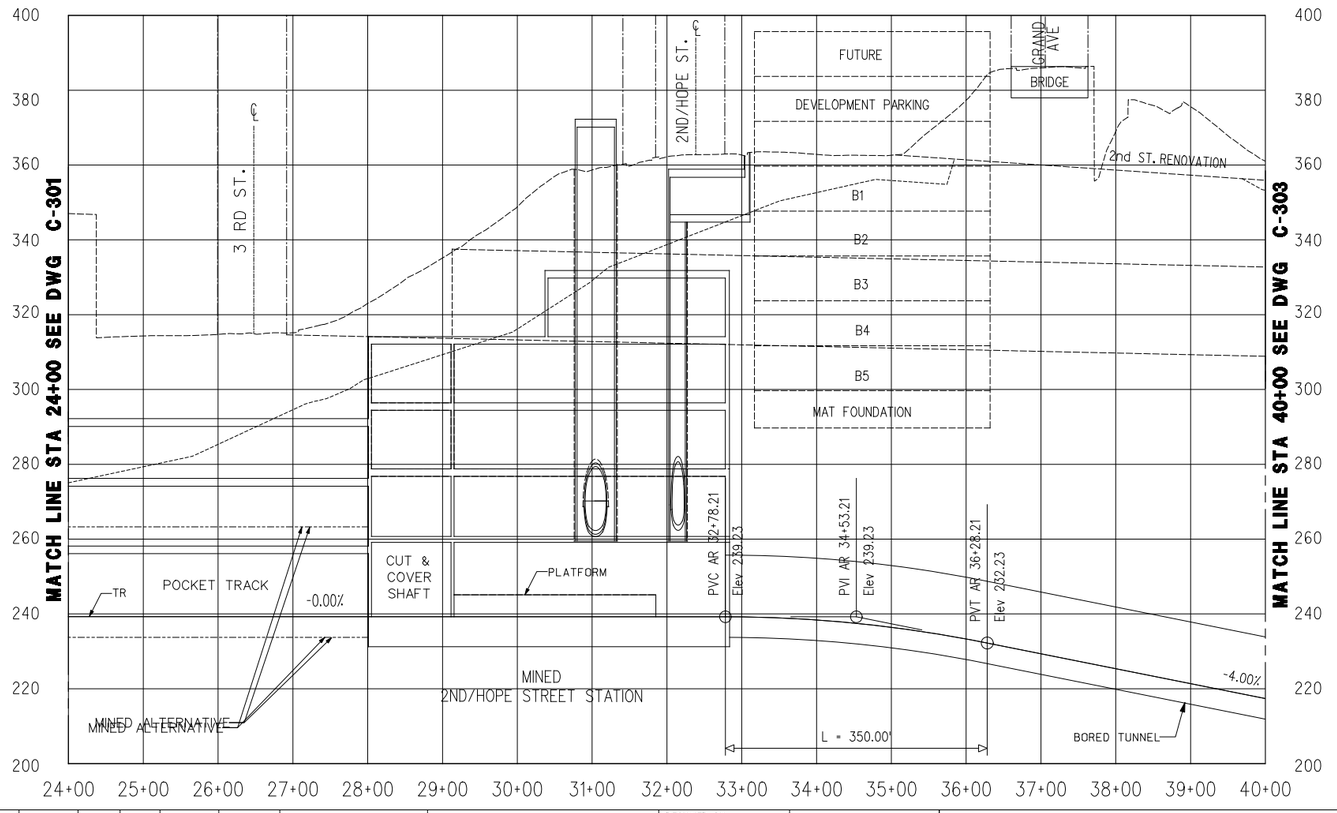
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 0+00 TO STA 24+00

CONTRACT NO
DRAWING NO C-301
REV
SCALE 1"=100'
SHEET NO

UserName: USER-grfiffin2 Date/Time: 12/8/2009 @ 8:58:33 PM FileName=> I:\27939a-regionalconnector\ace\cadd\sheets\civil\alternative 3\3_C-301.plg

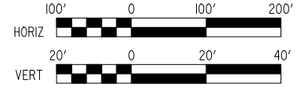


CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1030	0	0	46°00'00"	225'	180.64"	0"	0"	0"	20
3-1040	100'	100'	36°03'49"	720'	453.19'	6.53"	4.00"	2.53"	35
3-2030	0	0	46°00'00"	175'	140.50'	0"	0"	0"	25
3-2040	100'	100'	36°03'49"	720'	453.19'	6.53"	4.00"	2.53"	35



NOTES:

1. FOR BUNKER HILL STATION DETAILS SEE DWG. A3-002
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-334, C-335, C-336 & C-337



DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

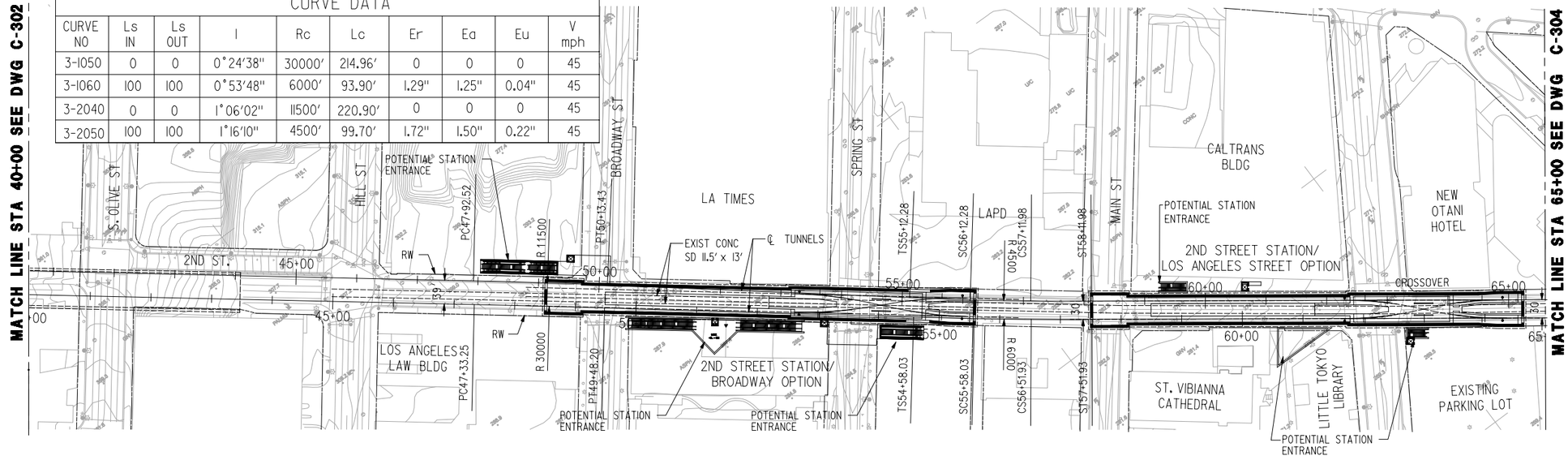
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 24+00 TO 40+00

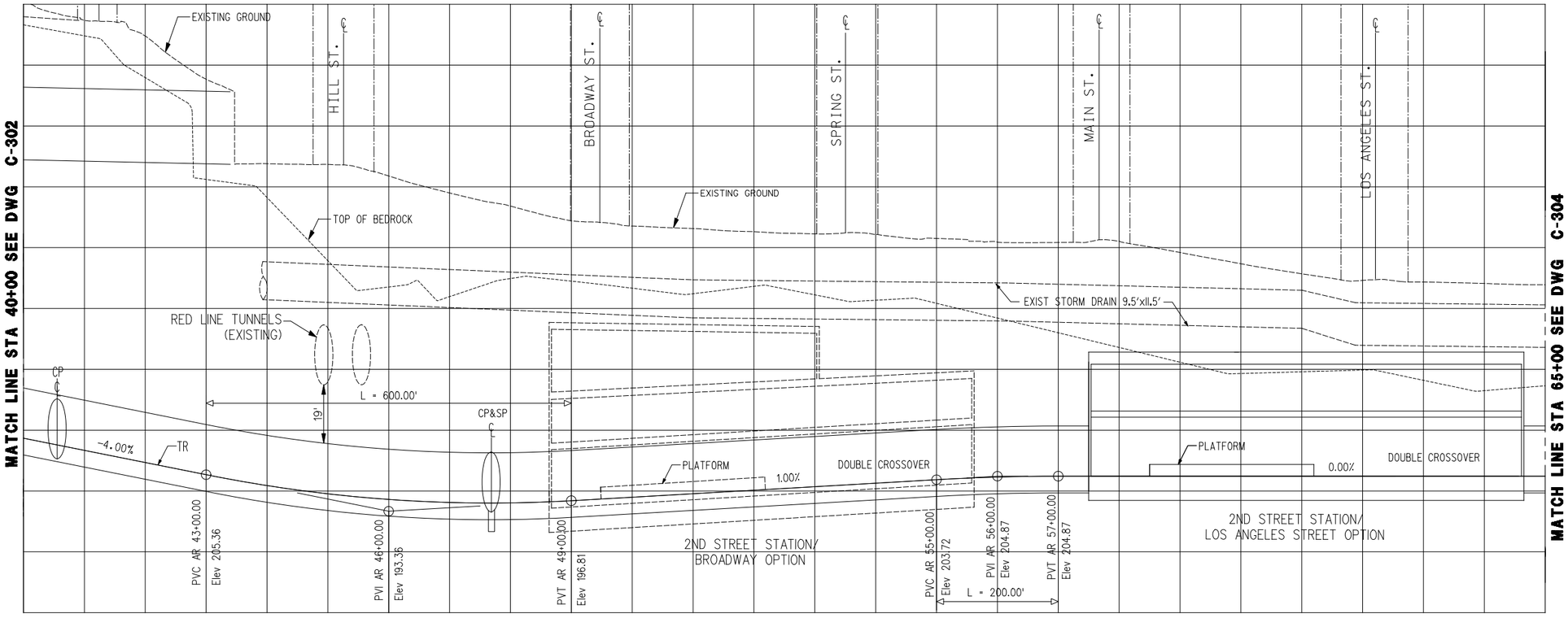
CONTRACT NO
DRAWING NO C-302
REV
SCALE 1" =100'
SHEET NO

UserName: USER-grriffith Date: 12/8/2009 @ 8:58:35 PM FileName: t:\27939a-regionalconnector\acad\sheets\civil\alternative 3\3_C-302.plg

CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1050	0	0	0°24'38"	30000'	214.96'	0	0	0	45
3-1060	100	100	0°53'48"	6000'	93.90'	1.29"	1.25"	0.04"	45
3-2040	0	0	1°06'02"	11500'	220.90'	0	0	0	45
3-2050	100	100	1°16'10"	4500'	99.70'	1.72"	1.50"	0.22"	45




EXISTING GROUND
TOP OF BEDROCK
EXIST STORM DRAIN 9.5'x11.5'
RED LINE TUNNELS (EXISTING)
L = 600.00'
19'
CP ℄
CP&SP ℄
-4.00%
TR
PLATFORM
1.00%
DOUBLE CROSSOVER
0.00%
2ND STREET STATION/ BROADWAY OPTION
2ND STREET STATION/ LOS ANGELES STREET OPTION
PVC AR 43+00.00 Elev 205.36
PVI AR 46+00.00 Elev 193.36
PVT AR 49+00.00 Elev 196.81
PVC AR 55+00.00 Elev 203.72
PVI AR 56+00.00 Elev 204.87
PVT AR 57+00.00 Elev 204.87
L = 200.00'
40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

NOTE:
1. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-338,C-339 & C-340

HORIZ 100' 0 100' 200'
VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

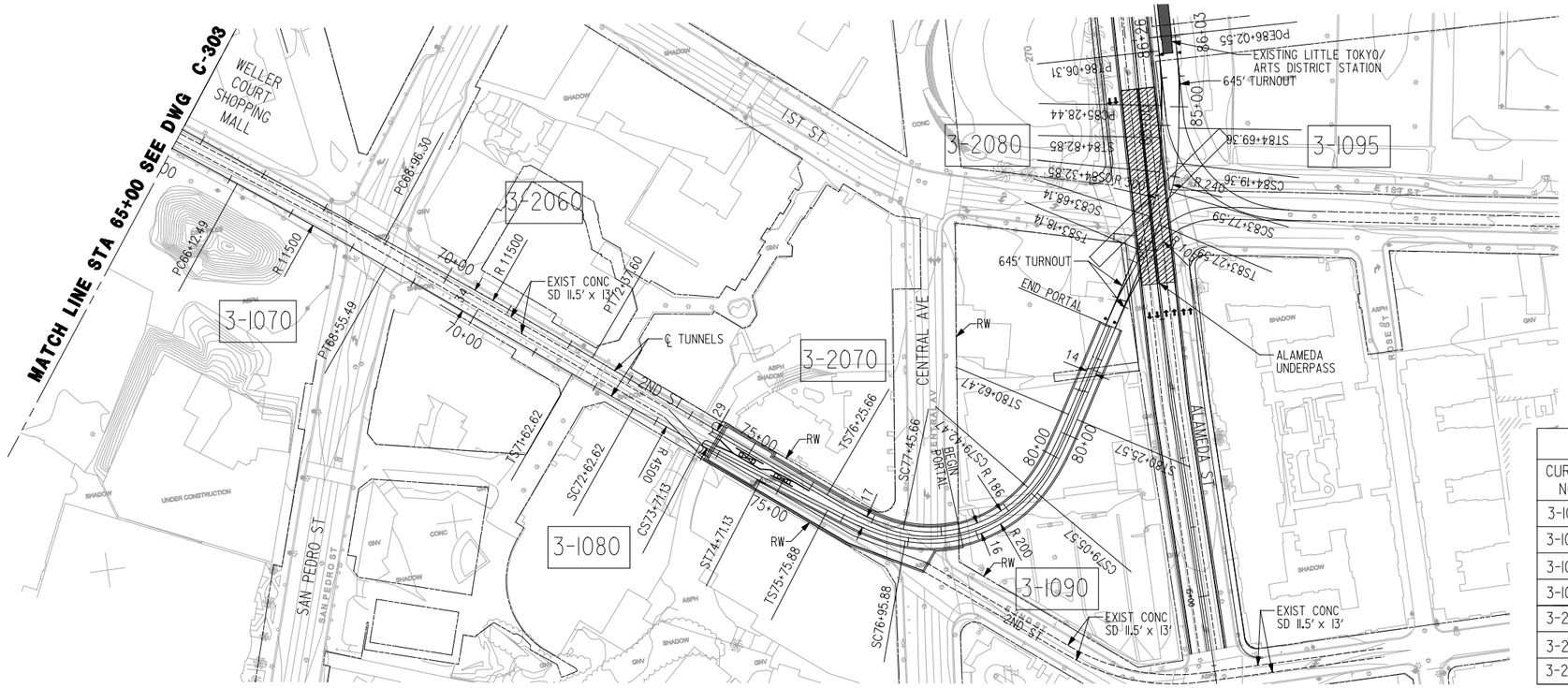
Metro CDM PB

PROJECT MANAGER

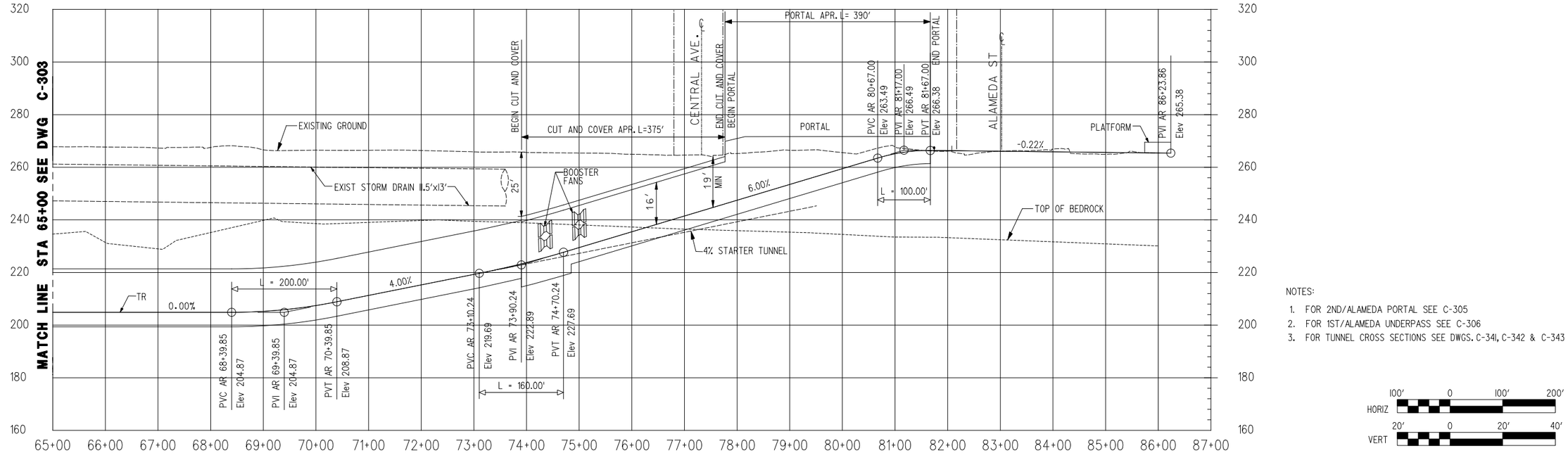
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 40+00 TO STA 65+00

CONTRACT NO
DRAWING NO C-303
REV
SCALE 1" = 100'
SHEET NO

UserName: USER-gr1ff1n2 Date/Time: 12/8/2009 @ 8:58:40 PM FileName=> I:\27939a-regionalconnector\ace\cadd\sheets\civil\alternative 3\3_C-303.plg



CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1070	0	0	1°12'49"	11500'	243.00'	0"	0"	0"	35
3-1080	100	100	1°22'54"	4500'	108.51'	0.76"	0.75"	0.01"	30
3-1090	120	120	60°04'15"	200'	209.69'	4.32"	4.00"	0.32"	15
3-1095	50	50	9°58'40"	240'	41.77'	3.59"	0.50"	3.09"	15
3-2060	0	0	1°42'01"	11500'	341.29'	0"	0"	0"	35
3-2070	120	120	60°37'36"	186'	196.81'	4.32"	4.00"	0.32"	15
3-2080	50	50	12°31'34"	300'	64.71'	2.80"	0.50"	2.30"	15



NOTES:

1. FOR 2ND/ALAMEDA PORTAL SEE C-305
2. FOR 1ST/ALAMEDA UNDERPASS SEE C-306
3. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-341, C-342 & C-343

HORIZ 100' 0 100' 200'

VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

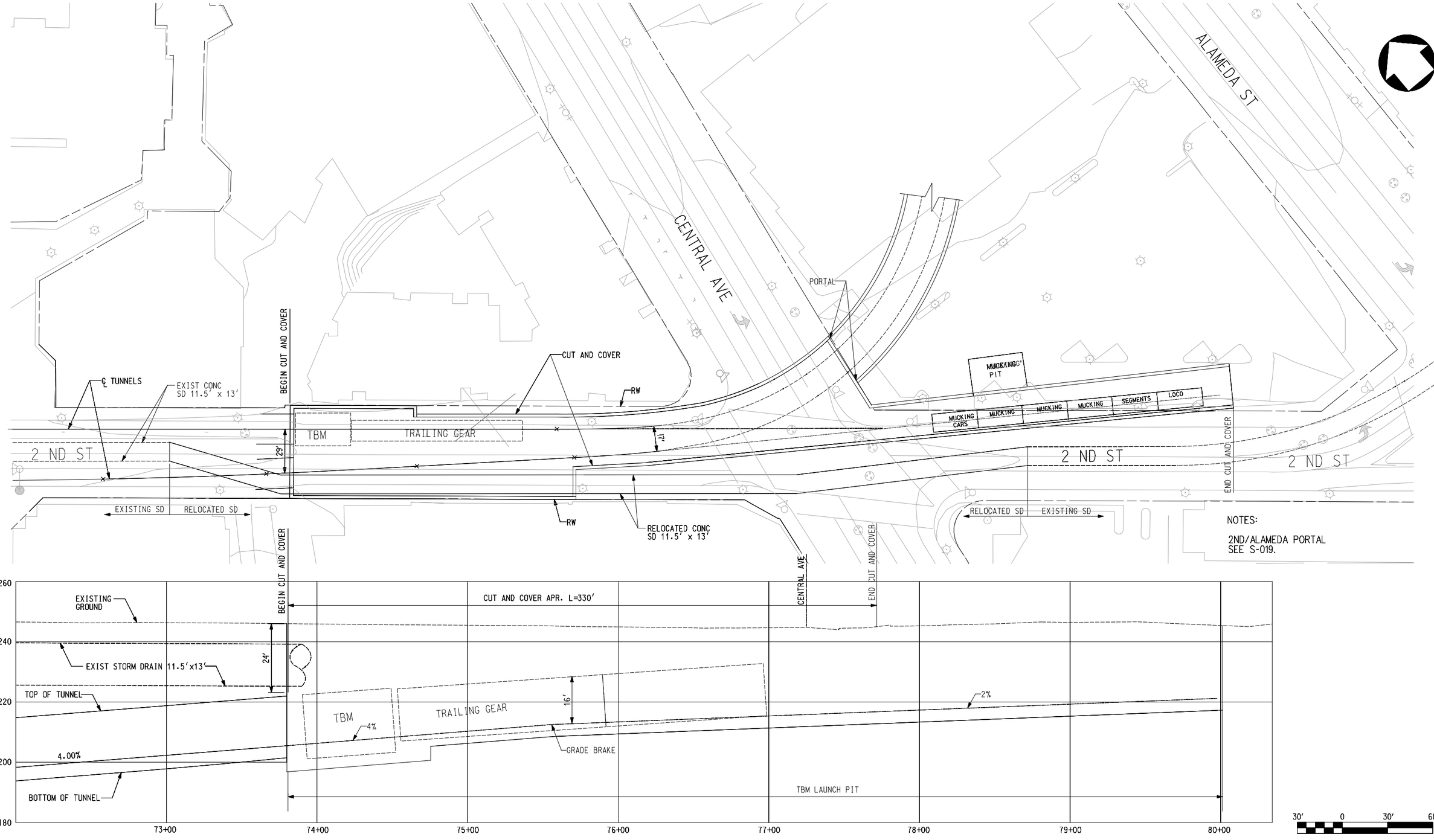
PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
PLAN AND PROFILE
STA 65+00 TO STA 87+00

CONTRACT NO
DRAWING NO C-304
REV
SCALE 1" =100'
SHEET NO

UserName: USER-gr1ff1th Date: 12/8/2009 @ 8:58:42 PM FileName=> I:\27939a-regionalconnector\ace\cadd\sheets\civil\alternative 3\3_c-304.plg



DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JUNE 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

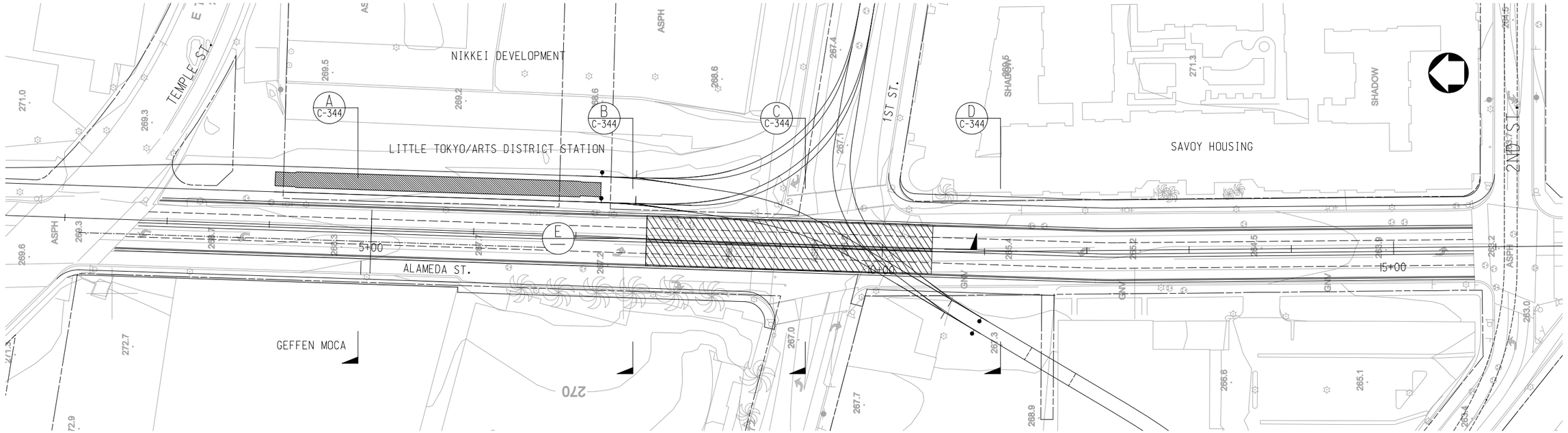
PROJECT MANAGER

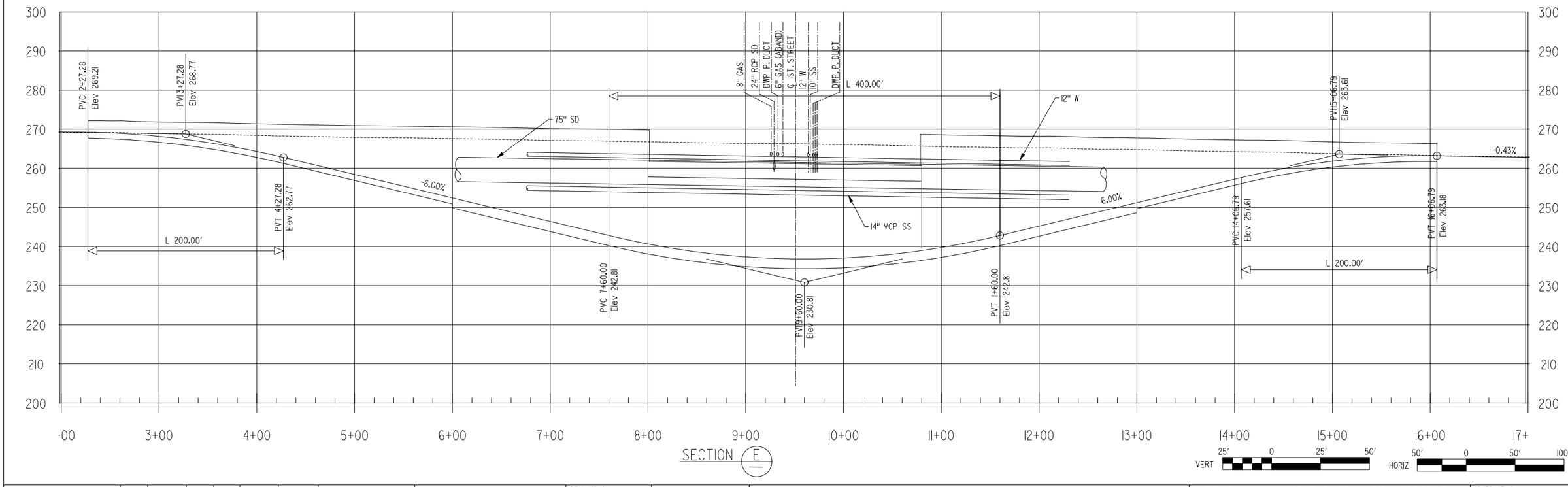
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
TEMPORARY CONSTRUCTION SHAFT
CUT AND COVER STRUCTURE

CONTRACT NO
DRAWING NO C-305
REV
SCALE 1" =30'
SHEET NO

User Name: USER-gr1ff1th Date: 8/8/2009 @ 8:58:44 PM FileName> I:\27939a-regionalconnector\cae\cadd\sheets\civil\alternative 3\3_C-305.plg





DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

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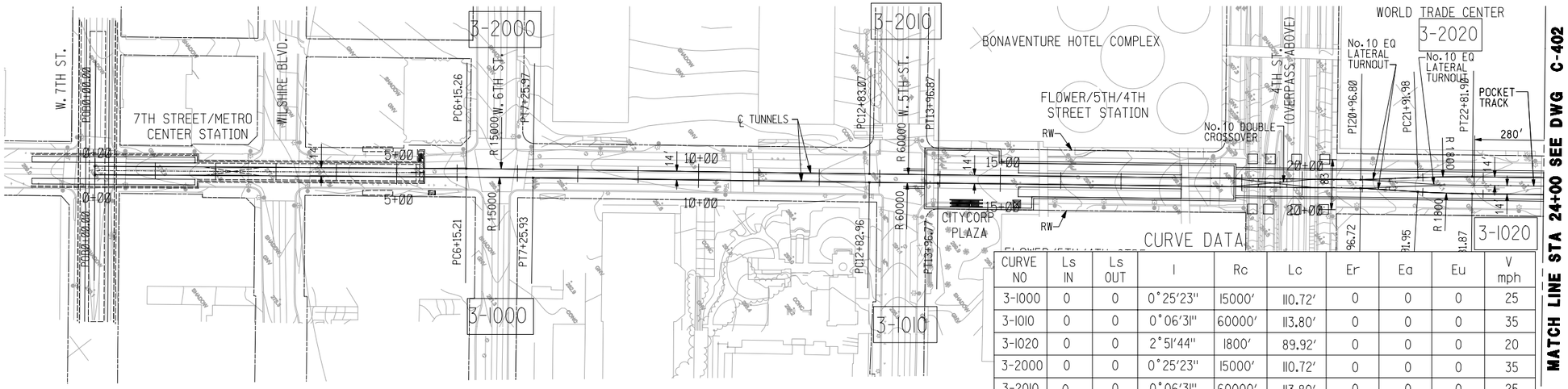
PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ALAMEDA ST. UNDERPASS
PLAN AND PROFILE

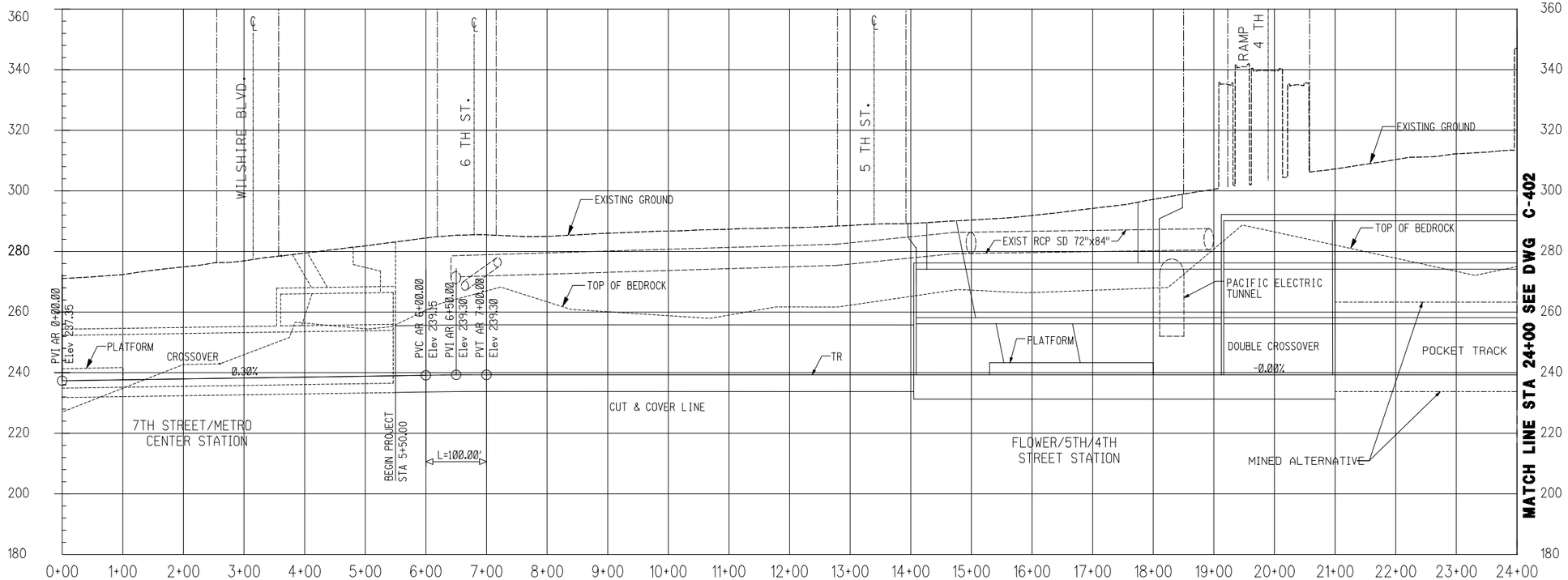
CONTRACT NO
DRAWING NO C-306
REV
SCALE 1"=50'
SHEET NO

UserName=USER-gr1ff1 | 12/08/2009 @ 8:58:50 PM | FileName=> f:\27939a-regionalconnector\acevcadd\sheets\civil\alternative 3\13_c-306.plg



CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1000	0	0	0°25'23"	15000'	110.72'	0	0	0	25
3-1010	0	0	0°06'31"	60000'	113.80'	0	0	0	35
3-1020	0	0	2°51'44"	1800'	89.92'	0	0	0	20
3-2000	0	0	0°25'23"	15000'	110.72'	0	0	0	35
3-2010	0	0	0°06'31"	60000'	113.80'	0	0	0	25
3-2020	0	0	2°51'44"	1800'	89.92'	0	0	0	20



NOTES:

1. FOR FLOWER/ 5TH_4TH STATION SEE DWG. A3-001
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-430 & C-431 C-432 & C-433

HORIZ 100' 0 100' 200'

VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

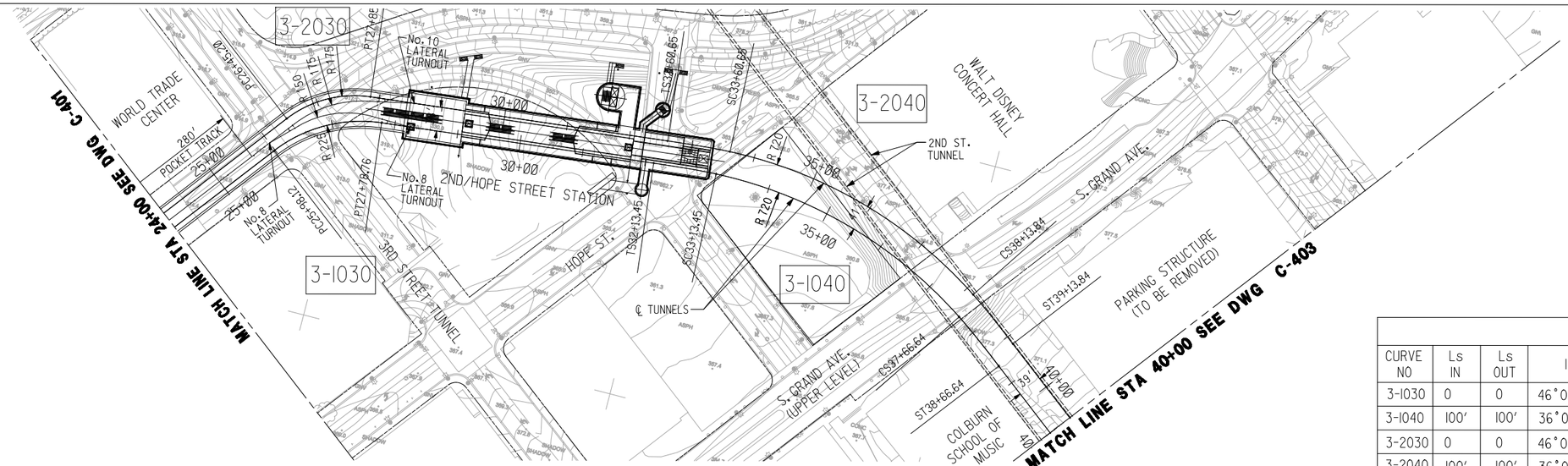
CDM PROJECT MANAGER

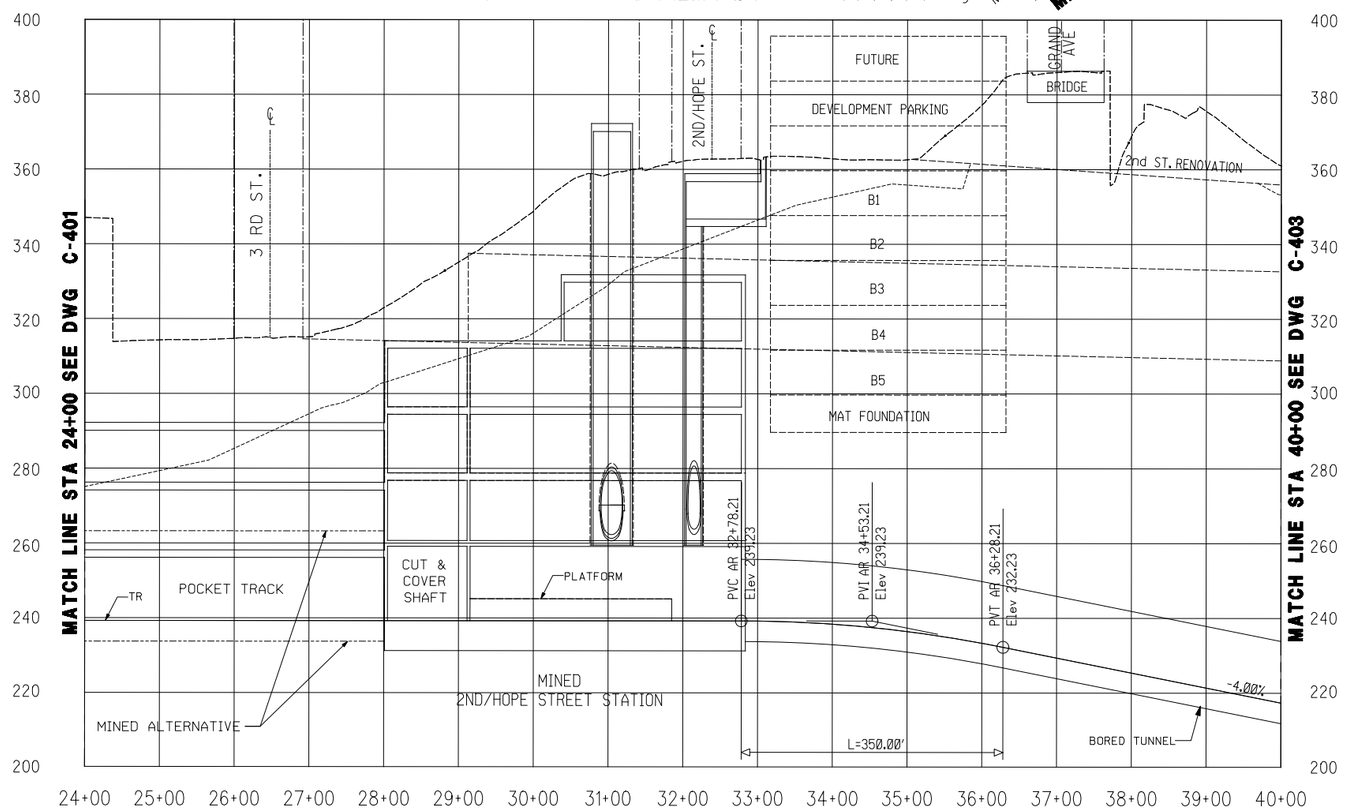
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION I
PLAN AND PROFILE
STA 0+00 TO STA 24+00

CONTRACT NO
DRAWING NO C-401 REV
SCALE 1"=100'
SHEET NO

UserName: USER-gr1ff1th Date/Time: 12/8/2009 @ 8:58:54 PM FileName: t:\27939a-regionalconnector-ace\cadd\sheets\civil\alternative 4a\3_C-401.plg





CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1030	0	0	46°00'00"	225'	180.64"	0"	0"	0"	20
3-1040	100'	100'	36°03'49"	720'	453.19'	6.53"	4.00"	2.53"	35
3-2030	0	0	46°00'00"	175'	140.50'	0"	0"	0"	25
3-2040	100'	100'	36°03'49"	720'	453.19'	6.53"	4.00"	2.53"	35

NOTES:

1. FOR BUNKER HILL STATION DETAILS SEE DWG. A3-002
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-434, C-435, C-436 & C-437

HORIZ 100' 0 100' 200'

VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

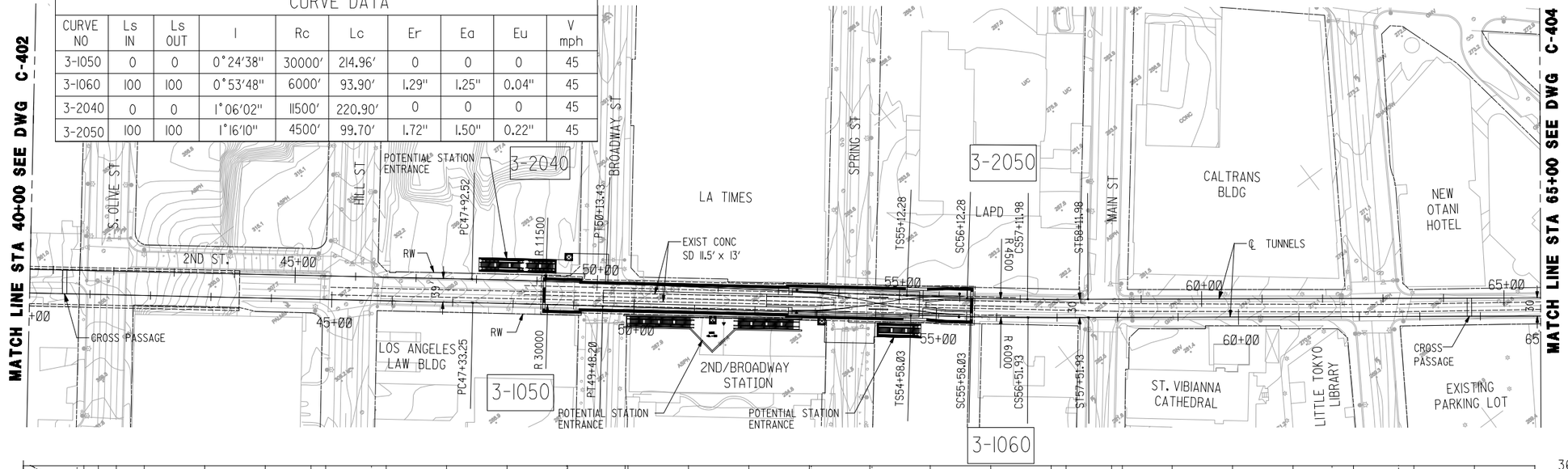
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION I
PLAN AND PROFILE
STA 24+00 TO STA 40+00

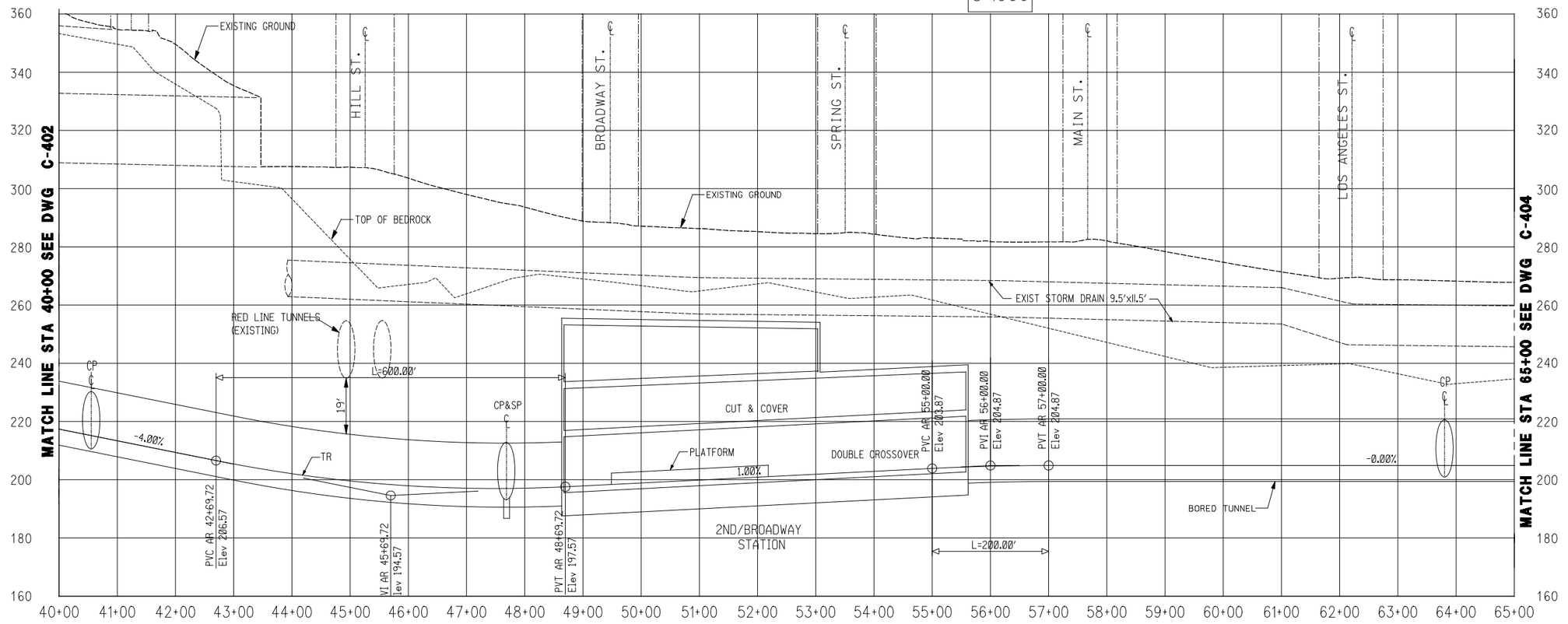
CONTRACT NO
DRAWING NO C-402
REV
SCALE 1"=100'
SHEET NO

User Name: USER-gr1f1f1 12/8/2009 @ 8:58:57 PM FileName=> t:\27939a-regionalconnector\cadd\sheets\civil\alternative 4a\3_C-402.plg

CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1050	0	0	0°24'38"	30000'	214.96'	0	0	0	45
3-1060	100	100	0°53'48"	6000'	93.90'	1.29"	1.25"	0.04"	45
3-2040	0	0	1°06'02"	11500'	220.90'	0	0	0	45
3-2050	100	100	1°16'10"	4500'	99.70'	1.72"	1.50"	0.22"	45





NOTE:
1. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-438,C-439,C-440 & C-441

HORIZ 100' 0 100' 200'
VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION I
PLAN AND PROFILE
STA 40+00 TO STA 65+00

CONTRACT NO
DRAWING NO C-403
REV
SCALE 1" =100'
SHEET NO

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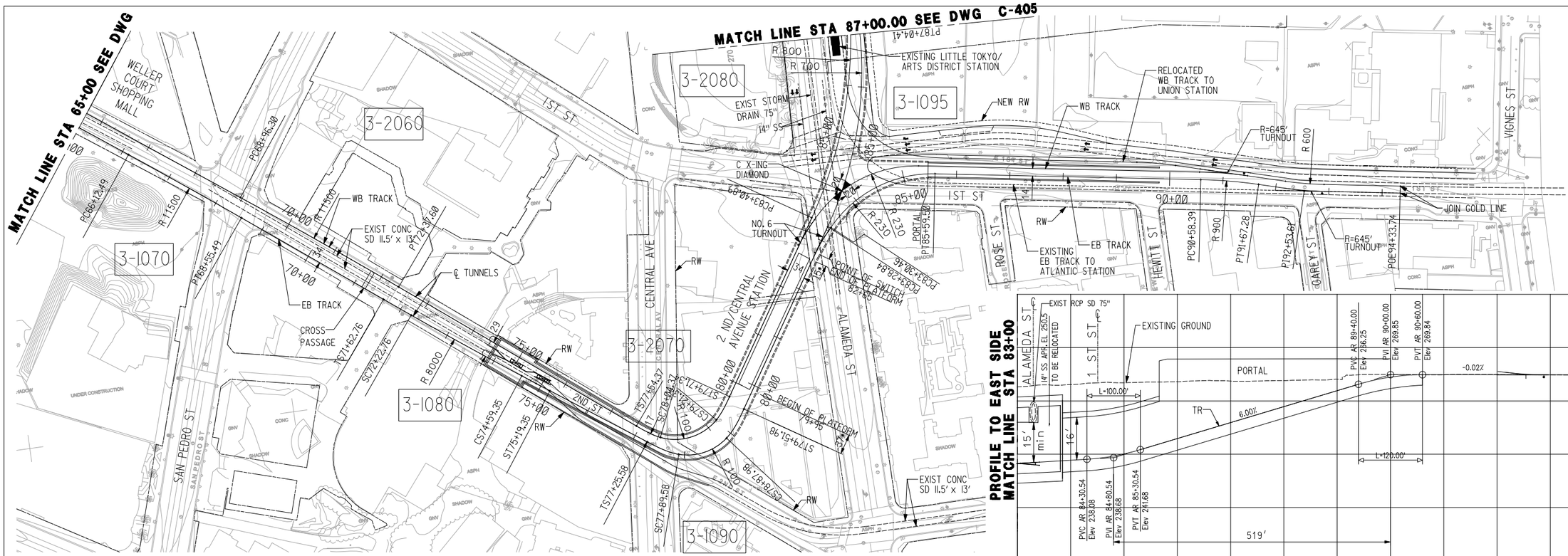
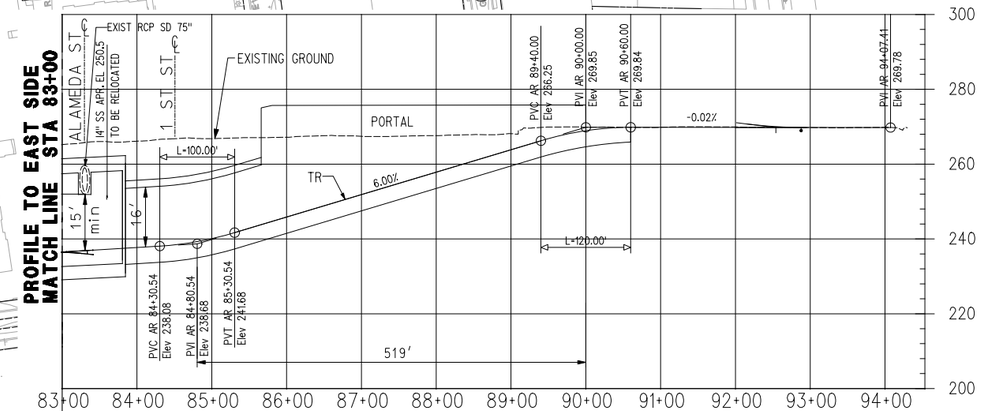
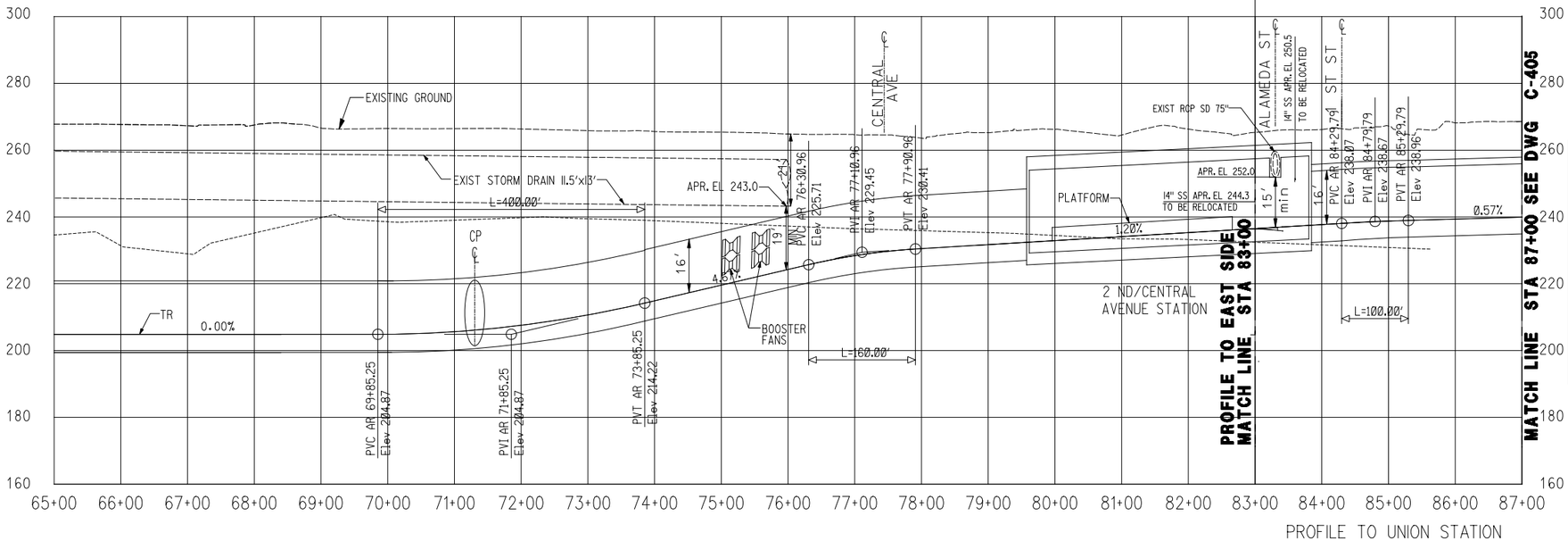
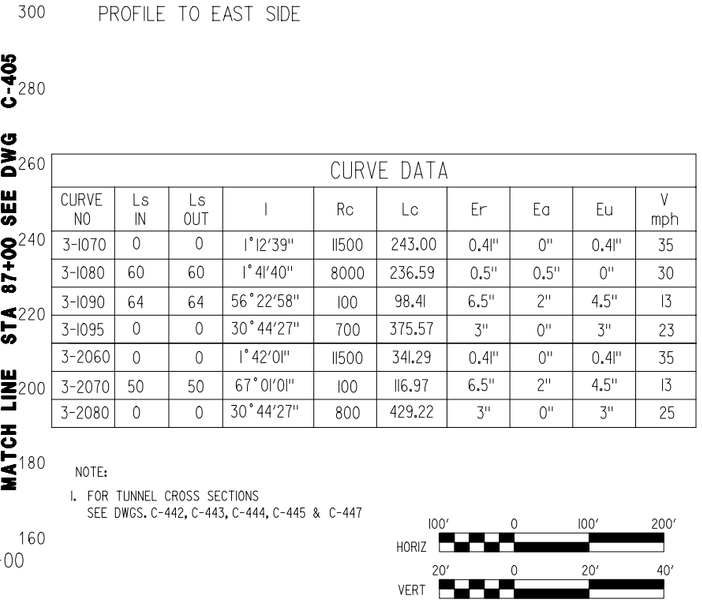








CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1070	0	0	1°12'39"	11500	243.00	0.41"	0"	0.41"	35
3-1080	60	60	1°41'40"	8000	236.59	0.5"	0.5"	0"	30
3-1090	64	64	56°22'58"	100	98.41	6.5"	2"	4.5"	13
3-1095	0	0	30°44'27"	700	375.57	3"	0"	3"	23
3-2060	0	0	1°42'01"	11500	341.29	0.41"	0"	0.41"	35
3-2070	50	50	67°01'01"	100	116.97	6.5"	2"	4.5"	13
3-2080	0	0	30°44'27"	800	429.22	3"	0"	3"	25

NOTE:

1. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-442, C-443, C-444, C-445 & C-447

100' 0 100' 200'
HORIZ
20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

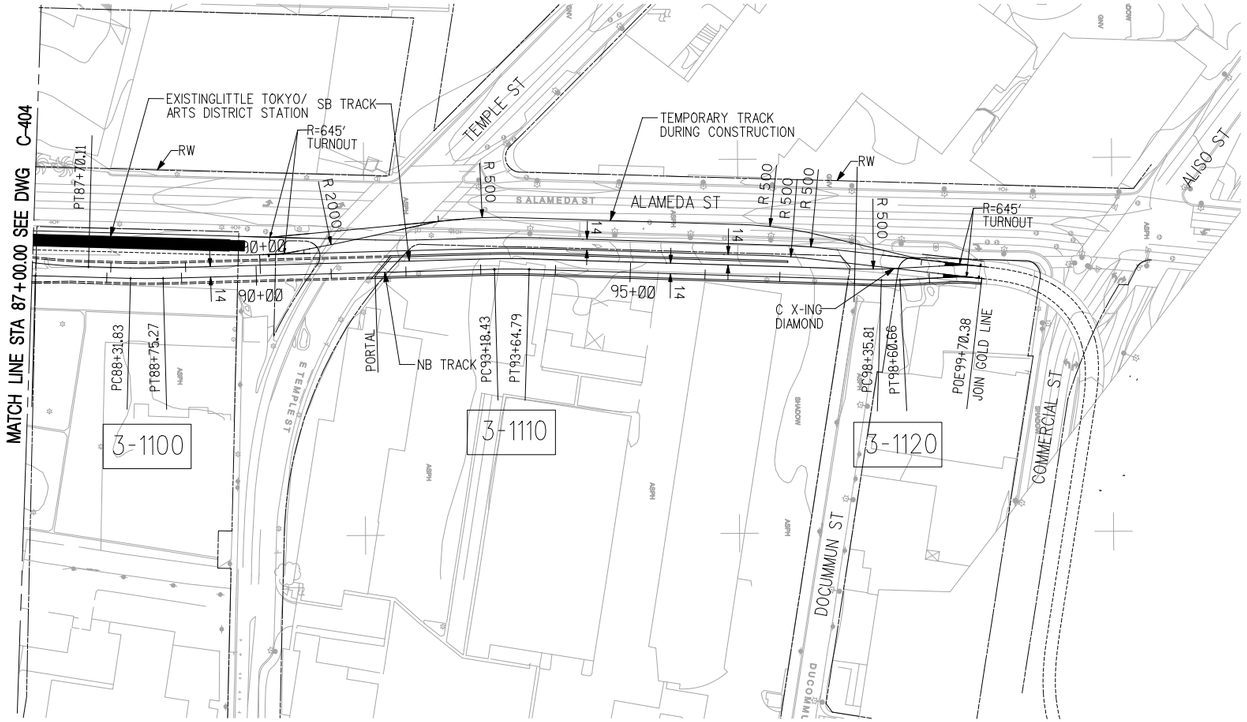
LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro CDM PROJECT MANAGER PB

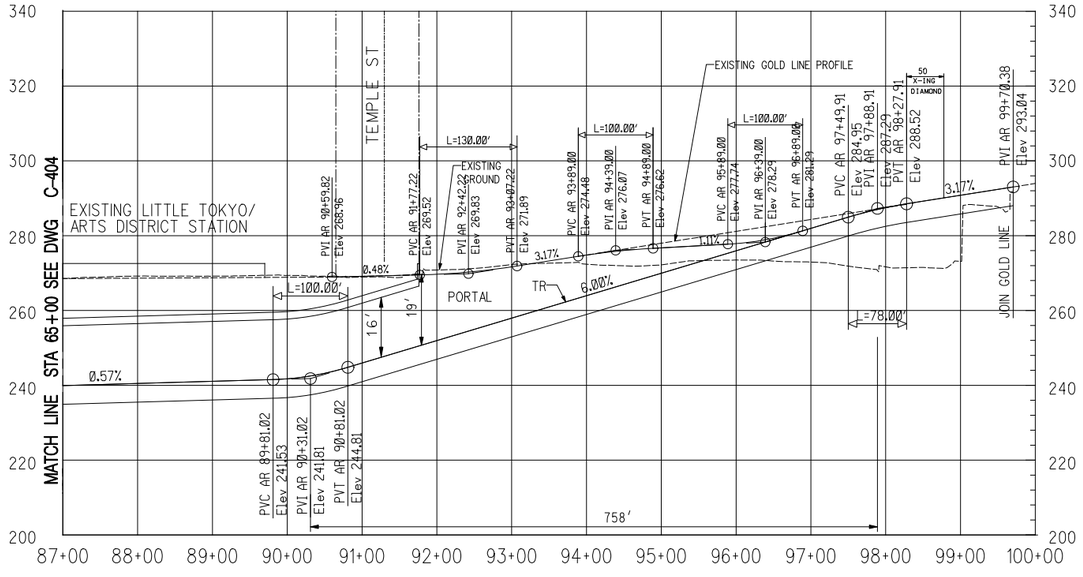
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION I
PLAN AND PROFILE
STA 65+00 TO STA 87+00

CONTRACT NO
DRAWING NO C-404
REV
SCALE 1" = 100'
SHEET NO

UserName: USER-grlff1f1 Date: 8/18/2009 @ 8:59:04 PM FileName: t:\27939a-regionalconnector\ae\cadd\sheets\civil\alternative 4a\3_C-404.plg



CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1100	0	0	3° 06'39"	800	43.44	3"	0"	3"	25
3-1110	0	0	3° 19'13"	800	46.36	3"	0"	3"	25
3-1120	0	0	4° 44'43"	300	24.85	3"	0"	3"	14



NOTE:

1. FOR TUNNEL CROSS SECTIONS SEE DWG. C-446

100' 0 100' 200'
HORIZ

20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
PLAN AND PROFILE
STA 65+00 TO STA 99+70.38

CONTRACT NO
DRAWING NO C-405
REV
SCALE 1" =100'
SHEET NO

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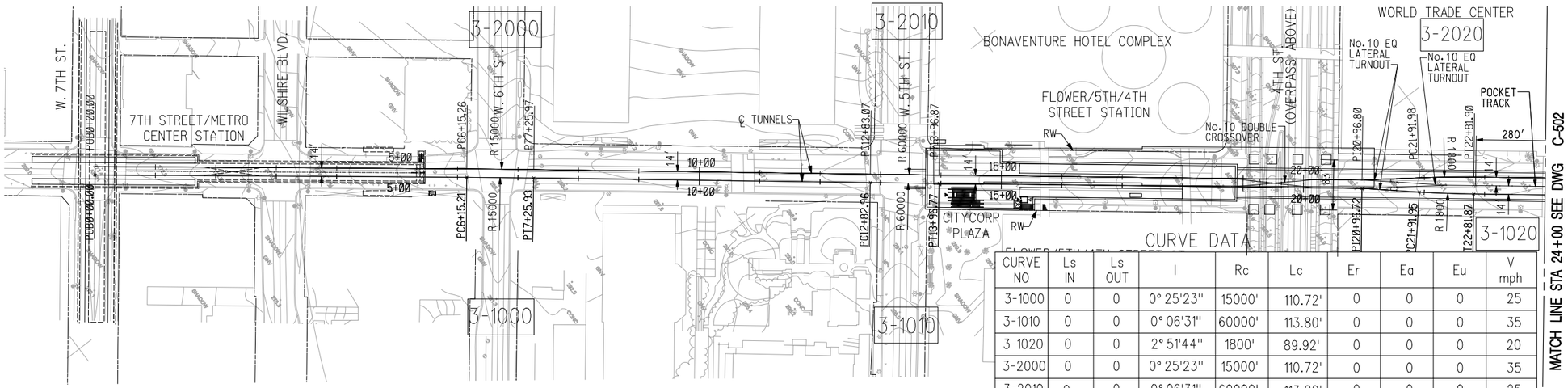
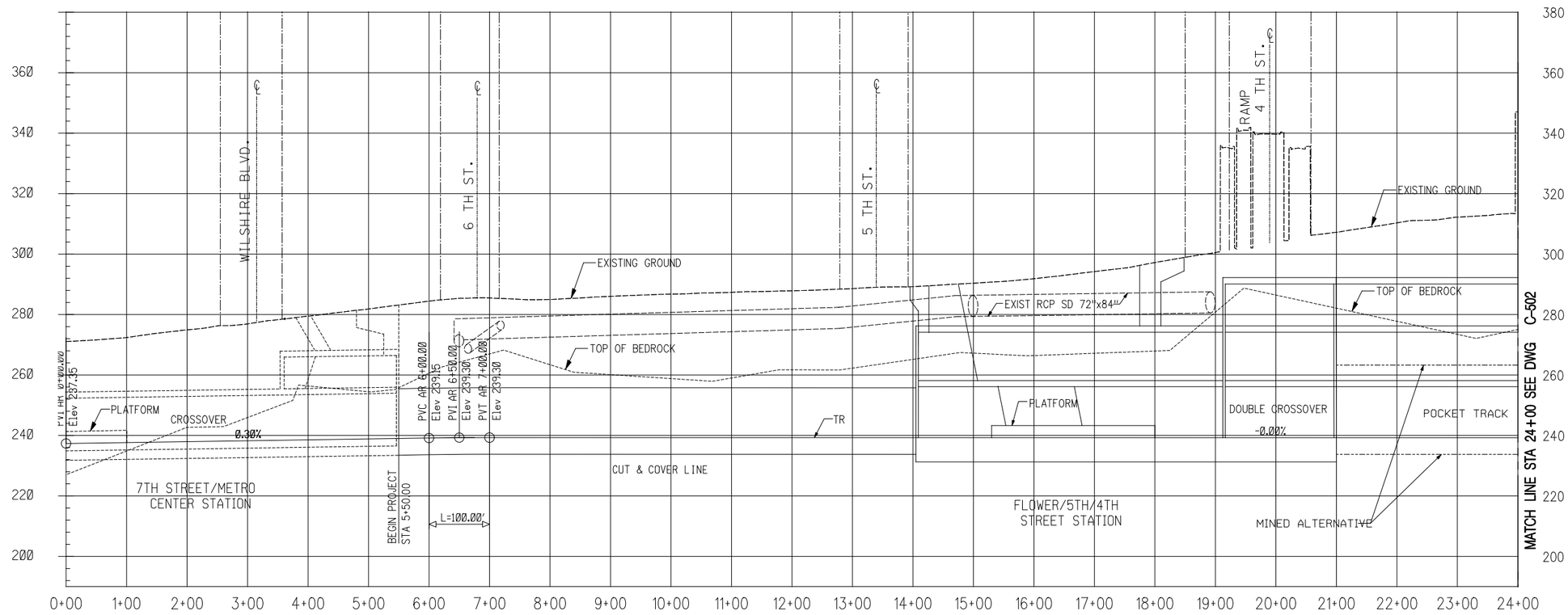


CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1000	0	0	0° 25'23"	15000'	110.72'	0	0	0	25
3-1010	0	0	0° 06'31"	60000'	113.80'	0	0	0	35
3-1020	0	0	2° 51'44"	1800'	89.92'	0	0	0	20
3-2000	0	0	0° 25'23"	15000'	110.72'	0	0	0	35
3-2010	0	0	0° 06'31"	60000'	113.80'	0	0	0	25
3-2020	0	0	2° 51'44"	1800'	89.92'	0	0	0	20



NOTES:

1. FOR FLOWER/ 5TH_4TH STATION SEE DWG. A3-001
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-530 & C-531 C-532 & C-533

HORIZ 100' 0 100' 200'

VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

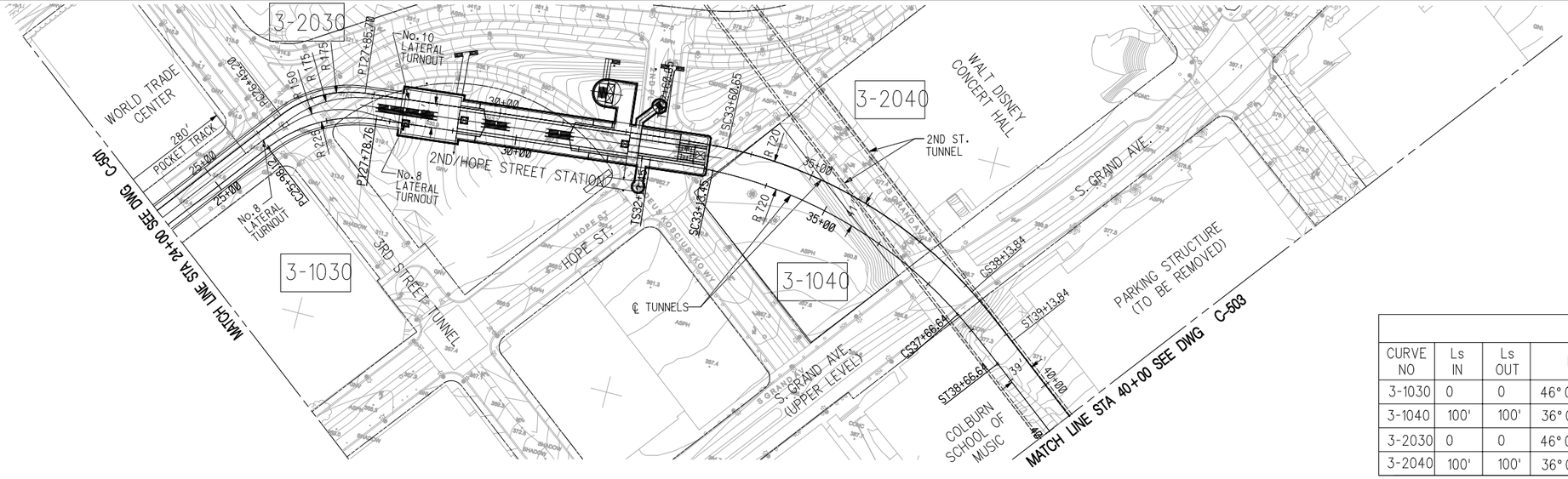
CDM PROJECT MANAGER

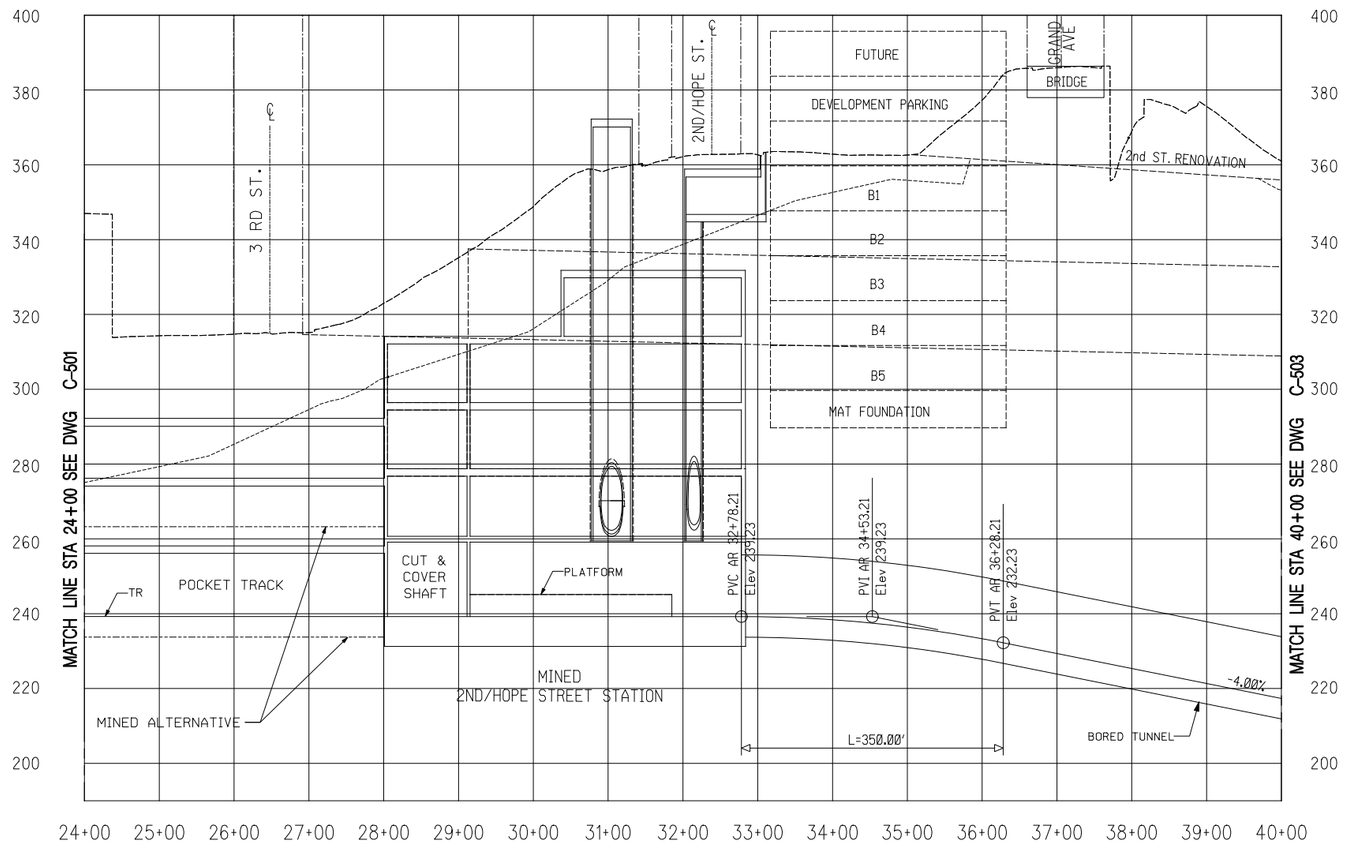
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
PLAN AND PROFILE
STA 0+00 TO STA 24+00

CONTRACT NO
DRAWING NO C-501
REV
SCALE 1"=100'
SHEET NO

UserName: USER-griffithd2/18/2009 @ 9:36:48 PM FileName=> I:\27939a-regionalconnectorace\cadd\sheets\civil\alternative 4b\3_C-501.plg





CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1030	0	0	46° 00'00"	225'	180.64'	0"	0"	0"	20
3-1040	100'	100'	36° 03'49"	720'	453.19'	6.53"	4.00"	2.53"	35
3-2030	0	0	46° 00'00"	175'	140.50'	0"	0"	0"	25
3-2040	100'	100'	36° 03'49"	720'	453.19'	6.53"	4.00"	2.53"	35

NOTES:

1. FOR BUNKER HILL STATION DETAILS SEE DWG. A3-002
2. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-534, C-535, C-536 & C-537

100' 0 100' 200'
HORIZ
20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
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IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

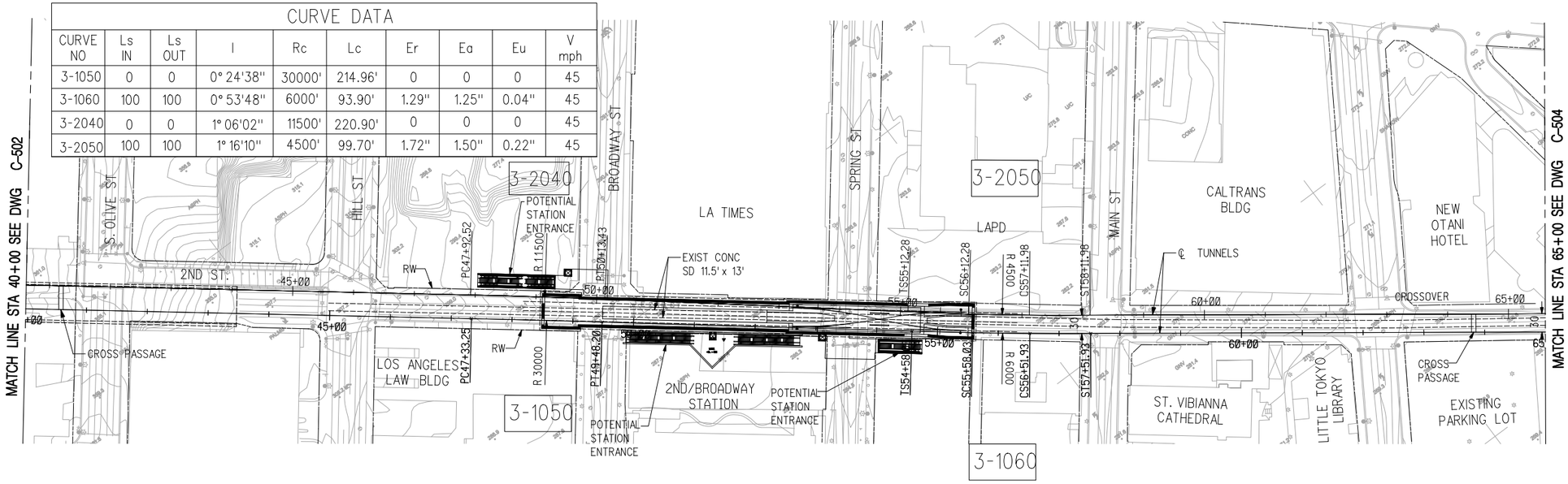
REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
PLAN AND PROFILE
STA 24+00 TO STA 40+00

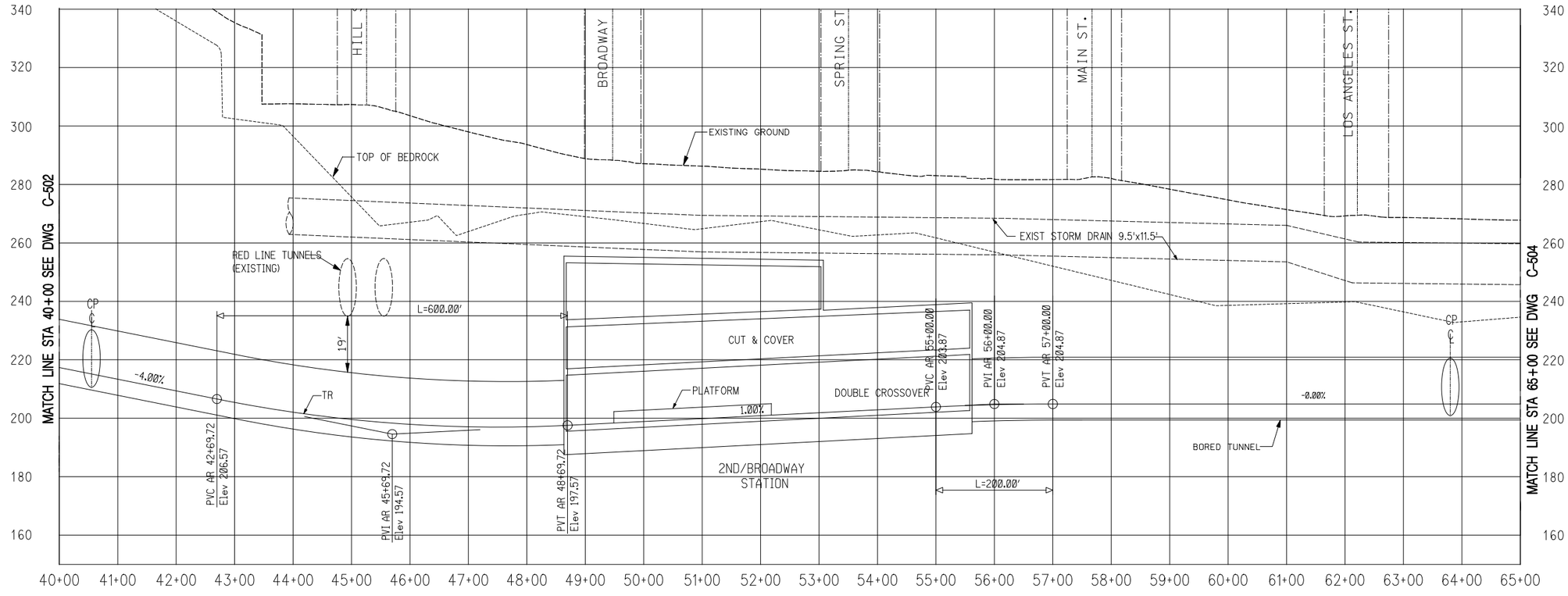
CONTRACT NO
DRAWING NO C-502
REV
SCALE 1"=100'
SHEET NO

UserName: USER-griffithd2/18/2009 @ 9:37:03 PM FileName=> I:\27939a-regionalconnectorace\cadd\sheets\civil\alternative 4b\3_C-502.plg

CURVE DATA

CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1050	0	0	0° 24'38"	30000'	214.96'	0	0	0	45
3-1060	100	100	0° 53'48"	6000'	93.90'	1.29"	1.25"	0.04"	45
3-2040	0	0	1° 06'02"	11500'	220.90'	0	0	0	45
3-2050	100	100	1° 16'10"	4500'	99.70'	1.72"	1.50"	0.22"	45





NOTE:
1. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-538,C-539,C-540 & C-541

HORIZ 100' 0 100' 200'
VERT 20' 0 20' 40'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
PLAN AND PROFILE
STA 40+00 TO STA 65+00

CONTRACT NO
DRAWING NO C-503
REV
SCALE 1" =100'
SHEET NO

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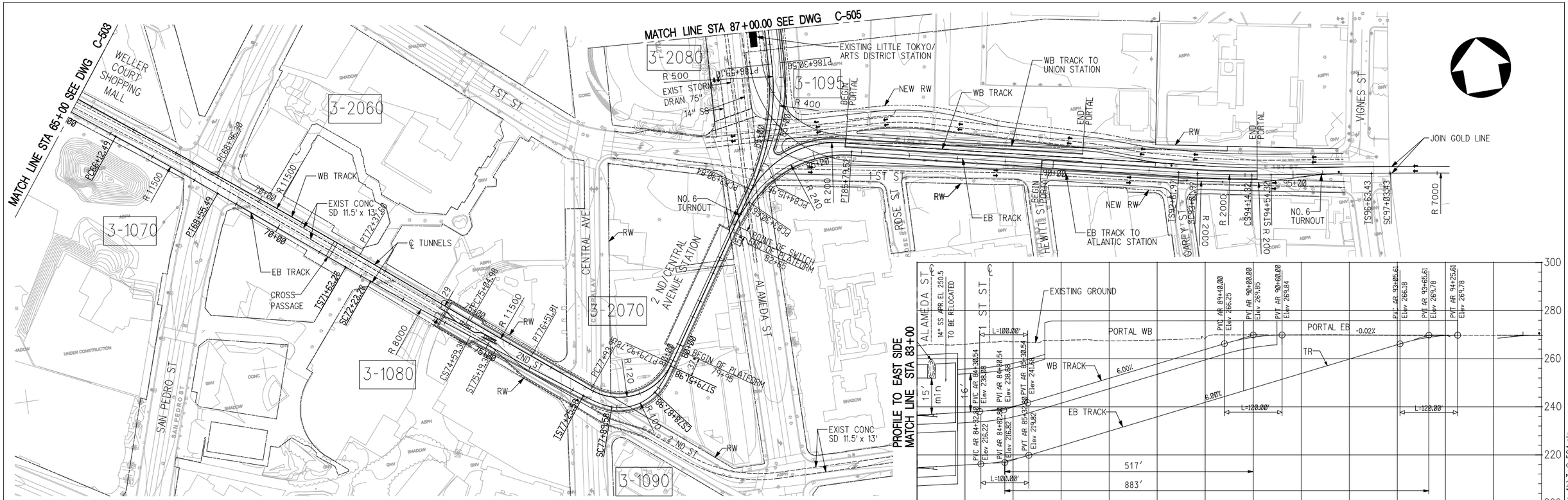

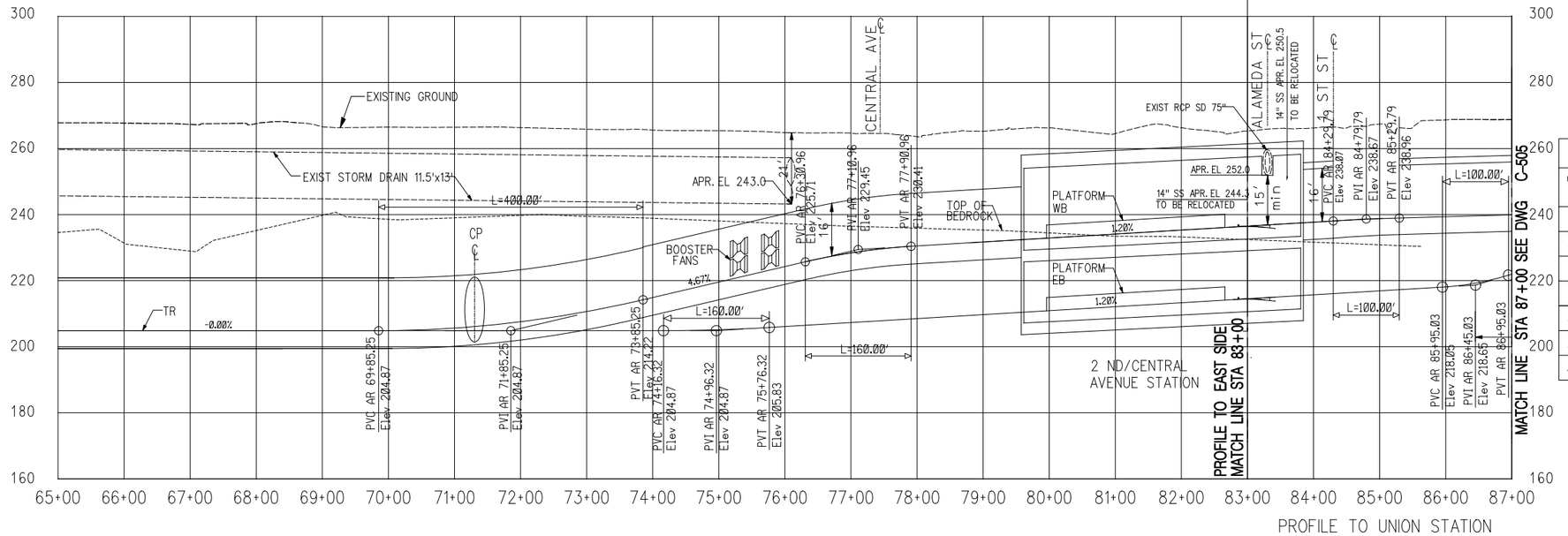

CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
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3-1080	60	60	1° 41'40"	8000	236.59	0.5"	0.5"	0"	30
3-1090	64	64	56° 22'58"	100	98.41	6.5"	2"	4.5"	13
3-1095	0	0	30° 44'27"	400	214.61	2.15"	0"	2.15'	15
3-2060	0	0	1° 42'01"	11500	341.29	0.41"	0"	0.41"	35
3-2070	0	0	94° 55'59"	120	198.83	3.19"	0"	3.19"	10
3-2080	0	0	30° 44'28"	500	268.27	3"	0"	3"	20

NOTE:

1. FOR TUNNEL CROSS SECTIONS SEE DWGS. C-542, C-543, C-544, C-545 & C-547

100' 0 100' 200'
HORIZ
20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
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IN CHARGE
DATE DEC 2009

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LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
PLAN AND PROFILE
STA 65+00 TO STA 87+00

CONTRACT NO
DRAWING NO C-504
REV
SCALE 1" =100'
SHEET NO

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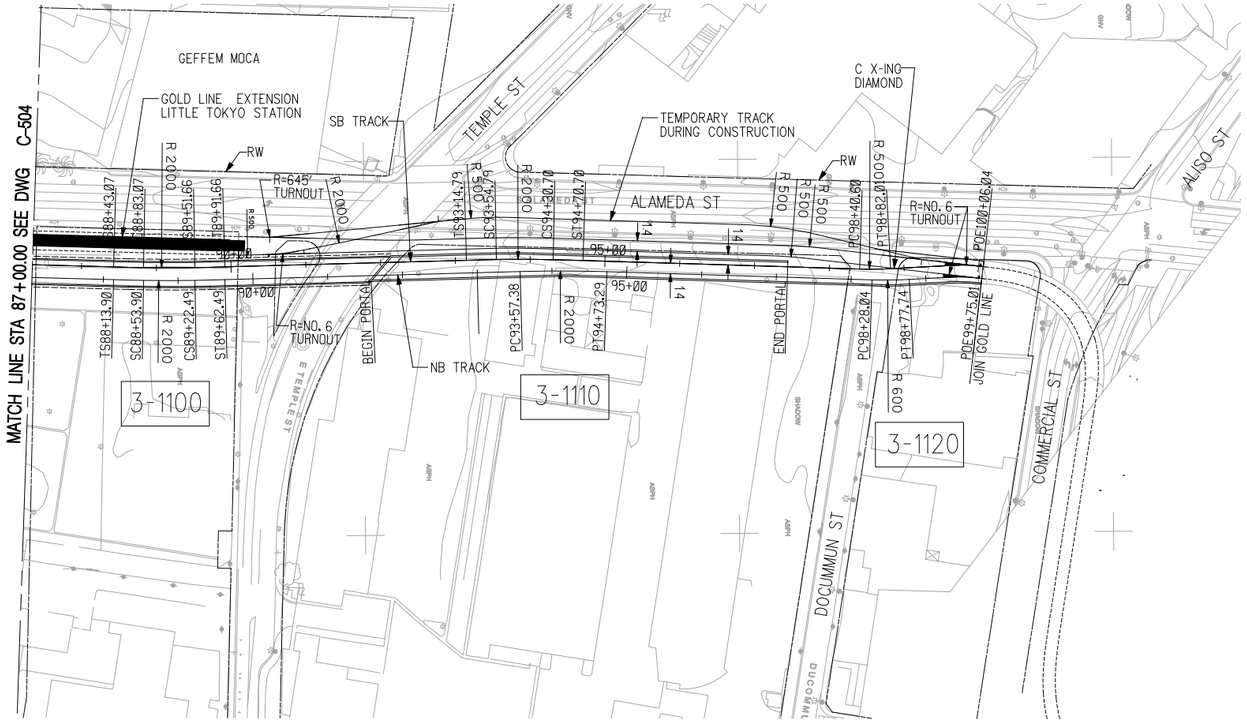

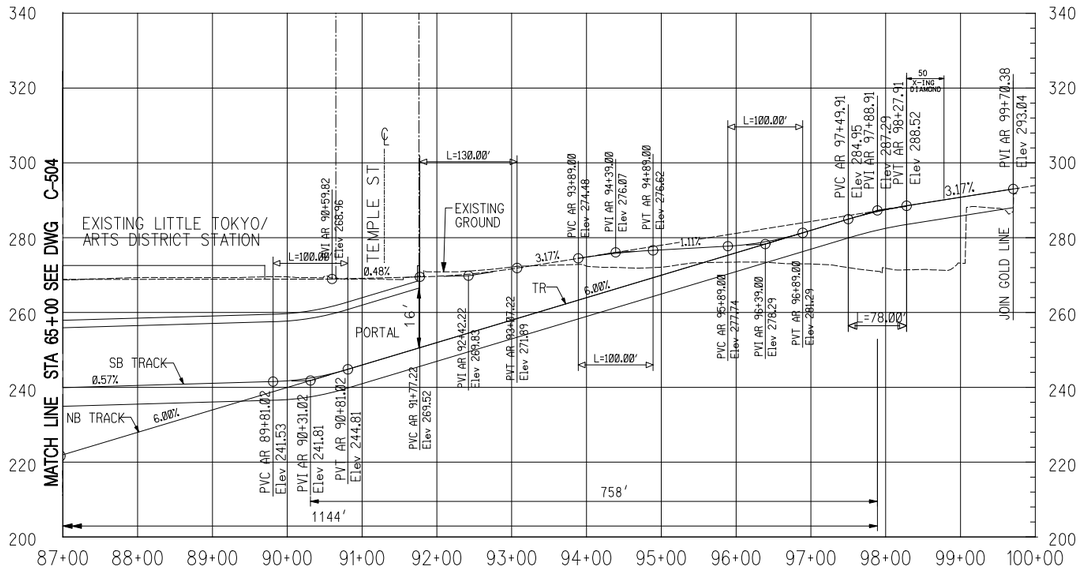

CURVE DATA									
CURVE NO	Ls IN	Ls OUT	I	Rc	Lc	Er	Ea	Eu	V mph
3-1100	40	40	1° 57'54"	2000	68.59	1.20"	1.25"	0"	25
3-1110	0	0	3° 19'13"	2000	115.90	1.20"	0"	1.25"	25
3-1120	0	0	4° 44'46"	600	49.70	1.25"	0"	1.25"	14

NOTE:

1. FOR TUNNEL CROSS SECTIONS SEE DWG. C-546

100' 0 100' 200'
HORIZ
20' 0 20' 40'
VERT

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
PLAN AND PROFILE
STA 87+00 TO STA 99+75.01

CONTRACT NO
DRAWING NO C-505
REV
SCALE 1" =100'
SHEET NO

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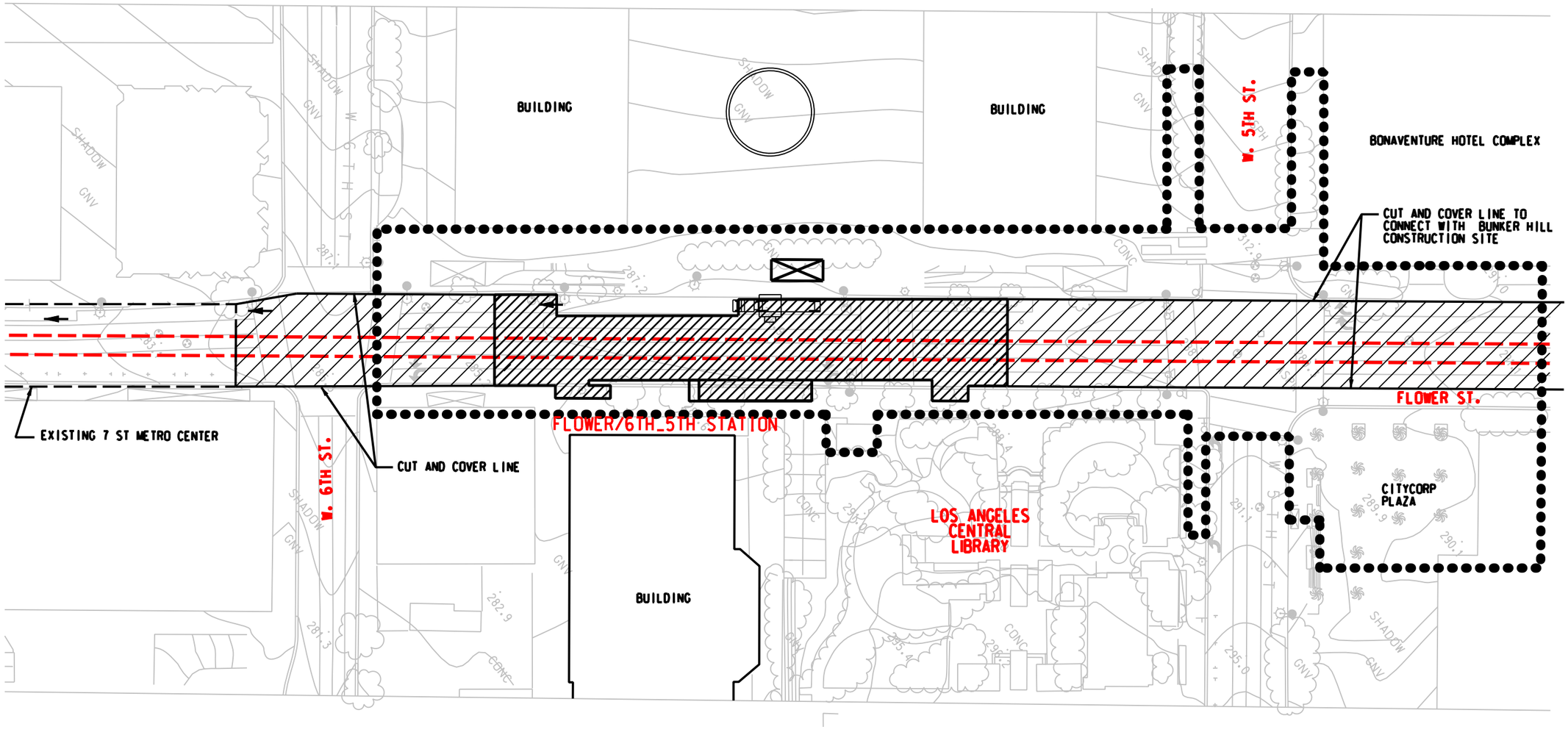
Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX II

CONCEPTUAL ENGINEERING DRAWINGS
Construction Staging Sites

The Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 are identical to the Underground Emphasis LRT Alternative – Broadway Station Option west of Central Avenue. Only the two drawings east of Central Avenue are included for the Fully Underground LRT Alternatives.

State Clearinghouse Number: 2009031043



DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FLOWER/6TH-5TH ST STATION
Construction Staging Site
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-001 REV
SCALE
SHEET NO

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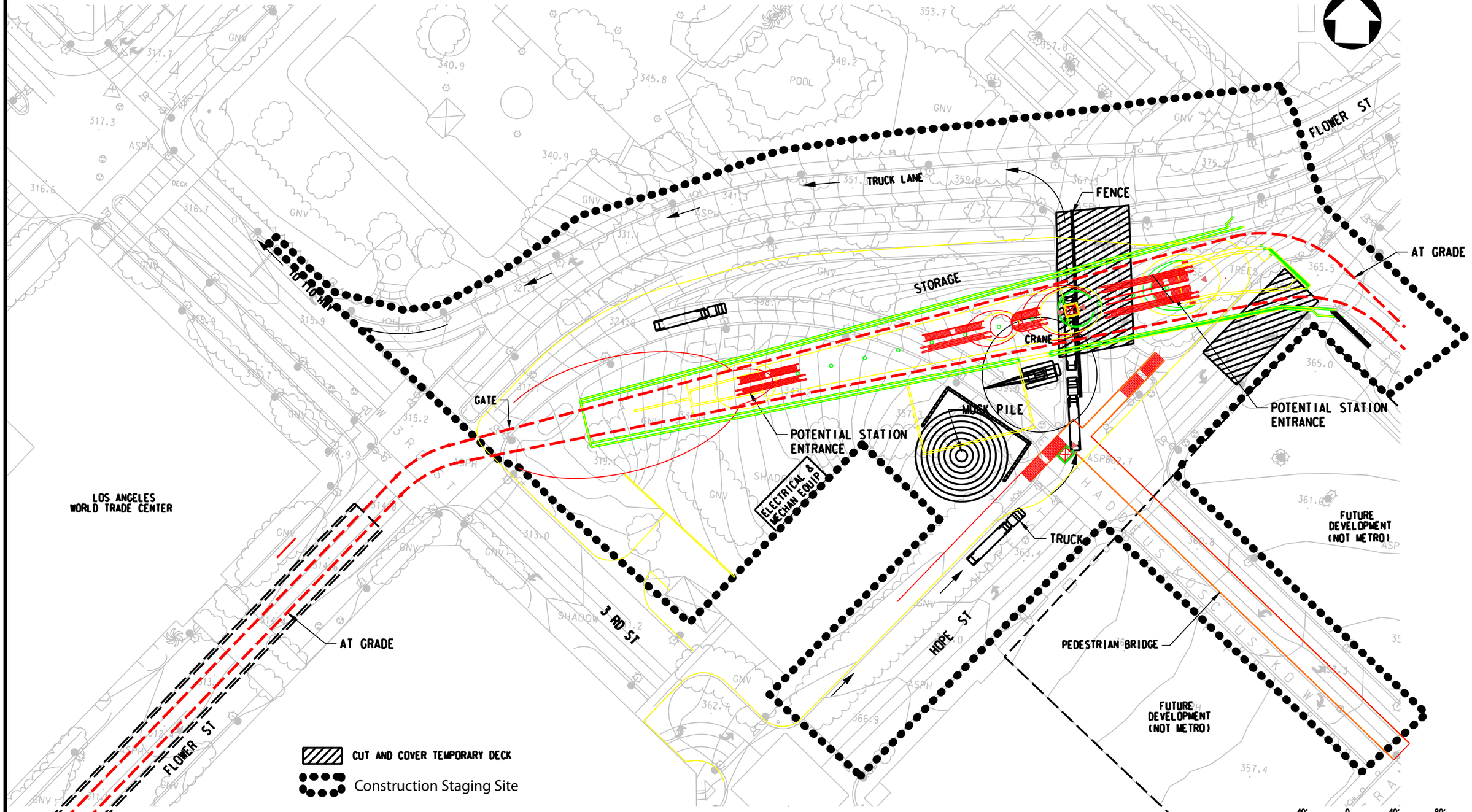

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

BUNKER HILL STATION
Construction Staging Site
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-002 REV
SCALE
SHEET NO

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OLD CALTRANS BLDG

W. 1ST ST.

LOS ANGELES CITY HALL

MAIN ST

MAIN ST STATION

CITY HALL ANNEX

CITY HALL EAST

CALTRANS BLDG

Construction Staging Site

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

Metro

LOS ANGELES COUNTY
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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
MAIN ST STATION
Construction Staging Site
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-003 REV
SCALE
SHEET NO

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CITY HALL ANNEX

CITY HALL EAST

LOS ANGELES ST.

W. 1ST ST.

65+00

70+00

75+00

LOS ANGELES ST STATION

Construction Staging Site

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
LOS ANGELES ST STATION
Construction Staging Site
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-004 REV
SCALE
SHEET NO

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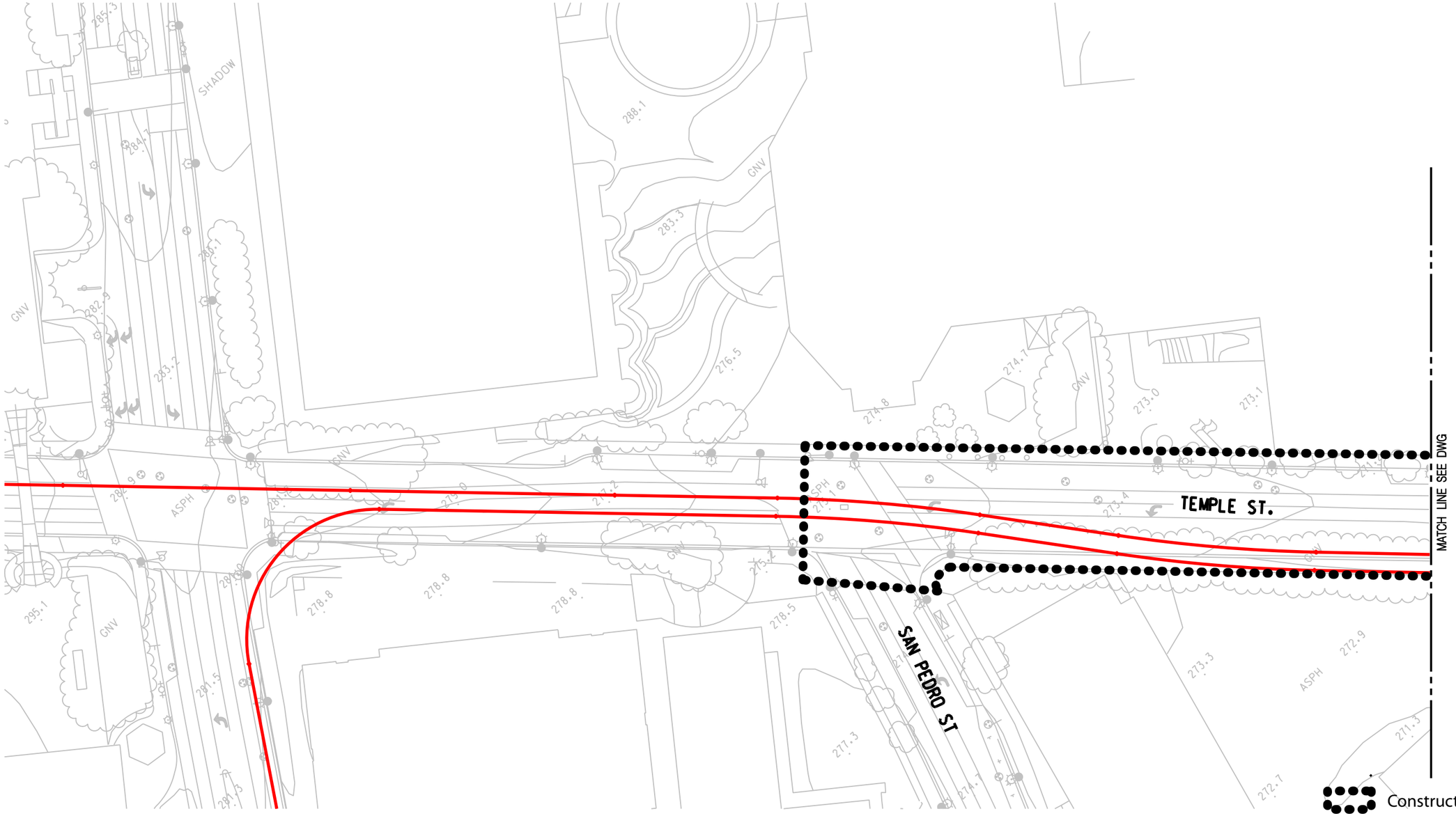

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
Temple Street Underpass
Construction Staging Site
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-005.1 REV
SCALE
SHEET NO

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ALAMEDA UNDERPASS

LITTLE TOKYO STATION

ALAMEDA ST.

TEMPLE ST.

MATCH LINE SEE DWG CS-007.1

Pedestrian Bridge

GEFFEN MOCA

Construction Staging Site

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

TEMPLE UNDERPASS

Construction Staging Site
At-Grade Emphasis LRT Alternative

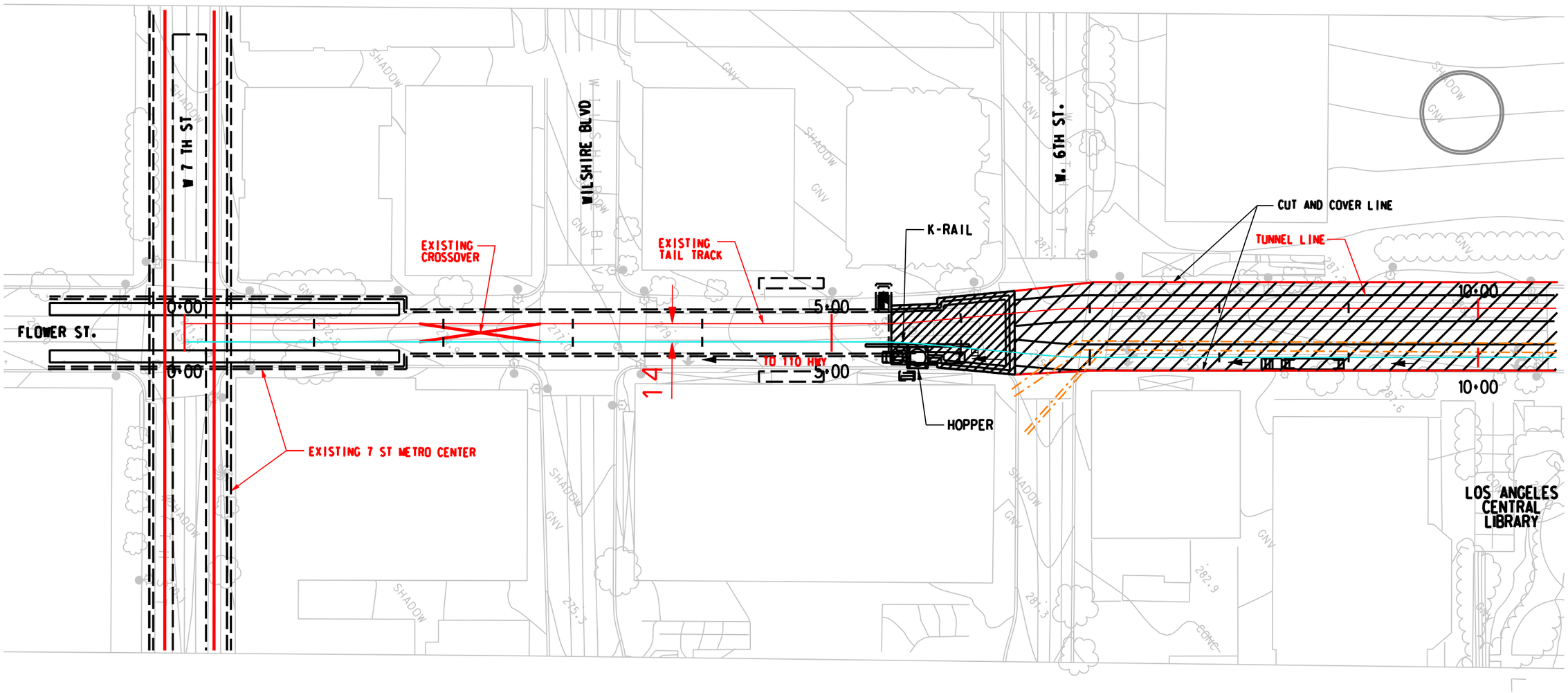
CONTRACT NO

DRAWING NO CS-005.2 REV

SCALE

SHEET NO

UserName: USER-mireo 5/14/2009 @ 9:00:46 PM FileName: I:\v2\9396-regionalconnectorgce\cadd\sheets\civil\env_imp_footprint\cs05_02_temple_underpass_optionA.dgn



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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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DRAWN BY
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IN CHARGE
DATE APRIL 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
TRANSITION STRUCTURE
Construction Staging Site
Underground Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-006 REV
SCALE
SHEET NO

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BUILDING

ARCO TOWERS

CUT AND COVER LINE

BONAVENTURE HOTEL COMPLEX

5TH/4TH ST STATION

CUT AND COVER LINE

PARKING SRTUCTURE

FLOWER ST.

EXISTING TUNNEL

CUT AND COVER TO CONNECT WITH BUNKER HILL CONSTRUCTION SITE

LOS ANGELES CENTRAL LIBRARY

CITIGROUP TOWER

W. 4TH ST. BRIDGE

CUT AND COVER TEMPORARY DECK

Construction Staging Site

PLAZA LEVEL

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

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DATE MMXY20089

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

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PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

5TH/4TH ST STATION

Construction Staging Site
Underground Emphasis LRT Alternative

CONTRACT NO

DRAWING NO CS-007 REV

SCALE

SHEET NO

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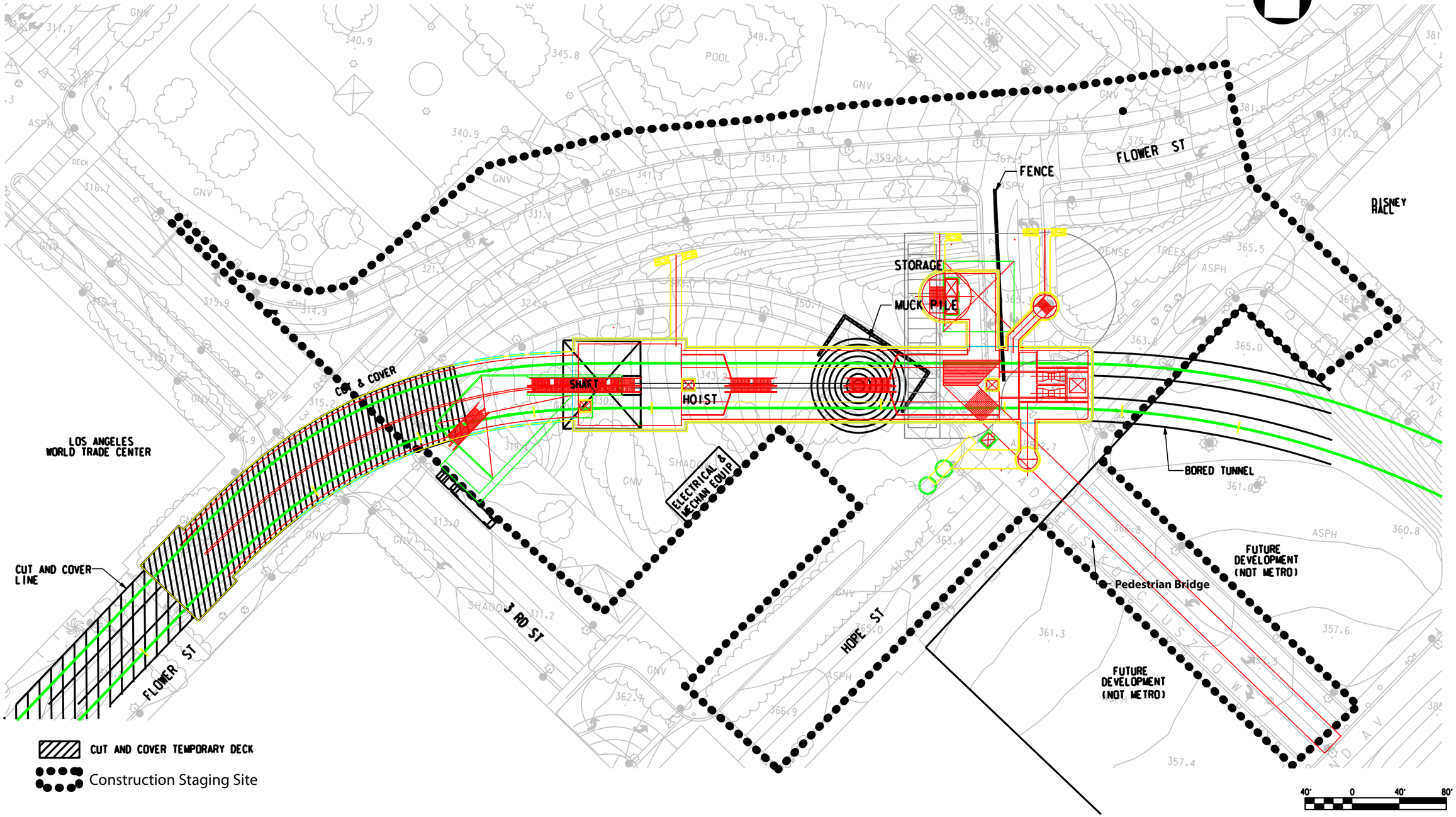

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE APRIL 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
BUNKER HILL STATION
Construction Staging Site
Underground Emphasis LRT Alternative

CONTRACT NO
DRAWING NO CS-008 REV
SCALE
SHEET NO

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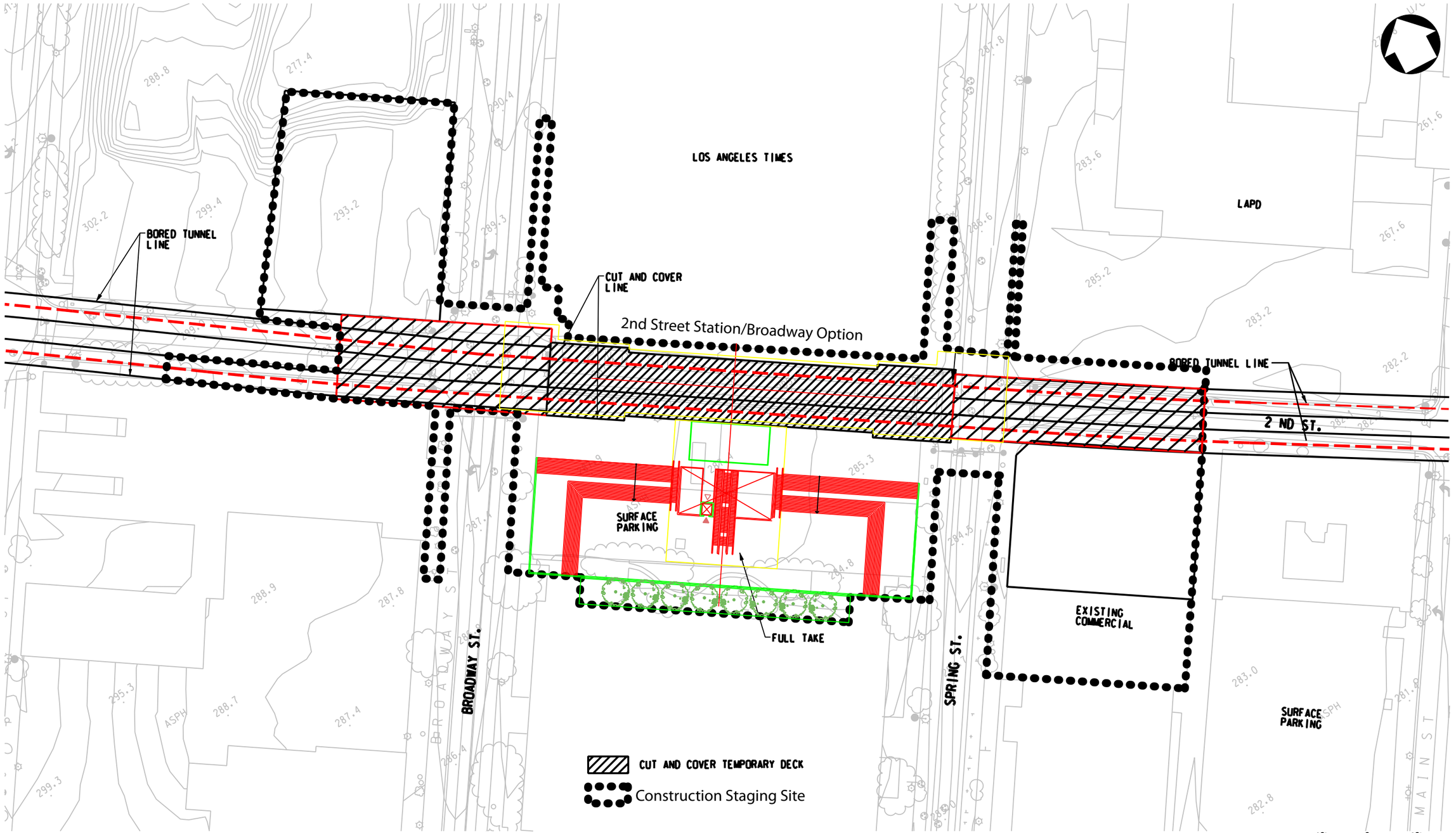

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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CHECKED BY
IN CHARGE
DATE APRIL 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd Street Station/Broadway Option
Construction Staging Site
Underground Emphasis LRT Alternative - Broadway Station Option

CONTRACT NO
DRAWING NO CS-009 REV
SCALE
SHEET NO

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LAPD

CALTRANS BLDG

TO 101 HWY

LOS ANGELES ST.

NEW OTANI HOTEL

WELLER COURT SHOPPING MALL

BORED TUNNEL LINE

POTENTIAL STATION ENTRANCE

CUT AND COVER LINE

2 ND ST.

BORED TUNNEL TO CONNECT 2 ND / ALAMEDA CONSTRUCTION SITE

MAIN/LOS ANGELES STATION

PARTIAL TAKE

SURFACE PARKING

ST. VIBIANNA CATHEDRAL COMPLEX

LITTLE TOKYO LIBRARY

POTENTIAL STATION ENTRANCE

EXISTING COMMERCIAL

MAIN ST

SURFACE PARKING

SURFACE PARKING

CUT AND COVER TEMPORARY DECK

Construction Staging Site

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd and Main/Los Angeles Station
Construction Staging Site
Underground Emphasis LRT Alternative -
Main/Los Angeles Station Option

CONTRACT NO

DRAWING NO CS-010 REV

SCALE

SHEET NO

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BORED TUNNEL

TEMPORARY CUT & COVER FOR TBM

TO 101 HWY

CENTRAL AVE.

PORTAL

OFFICE

PORTAL/TUNNEL CONSTRUCTION SITE

1ST ST

2ND ST

CRANE

ELECTRICAL & MECHAN EQUIP

ALAMEDA ST

SAVOY HOUSING

UNDERPASS

GEFFEN MOCA

Little Tokyo/Arts District Station

PARTIAL TAKE FOR PEDESTRIAN BRIDGE

PEDESTRIAN BRIDGE

EXISTING EAST SIDE LRT LINE

CUT AND COVER TEMPORARY DECK

Construction Staging Site

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE MAY 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

ALAMEDA/2ND PORTAL/UNDERPASS
Construction Staging Site
Underground Emphasis LRT Alternative

CONTRACT NO

DRAWING NO CS-011 REV

SCALE

SHEET NO

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BORED TUNNEL

TEMPORARY CUT & COVER FOR TBM

TO 101 HWY

CENTRAL AVE.

CENTRAL AV

OFFICE

PORTAL/TUNNEL CONSTRUCTION SITE

2nd/Central Avenue Station

1 ST ST

2ND ST

CRANE

ELECTRICAL & MECHAN EQUIP

ALAMEDA ST

SAVOY HOUSING

GEFFEN MOCA

270

MATCH LINE SEE DWG

MATCH LINE SEE DWG CS-412

CUT AND COVER TEMPORARY DECK

POTENTIAL WORK SITE AREA

EXISTING EAST SIDE LRT LINE

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
CONSTRUCTION STAGING SITE
2ND/CENTRAL AVE STATION/ALAMEDA

CONTRACT NO
DRAWING NO CS-411 REV
SCALE 1" =50'
SHEET NO

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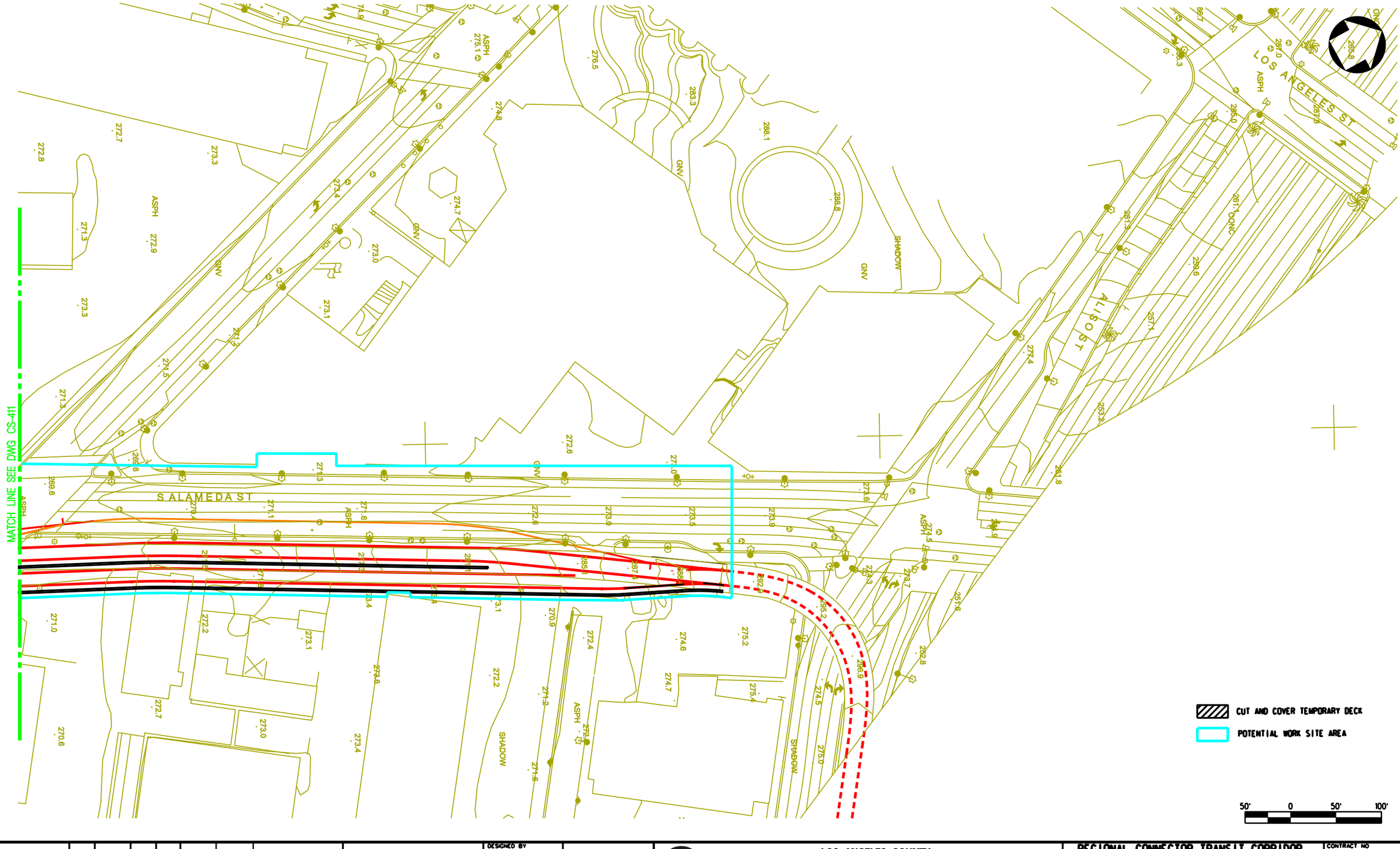

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY	
DRAWN BY	
CHECKED BY	
IN CHARGE	
DATE	DEC 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
CONSTRUCTION STAGING SITE
NORTH ALAMEDA STREET

CONTRACT NO	
DRAWING NO	CS-412
REV	
SCALE	1" =50'
SHEET NO	

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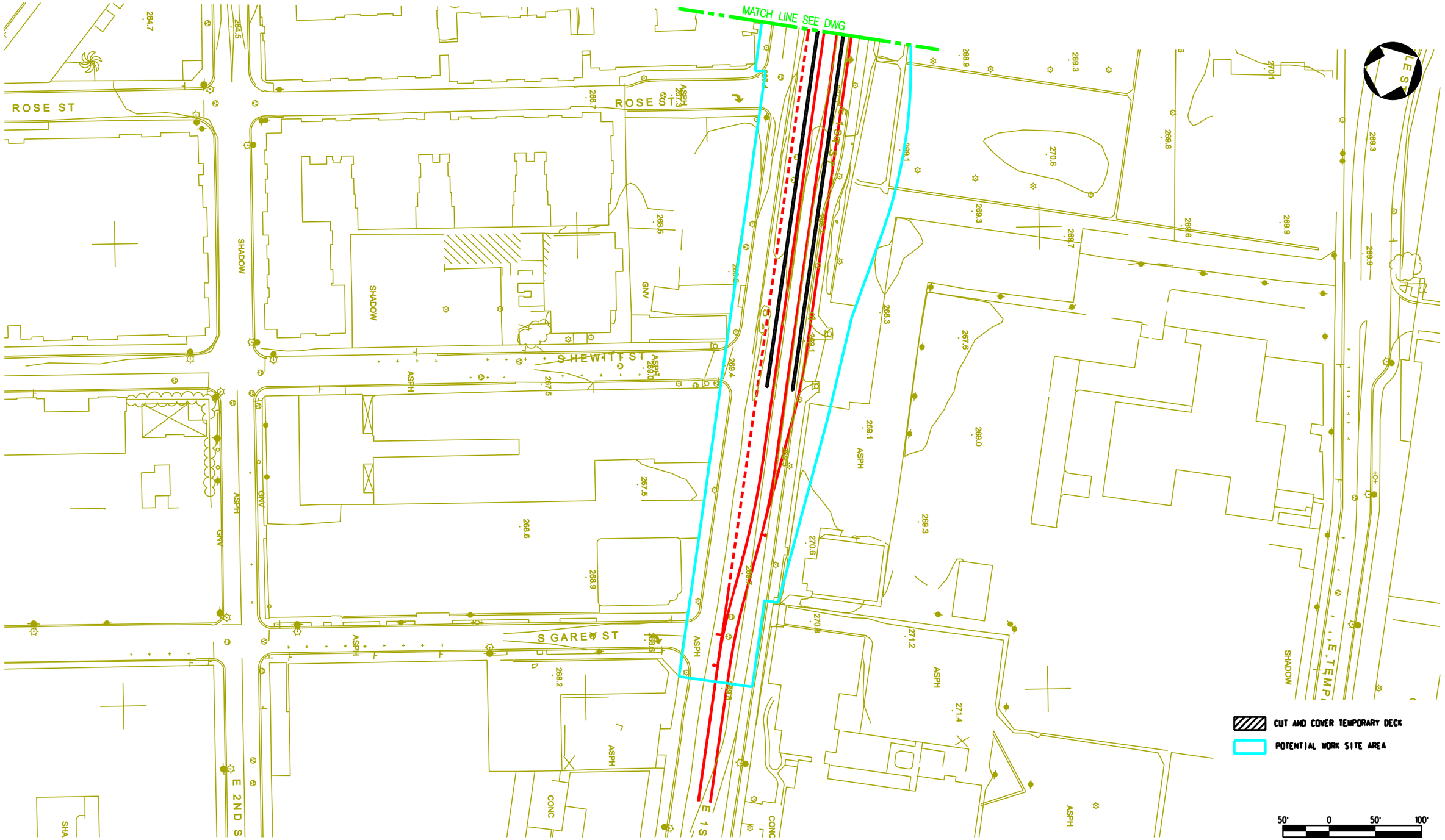

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
CONSTRUCTION STAGING SITE
1ST STREET PORTAL

CONTRACT NO
DRAWING NO CS-413 REV
SCALE 1"=50'
SHEET NO

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BORED TUNNEL

TEMPORARY CUT & COVER FOR TBM

TO 101 HWY

CENTRAL AVE.

CENTRAL AV

OFFICE

PORTAL/TUNNEL CONSTRUCTION SITE

2ND ST

CRANE

2nd/Central Avenue Station

ELECTRICAL & MECHAN EQUIP

1ST ST

GEFFEN MOCA

ALAMEDA ST

SAVOY HOUSING

MATCH LINE SEE DWG CS-513

EXISTING EAST SIDE LRT LINE

CUT AND COVER TEMPORARY DECK

POTENTIAL WORK SITE AREA

MATCH LINE SEE DWG CS-512

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY	
DRAWN BY	
CHECKED BY	
IN CHARGE	
DATE	DEC 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
CONSTRUCTION STAGING SITE
2ND/CENTRAL AVE STATION/ALAMEDA

CONTRACT NO	
DRAWING NO	CS-511
REV	
SCALE	1" =50'
SHEET NO	

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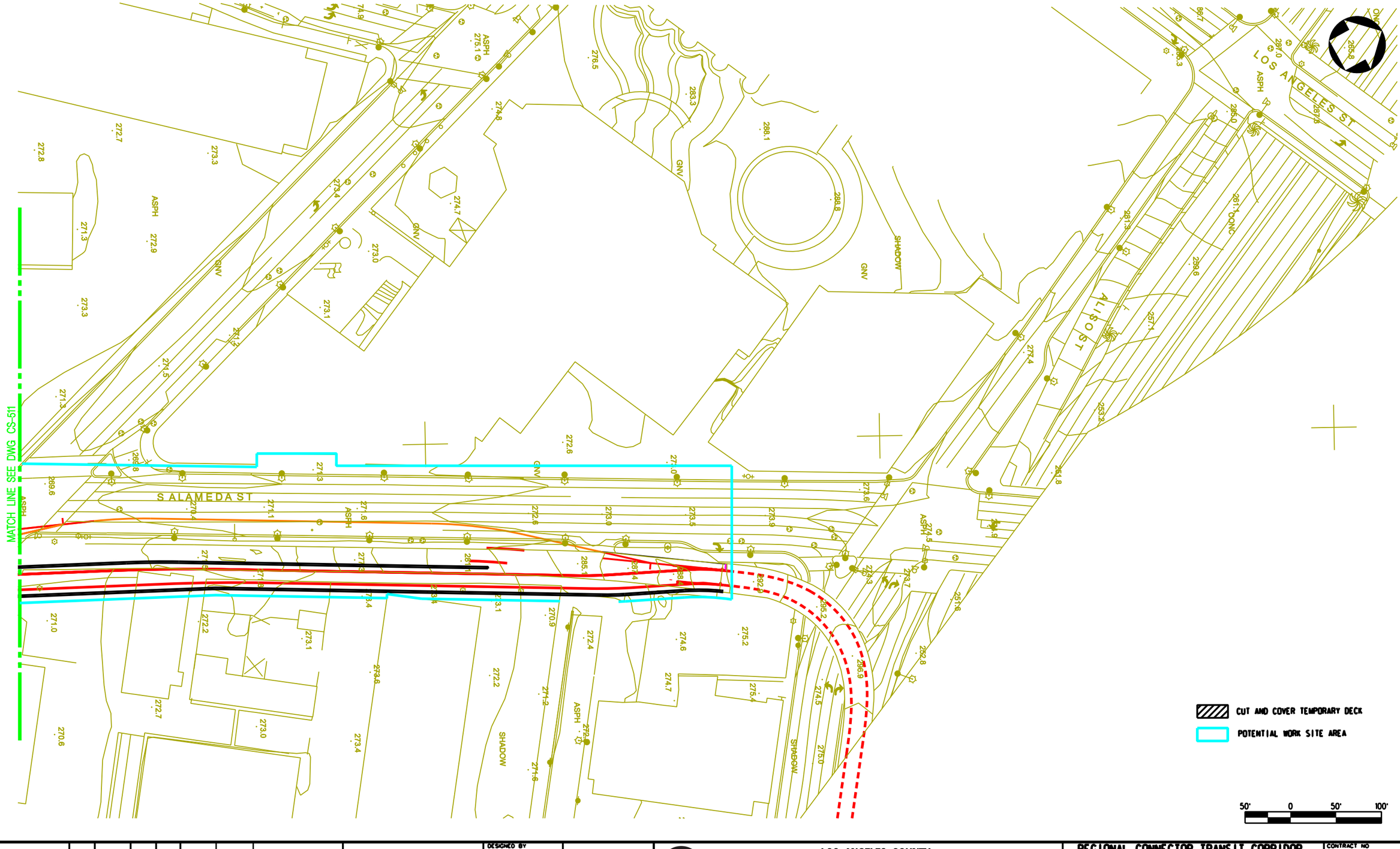

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
CONSTRUCTION STAGING SITE
NORTH ALAMEDA STREET

CONTRACT NO
DRAWING NO CS-512 REV
SCALE 1" =50'
SHEET NO

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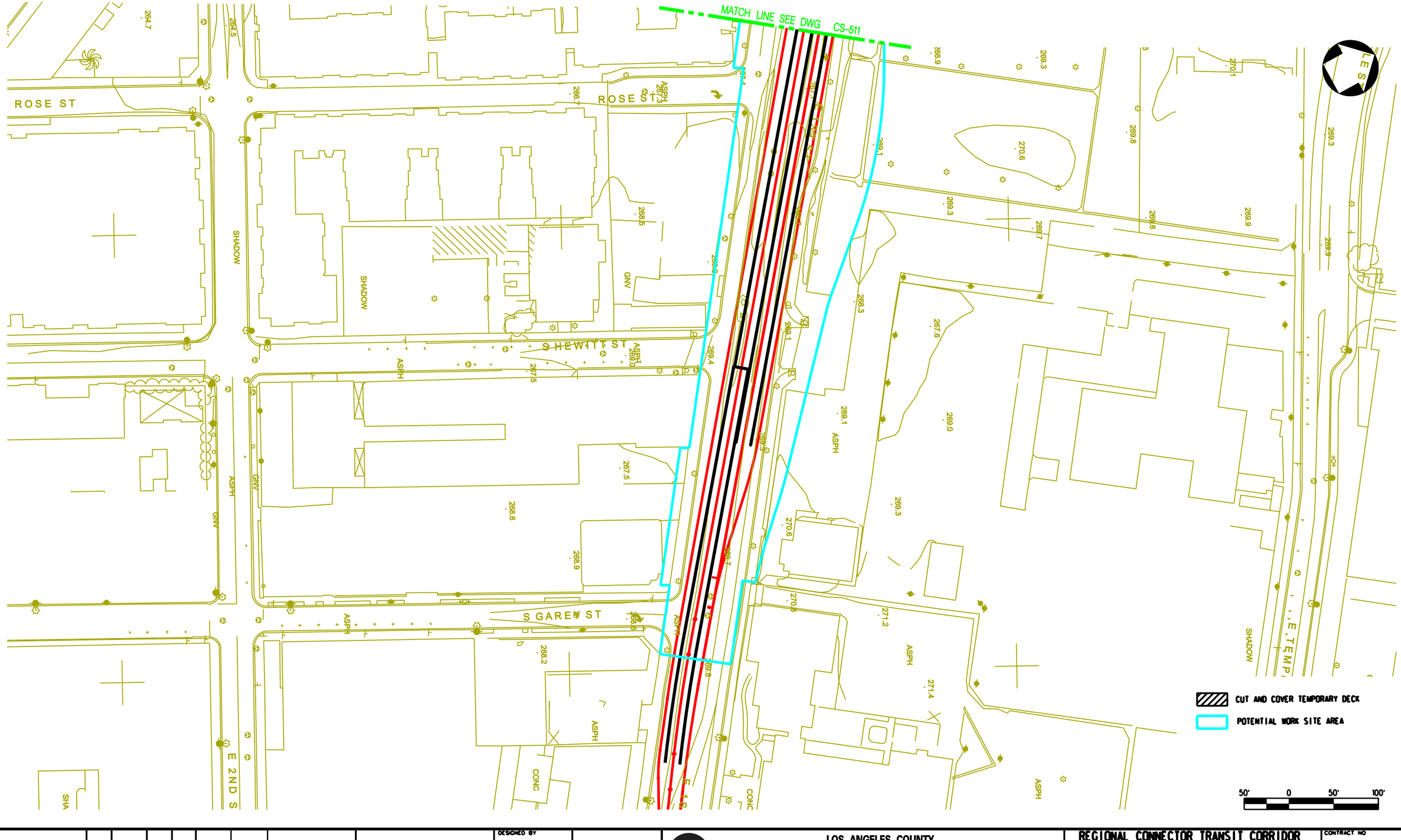

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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CHECKED BY
IN CHARGE
DATE DEC 2009

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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
CONSTRUCTION STAGING SITE
1ST STREET PORTALS

CONTRACT NO
DRAWING NO CS-513 REV
SCALE 1" =50'
SHEET NO

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX II

CONCEPTUAL ENGINEERING DRAWINGS
Station Site Footprints

The Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 are identical to the Underground Emphasis LRT Alternative – Broadway Station Option west of Central Avenue. Only the two drawings east of Central Avenue are included for the Fully Underground LRT Alternatives.

State Clearinghouse Number: 2009031043

BUILDING

BUILDING

BONAVENTURE HOTEL COMPLEX

W. 5TH ST.

CUT AND COVER LINE

FLOWER ST.

EXISTING 7 ST METRO CENTER

W. 6TH ST.

CUT AND COVER LINE

FLOWER/6TH_5TH STATION

LOS ANGELES CENTRAL LIBRARY

CITYCORP PLAZA

BUILDING

Potential Station Entrance

Station Site Footprint

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FLOWER/6TH-5TH ST STATION
Station Site Footprint
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO SF-001 REV
SCALE
SHEET NO

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LOS ANGELES
WORLD TRADE CENTER

10 TO I-110

AT GRADE

FLOWER ST

3 RD ST

HOPE ST

AT GRADE

FUTURE
DEVELOPMENT
(NOT METRO)

PEDESTRIAN BRIDGE

FUTURE
DEVELOPMENT
(NOT METRO)

Potential Station Entrance

Station Site Footprint

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd/Hope Station
Station Site Footprint
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO SF-002 REV
SCALE
SHEET NO

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OLD CALTRANS BLDG

W. 1ST ST.

LOS ANGELES CITY HALL

MAIN ST

MAIN ST STATION

CITY HALL ANNEX

CITY HALL EAST

CALTRANS BLDG

Potential Station Entrance

Station Site Footprint

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
MAIN ST STATION
Station Site Footprint
At-Grade Emphasis LRT Alternative

CONTRACT NO
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SCALE
SHEET NO

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CITY HALL ANNEX

CITY HALL EAST

LOS ANGELES ST.

W. 1ST ST.

65+00

70+00

75+00

LOS ANGELES ST STATION

Potential Station Entrance

Station Site Footprint

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE MAY 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
LOS ANGELES ST STATION
Station Site Footprint
At-Grade Emphasis LRT Alternative

CONTRACT NO

DRAWING NO SF-004 REV

SCALE

SHEET NO

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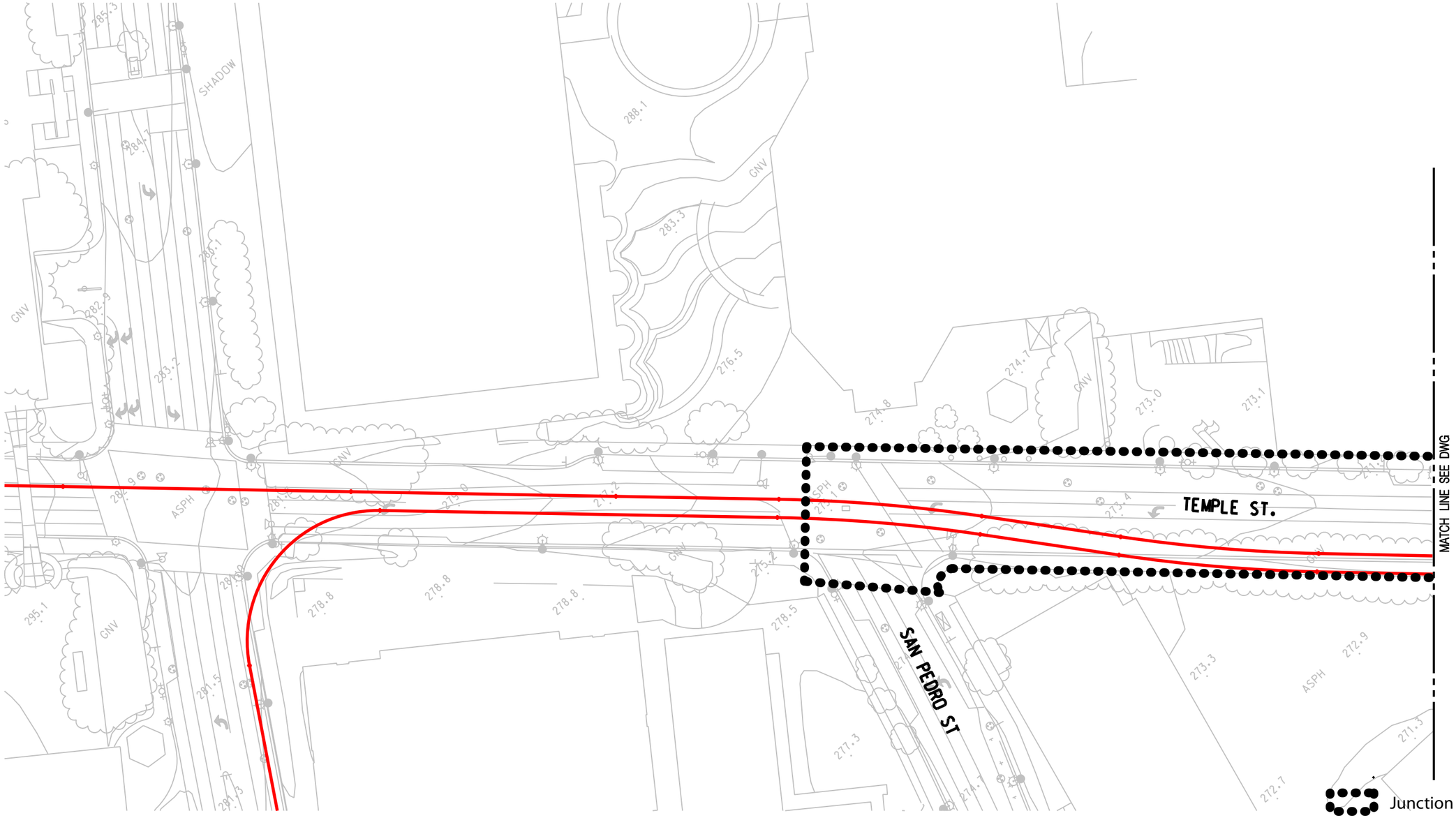

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
Temple Street Underpass
Junction Site Footprint
At-Grade Emphasis LRT Alternative

CONTRACT NO
DRAWING NO SF-005.1 REV
SCALE
SHEET NO

UserName: USER-mireo 5/14/2009 @ 9:00:42 PM FileName>> I:\x27939A-RegionalConnectorACE\CAD\Sheets\civil\Env Imp Footprint\Vcs05_01_Temple_Underpass_optionA.dgn

ALAMEDA UNDERPASS

LITTLE TOKYO STATION

ALAMEDA ST.

TEMPLE ST.

MATCH LINE SEE DWG CS-007.1

Pedestrian Bridge

GEFFEN MOCA

Junction Site Footprint

40' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

TEMPLE UNDERPASS

Junction Site Footprint

At-Grade Emphasis LRT Alternative

CONTRACT NO

DRAWING NO SF-005.2 REV

SCALE

SHEET NO

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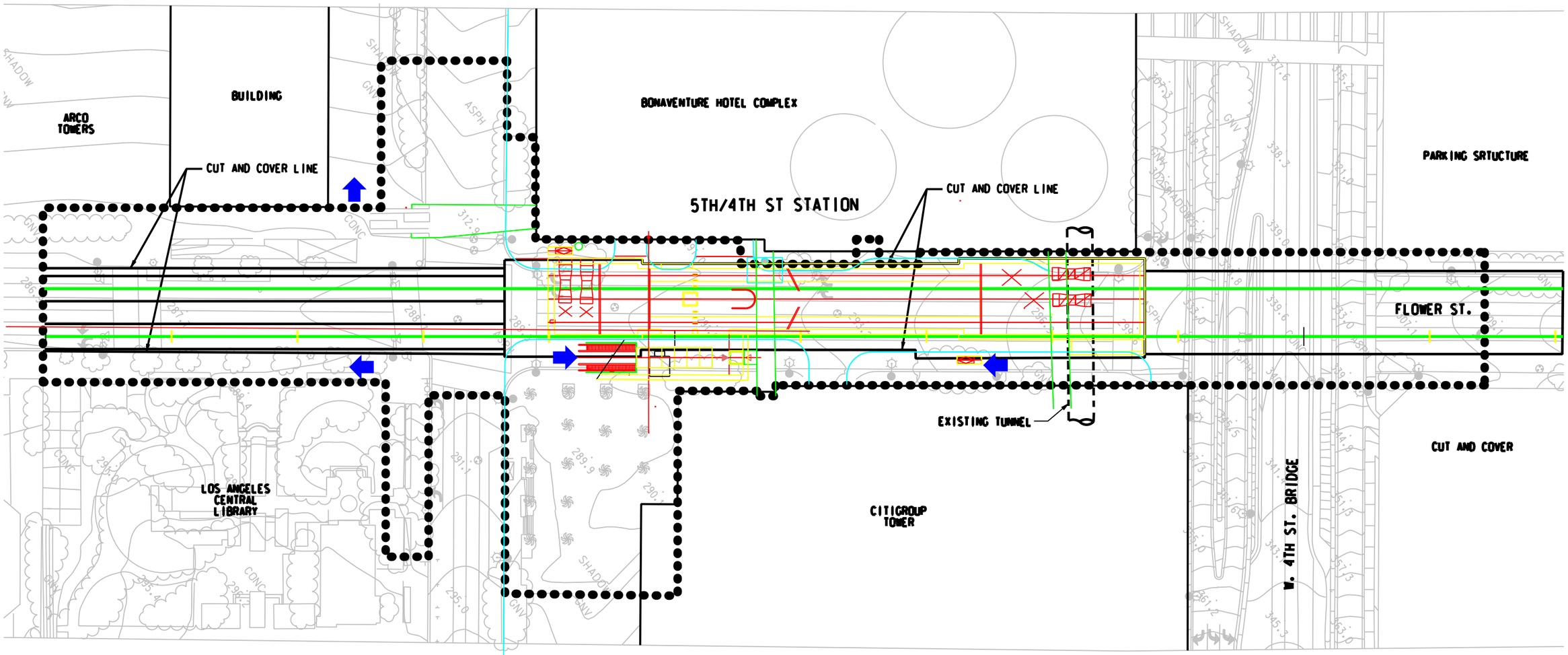

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MMXY20089

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
5TH/4TH ST STATION
Station Site Footprint
Underground Emphasis LRT Alternative

CONTRACT NO
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SCALE
SHEET NO

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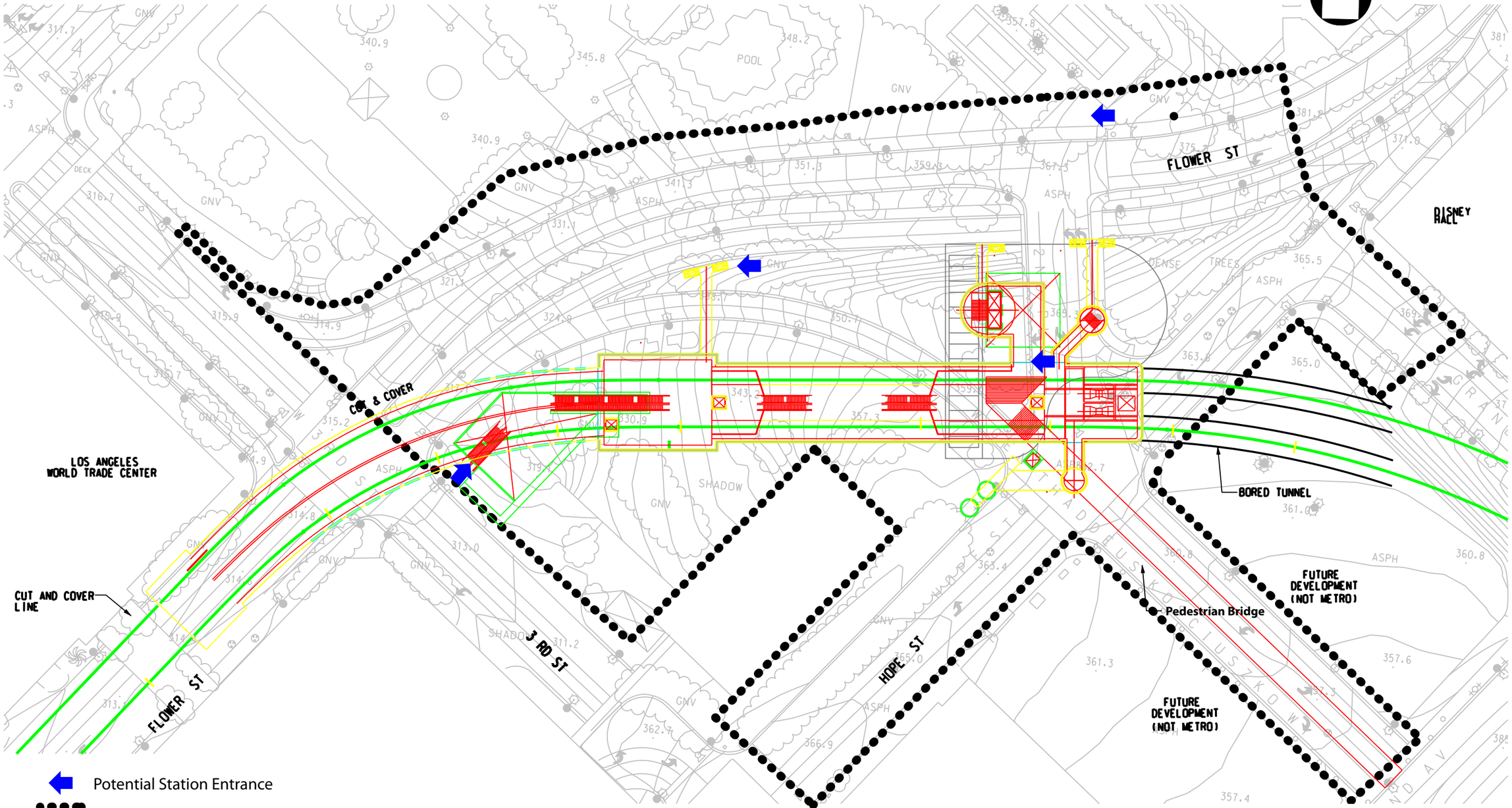

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DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE APRIL 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd/Hope Station
Station Site Footprint
Underground Emphasis LRT Alternative

CONTRACT NO
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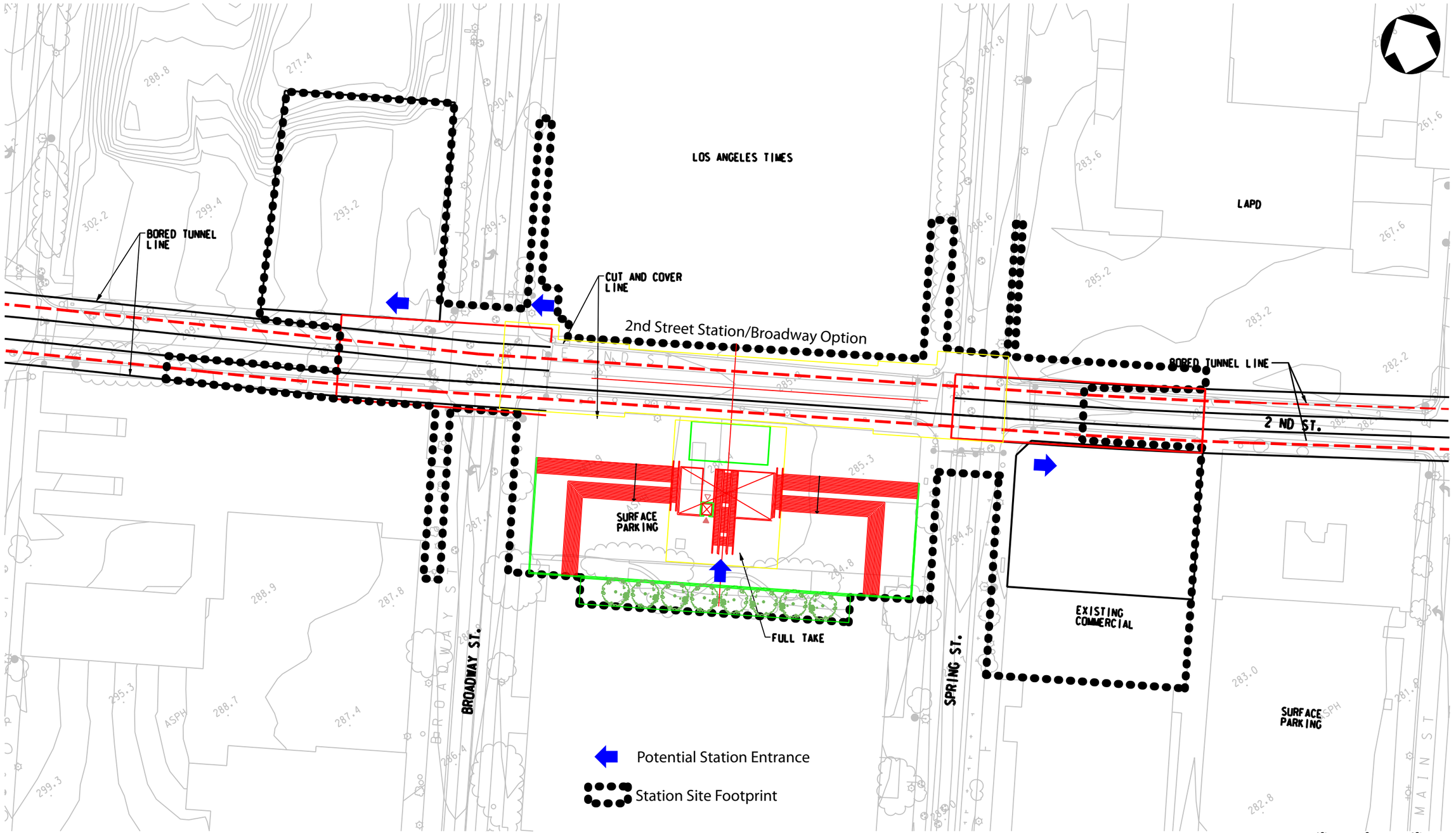

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE APRIL 2009

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd Street Station/Broadway Option
Station Site Footprint
Underground Emphasis LRT Alternative - Broadway Station Option

CONTRACT NO
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SCALE
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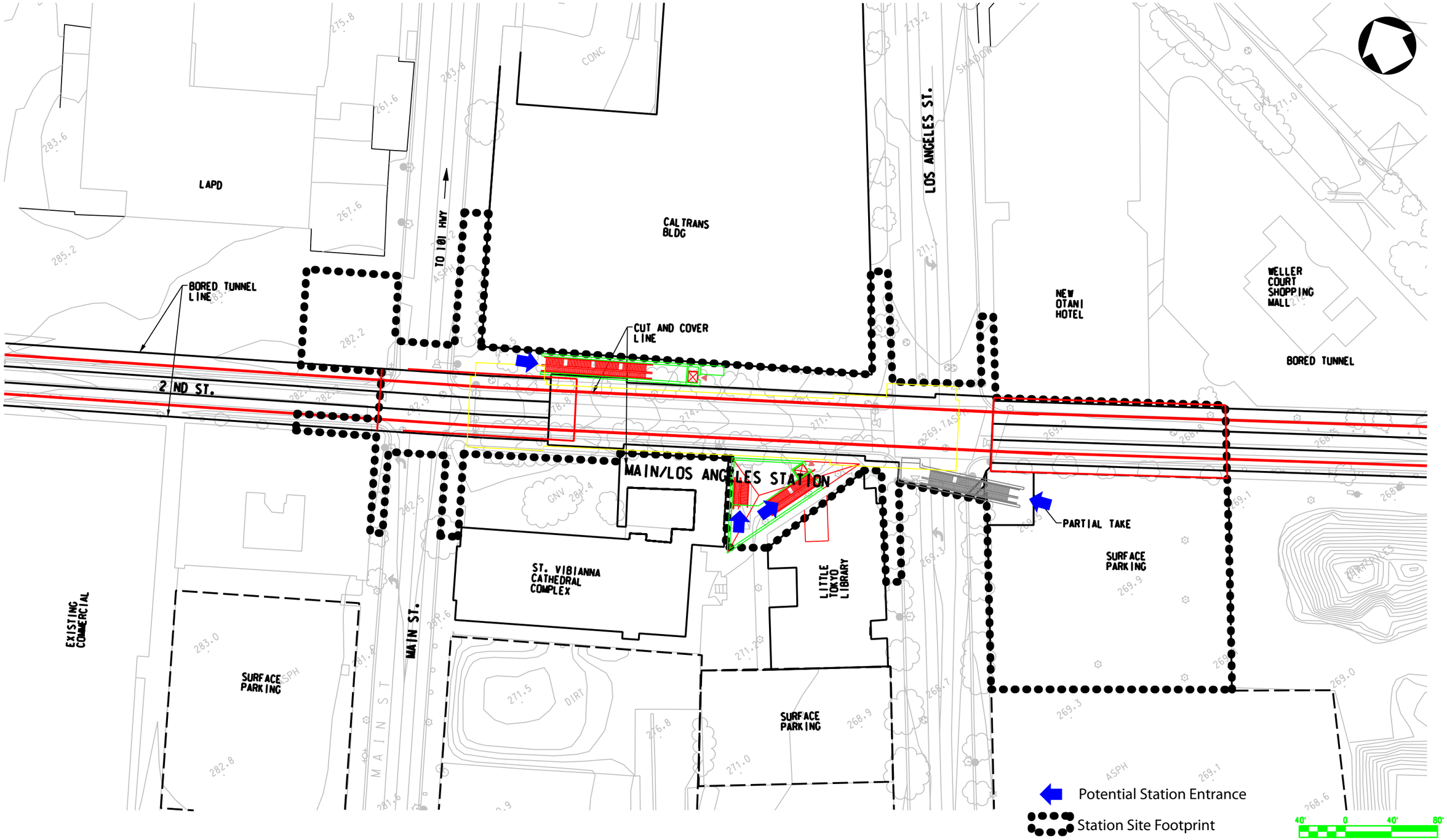

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE MAY 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
2nd and Main/Los Angeles Station
Station Site Footprint
Underground Emphasis LRT Alternative -
Main/Los Angeles Station Option

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SCALE
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BORED TUNNEL

PORTAL

TO 101 HWY

CENTRAL AVE.

1 ST ST

2ND ST

ALAMEDA ST

SAVOY HOUSING

UNDERPASS

GEFFEN MOCA

Little Tokyo/Arts District Station

PARTIAL TAKE FOR PEDESTRIAN BRIDGE

PEDESTRIAN BRIDGE

EXISTING EAST SIDE LRT LINE

Junction Site Footprint

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE MAY 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

ALAMEDA/2ND PORTAL/UNDERPASS
Junction Site Footprint
Underground Emphasis LRT Alternative

CONTRACT NO

DRAWING NO SF-010 REV

SCALE

SHEET NO

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BORED TUNNEL

TEMPORARY CUT & COVER FOR TBM

TO 101 HWY

CENTRAL AV

CENTRAL AVE.

OFFICE

PORTAL/TUNNEL CONSTRUCTION SITE

1ST ST

2ND ST

CRANE

ELECTRICAL & MECHAN EQUIP

ALAMEDA ST

SAVOY HOUSING

GEFFEN MOCA

MATCH LINE SEE DWG

MATCH LINE SEE DWG CS-412

CUT AND COVER TEMPORARY DECK

POTENTIAL WORK SITE AREA

PARTIAL TAKE FOR PEDESTRIAN BRIDGE

EXISTING EAST SIDE LRT LINE

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE DEC 2009

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
Station Site Footprint
2ND/CENTRAL AVE STATION/ALAMEDA

CONTRACT NO
DRAWING NO CS-411 REV
SCALE 1" =50'
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BORED TUNNEL

TEMPORARY CUT & COVER FOR TBM

TO 101 HWY

CENTRAL AV

CENTRAL AVE.

OFFICE

PORTAL/TUNNEL CONSTRUCTION SITE

2ND ST

CRANE

ELECTRICAL & MECHAN EQUIP

1ST ST

GEFFEN MOCA

ALAMEDA ST

SAVOY HOUSING

MATCH LINE SEE DWG CS-513

MATCH LINE SEE DWG CS-512

EXISTING EAST SIDE LRT LINE

CUT AND COVER TEMPORARY DECK

POTENTIAL WORK SITE AREA

50' 0 50' 100'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY	
DRAWN BY	
CHECKED BY	
IN CHARGE	
DATE	DEC 2009

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
Station Site Footprint
2ND/CENTRAL AVE STATION/ALAMEDA

CONTRACT NO	
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REV	
SCALE	1" =50'
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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

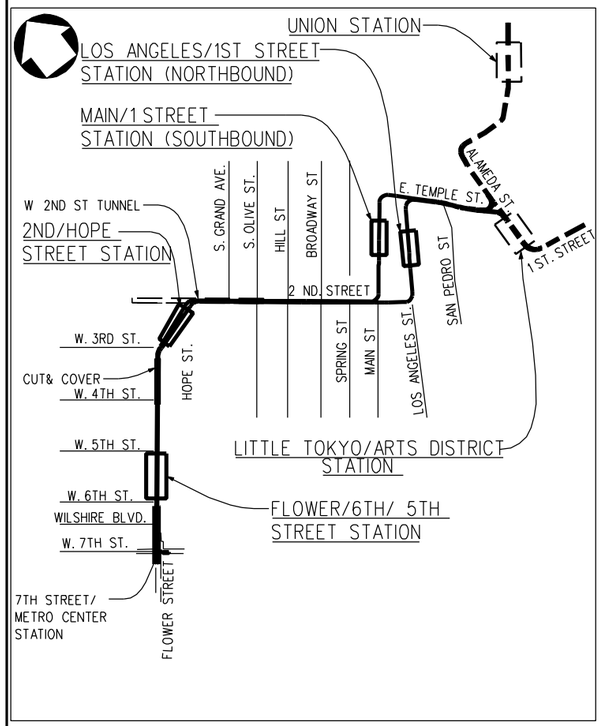
APPENDIX II

CONCEPTUAL ENGINEERING DRAWINGS
Right – of – Way

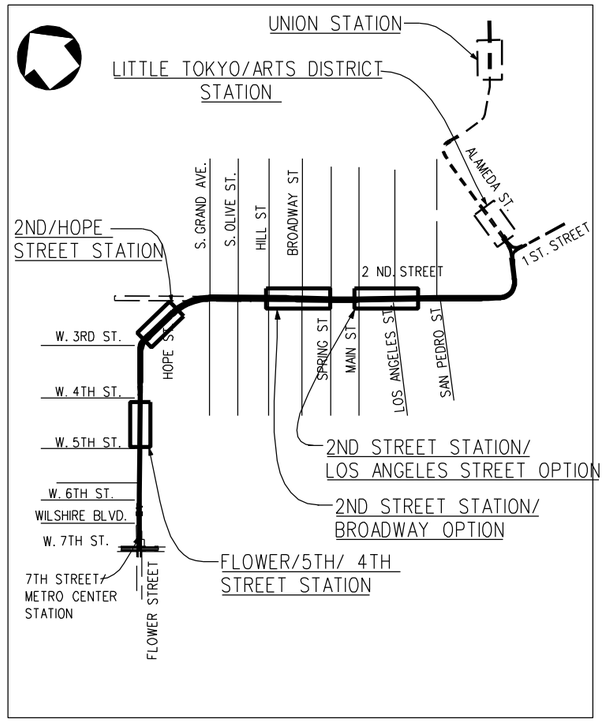
State Clearinghouse Number: 2009031043

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

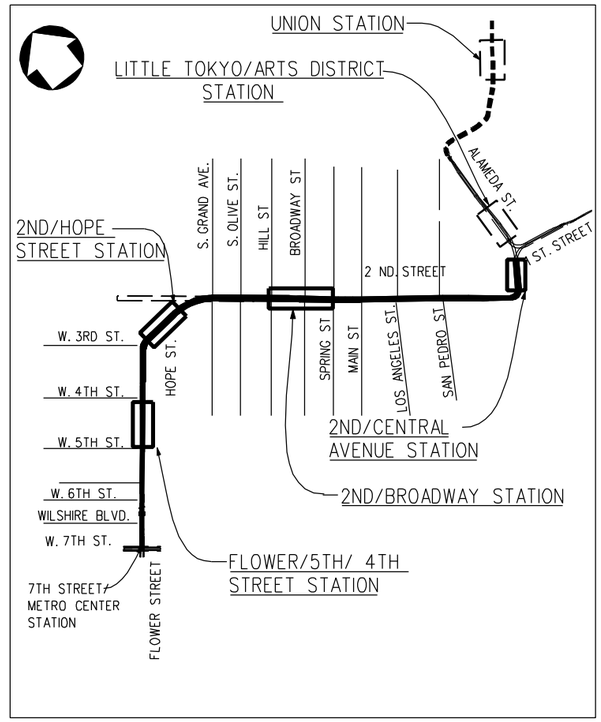
REGIONAL CONNECTOR TRANSIT CORRIDOR
DRAFT RIGHT OF WAY PLANS
JANUARY 2010



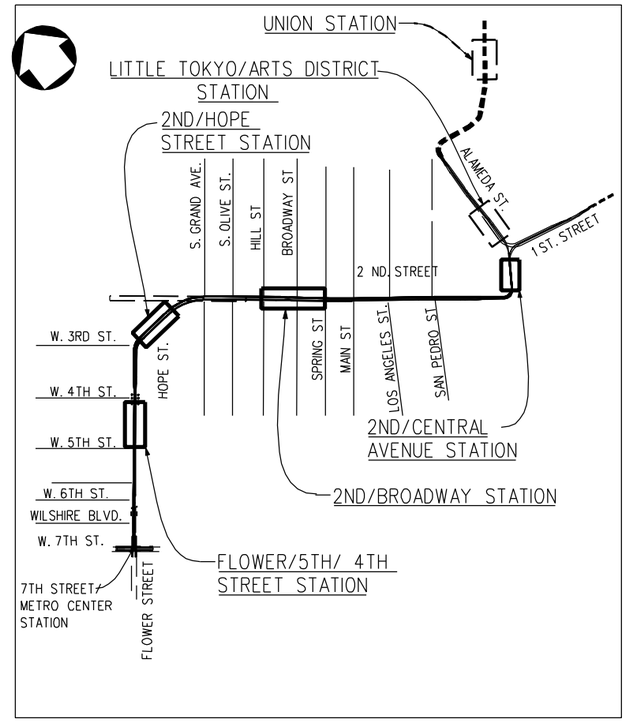
AT-GRADE EMPHASIS
LRT ALTERNATIVE



UNDERGROUND EMPHASIS
LRT ALTERNATIVE



FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1



FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro CDM PB

INDEX OF DRAWINGS

DWG NUMBER	NAME
GC-000	COVER SHEET
GC-001	INDEX OF DRAWINGS
GR-101	KEY MAP FOR AT-GRADE EMPHASIS LRT ALTERNATIVE
GR-301	KEY MAP FOR UNDERGROUND EMPHASIS LRT ALTERNATIVE
GR-401	KEY MAP FOR FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 1
GR-501	KEY MAP FOR FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 2
	AT-GRADE EMPHASIS LRT ALTERNATIVE
R-101	ROW PLAN STA 0+00 TO STA 10+00
R-102	ROW PLAN STA 10+00 TO STA 22+00
R-103	ROW PLAN STA 22+00 TO STA 33+00
R-104	ROW PLAN STA 33+00 TO STA 44+00
R-105	ROW PLAN STA 44+00 TO STA 56+00
R-106	ROW PLAN STA 56+00 TO STA 66+00
R-107	ROW PLAN STA 66+00 TO STA 75+00
R-108	ROW PLAN STA 75+00 TO STA 83+00
R-109	ROW PLAN STA 83+00 TO STA 89+32.84
R-110	PARCEL DATA TABLE
	UNDERGROUND EMPHASIS LRT ALTERNATIVE
R-301	ROW PLAN STA 0+00 TO STA 10+00
R-302	ROW PLAN STA 10+00 TO STA 22+00
R-303	ROW PLAN STA 22+00 TO STA 33+00
R-304	ROW PLAN STA 33+00 TO STA 43+00
R-305	ROW PLAN STA 43+00 TO STA 55+00
R-306	ROW PLAN STA 55+00 TO STA 67+00
R-307	ROW PLAN STA 67+00 TO STA 80+00
R-308	ROW PLAN STA 80+00 TO STA 86+07.70
R-309	PARCEL DATA TABLE

DWG NUMBER	NAME
	FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 1
R-401	ROW PLAN STA 0+00 TO STA 11+00
R-402	ROW PLAN STA 11+00 TO STA 23+00
R-403	ROW PLAN STA 23+00 TO STA 34+00
R-404	ROW PLAN STA 34+00 TO STA 45+00
R-405	ROW PLAN STA 45+00 TO STA 57+00
R-406	ROW PLAN STA 57+00 TO STA 69+00
R-407	ROW PLAN STA 69+00 TO STA 81+00
R-408	ROW PLAN STA 81+00 TO STA 85+00, 93+00
R-409	ROW PLAN STA 93+00 TO STA 99+70.28
R-410	ROW PLAN STA 85+00 TO STA 94+33.74
R-411	PARCEL DATA TABLE
	FULLY UNDERGROUND LRT ALTERNATIVE LITTLE TOKYO VARIATION 2
R-501	ROW PLAN STA 0+00 TO STA 11+00
R-502	ROW PLAN STA 11+00 TO STA 23+00
R-503	ROW PLAN STA 23+00 TO STA 34+00
R-504	ROW PLAN STA 34+00 TO STA 45+00
R-505	ROW PLAN STA 45+00 TO STA 57+00
R-506	ROW PLAN STA 57+00 TO STA 69+00
R-507	ROW PLAN STA 69+00 TO STA 81+00
R-508	ROW PLAN STA 81+00 TO STA 86+00, 92+00
R-509	ROW PLAN STA 92+00 TO STA 99+74.92
R-510	ROW PLAN STA 86+00 TO STA 96+00
R-511	PARCEL DATA TABLE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

INDEX OF DRAWINGS

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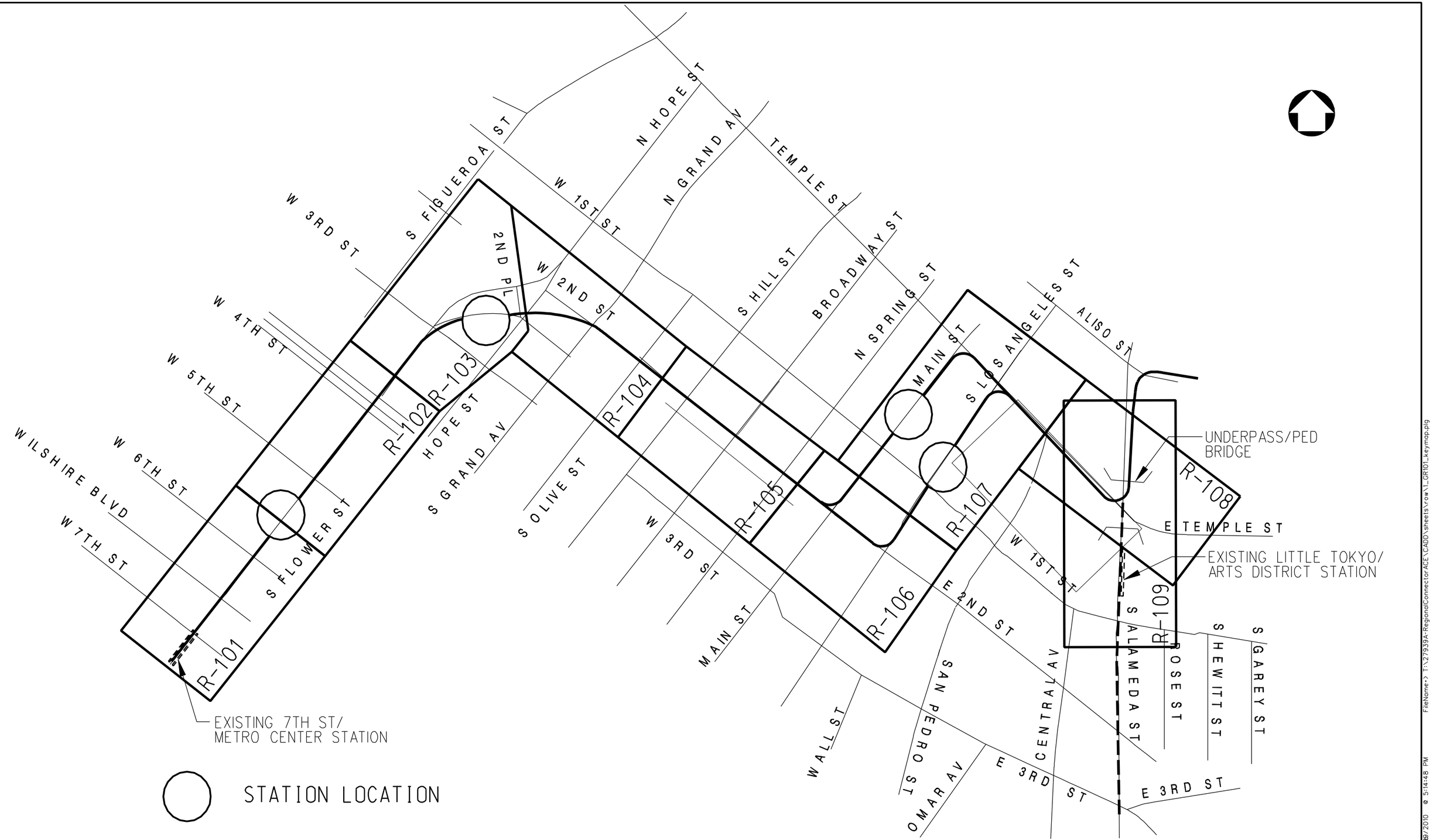

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

KEY MAP FOR AT-GRADE EMPHASIS
LRT ALTERNATIVE

CONTRACT NO
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REV
SCALE
SHEET NO

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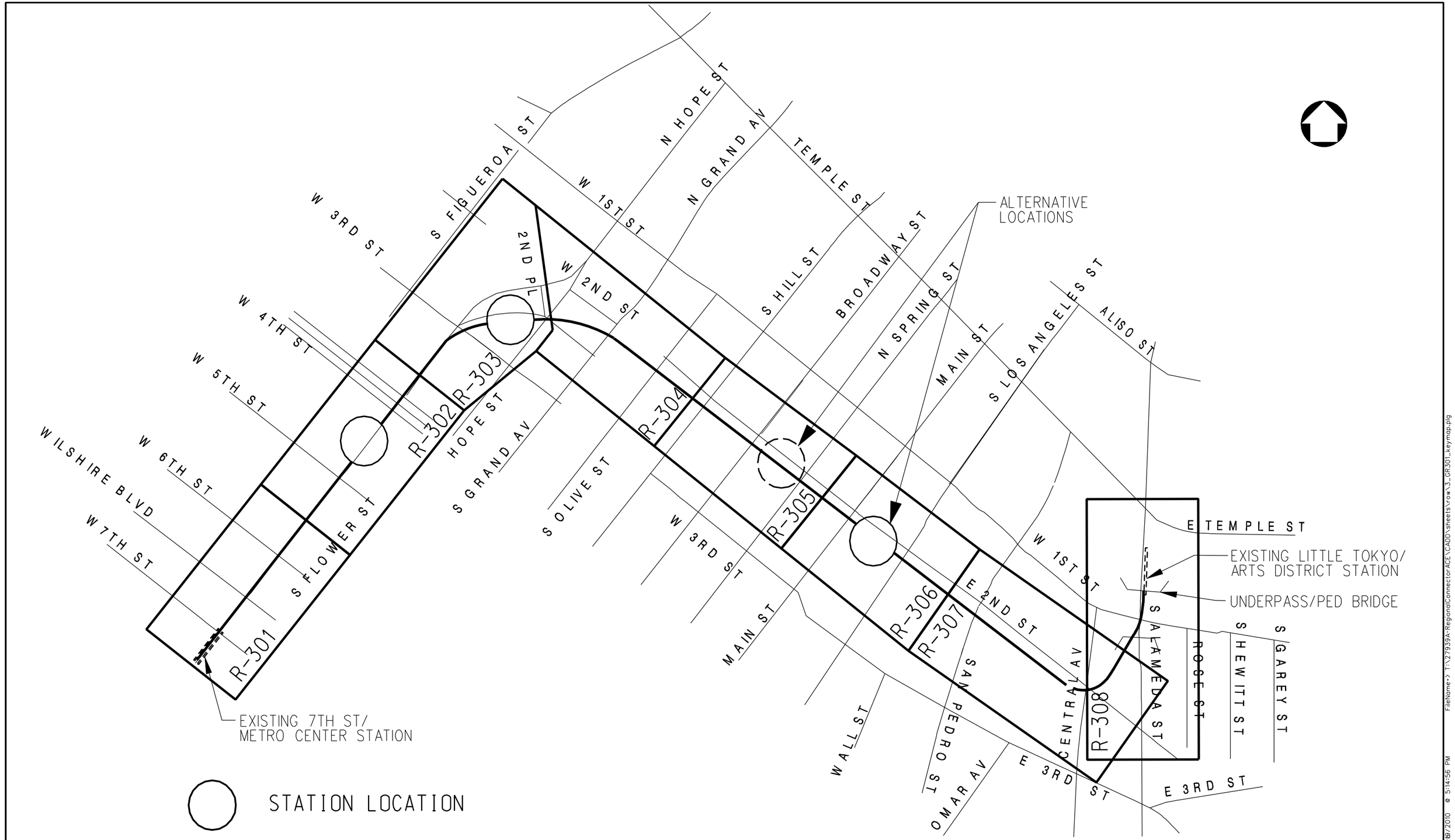

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING

KEY MAP FOR UNDERGROUND EMPHASIS
LRT ALTERNATIVE

CONTRACT NO
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SCALE
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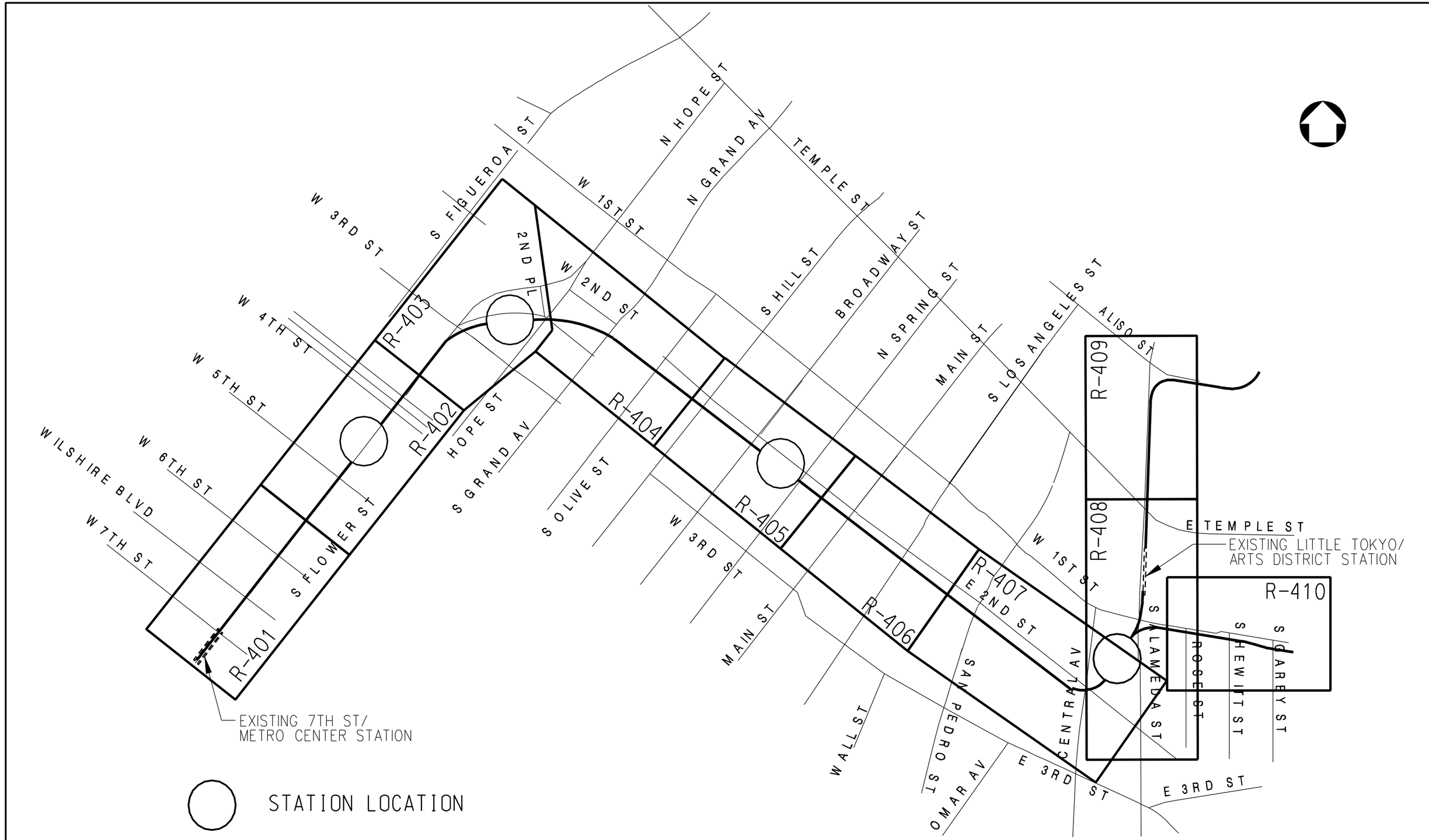

STATION LOCATION

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
KEY MAP FOR FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1

CONTRACT NO
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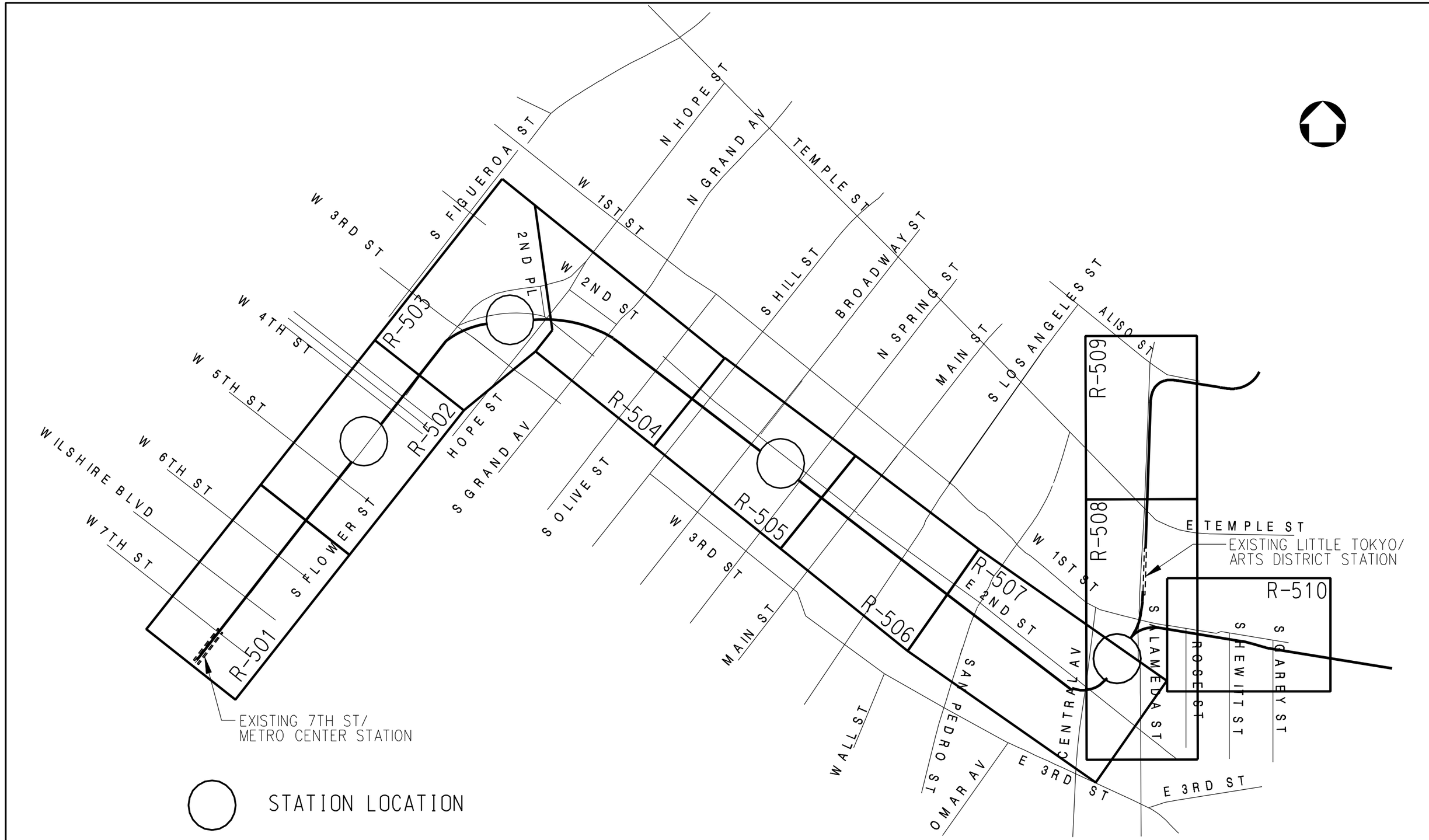

STATION LOCATION

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
KEY MAP FOR FULLY UNDERGROUND
LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2

CONTRACT NO
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SCALE
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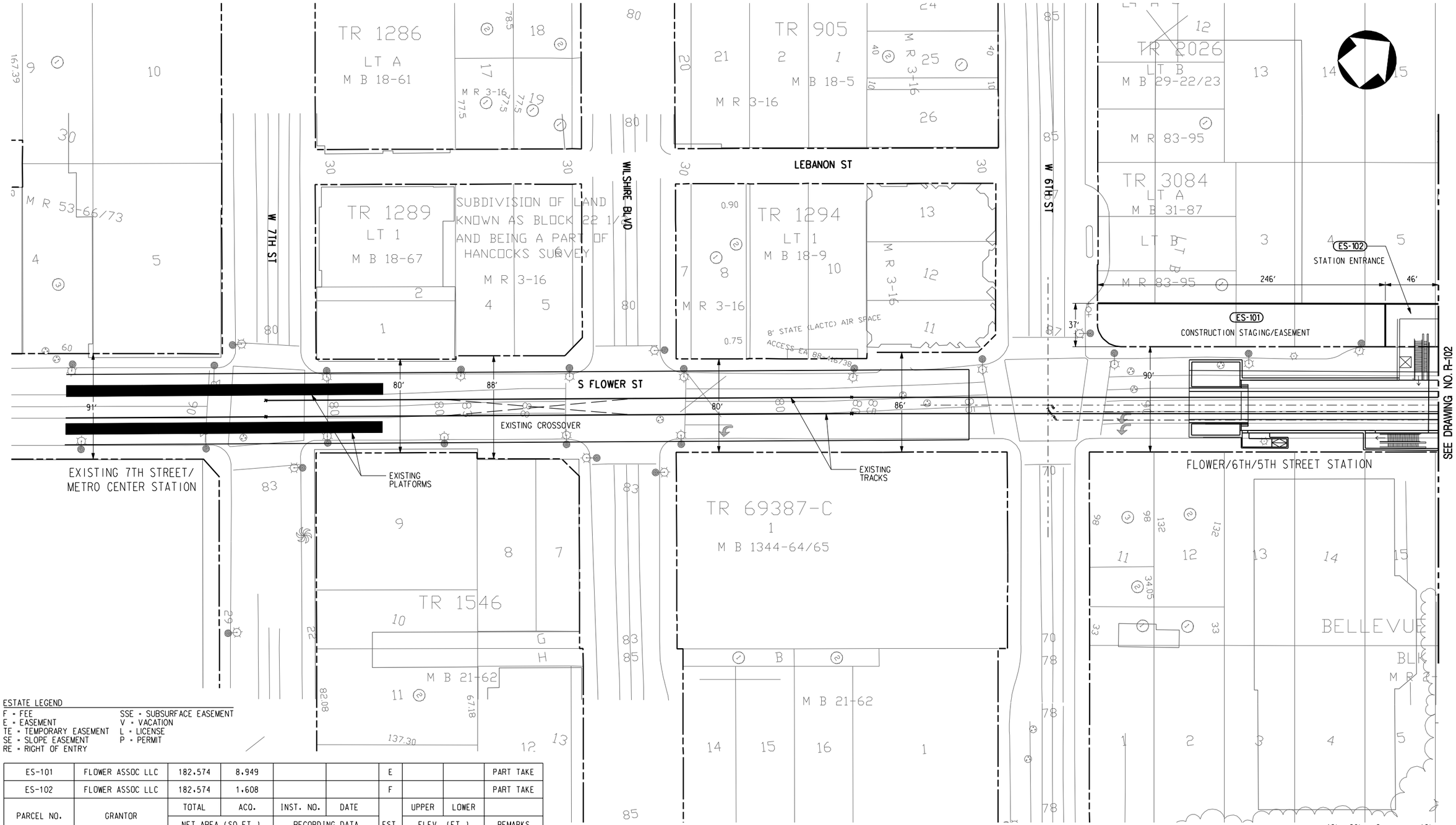

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-101	FLOWER ASSOC LLC	182,574	8,949			E			PART TAKE
ES-102	FLOWER ASSOC LLC	182,574	1,608			F			PART TAKE

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DRAFT

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 0+00 TO STA 10+00

CONTRACT NO
DRAWING NO R-101 REV
SCALE 1" =40'
SHEET NO

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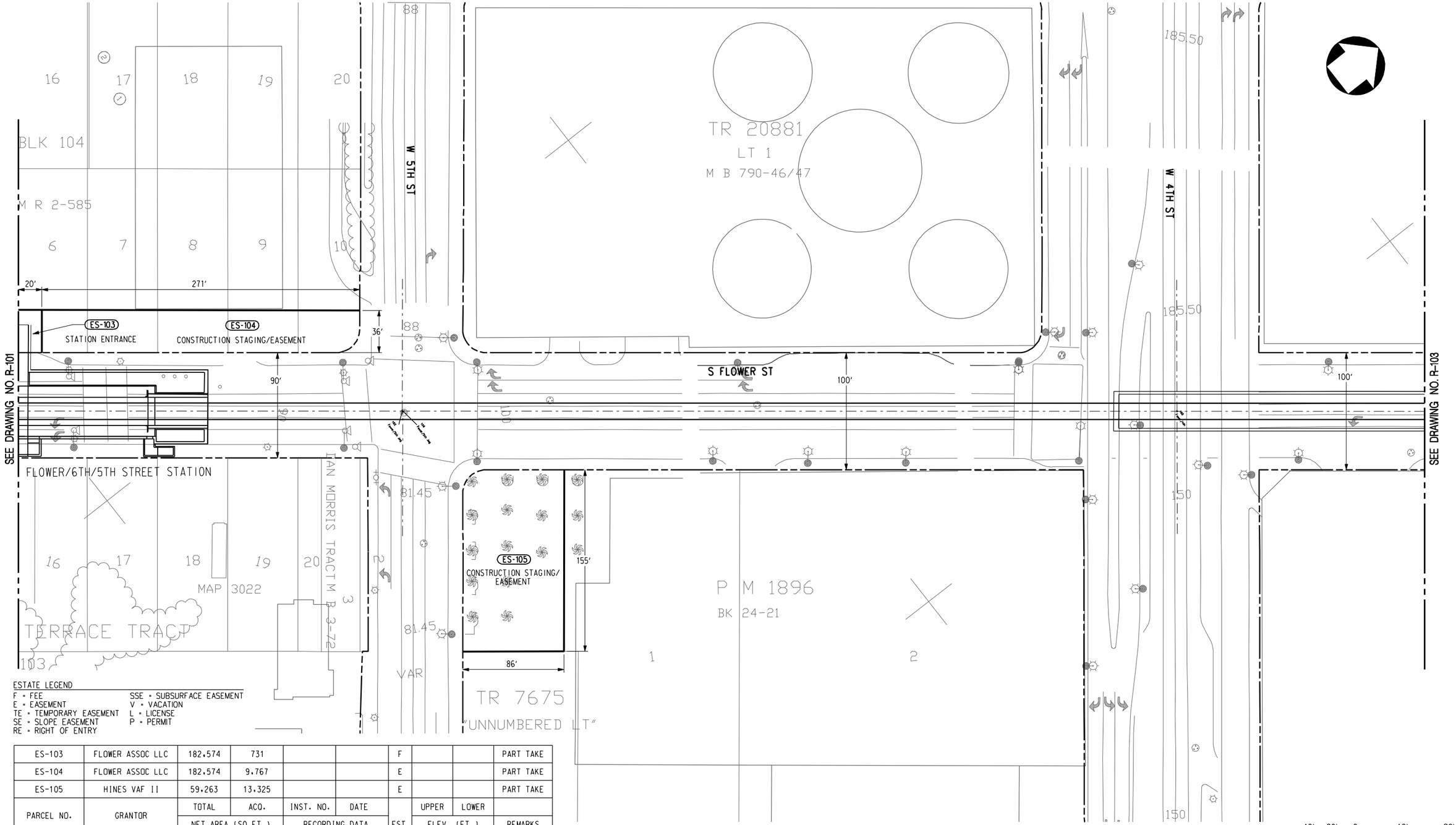

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-103	FLOWER ASSOC LLC	182,574	731			F			PART TAKE
ES-104	FLOWER ASSOC LLC	182,574	9,767			E			PART TAKE
ES-105	HINES VAF II	59,263	13,325			E			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 10+00 TO STA 22+00

CONTRACT NO
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SCALE 1" =40'
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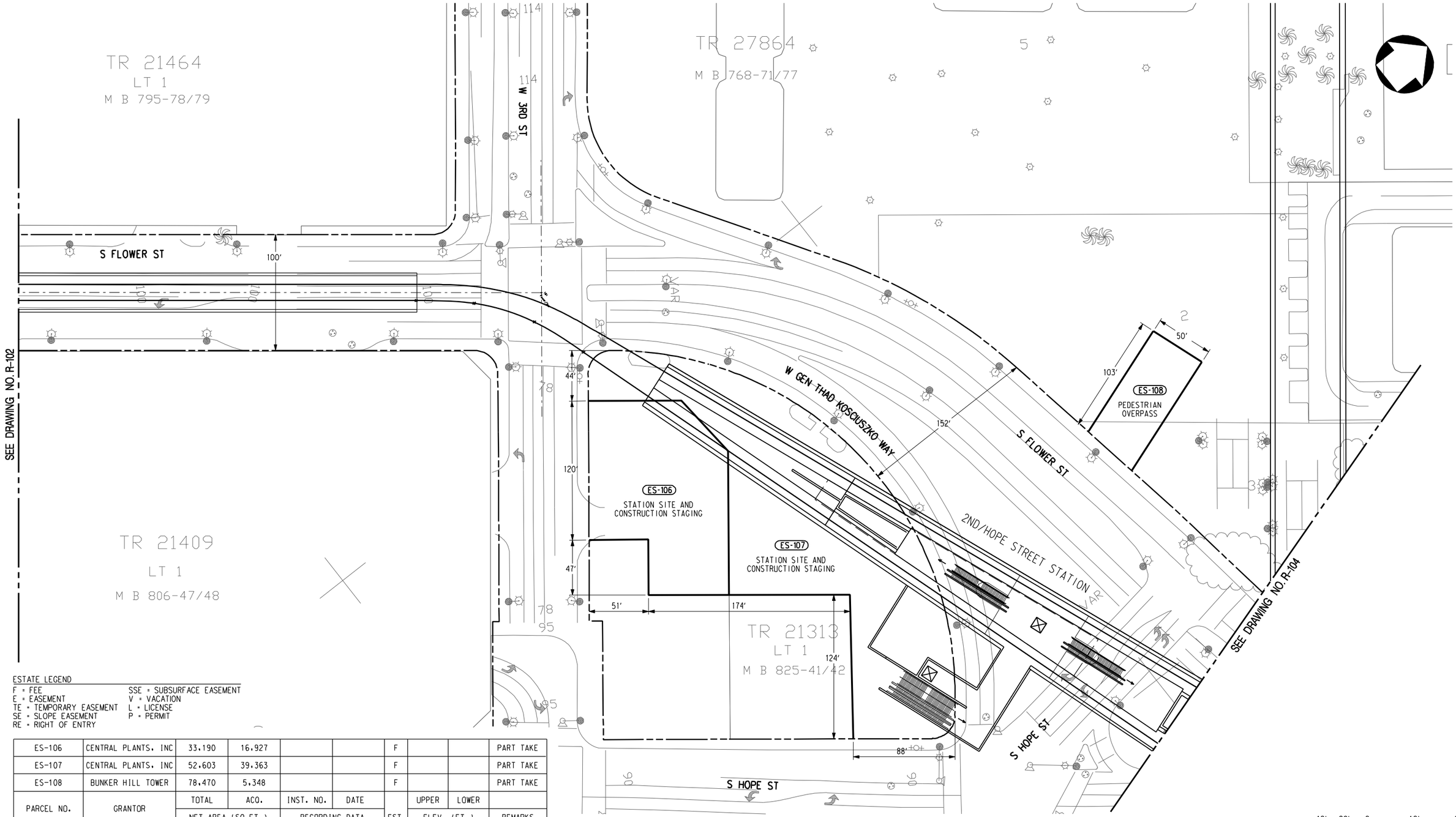

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-106	CENTRAL PLANTS, INC	33,190	16,927			F			PART TAKE
ES-107	CENTRAL PLANTS, INC	52,603	39,363			F			PART TAKE
ES-108	BUNKER HILL TOWER	78,470	5,348			F			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 22+00 TO STA 33+00

CONTRACT NO
DRAWING NO R-103 REV
SCALE 1" =40'
SHEET NO

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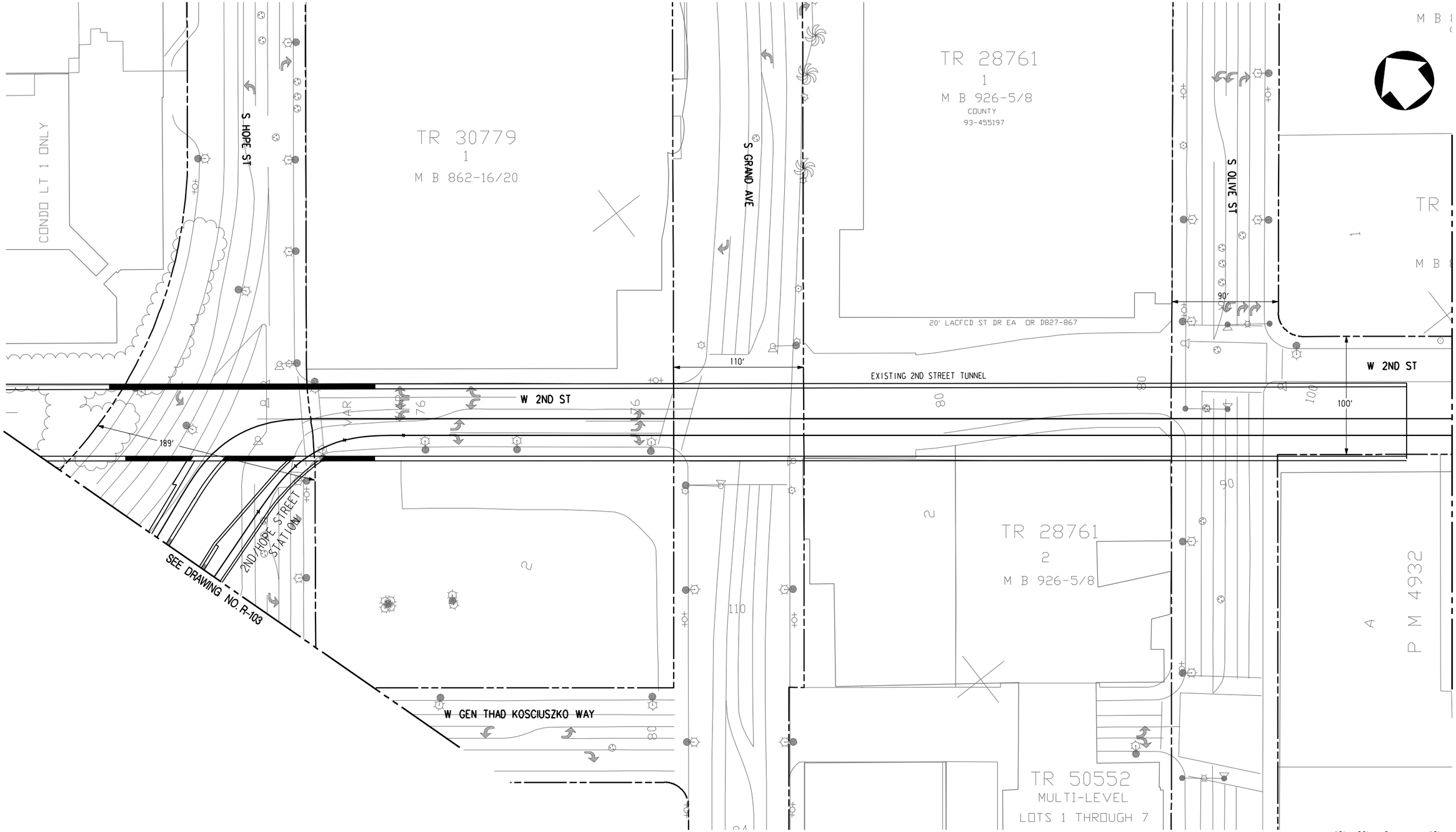

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 33+00 TO STA 44+00

CONTRACT NO
DRAWING NO R-104 REV
SCALE 1" = 40'
SHEET NO

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1_R-104.plg 2/10/2010 4:44:29 PM

854-13/14
COUNTY

28633
1
854-13/14

S HILL ST

S BROADWAY ST

S SPRING ST

STATE
97-1188492

TIMES SQUARE
M B 184-21

M R 53-66/73

W 2ND ST

CROSSOVER

SEE DRAWING NO. R-104

SEE DRAWING NO. R-106

TR 251
M B 14-82
"UNNUMBERED LT"

DM 1023-177

M R 53-66/73

TR 87
"UNNUMBERED LT"
M B 183-50
ES-109
TPSS SITE
POTENTIAL TPSS

ORD'S SURVEY
M R 53-66/73

BK 134-71

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

ES-109	TRIBUNE CO	25,752	22,783			F			PART TAKE
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE		UPPER	LOWER	
		NET AREA (SQ.FT.)		RECORDING DATA		EST.	ELEV. (FT.)		REMARKS

40' 20' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
CDM
PB

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

PROJECT MANAGER

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 44+00 TO STA 56+00

CONTRACT NO
DRAWING NO R-105
REV
SCALE 1" =40'
SHEET NO

User:Name= USER-rodrigu2d00/2010 @ 4:45:09 PM FileName=> T:\27939A-RegionalConnectorACE\CADD\sheets\row\alternative 1\1_R-105.plg

1_R-105.plg 2/10/2010 4:45:09 PM

SEE DRAWING NO. R-107

SEE DRAWING NO. R-105

S MAIN ST

S LOS ANGELES ST

S ONIZUKA ST

W 2ND ST

80'

90'

96'

60'

65'

60'

65'

PCL STATE DEPT OF TRANSP L A C A 1

TR 2647 LT A M B 27-31

"UNNUMBERED LT" PAT 3-64/65 M R 2-504/505 0.66

STATE DR D1747-998

DR D2088-245

DR D1878-952

DR D1849-395

TR 30213 1 M B 856-50/51 4

TR 2918 2 1 M R 35-22

TR 53327-C LT 1 M B 1297-83/84

M R 53-66/73 (M R 1-400)

TR 418 M B 14-133 LT A

CITY LANDS OF LOS ANGELES

TR 4874 LT B LT A M B 115-89

PERRY-HELLMAN PROPERTY LT A M B 5-49

WEINSHENK TRACT 21

M R 53-33

M R 54-93

"UNNUMBERED LT" PAT 3-64/65 M R 2-504/505

TR 2613 LT A M B 32-51

TR 155 LT A 200.97

40' 20' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE JAN 2010

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 56+00 TO STA 66+00

CONTRACT NO

DRAWING NO R-106 REV

SCALE 1" = 40'

SHEET NO

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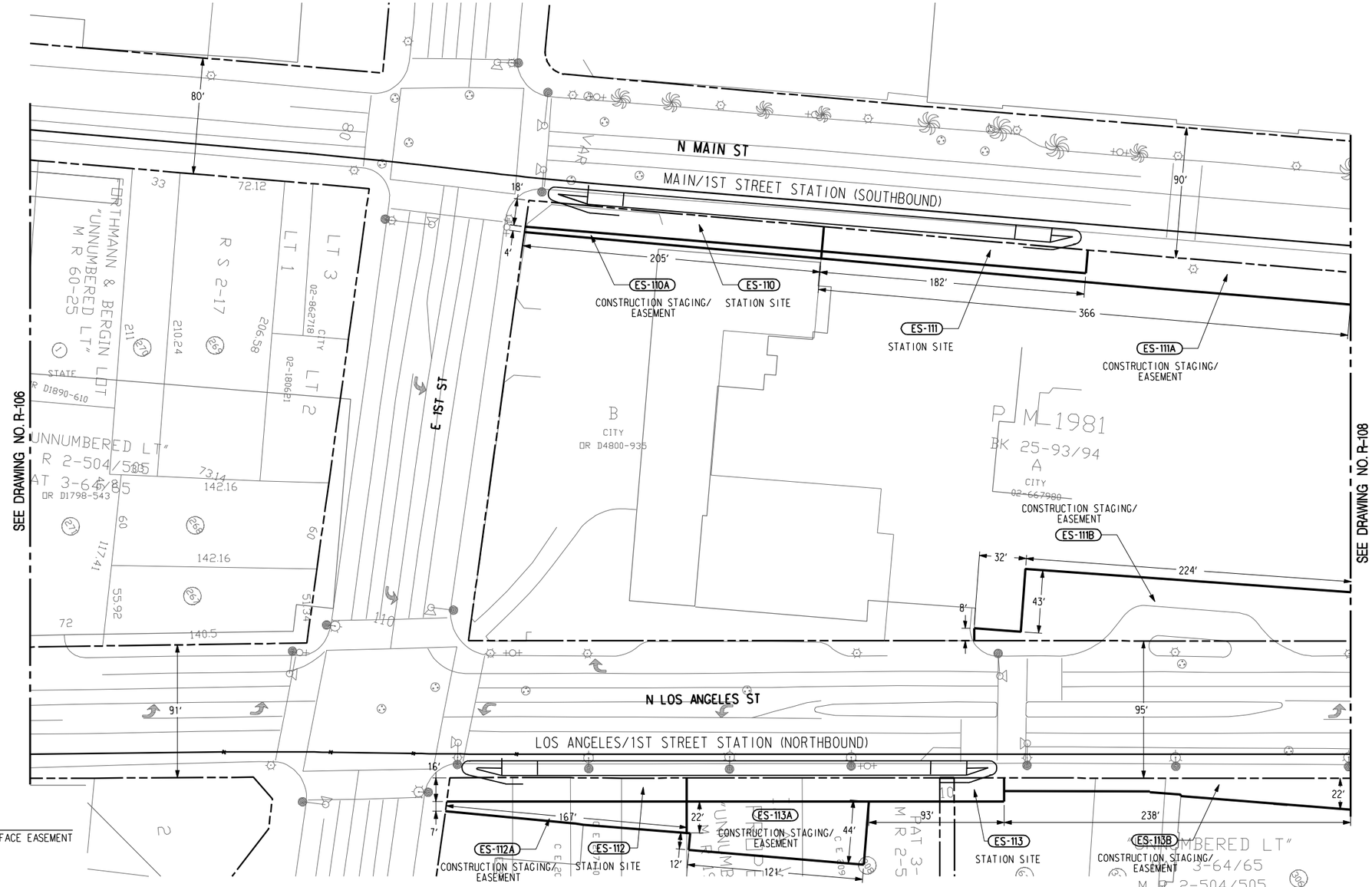

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER	REMARKS
ES-110	CITY OF LA	62,911	3,609			F			PART TAKE
ES-110A	CITY OF LA	62,911	888			E			PART TAKE
ES-111	CITY OF LA	139,462	3,000			F			PART TAKE
ES-111A	CITY OF LA	139,462	5,025			E			PART TAKE
ES-111B	CITY OF LA	139,462	9,628			E			PART TAKE

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER	REMARKS
ES-112	CITY OF LA	116,157	2,691			F			PART TAKE
ES-112A	CITY OF LA	116,157	2,394			E			PART TAKE
ES-113	CITY OF LA	114,092	3,336			F			PART TAKE
ES-113A	CITY OF LA	114,092	4,737			E			PART TAKE
ES-113B	CITY OF LA	114,092	3,104			E			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS LRT ALTERNATIVE
ROW PLAN
STA 66+00 TO STA 75+00

CONTRACT NO
DRAWING NO R-107 REV
SCALE 1" = 40'
SHEET NO

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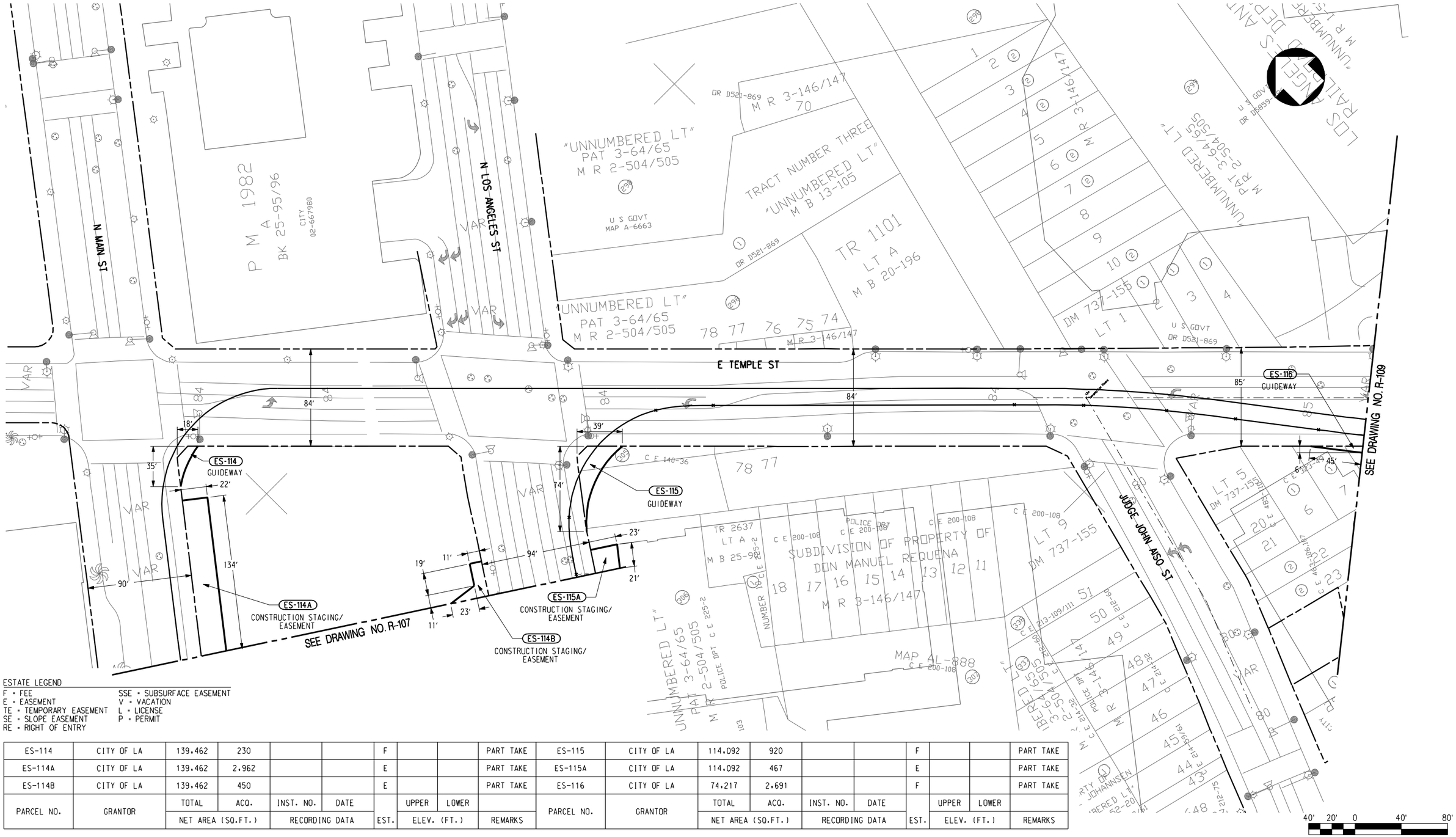

ESTATE LEGEND

F = FEE
E = EASEMENT
TE = TEMPORARY EASEMENT
SE = SLOPE EASEMENT
RE = RIGHT OF ENTRY
SSE = SUBSURFACE EASEMENT
V = VACATION
L = LICENSE
P = PERMIT

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-114	CITY OF LA	139,462	230			F			PART TAKE
ES-114A	CITY OF LA	139,462	2,962			E			PART TAKE
ES-114B	CITY OF LA	139,462	450			E			PART TAKE
ES-115	CITY OF LA	114,092	920			F			PART TAKE
ES-115A	CITY OF LA	114,092	467			E			PART TAKE
ES-116	CITY OF LA	74,217	2,691			F			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 75+00 TO STA 83+00

CONTRACT NO
DRAWING NO R-108
REV
SCALE 1" =40'
SHEET NO

UserName: USER-rodrigue2d0/2010 @ 4:45:38 PM FileName=> T:\27939A-RegionalConnectorACE\CADD\sheets\row\alternative 1\r_R-108.plg

SEE DRAWING NO. R-108

M R 2-634

BLK 2
M R 2-634

BLK 3
M B 14-31

TR 255
LT A
M B 146-72

LT B
M B 146-72

TR 9244
LT A
M B 146-72

SUBDIVISION OF THE
PRYOR TRACT OF LAND

BLK 3
M R 2-634
POLICE DPT
C E 214-50

LOS ANGELES AND SAN PEDRO
RAILROAD DEPOT TRACT
"UNNUMBERED LT"
M R 1-535/536

"UNNUMBERED LT"
PAT 3-64/65
M R 2-504/505

C E 214-50
C E 281-20
C E 281-20
CITY
C E 281-20
CITY
C E 324-85
CITY
C E 393-92
CITY
C E 276-62

DR D4625-663
DR D5859-901
DR D5859-896
DR D192-5

371'
13'
87'
ES-117
GUIDEWAY

BRIDGE PIER
ES-118
70'
60'
36'
14'

E TEMPLE ST
N ALAMEDA ST
UNDERPASS
POTENTIAL PEDESTRIAN BRIDGE

80'
90'
100'
100'

EXISTING LITTLE TOKYO/
ARTS DISTRICT STATION

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-117	CITY OF LA	74,217	4,505			F			PART TAKE
ES-118	CITY OF LA	60,882	4,532			F			PART TAKE

40' 20' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 83+00 TO STA 89+32.84

CONTRACT NO
DRAWING NO R-109 REV
SCALE 1" =40'
SHEET NO

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T_R-109.plg 2/10/2010 4:45:48 PM

PARCELS DATA TABLE

AREA	TYPE	USE	DEPTH TO 10' CROWN	TOTAL AREA (SF)	IMPACT AREA (SF)	LOS ANGELES COUNTY ASSESSOR'S DATA					
						BOOK	PAGE	PARCEL	OWNER	REMARKS	ADDRESS
ES-101	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	182,574	8,949	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-102	FEE	STATION ENTRANCE	-	182,574	1,608	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-103	FEE	STATION ENTRANCE	-	182,574	731	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-104	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	182,574	9,767	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-105	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	59,263	13,325	5151	018	017	HINES VAF II	PARTIAL TAKE	444 S FLOWER ST, LOS ANGELES, CA 90071
ES-106	FEE	STATION SITE AND CONSTRUCTION STAGING	-	33,190	16,927	5151	014	032	CENTRAL PLANTS, INC	PARTIAL TAKE	703 W 3RD ST, LOS ANGELES, CA 90071
ES-107	FEE	STATION SITE AND CONSTRUCTION STAGING	-	52,603	39,363	5151	014	033	CENTRAL PLANTS, INC	PARTIAL TAKE	N/A
ES-108	FEE	PEDESTRIAN OVERPASS	-	78,470	5,348	5151	027	256	BUNKER HILL TOWER	PARTIAL TAKE	N/A
ES-109	FEE	TPSS SITE	-	25,752	22,783	5149	008	032	TRIBUNE COMPANY	PARTIAL TAKE	201 S SPRING ST, LOS ANGELES, CA 90012
ES-110	FEE	STATION SITE	-	62,911	3,609	5161	014	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-110A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	62,911	888	5161	014	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-111	FEE	STATION SITE	-	139,462	3,000	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-111A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	139,462	5,025	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-111B	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	139,462	9,628	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-112	FEE	STATION SITE	-	116,157	2,691	5161	013	905	CITY OF LOS ANGELES	PARTIAL TAKE	150 N LOS ANGELES ST, LOS ANGELES, CA 90012
ES-112A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	116,157	2,394	5161	013	905	CITY OF LOS ANGELES	PARTIAL TAKE	150 N LOS ANGELES ST, LOS ANGELES, CA 90012
ES-113	FEE	STATION SITE	-	114,092	3,336	5161	013	904	CITY OF LOS ANGELES	PARTIAL TAKE	220 E MARKET CT9, LOS ANGELES, CA 90012
ES-113A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	114,092	4,737	5161	013	904	CITY OF LOS ANGELES	PARTIAL TAKE	220 E MARKET CT9, LOS ANGELES, CA 90012
ES-113B	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	114,092	3,104	5161	013	904	CITY OF LOS ANGELES	PARTIAL TAKE	220 E MARKET CT9, LOS ANGELES, CA 90012
ES-114	FEE	GUIDEWAY	-	139,462	230	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-114A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	139,462	2,962	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-114B	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	139,462	450	5161	014	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-115	FEE	GUIDEWAY	-	114,092	920	5161	013	904	CITY OF LOS ANGELES	PARTIAL TAKE	220 E MARKET CT9, LOS ANGELES, CA 90012
ES-115A	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	114,092	467	5161	013	904	CITY OF LOS ANGELES	PARTIAL TAKE	220 E MARKET CT9, LOS ANGELES, CA 90012
ES-116	FEE	GUIDEWAY	-	74,217	2,691	5161	012	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-117	FEE	GUIDEWAY	-	74,217	4,505	5161	012	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-118	FEE	BRIDGE PIER	-	60,882	4,532	5161	012	905	CITY OF LOS ANGELES	PARTIAL TAKE	N/A

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
AT-GRADE EMPHASIS
LRT ALTERNATIVE
ROW PLAN
PARCELS DATA TABLE

CONTRACT NO
DRAWING NO R-110
REV
SCALE
SHEET NO

UserName: USER-rodriguez 2/10/2010 @ 4:46:00 PM
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M B 18-61

M R 3-16

TR 905

M B 18-5

M R 3-16

M R 3-16

LEBANON ST

W 7TH ST

WILSHIRE BLVD

W 6TH ST

TR 2026

LT B

M B 29-22/23

M R 83-95

TR 3084

M B 31-87

LT B

M R 2-585

SUBDIVISION OF LAND KNOWN AS BLOCK 22 1/2 AND BEING A PART OF HANCOCKS SURVEY

M R 3-16

M B 18-67

TR 1294

LT 1

M B 18-9

M R 3-16

M R 3-16

392'

37'

ES-301

CONSTRUCTION EASEMENT

80'

EXISTING CROSSOVER

88'

80'

S FLOWER ST

90'

85'

90'

EXISTING 7TH STREET/
METRO CENTER STATION

M B 1344-64/65

BELLEVUE TERRACE T

M B 21-62

M B 21-62

SEE DRAWING NO. R-302

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

ES-301	FLOWER ASSOC LLC	182,574	14,287			E			PART TAKE
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE		UPPER	LOWER	
		NET AREA (SQ.FT.)		RECORDING DATA		EST.	ELEV. (FT.)		REMARKS

40' 20' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY

DRAWN BY

CHECKED BY

IN CHARGE

DATE JAN 2010

Metro

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 0+00 TO STA 10+00

CONTRACT NO

DRAWING NO R-301 REV

SCALE 1" =40'

SHEET NO

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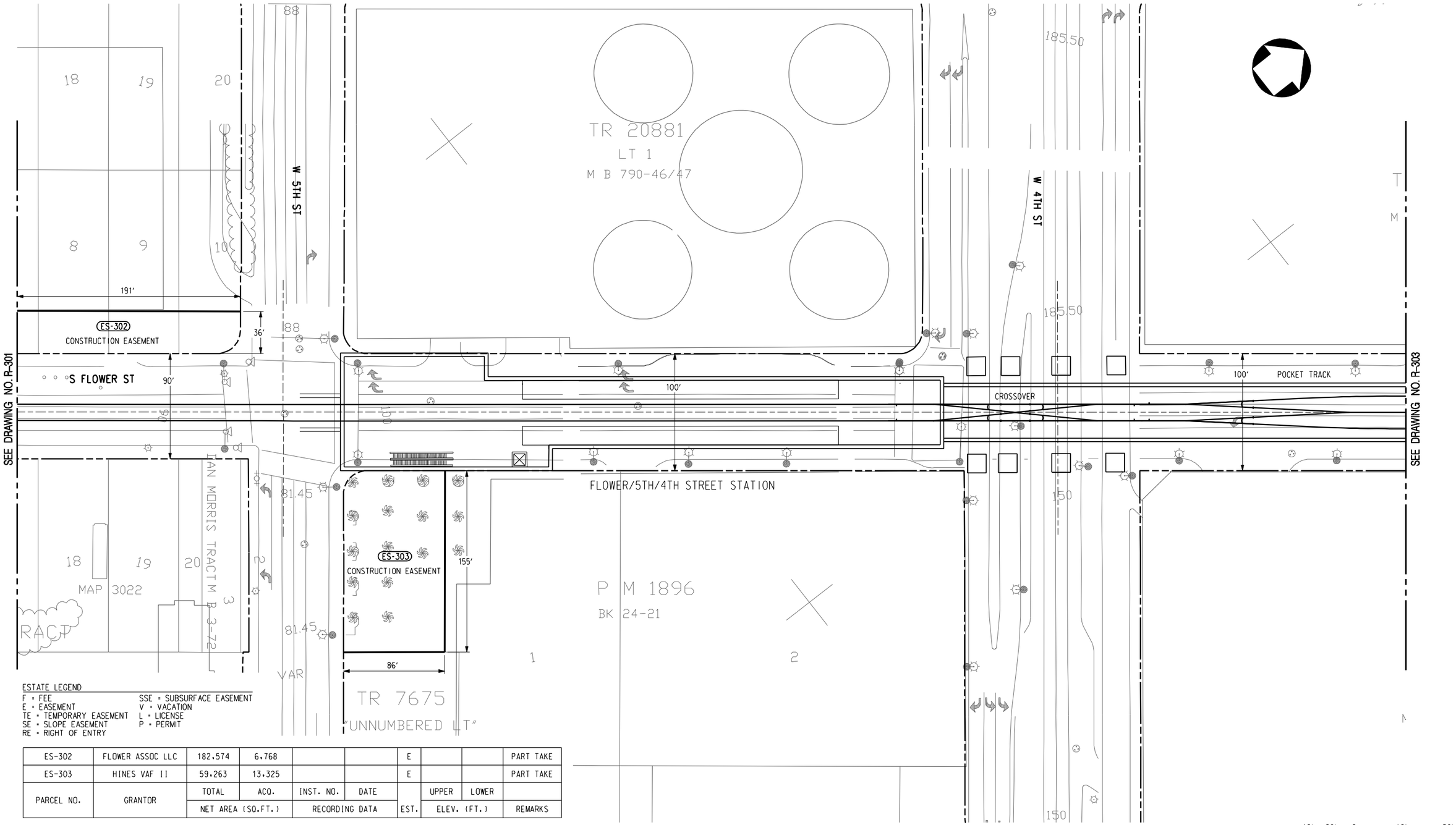

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-302	FLOWER ASSOC LLC	182,574	6,768			E			PART TAKE
ES-303	HINES VAF II	59,263	13,325			E			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 10+00 TO STA 22+00

CONTRACT NO
DRAWING NO R-302 REV
SCALE 1" =40'
SHEET NO

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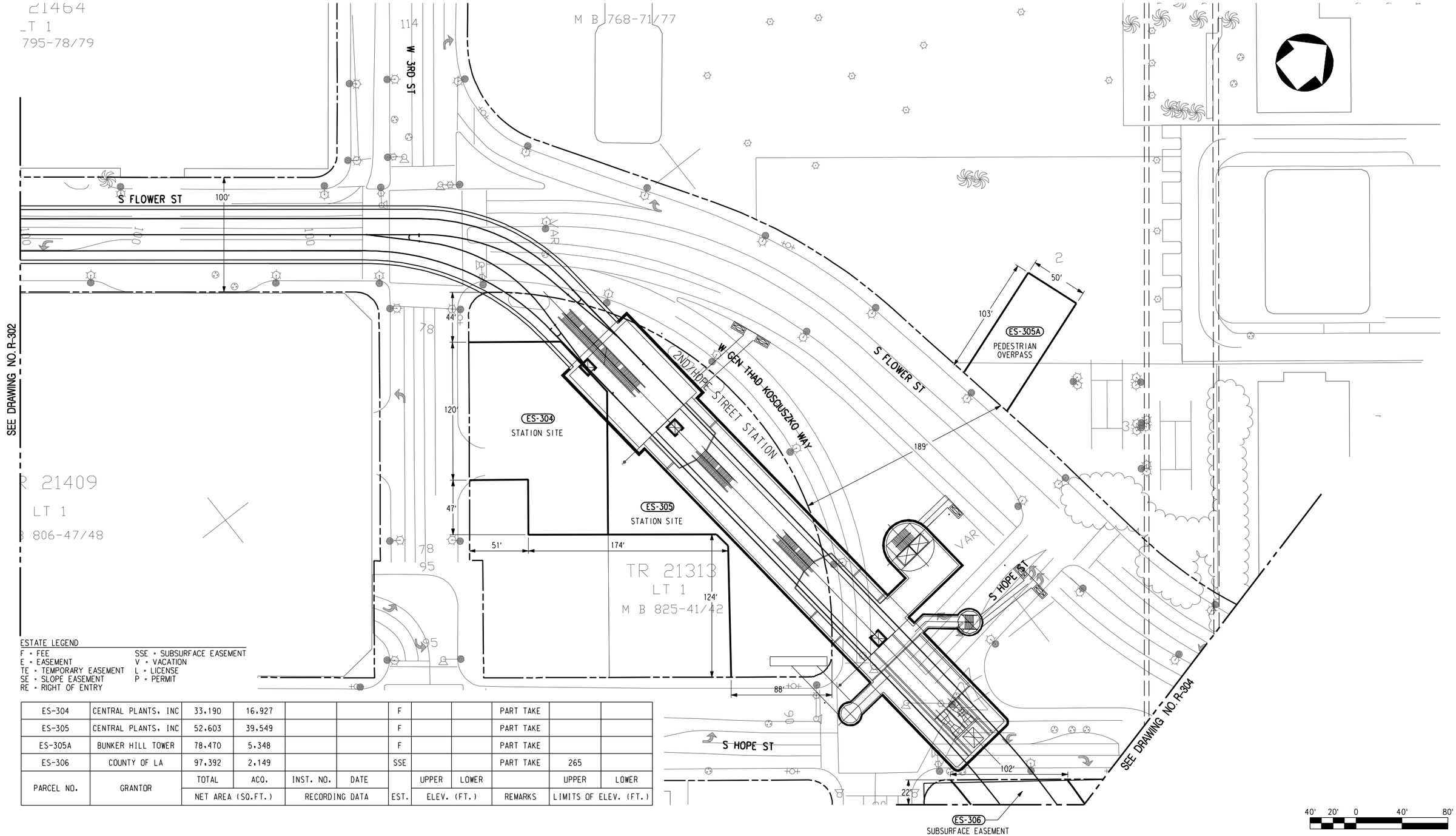

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-304	CENTRAL PLANTS, INC	33,190	16,927			F			PART TAKE		
ES-305	CENTRAL PLANTS, INC	52,603	39,549			F			PART TAKE		
ES-305A	BUNKER HILL TOWER	78,470	5,348			F			PART TAKE		
ES-306	COUNTY OF LA	97,392	2,149			SSE			PART TAKE	265	

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 22+00 TO STA 33+00

CONTRACT NO
DRAWING NO R-303 REV
SCALE 1" =40'
SHEET NO

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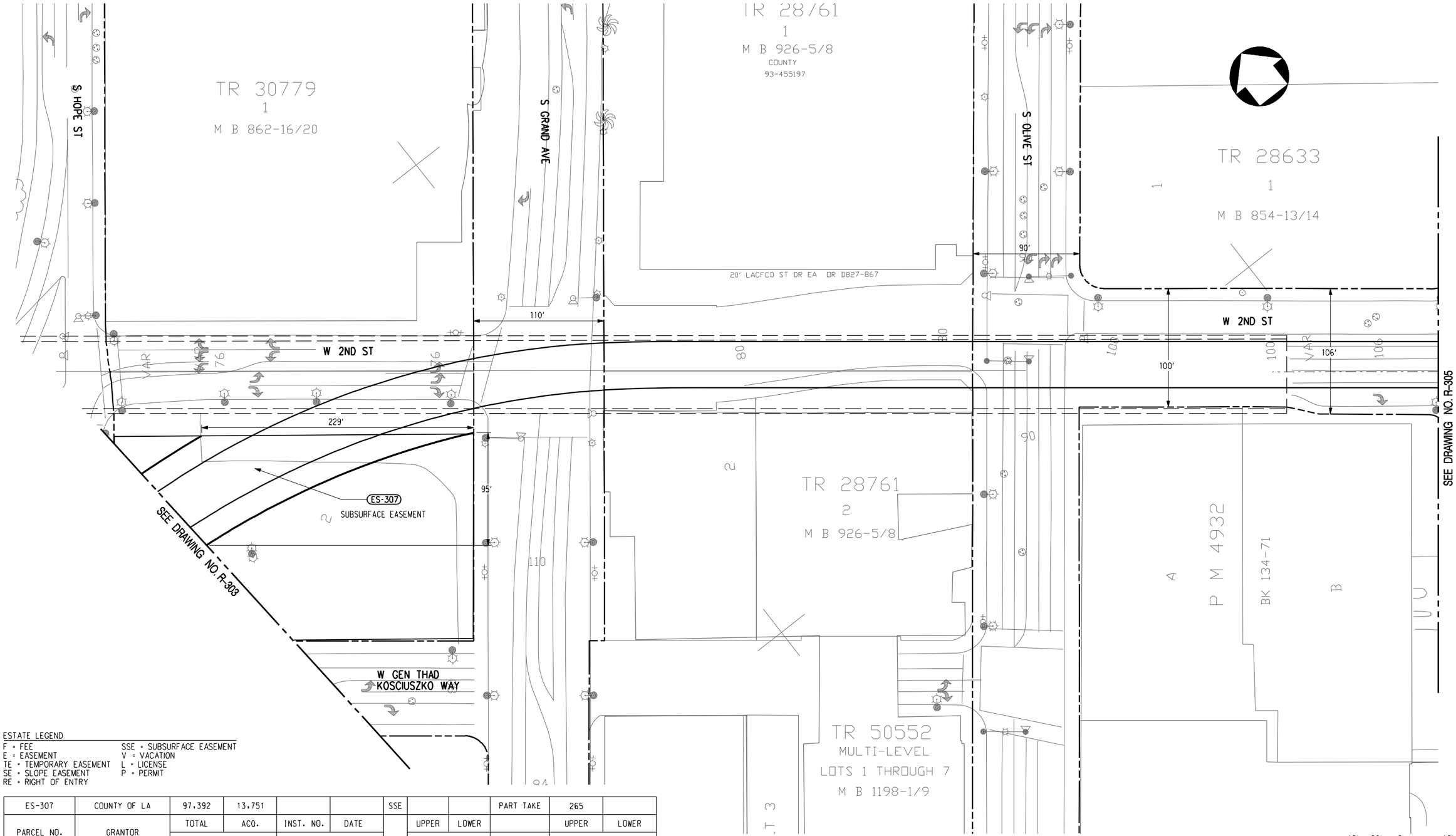

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

ES-307	COUNTY OF LA	97.392	13.751			SSE			PART TAKE	265	
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE	EST.	UPPER	LOWER	REMARKS	UPPER	LOWER
		NET AREA (SQ.FT.)		RECORDING DATA			ELEV. (FT.)			LIMITS OF ELEV. (FT.)	

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 33+00 TO STA 43+00

CONTRACT NO
DRAWING NO R-304 REV
SCALE 1" = 40'
SHEET NO

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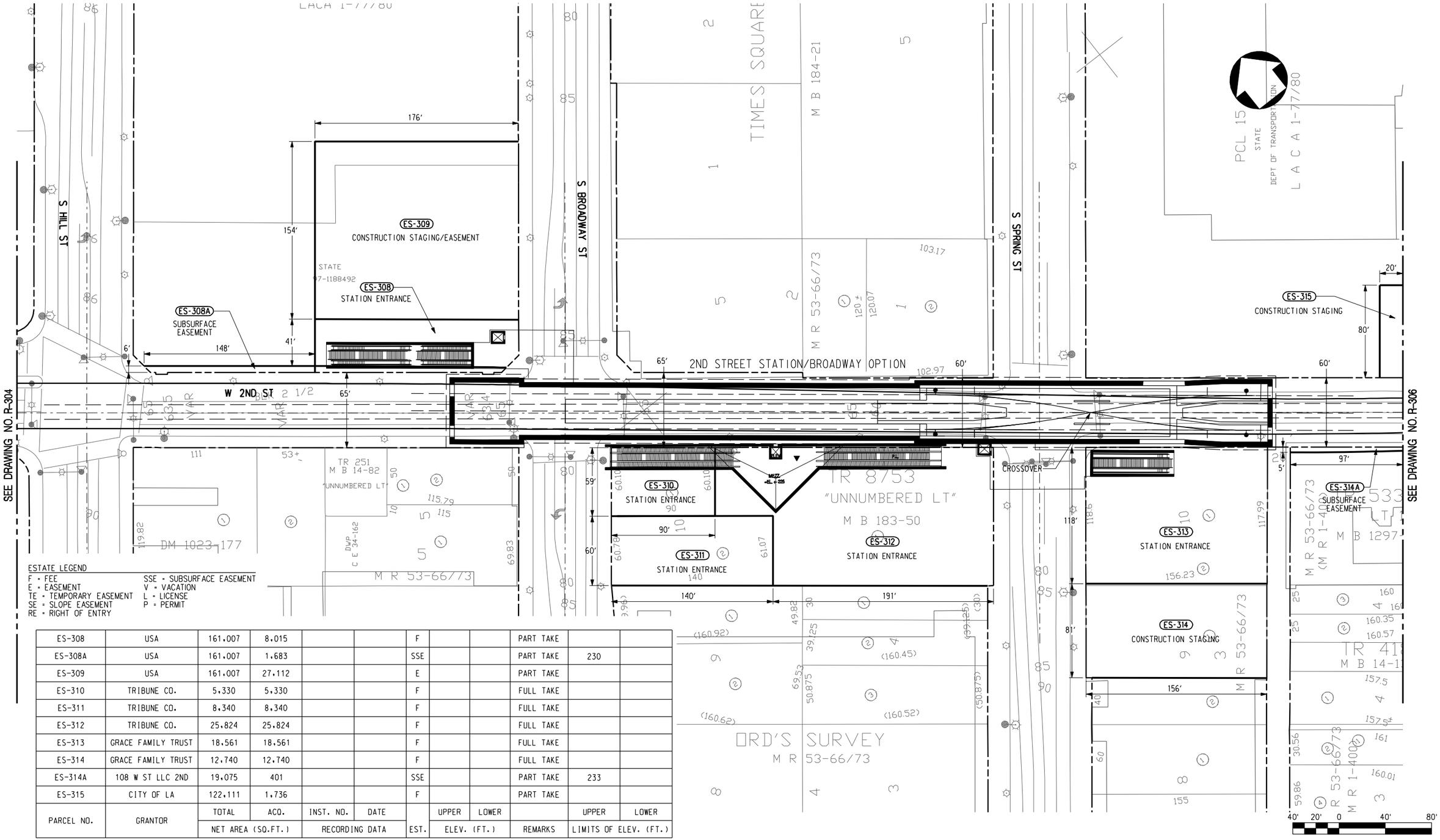

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-308	USA	161,007	8,015			F			PART TAKE		
ES-308A	USA	161,007	1,683			SSE			PART TAKE	230	
ES-309	USA	161,007	27,112			E			PART TAKE		
ES-310	TRIBUNE CO.	5,330	5,330			F			FULL TAKE		
ES-311	TRIBUNE CO.	8,340	8,340			F			FULL TAKE		
ES-312	TRIBUNE CO.	25,824	25,824			F			FULL TAKE		
ES-313	GRACE FAMILY TRUST	18,561	18,561			F			FULL TAKE		
ES-314	GRACE FAMILY TRUST	12,740	12,740			F			FULL TAKE		
ES-314A	108 W ST LLC 2ND	19,075	401			SSE			PART TAKE	233	
ES-315	CITY OF LA	122,111	1,736			F			PART TAKE		

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
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DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 43+00 TO STA 55+00

CONTRACT NO
DRAWING NO R-305
REV
SCALE 1" = 40'
SHEET NO

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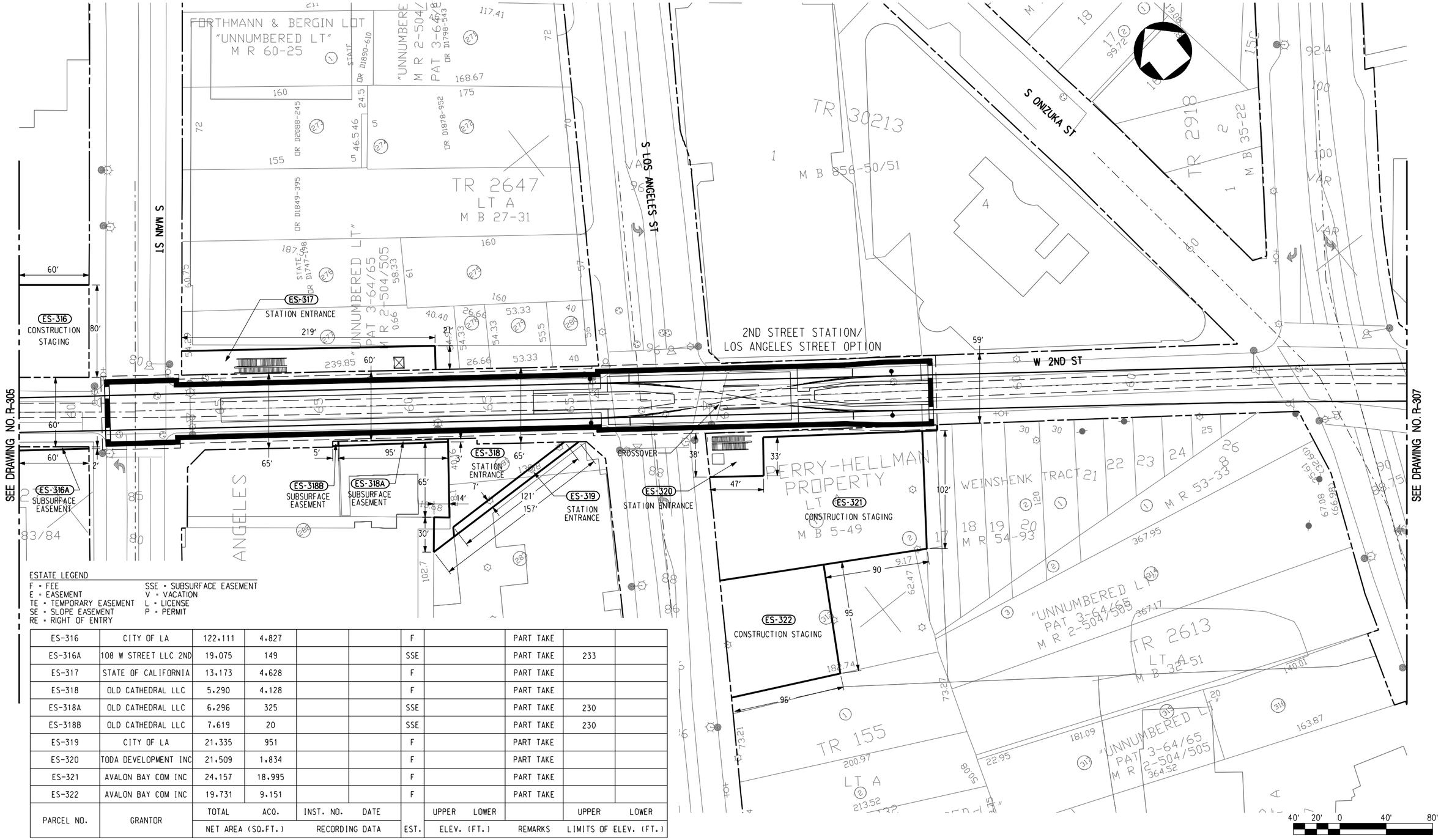

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-316	CITY OF LA	122,111	4,827			F			PART TAKE		
ES-316A	108 W STREET LLC 2ND	19,075	149			SSE			PART TAKE	233	
ES-317	STATE OF CALIFORNIA	13,173	4,628			F			PART TAKE		
ES-318	OLD CATHEDRAL LLC	5,290	4,128			F			PART TAKE		
ES-318A	OLD CATHEDRAL LLC	6,296	325			SSE			PART TAKE	230	
ES-318B	OLD CATHEDRAL LLC	7,619	20			SSE			PART TAKE	230	
ES-319	CITY OF LA	21,335	951			F			PART TAKE		
ES-320	TODA DEVELOPMENT INC	21,509	1,834			F			PART TAKE		
ES-321	AVALON BAY COM INC	24,157	18,995			F			PART TAKE		
ES-322	AVALON BAY COM INC	19,731	9,151			F			PART TAKE		

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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IN CHARGE
DATE JAN 2010

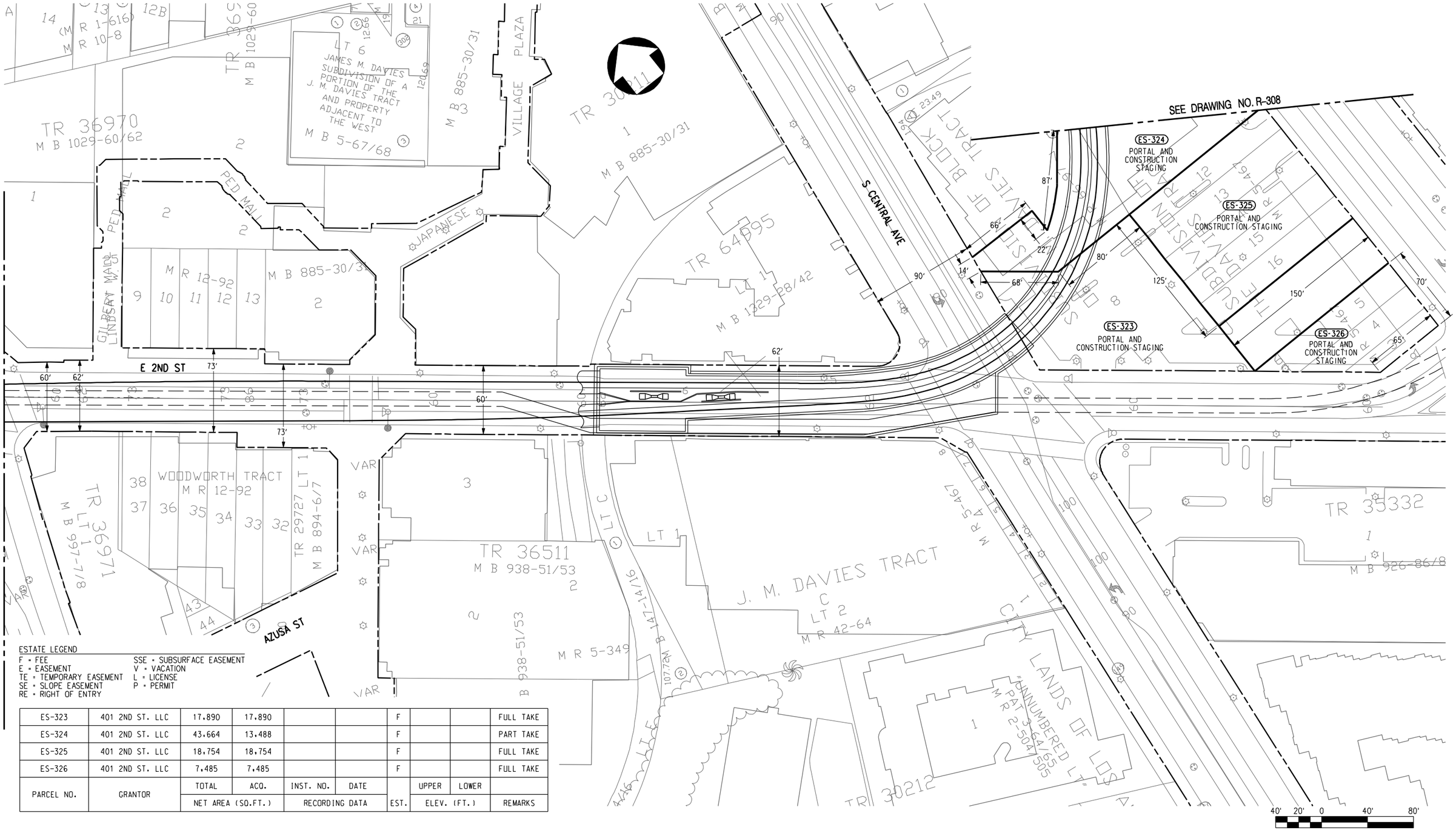
Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 55+00 TO STA 67+00

CONTRACT NO
DRAWING NO R-306
REV
SCALE 1" = 40'
SHEET NO

UserName: USER-rodriguez 2/10/2010 @ 4:47:23 PM FileName=> T:\27939A-RegionalConnectorACE\CADD\sheets\row\alternative 3\r3_R-306.plg



ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-323	401 2ND ST. LLC	17,890	17,890			F			FULL TAKE
ES-324	401 2ND ST. LLC	43,664	13,488			F			PART TAKE
ES-325	401 2ND ST. LLC	18,754	18,754			F			FULL TAKE
ES-326	401 2ND ST. LLC	7,485	7,485			F			FULL TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

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PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 67+00 TO STA 80+00

CONTRACT NO
DRAWING NO R-307
REV
SCALE 1"=40'
SHEET NO

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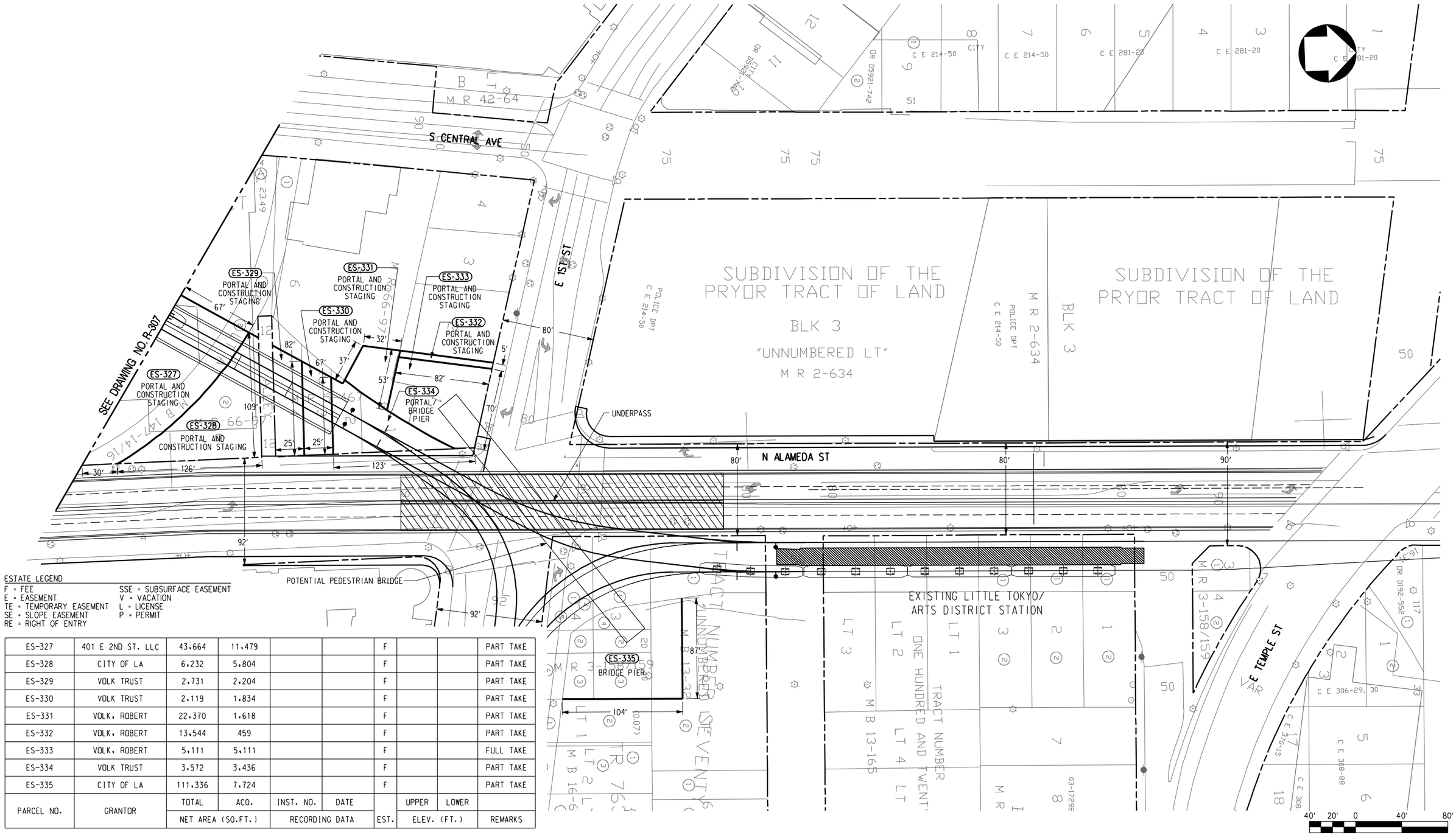
3_R-307.plg 2/10/2010 4:47:37 PM



ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-327	401 E 2ND ST. LLC	43,664	11,479			F			PART TAKE
ES-328	CITY OF LA	6,232	5,804			F			PART TAKE
ES-329	VOLK TRUST	2,731	2,204			F			PART TAKE
ES-330	VOLK TRUST	2,119	1,834			F			PART TAKE
ES-331	VOLK, ROBERT	22,370	1,618			F			PART TAKE
ES-332	VOLK, ROBERT	13,544	459			F			PART TAKE
ES-333	VOLK, ROBERT	5,111	5,111			F			FULL TAKE
ES-334	VOLK TRUST	3,572	3,436			F			PART TAKE
ES-335	CITY OF LA	111,336	7,724			F			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
STA 80+00 TO STA 86+07.70

CONTRACT NO
DRAWING NO R-308 REV
SCALE 1" = 40'
SHEET NO

UserName: USER=rodrigu@2/00/2010 @ 4:47:45 PM FileName=> T:\27939A\RegionalConnector\ACE\CADD\sheets\row\alternative 3\r3_R-308.plg

PARCELS DATA TABLE

AREA	TYPE	USE	DEPTH TO 10' CROWN	TOTAL AREA (SF)	IMPACT AREA (SF)	LOS ANGELES COUNTY ASSESSOR'S DATA					
						BOOK	PAGE	PARCEL	OWNER	REMARKS	ADDRESS
ES-301	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	14,287	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-302	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	6,768	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-303	EASEMENT	CONSTRUCTION EASEMENT	-	59,263	13,325	5151	018	017	HINES VAF II	PARTIAL TAKE	444 S FLOWER ST, LOS ANGELES, CA 90071
ES-304	FEE	STATION SITE	-	33,190	16,927	5151	014	032	CENTRAL PLANTS, INC	PARTIAL TAKE	703 W 3RD ST, LOS ANGELES, CA 90071
ES-305	FEE	STATION SITE	-	52,603	39,549	5151	014	033	CENTRAL PLANTS, INC	PARTIAL TAKE	N/A
ES-305A	FEE	PEDESTRIAN OVERPASS	-	78,470	5,348	5151	027	256	BUNKER HILL TOWER	PARTIAL TAKE	N/A
ES-306	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	2,149	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-307	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	13,751	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-308	FEE	STATION ENTRANCE	-	161,007	8,015	5149	001	903	USA	PARTIAL TAKE	N/A
ES-308A	EASEMENT	SUBSURFACE EASEMENT	70'	161,007	1,683	5149	001	903	USA	PARTIAL TAKE	N/A
ES-309	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	161,007	27,112	5149	001	903	USA	PARTIAL TAKE	N/A
ES-310	FEE	STATION ENTRANCE	-	5,330	5,330	5149	008	031	TRIBUNE COMPANY	FULL TAKE	200 S BROADWAY, LOS ANGELES, CA 90012
ES-311	FEE	STATION ENTRANCE	-	8,340	8,340	5149	008	030	TRIBUNE COMPANY	FULL TAKE	208 S BROADWAY, LOS ANGELES, CA 90012
ES-312	FEE	STATION ENTRANCE	-	25,824	25,824	5149	008	032	TRIBUNE COMPANY	FULL TAKE	201 S SPRING ST, LOS ANGELES, CA 90012
ES-313	FEE	STATION ENTRANCE	-	18,561	18,561	5149	007	006	GRACE FAMILY TRUST	FULL TAKE	206 S SPRING ST, LOS ANGELES, CA 90012
ES-314	FEE	CONSTRUCTION STAGING	-	12,740	12,740	5149	007	005	GRACE FAMILY TRUST	FULL TAKE	212 S SPRING ST, LOS ANGELES, CA 90012
ES-314A	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	401	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-315	FEE	CONSTRUCTION STAGING	-	122,111	1,736	5149	001	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-316	FEE	CONSTRUCTION STAGING	-	122,111	4,827	5149	001	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-316A	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	149	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-317	FEE	STATION ENTRANCE	-	13,173	4,628	5161	015	901	STATE OF CALIFORNIA	PARTIAL TAKE	N/A
ES-318	FEE	STATION ENTRANCE	-	5,290	4,128	5161	026	033	OLD CATHEDRAL LLC	PARTIAL TAKE	N/A
ES-318A	EASEMENT	SUBSURFACE EASEMENT	40'	6,296	325	5161	026	024	OLD CATHEDRAL LLC	PARTIAL TAKE	114 E 2ND ST, LOS ANGELES, CA 90012
ES-318B	EASEMENT	SUBSURFACE EASEMENT	40'	7,619	20	5161	026	023	OLD CATHEDRAL LLC	PARTIAL TAKE	200 S MAIN ST, LOS ANGELES, CA 90012
ES-319	FEE	STATION ENTRANCE	-	21,335	951	5161	026	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-320	FEE	STATION ENTRANCE	-	21,509	1,834	5161	024	014	TODA DEVELOPMENT INC	PARTIAL TAKE	N/A
ES-321	FEE	CONSTRUCTION STAGING	-	24,157	18,995	5161	024	014	AVALON BAY COMMUNITIES INC	PARTIAL TAKE	N/A
ES-322	FEE	CONSTRUCTION STAGING	-	19,731	9,151	5161	024	018	AVALON BAY COMMUNITIES INC	PARTIAL TAKE	N/A
ES-323	FEE	PORTAL AND CONSTRUCTION STAGING	-	17,890	17,890	5161	018	007	401 2ND STREET, LLC	FULL TAKE	401 E 2ND ST, LOS ANGELES, CA 90012
ES-324	FEE	PORTAL AND CONSTRUCTION STAGING	-	43,664	13,488	5161	018	020	401 2ND STREET, LLC	PARTIAL TAKE	N/A
ES-325	FEE	PORTAL AND CONSTRUCTION STAGING	-	18,754	18,754	5161	018	011	401 2ND STREET, LLC	FULL TAKE	437 E 2ND ST, LOS ANGELES, CA 90012
ES-326	FEE	PORTAL AND CONSTRUCTION STAGING	-	7,485	7,485	5161	018	011	401 2ND STREET, LLC	FULL TAKE	437 E 2ND ST, LOS ANGELES, CA 90012
ES-327	FEE	PORTAL AND CONSTRUCTION STAGING	-	43,664	11,479	5161	018	020	401 2ND STREET, LLC	PARTIAL TAKE	N/A
ES-328	FEE	PORTAL AND CONSTRUCTION STAGING	-	6,232	5,804	5161	018	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-329	FEE	PORTAL AND CONSTRUCTION STAGING	-	2,731	2,204	5161	018	010	VOLK TRUST	PARTIAL TAKE	N/A
ES-330	FEE	PORTAL AND CONSTRUCTION STAGING	-	2,119	1,834	5161	018	009	VOLK TRUST	PARTIAL TAKE	N/A
ES-331	FEE	PORTAL AND CONSTRUCTION STAGING	-	22,370	1,618	5161	018	021	VOLK, ROBERT	PARTIAL TAKE	N/A
ES-332	FEE	PORTAL AND CONSTRUCTION STAGING	-	13,544	459	5161	018	002	VOLK, ROBERT	PARTIAL TAKE	402 E 1ST ST, LOS ANGELES, CA 90012
ES-333	FEE	PORTAL AND CONSTRUCTION STAGING	-	5,111	5,111	5161	018	001	VOLK, ROBERT	FULL TAKE	416 E 1ST ST, LOS ANGELES, CA 90012
ES-334	FEE	PORTAL/BRIDGE PIER	-	3,572	3,436	5161	018	008	VOLK TRUST	PARTIAL TAKE	105 S ALAMEDA ST, LOS ANGELES, CA
ES-335	FEE	BRIDGE PIER	-	111,336	7,724	5173	011	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM
PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
UNDERGROUND EMPHASIS
LRT ALTERNATIVE
ROW PLAN
PARCELS DATA TABLE

CONTRACT NO
DRAWING NO R-309
REV
SCALE
SHEET NO

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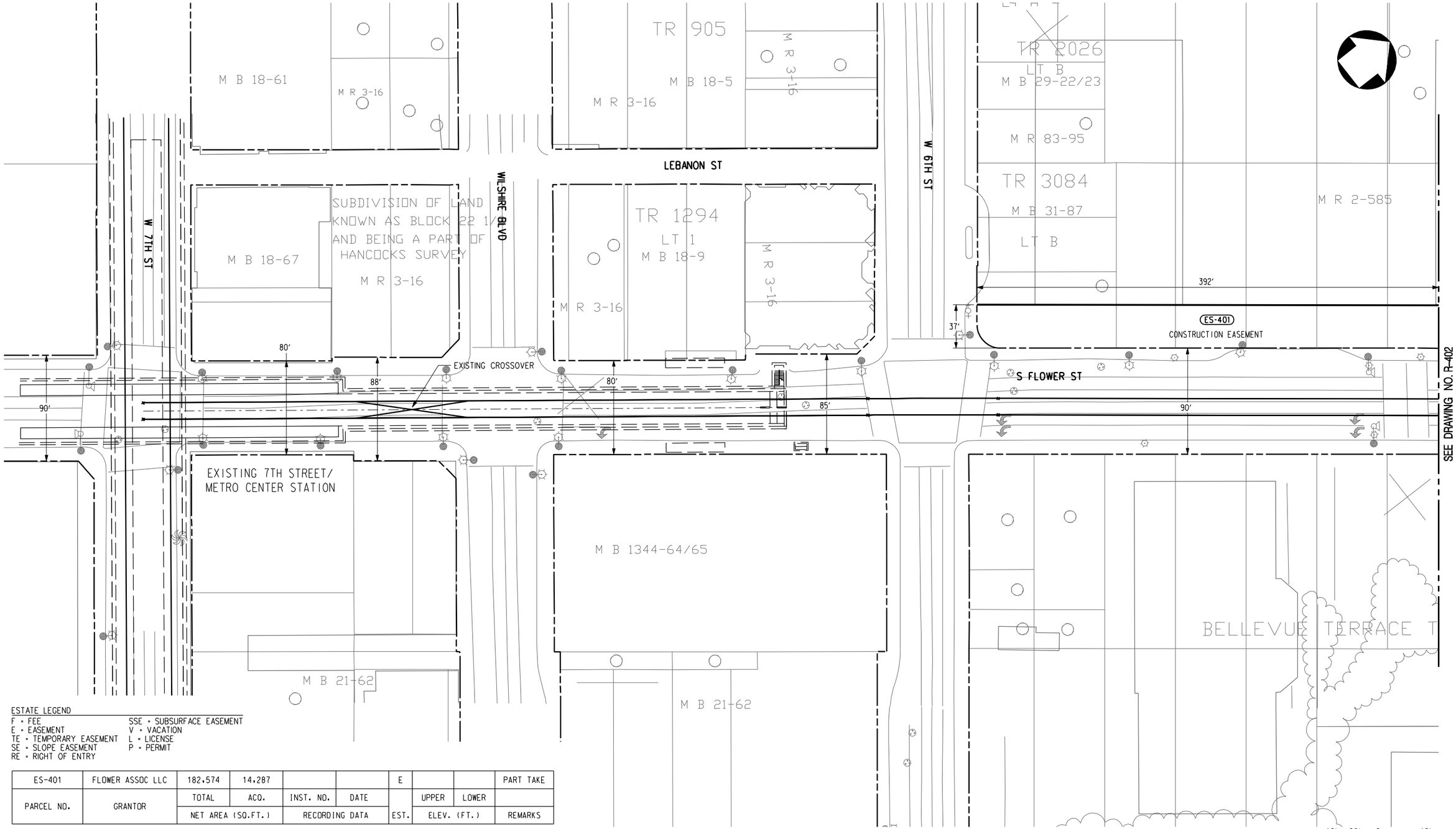

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

ES-401	FLOWER ASSOC LLC	182,574	14,287			E			PART TAKE
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE		UPPER	LOWER	
		NET AREA (SQ.FT.)		RECORDING DATA		EST.	ELEV. (FT.)		REMARKS

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 0+00 TO STA 11+00

CONTRACT NO
DRAWING NO R-401
REV
SCALE 1"=40'
SHEET NO

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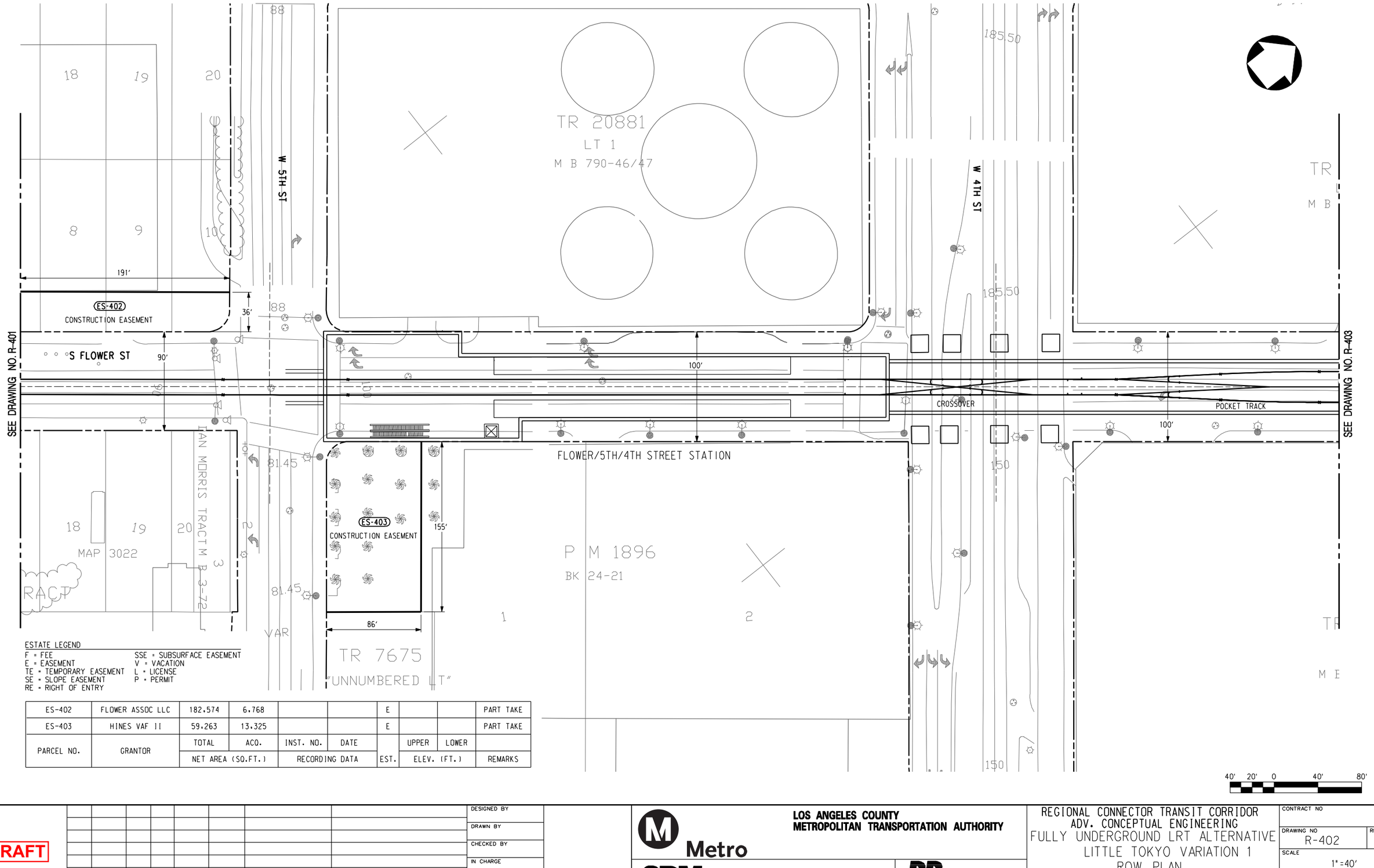

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
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PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-402	FLOWER ASSOC LLC	182.574	6.768			E			PART TAKE
ES-403	HINES VAF II	59.263	13.325			E			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 11+00 TO STA 23+00

CONTRACT NO
DRAWING NO R-402 REV
SCALE 1"=40'
SHEET NO

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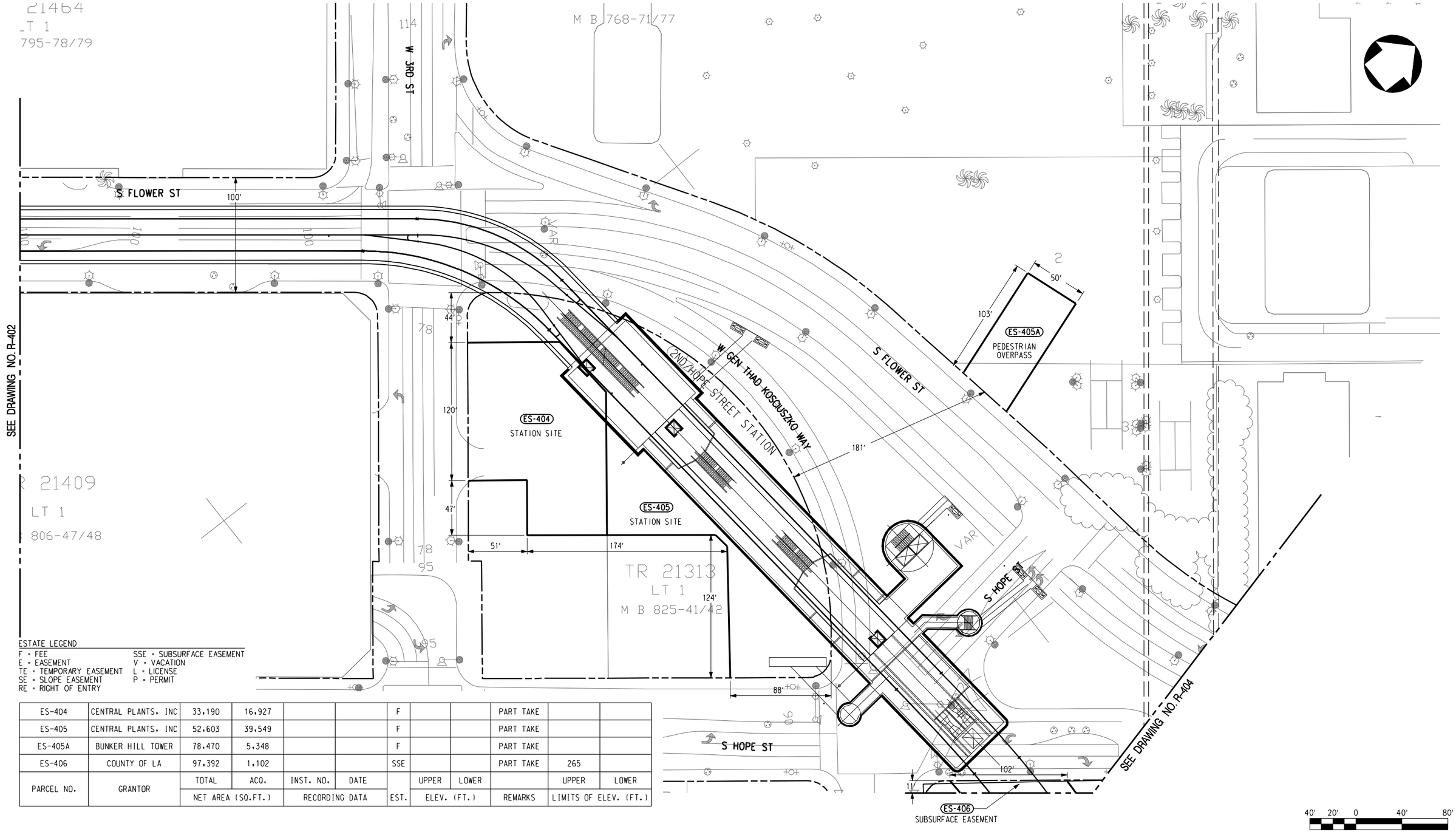

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
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RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-404	CENTRAL PLANTS, INC	33,190	16,927			F			PART TAKE		
ES-405	CENTRAL PLANTS, INC	52,603	39,549			F			PART TAKE		
ES-405A	BUNKER HILL TOWER	78,470	5,348			F			PART TAKE		
ES-406	COUNTY OF LA	97,392	1,102			SSE			PART TAKE	265	

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

Metro
LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 23+00 TO STA 34+00

CONTRACT NO
DRAWING NO R-403 REV
SCALE 1"=40'
SHEET NO

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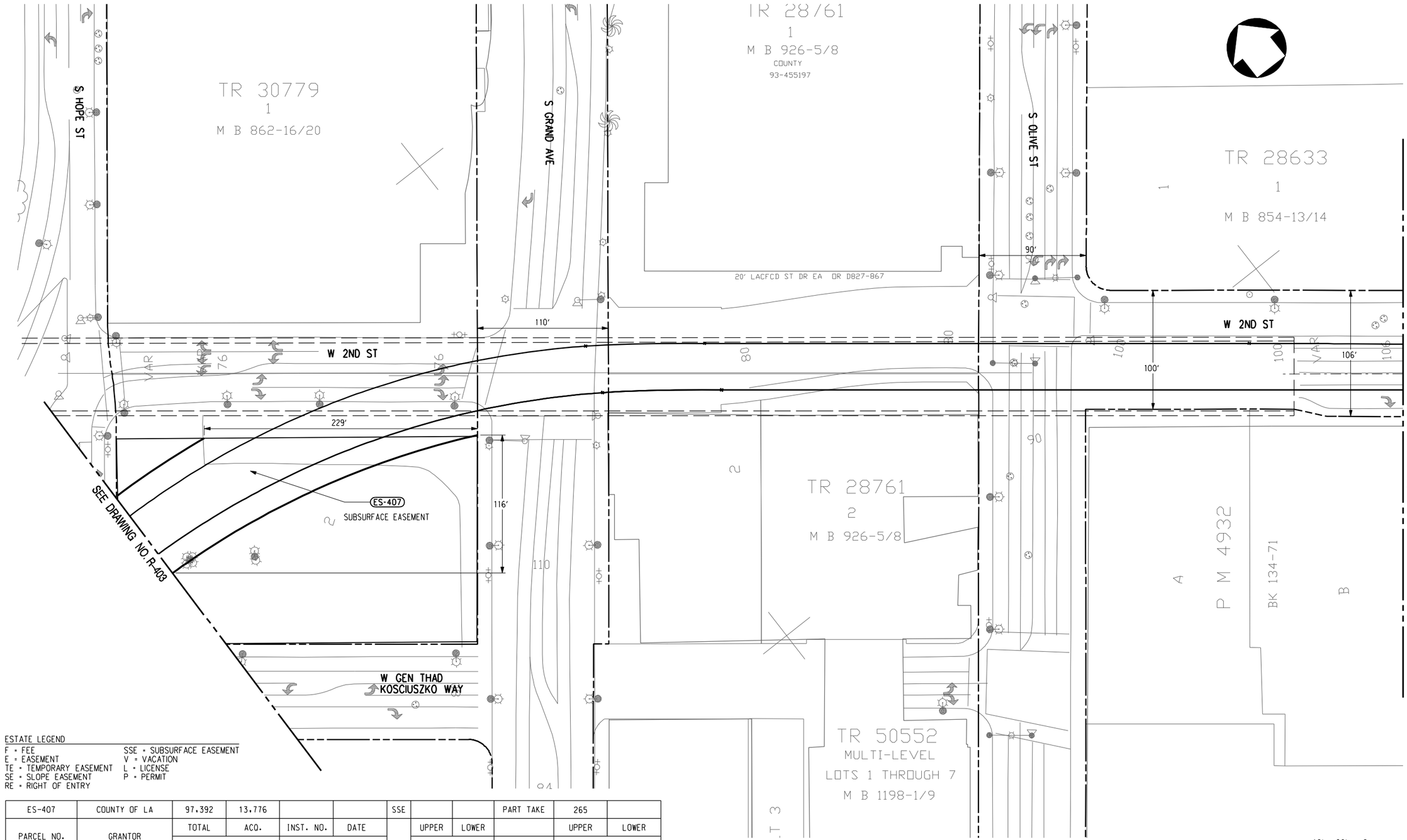

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

ES-407	COUNTY OF LA	97,392	13,776			SSE			PART TAKE	265	
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE	EST.	UPPER	LOWER	REMARKS	UPPER	LOWER
		NET AREA (SQ.FT.)		RECORDING DATA			ELEV. (FT.)			LIMITS OF ELEV. (FT.)	

40' 20' 0 40' 80'

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 34+00 TO STA 45+00

CONTRACT NO
DRAWING NO R-404 REV
SCALE 1"=40'
SHEET NO

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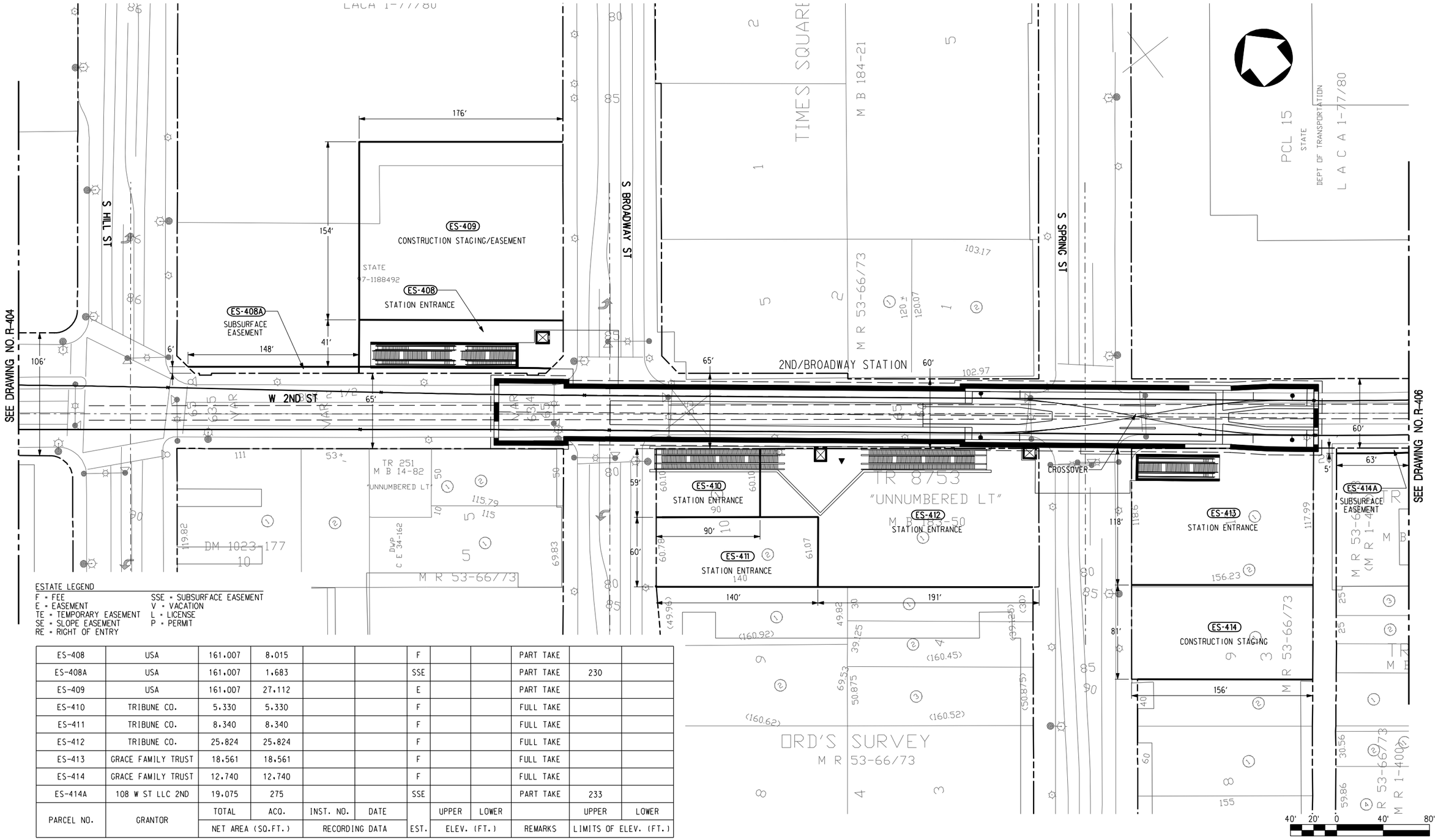

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-408	USA	161,007	8,015			F			PART TAKE		
ES-408A	USA	161,007	1,683			SSE			PART TAKE	230	
ES-409	USA	161,007	27,112			E			PART TAKE		
ES-410	TRIBUNE CO.	5,330	5,330			F			FULL TAKE		
ES-411	TRIBUNE CO.	8,340	8,340			F			FULL TAKE		
ES-412	TRIBUNE CO.	25,824	25,824			F			FULL TAKE		
ES-413	GRACE FAMILY TRUST	18,561	18,561			F			FULL TAKE		
ES-414	GRACE FAMILY TRUST	12,740	12,740			F			FULL TAKE		
ES-414A	108 W ST LLC 2ND	19,075	275			SSE			PART TAKE	233	

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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METROPOLITAN TRANSPORTATION AUTHORITY

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 45+00 TO STA 57+00

CONTRACT NO
DRAWING NO R-405
REV
SCALE 1"=40'
SHEET NO

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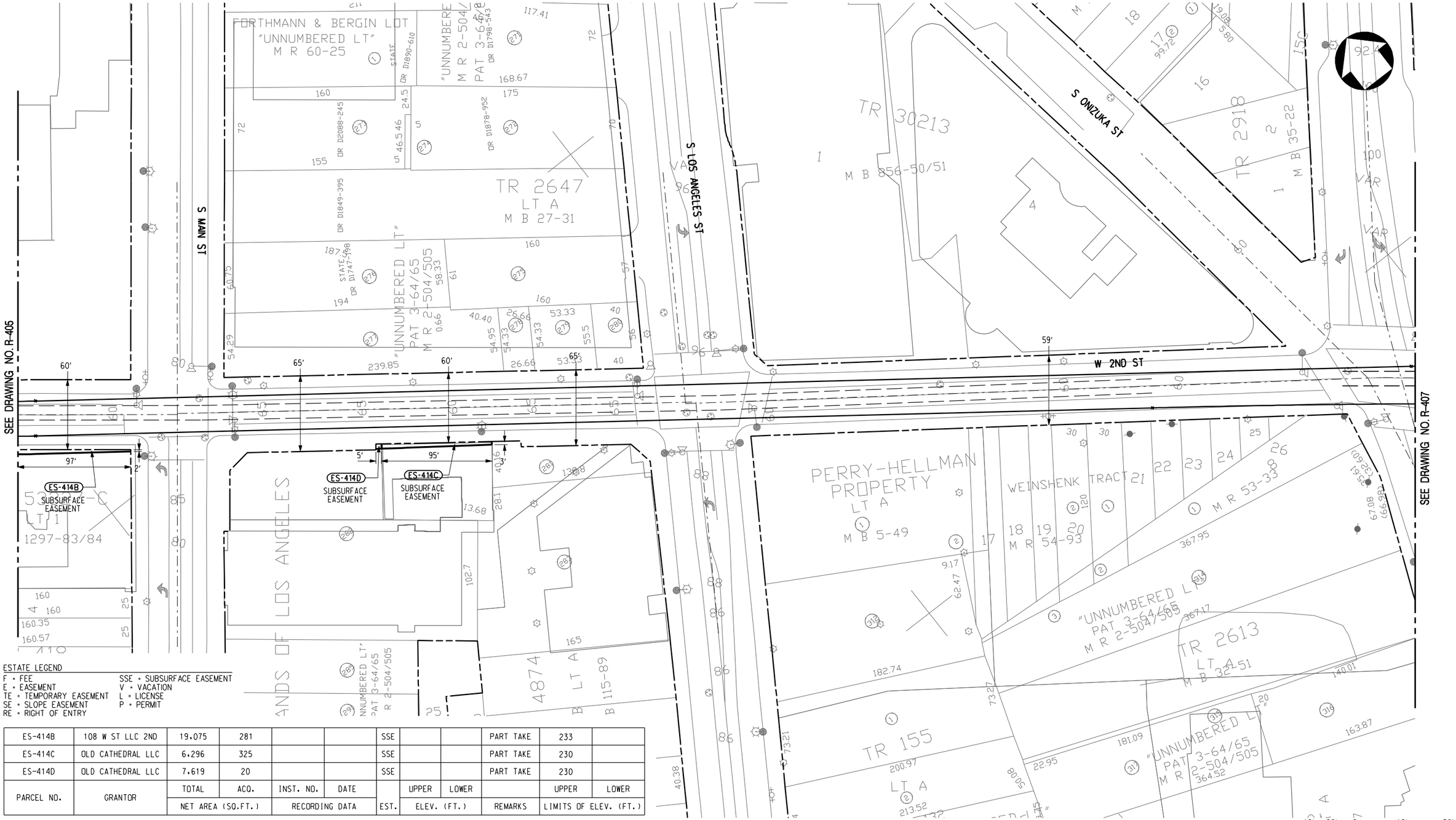

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-414B	108 W ST LLC 2ND	19,075	281			SSE			PART TAKE	233	
ES-414C	OLD CATHEDRAL LLC	6,296	325			SSE			PART TAKE	230	
ES-414D	OLD CATHEDRAL LLC	7,619	20			SSE			PART TAKE	230	

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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METROPOLITAN TRANSPORTATION AUTHORITY

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PROJECT MANAGER
PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 57+00 TO STA 69+00

CONTRACT NO
DRAWING NO R-406
REV
SCALE 1"=40'
SHEET NO

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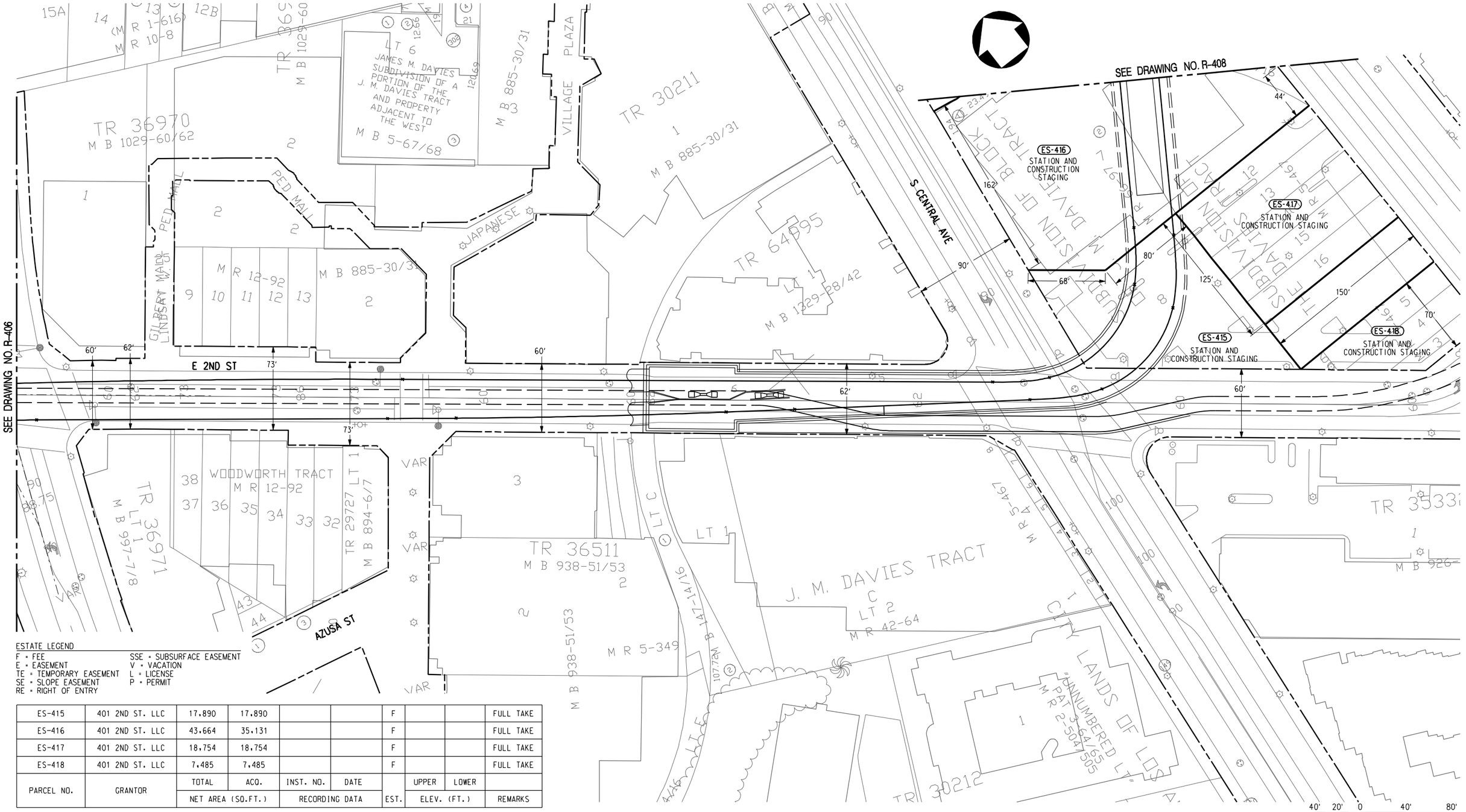

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-415	401 2ND ST. LLC	17,890	17,890			F			FULL TAKE
ES-416	401 2ND ST. LLC	43,664	35,131			F			FULL TAKE
ES-417	401 2ND ST. LLC	18,754	18,754			F			FULL TAKE
ES-418	401 2ND ST. LLC	7,485	7,485			F			FULL TAKE

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 69+00 TO STA 81+00

CONTRACT NO
DRAWING NO R-407
REV
SCALE 1"=40'
SHEET NO

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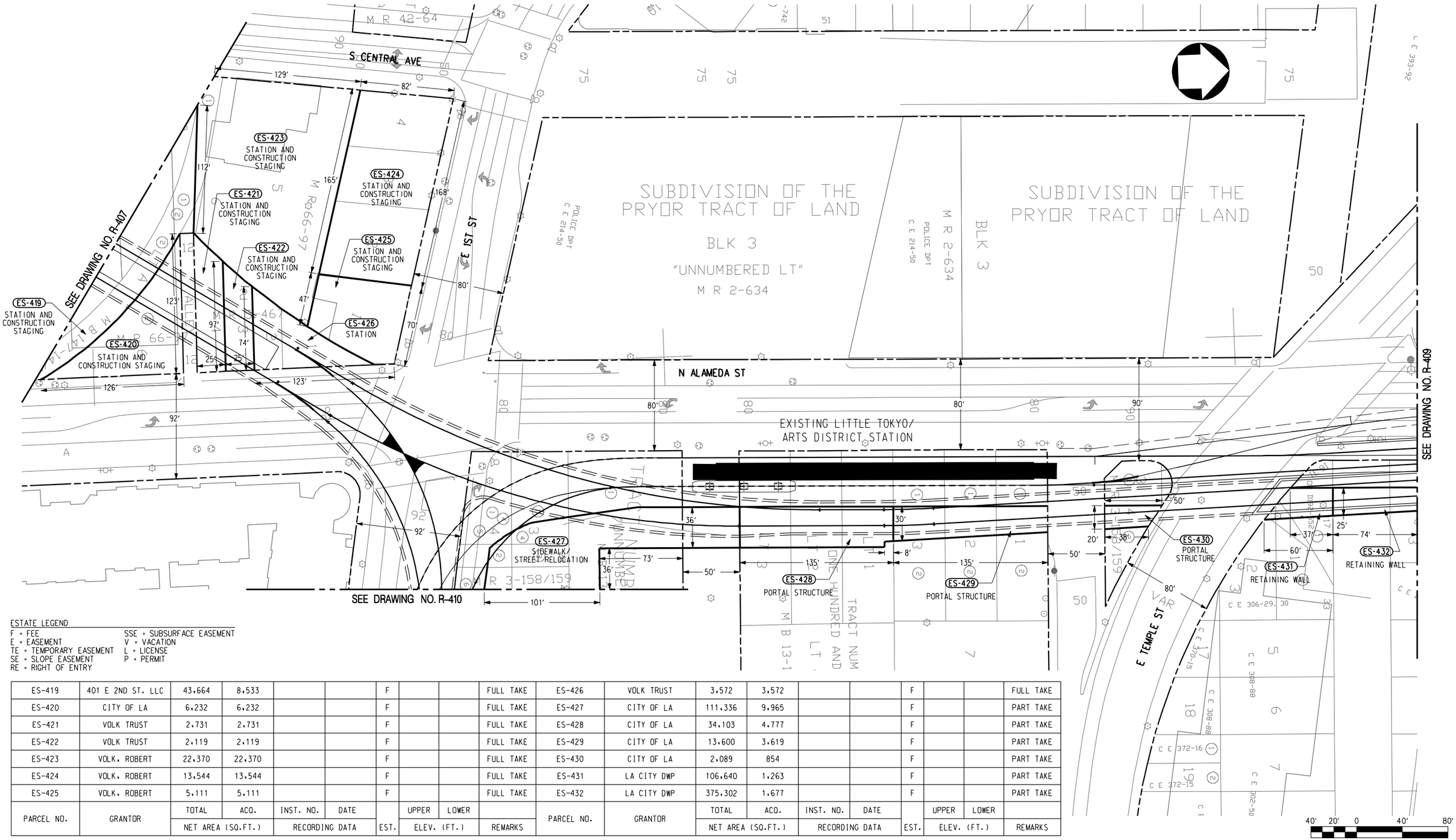

ESTATE LEGEND

F - FEE
E - EASEMENT
TE - TEMPORARY EASEMENT
SE - SLOPE EASEMENT
RE - RIGHT OF ENTRY
SSE - SUBSURFACE EASEMENT
V - VACATION
L - LICENSE
P - PERMIT

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-419	401 E 2ND ST. LLC	43,664	8,533			F			FULL TAKE
ES-420	CITY OF LA	6,232	6,232			F			FULL TAKE
ES-421	VOLK TRUST	2,731	2,731			F			FULL TAKE
ES-422	VOLK TRUST	2,119	2,119			F			FULL TAKE
ES-423	VOLK, ROBERT	22,370	22,370			F			FULL TAKE
ES-424	VOLK, ROBERT	13,544	13,544			F			FULL TAKE
ES-425	VOLK, ROBERT	5,111	5,111			F			FULL TAKE
ES-426	VOLK TRUST	3,572	3,572			F			FULL TAKE
ES-427	CITY OF LA	111,336	9,965			F			PART TAKE
ES-428	CITY OF LA	34,103	4,777			F			PART TAKE
ES-429	CITY OF LA	13,600	3,619			F			PART TAKE
ES-430	CITY OF LA	2,089	854			F			PART TAKE
ES-431	LA CITY DWP	106,640	1,263			F			PART TAKE
ES-432	LA CITY DWP	375,302	1,677			F			PART TAKE

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 81+00 TO STA 85+00, 93+00

CONTRACT NO
DRAWING NO R-408
REV
SCALE 1"=40'
SHEET NO

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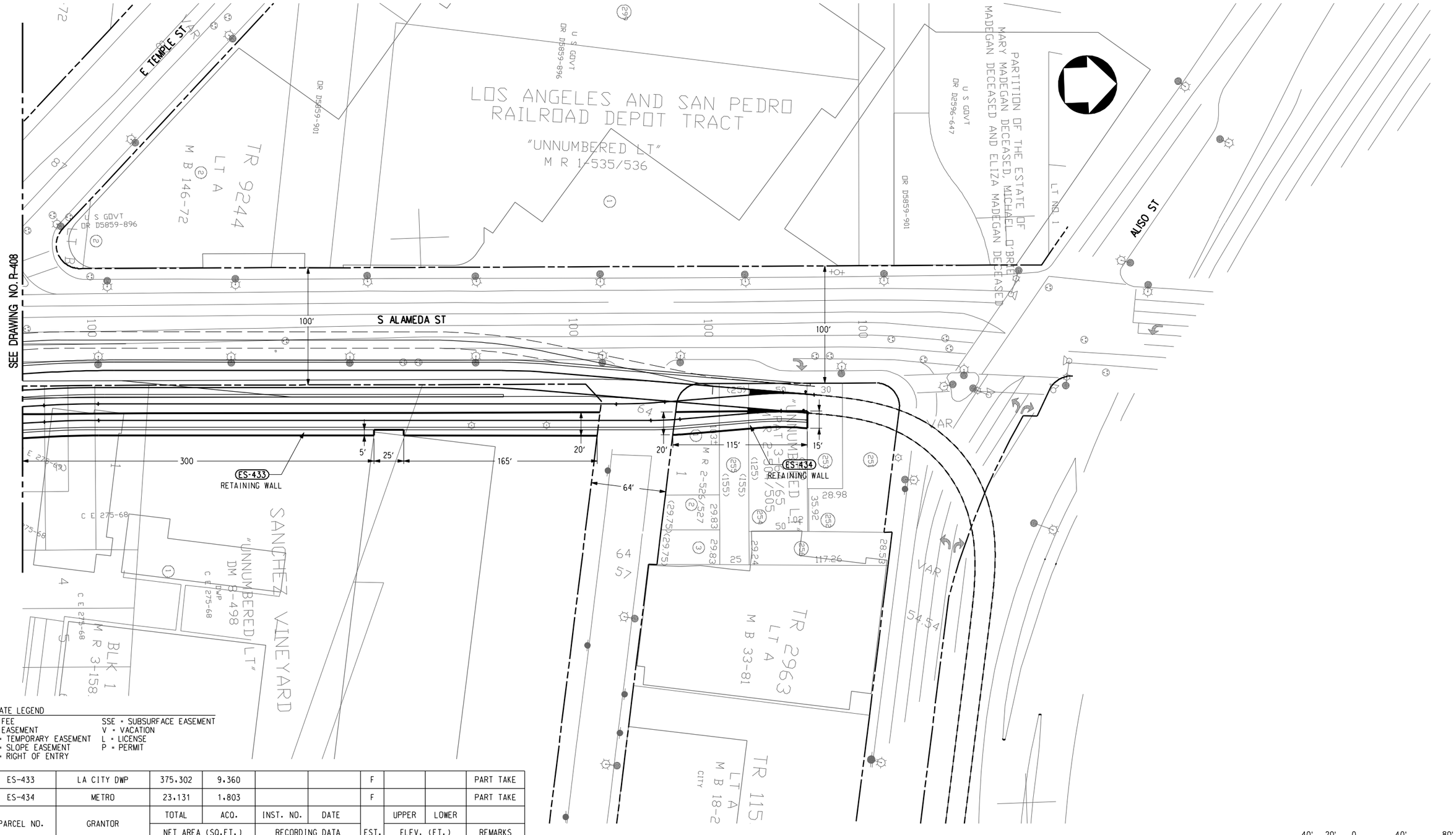

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-433	LA CITY DWP	375.302	9.360			F			PART TAKE
ES-434	METRO	23.131	1.803			F			PART TAKE

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ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 93+00 TO STA 99+70.28

CONTRACT NO
DRAWING NO R-409
REV
SCALE 1"=40'
SHEET NO

UserName: USER-rodriguez 2/10/2010 @ 4:49:46 PM FileName=> T:\27939A-RegionalConnectorACE\CADD\sheets\row\alternative 4a\4a_R-409.plg

4a_R-409.plg 2/10/2010 4:49:46 PM

SEE DRAWING NO. R-408

SIDEWALK/STREET RELOCATION ES-435

STREET RELOCATION ES-436

E 1ST ST

ROSE ST

S HEWITT ST

S CAREY ST

N VIGNES ST

SANCHEZ TRACT
BLK 4
M R 158/159

TR 763
LT 1 LT 2 LT 3
M B 16-64

FORTHMANN AND BERGIN TRACT
M R 70-96

FORTHMANN AND BERGIN TRACT
SHT 2
M B 18-152

SUBDIVISION OF THE ALISO TRACT
M R 4-12/13

"UNNUMBERED LT"
M R 2-92/93

"UNNUMBERED LT"
M R 4-12/13

SUBDIVISION OF THE BIGELOW TRACT
"UNNUMBERED LT"
BLK B
M R 24-81

ALLEY

M B 26-11

M B 18-115

M B 3-60/61

20'
69'
(0.07)
35'
55'
39'
367'
333'
92'
80'
80'
90'
90'
100'

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO. RECORDING DATA	DATE	EST.	UPPER ELEV. (FT.)	LOWER	REMARKS
ES-435	CITY OF LA	88,807	19,958			F			PART TAKE
ES-436	CITY OF LA	85,884	6,555			F			PART TAKE

40' 20' 0 40' 80'

DRAFT

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
STA 85+00 TO STA 94+33.74

CONTRACT NO
DRAWING NO R-410 REV
SCALE 1"=40'
SHEET NO

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PARCELS DATA TABLE

AREA	TYPE	USE	DEPTH TO 10' CROWN	TOTAL AREA (SF)	IMPACT AREA (SF)	LOS ANGELES COUNTY ASSESSOR'S DATA					
						BOOK	PAGE	PARCEL	OWNER	REMARKS	ADDRESS
ES-401	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	14,287	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-402	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	6,768	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-403	EASEMENT	CONSTRUCTION EASEMENT	-	59,263	13,325	5151	018	017	HINES VAF II	PARTIAL TAKE	444 S FLOWER ST, LOS ANGELES, CA 90071
ES-404	FEE	STATION SITE	-	33,190	16,927	5151	014	032	CENTRAL PLANTS, INC	PARTIAL TAKE	703 W 3RD ST, LOS ANGELES, CA 90071
ES-405	FEE	STATION SITE	-	52,603	39,549	5151	014	033	CENTRAL PLANTS, INC	PARTIAL TAKE	N/A
ES-405A	FEE	PEDESTRIAN OVERPASS	-	78,470	5,348	5151	027	256	BUNKER HILL TOWER	PARTIAL TAKE	N/A
ES-406	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	1,102	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-407	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	13,776	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-408	FEE	STATION ENTRANCE	-	161,007	8,015	5149	001	903	USA	PARTIAL TAKE	N/A
ES-408A	EASEMENT	SUBSURFACE EASEMENT	70'	161,007	1,683	5149	001	903	USA	PARTIAL TAKE	N/A
ES-409	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	161,007	27,112	5149	001	903	USA	PARTIAL TAKE	N/A
ES-410	FEE	STATION ENTRANCE	-	5,330	5,330	5149	008	031	TRIBUNE COMPANY	FULL TAKE	200 S BROADWAY, LOS ANGELES, CA 90012
ES-411	FEE	STATION ENTRANCE	-	8,340	8,340	5149	008	030	TRIBUNE COMPANY	FULL TAKE	208 S BROADWAY, LOS ANGELES, CA 90012
ES-412	FEE	STATION ENTRANCE	-	25,824	25,824	5149	008	032	TRIBUNE COMPANY	FULL TAKE	201 S SPRING ST, LOS ANGELES, CA 90012
ES-413	FEE	STATION ENTRANCE	-	18,561	18,561	5149	007	006	GRACE FAMILY TRUST	FULL TAKE	206 S SPRING ST, LOS ANGELES, CA 90012
ES-414	FEE	CONSTRUCTION STAGING	-	12,740	12,740	5149	007	005	GRACE FAMILY TRUST	FULL TAKE	212 S SPRING ST, LOS ANGELES, CA 90012
ES-414A	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	275	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-414B	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	281	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-414C	EASEMENT	SUBSURFACE EASEMENT	40'	6,296	325	5149	026	024	OLD CATHEDRAL LLC	PARTIAL TAKE	114 E 2ND ST, LOS ANGELES, CA 90012
ES-414D	EASEMENT	SUBSURFACE EASEMENT	40'	7,619	20	5149	026	023	OLD CATHEDRAL LLC	PARTIAL TAKE	200 S MAIN ST, LOS ANGELES, CA 90012
ES-415	FEE	STATION AND CONSTRUCTION STAGING	-	17,890	17,890	5161	018	007	401 2ND STREET, LLC	FULL TAKE	401 E 2ND ST, LOS ANGELES, CA 90012
ES-416	FEE	STATION AND CONSTRUCTION STAGING	-	43,664	35,131	5161	018	020	401 2ND STREET, LLC	FULL TAKE	N/A
ES-417	FEE	STATION AND CONSTRUCTION STAGING	-	18,754	18,754	5161	018	011	401 2ND STREET, LLC	FULL TAKE	437 E 2ND ST, LOS ANGELES, CA 90012
ES-418	FEE	STATION AND CONSTRUCTION STAGING	-	7,485	7,485	5161	018	011	401 2ND STREET, LLC	FULL TAKE	437 E 2ND ST, LOS ANGELES, CA 90012
ES-419	FEE	STATION AND CONSTRUCTION STAGING	-	43,664	8,533	5161	018	020	401 2ND STREET, LLC	FULL TAKE	N/A
ES-420	FEE	STATION AND CONSTRUCTION STAGING	-	6,232	6,232	5161	018	901	CITY OF LOS ANGELES	FULL TAKE	N/A
ES-421	FEE	STATION AND CONSTRUCTION STAGING	-	2,731	2,731	5161	018	010	VOLK TRUST	FULL TAKE	N/A
ES-422	FEE	STATION AND CONSTRUCTION STAGING	-	2,119	2,119	5161	018	009	VOLK TRUST	FULL TAKE	N/A
ES-423	FEE	STATION AND CONSTRUCTION STAGING	-	22,370	22,370	5161	018	021	VOLK, ROBERT	FULL TAKE	N/A
ES-424	FEE	STATION AND CONSTRUCTION STAGING	-	13,544	13,544	5161	018	002	VOLK, ROBERT	FULL TAKE	402 E 1ST ST, LOS ANGELES, CA 90012
ES-425	FEE	STATION AND CONSTRUCTION STAGING	-	5,111	5,111	5161	018	001	VOLK, ROBERT	FULL TAKE	416 E 1ST ST, LOS ANGELES, CA 90012
ES-426	FEE	STATION	-	3,572	3,572	5161	018	008	VOLK TRUST	FULL TAKE	105 S ALAMEDA ST, LOS ANGELES, CA 90012
ES-427	FEE	SIDEWALK/STREET RELOCATION	-	111,336	9,965	5173	011	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-428	FEE	PORTAL STRUCTURE	-	34,103	4,777	5173	008	908	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-429	FEE	PORTAL STRUCTURE	-	13,600	3,619	5173	008	901	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-430	FEE	PORTAL STRUCTURE	-	2,089	854	5173	007	905	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-431	FEE	RETAINING WALL	-	106,640	1,263	5173	007	901	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-432	FEE	RETAINING WALL	-	375,302	1,677	5173	006	900	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-433	FEE	RETAINING WALL	-	375,302	9,360	5173	006	900	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-434	FEE	RETAINING WALL	-	23,131	1,803	5173	001	901	METRO	PARTIAL TAKE	N/A
ES-435	FEE	SIDEWALK/STREET RELOCATION	-	88,807	19,958	5173	011	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-436	FEE	STREET RELOCATION	-	85,884	6,555	5173	012	906	CITY OF LOS ANGELES	PARTIAL TAKE	N/A

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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CDM PROJECT MANAGER PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 1
ROW PLAN
PARCELS DATA TABLE

CONTRACT NO
DRAWING NO R-411
REV
SCALE
SHEET NO

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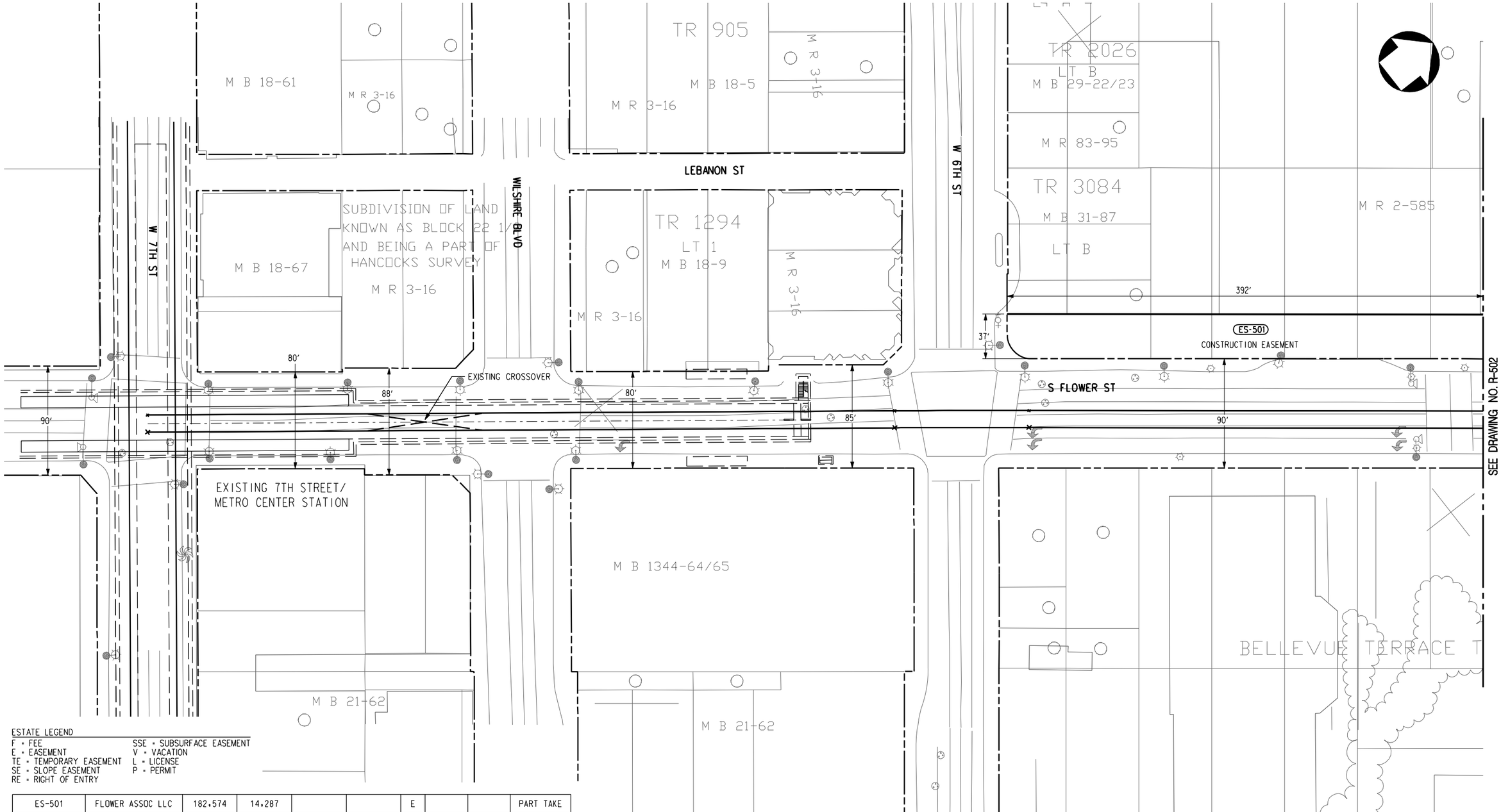

ESTATE LEGEND

F - FEE	SSE - SUBSURFACE EASEMENT
E - EASEMENT	V - VACATION
TE - TEMPORARY EASEMENT	L - LICENSE
SE - SLOPE EASEMENT	P - PERMIT
RE - RIGHT OF ENTRY	

ES-501	FLOWER ASSOC LLC	182,574	14,287			E			PART TAKE
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE		UPPER	LOWER	
		NET AREA (SQ.FT.)		RECORDING DATA		EST.	ELEV. (FT.)		REMARKS

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

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PROJECT MANAGER

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 0+00 TO STA 11+00

CONTRACT NO
DRAWING NO R-501
REV
SCALE 1"=40'
SHEET NO

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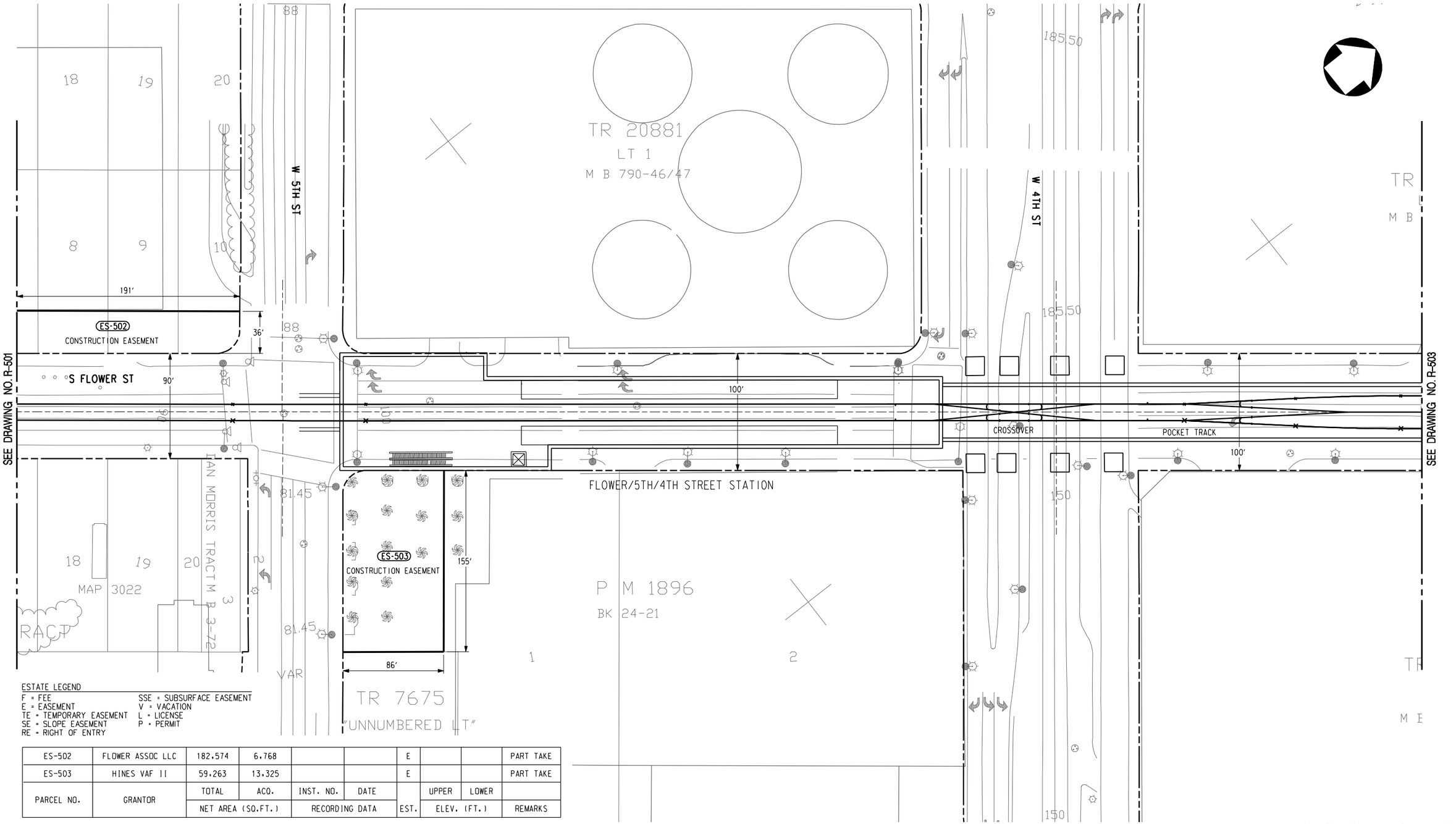

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-502	FLOWER ASSOC LLC	182.574	6.768			E			PART TAKE
ES-503	HINES VAF II	59.263	13.325			E			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 11+00 TO STA 23+00

CONTRACT NO
DRAWING NO R-502
REV
SCALE 1"=40'
SHEET NO

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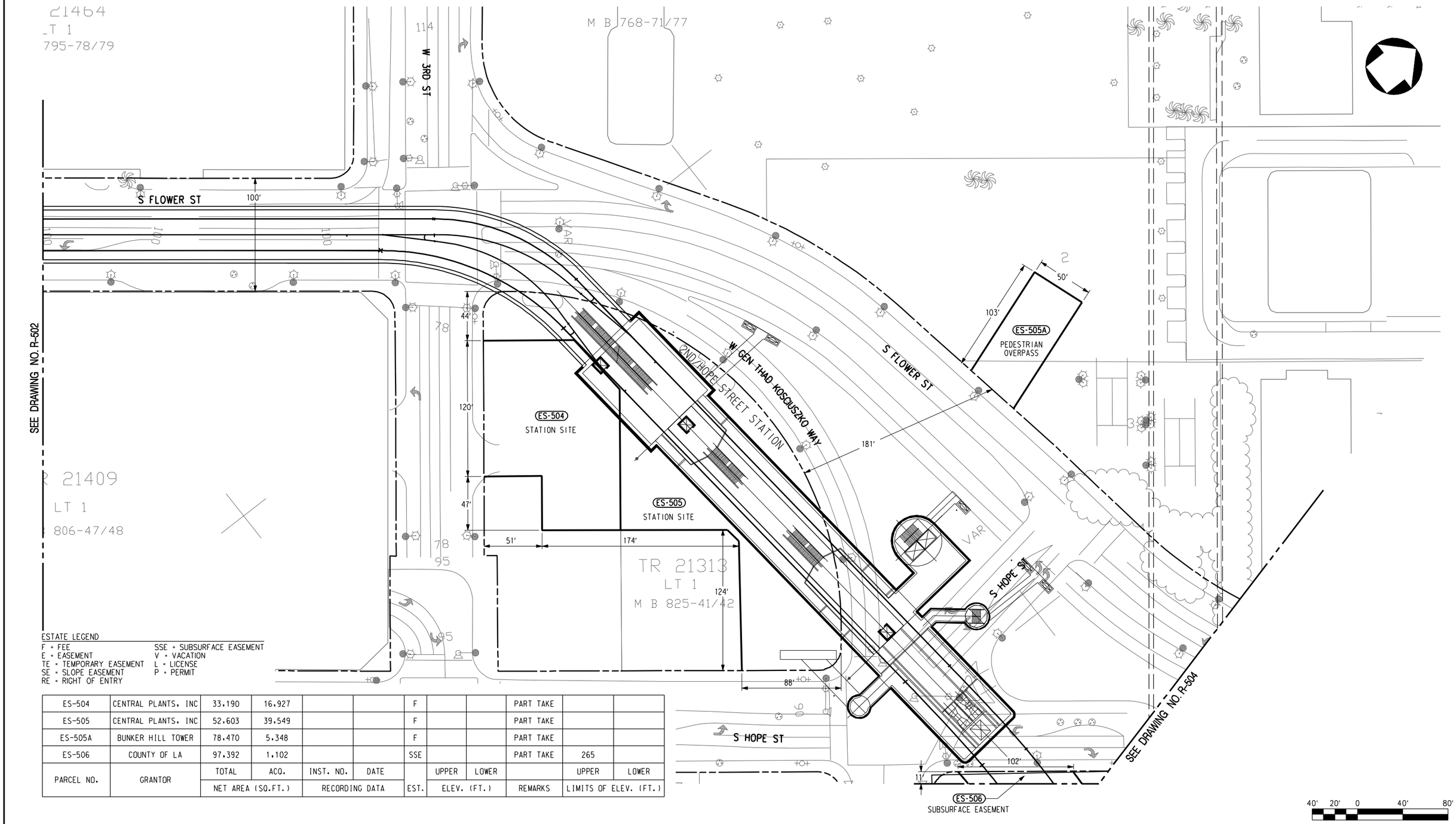

ESTATE LEGEND

F - FEE
E - EASEMENT
TE - TEMPORARY EASEMENT
SE - SLOPE EASEMENT
RE - RIGHT OF ENTRY
SSE - SUBSURFACE EASEMENT
V - VACATION
L - LICENSE
P - PERMIT

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER LIMITS OF ELEV. (FT.)
ES-504	CENTRAL PLANTS, INC	33,190	16,927			F			PART TAKE		
ES-505	CENTRAL PLANTS, INC	52,603	39,549			F			PART TAKE		
ES-505A	BUNKER HILL TOWER	78,470	5,348			F			PART TAKE		
ES-506	COUNTY OF LA	97,392	1,102			SSE			PART TAKE	265	

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
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DATE JAN 2010

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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 23+00 TO STA 34+00

CONTRACT NO
DRAWING NO R-503 REV
SCALE 1"=40'
SHEET NO

UserName: USER-rodrigue2 2/10/2010 @ 4:50:48 PM FileName=> T:\27939A-RegionalConnectorACE\CADD\sheets\row\alternative 4b\4b_R-503.plg

TR 30779
1
M B 862-16/20

TR 28761
1
M B 926-5/8
COUNTY
93-455197

TR 28633
1
M B 854-13/14

TR 28761
2
M B 926-5/8

TR 50552
MULTI-LEVEL
LOTS 1 THROUGH 7
M B 1198-1/9

P M 4932
BK 134-71

S HOPE ST

S GRAND AVE

S OLIVE ST

W 2ND ST

W GEN THAD KOSCIUSZKO WAY

20' LACFCD ST DR EA DR D827-867

110'

229'

116'

90'

100'

106'

VAR

ES-507
SUBSURFACE EASEMENT

SEE DRAWING NO. R-503

SEE DRAWING NO. R-505

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

ES-507	COUNTY OF LA	97,392	13,776			SSE			PART TAKE	265	
PARCEL NO.	GRANTOR	TOTAL	ACQ.	INST. NO.	DATE	EST.	UPPER	LOWER		UPPER	LOWER
		NET AREA (SQ.FT.)		RECORDING DATA			ELEV. (FT.)		REMARKS	LIMITS OF ELEV. (FT.)	

40' 20' 0 40' 80'

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 34+00 TO STA 45+00

CONTRACT NO
DRAWING NO R-504 REV
SCALE 1"=40'
SHEET NO

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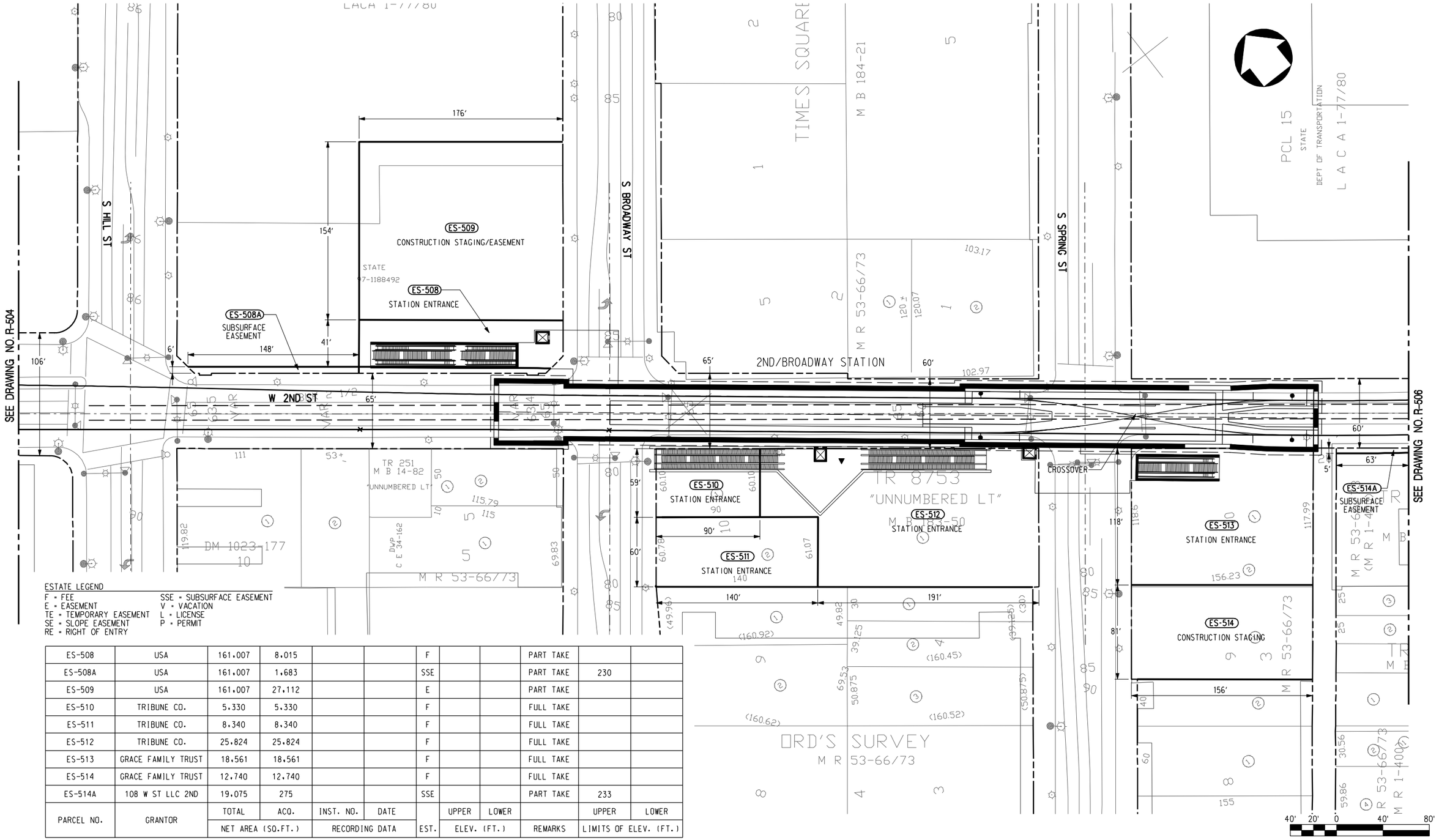

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	NET AREA (SQ.FT.) TOTAL	NET AREA (SQ.FT.) ACQ.	RECORDING DATA INST. NO.	RECORDING DATA DATE	EST.	ELEV. (FT.) UPPER	ELEV. (FT.) LOWER	REMARKS	LIMITS OF ELEV. (FT.) UPPER	LIMITS OF ELEV. (FT.) LOWER
ES-508	USA	161,007	8,015			F			PART TAKE		
ES-508A	USA	161,007	1,683			SSE			PART TAKE	230	
ES-509	USA	161,007	27,112			E			PART TAKE		
ES-510	TRIBUNE CO.	5,330	5,330			F			FULL TAKE		
ES-511	TRIBUNE CO.	8,340	8,340			F			FULL TAKE		
ES-512	TRIBUNE CO.	25,824	25,824			F			FULL TAKE		
ES-513	GRACE FAMILY TRUST	18,561	18,561			F			FULL TAKE		
ES-514	GRACE FAMILY TRUST	12,740	12,740			F			FULL TAKE		
ES-514A	108 W ST LLC 2ND	19,075	275			SSE			PART TAKE	233	

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 45+00 TO STA 57+00

CONTRACT NO
DRAWING NO R-505 REV
SCALE 1"=40'
SHEET NO

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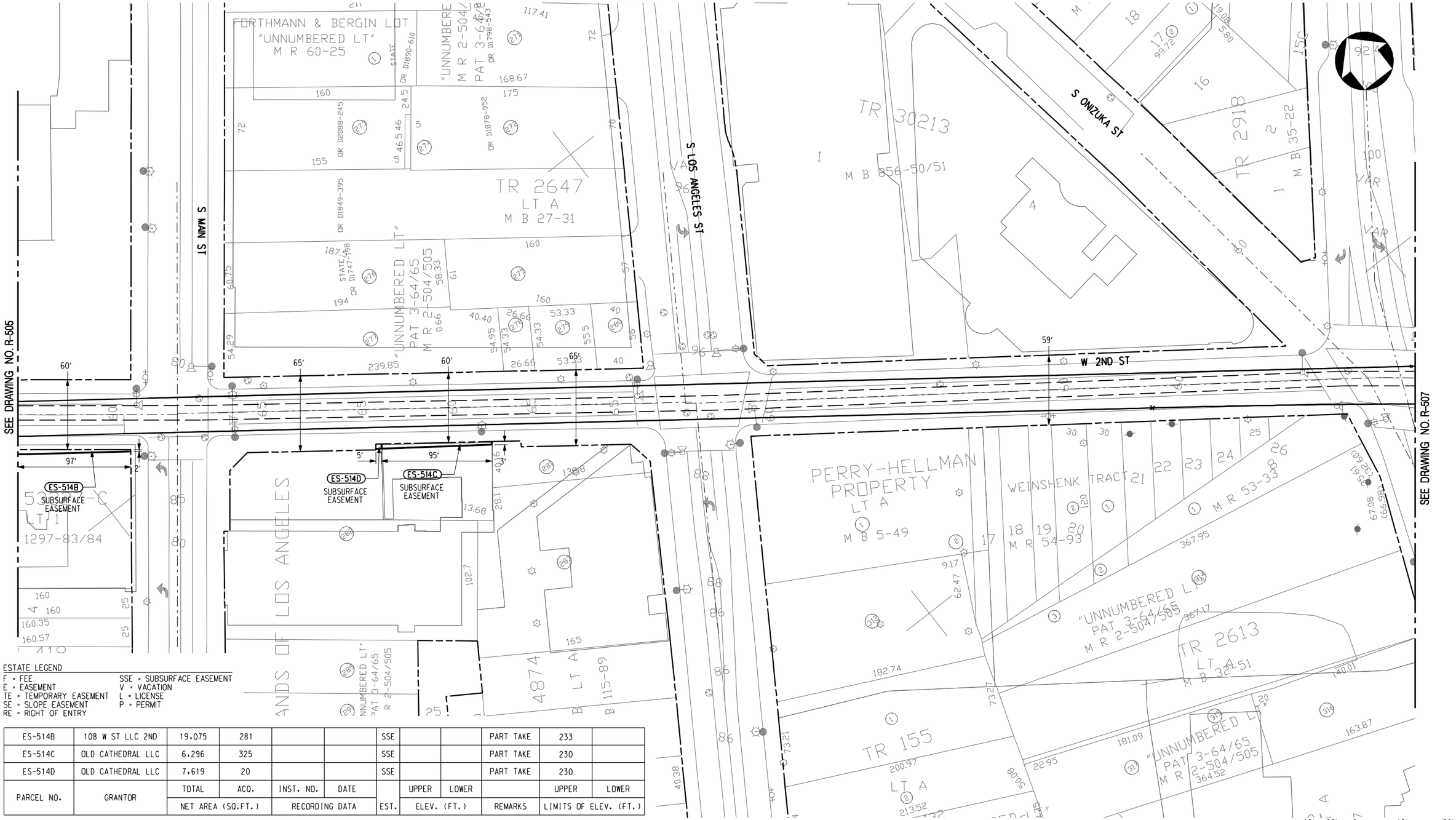

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS	UPPER LIMITS OF ELEV. (FT.)	LOWER
ES-514B	108 W ST LLC 2ND	19,075	281			SSE			PART TAKE	233	
ES-514C	OLD CATHEDRAL LLC	6,296	325			SSE			PART TAKE	230	
ES-514D	OLD CATHEDRAL LLC	7,619	20			SSE			PART TAKE	230	

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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DATE JAN 2010

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 57+00 TO STA 69+00

CONTRACT NO
DRAWING NO R-506
REV
SCALE 1"=40'
SHEET NO

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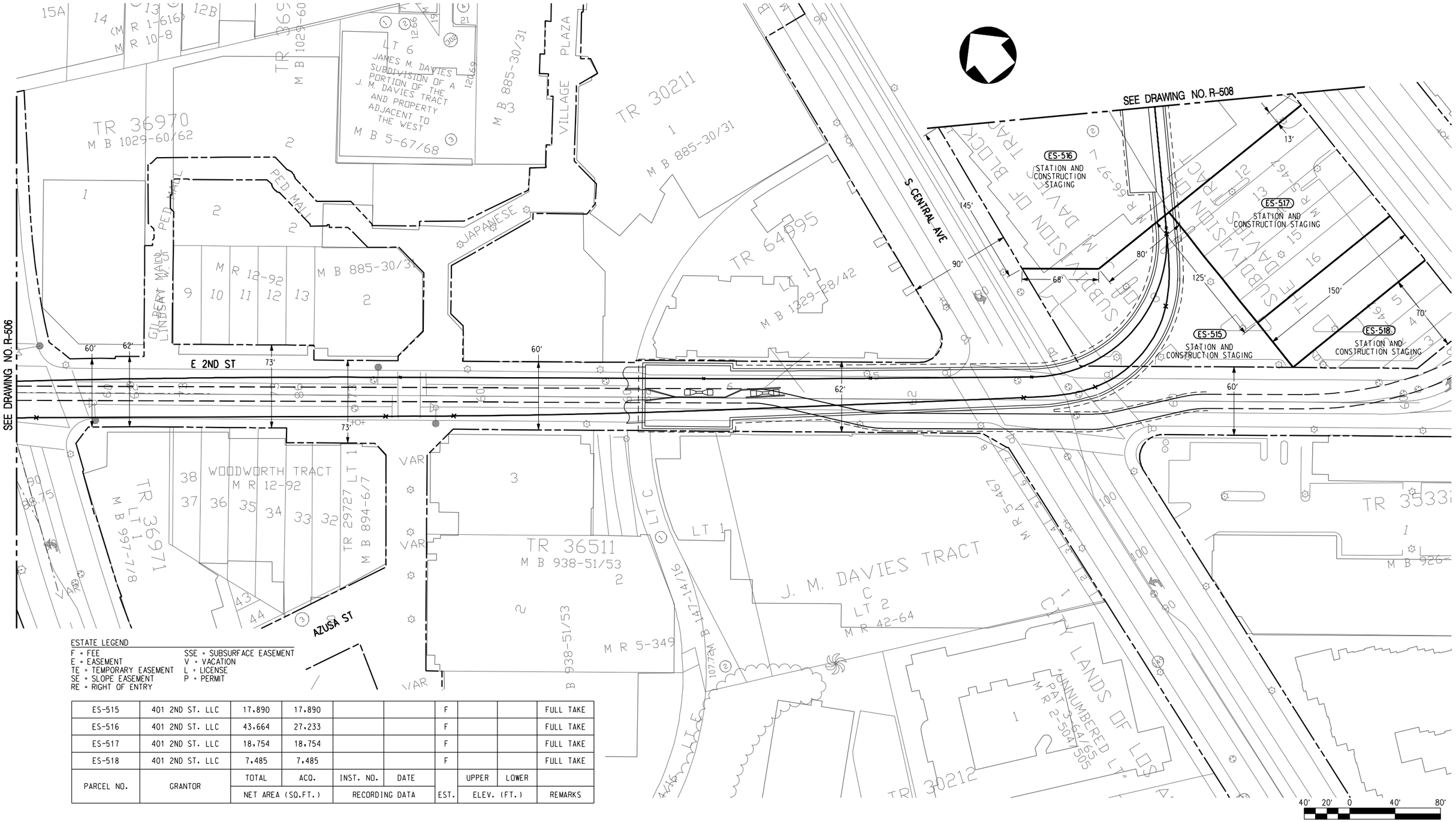

ESTATE LEGEND

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E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-515	401 2ND ST. LLC	17,890	17,890			F			FULL TAKE
ES-516	401 2ND ST. LLC	43,664	27,233			F			FULL TAKE
ES-517	401 2ND ST. LLC	18,754	18,754			F			FULL TAKE
ES-518	401 2ND ST. LLC	7,485	7,485			F			FULL TAKE

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 69+00 TO STA 81+00

CONTRACT NO
DRAWING NO R-507
REV
SCALE 1"=40'
SHEET NO

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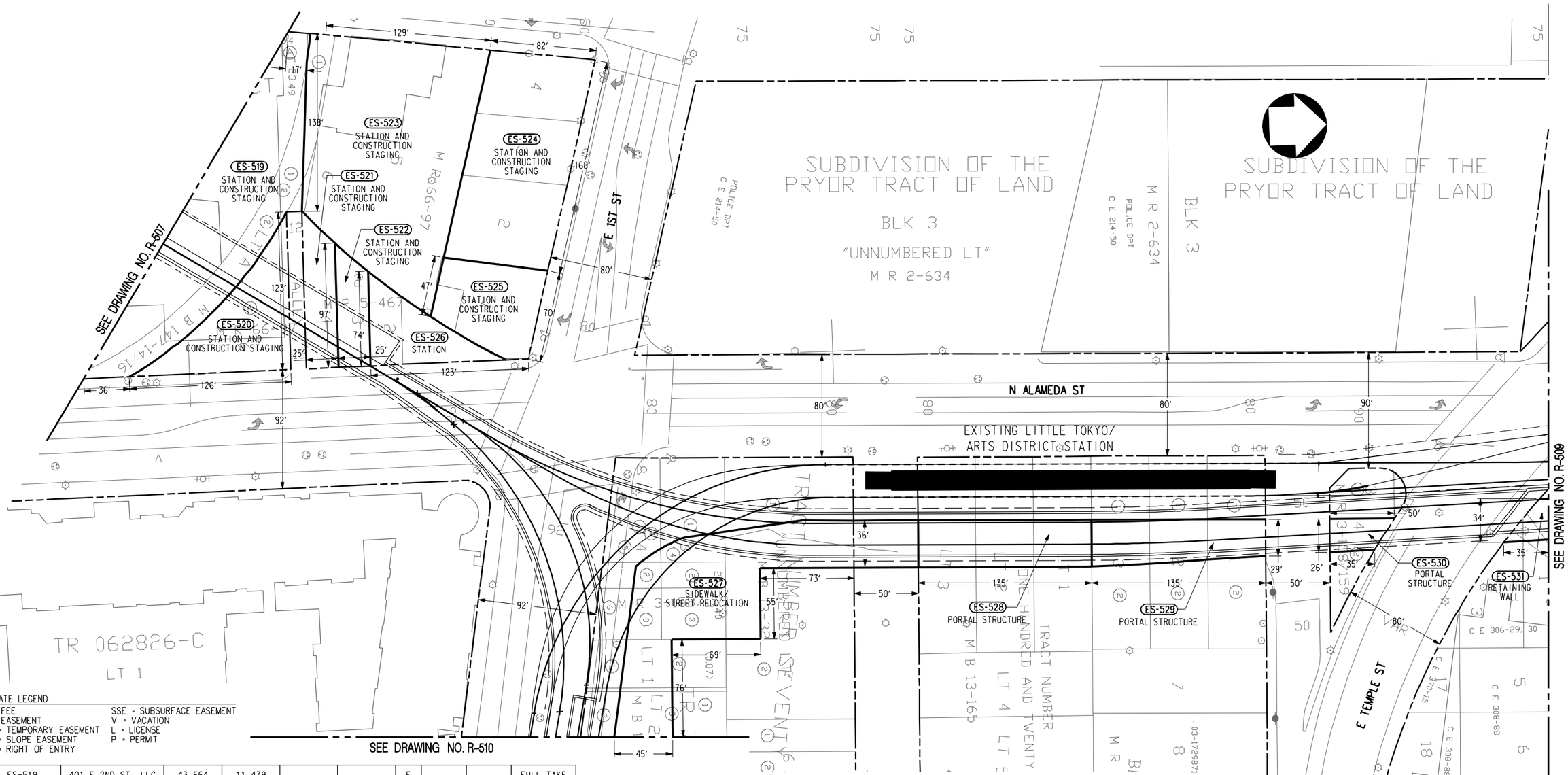

ESTATE LEGEND

F = FEE
E = EASEMENT
TE = TEMPORARY EASEMENT
SE = SLOPE EASEMENT
RE = RIGHT OF ENTRY
SSE = SUBSURFACE EASEMENT
V = VACATION
L = LICENSE
P = PERMIT

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-519	401 E 2ND ST. LLC	43,664	11,479			F			FULL TAKE
ES-520	CITY OF LA	6,232	6,232			F			FULL TAKE
ES-521	VOLK TRUST	2,731	2,731			F			FULL TAKE
ES-522	VOLK TRUST	2,119	2,119			F			FULL TAKE
ES-523	VOLK, ROBERT	22,370	22,370			F			FULL TAKE
ES-524	VOLK, ROBERT	13,544	13,544			F			FULL TAKE
ES-525	VOLK, ROBERT	5,111	5,111			F			FULL TAKE
ES-526	VOLK TRUST	3,572	3,572			F			FULL TAKE
ES-527	CITY OF LA	111,336	15,196			F			PART TAKE
ES-528	CITY OF LA	34,103	4,932			F			PART TAKE
ES-529	CITY OF LA	13,600	4,422			F			PART TAKE
ES-530	CITY OF LA	2,089	1,054			F			PART TAKE
ES-531	LA CITY DWP	106,640	675			F			PART TAKE

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 81+00 TO STA 86+00, 92+00

CONTRACT NO
DRAWING NO R-508 REV
SCALE 1"=40'
SHEET NO

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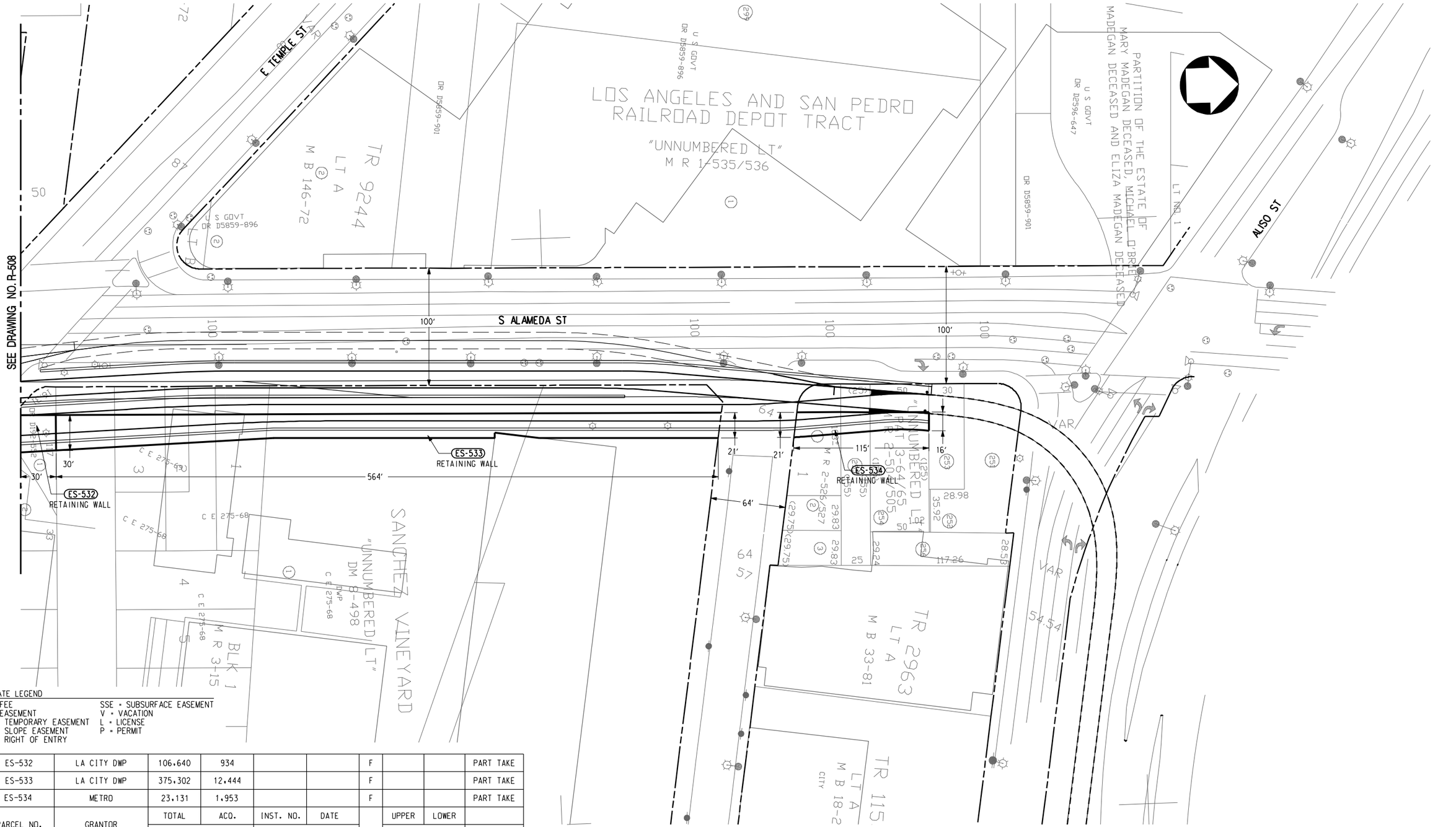

ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
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SE = SLOPE EASEMENT	P = PERMIT
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PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ.	INST. NO.	DATE	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-532	LA CITY DWP	106,640	934			F			PART TAKE
ES-533	LA CITY DWP	375,302	12,444			F			PART TAKE
ES-534	METRO	23,131	1,953			F			PART TAKE

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 92+00 TO STA 99+74.92

CONTRACT NO
DRAWING NO R-509 REV
SCALE 1"=40'
SHEET NO

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ESTATE LEGEND

F = FEE	SSE = SUBSURFACE EASEMENT
E = EASEMENT	V = VACATION
TE = TEMPORARY EASEMENT	L = LICENSE
SE = SLOPE EASEMENT	P = PERMIT
RE = RIGHT OF ENTRY	

PARCEL NO.	GRANTOR	TOTAL NET AREA (SQ.FT.)	ACQ. NET AREA (SQ.FT.)	INST. NO. RECORDING DATA	DATE RECORDING DATA	EST.	UPPER ELEV. (FT.)	LOWER ELEV. (FT.)	REMARKS
ES-535	CITY OF LA	88,807	14,889			F			PART TAKE
ES-536	CITY OF LA	85,884	6,706			F			PART TAKE
ES-537	HEWITT ST LOFTS LLC	4,806	401			F			PART TAKE
ES-538	HIROSHIMA KENJINKAI OF SC	4,607	411			F			PART TAKE

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

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REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
STA 86+00 TO STA 96+00

CONTRACT NO
DRAWING NO R-510 REV
SCALE 1"=40'
SHEET NO

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PARCELS DATA TABLE

AREA	TYPE	USE	DEPTH TO 10' CROWN	TOTAL AREA (SF)	IMPACT AREA (SF)	LOS ANGELES COUNTY ASSESSOR'S DATA					
						BOOK	PAGE	PARCEL	OWNER	REMARKS	ADDRESS
ES-501	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	14,287	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-502	EASEMENT	CONSTRUCTION EASEMENT	-	182,574	6,768	5151	023	400	FLOWER ASSOCIATES LLC	PARTIAL TAKE	525 S FLOWER ST, LOS ANGELES, CA 90071
ES-503	EASEMENT	CONSTRUCTION EASEMENT	-	59,263	13,325	5151	018	017	HINES VAF II	PARTIAL TAKE	444 S FLOWER ST, LOS ANGELES, CA 90071
ES-504	FEE	STATION SITE	-	33,190	16,927	5151	014	032	CENTRAL PLANTS, INC	PARTIAL TAKE	703 W 3RD ST, LOS ANGELES, CA 90071
ES-505	FEE	STATION SITE	-	52,603	39,549	5151	014	033	CENTRAL PLANTS, INC	PARTIAL TAKE	N/A
ES-505A	FEE	PEDESTRIAN OVERPASS	-	78,470	5,348	5151	027	256	BUNKER HILL TOWER	PARTIAL TAKE	N/A
ES-506	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	1,102	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-507	EASEMENT	SUBSURFACE EASEMENT	95'-100'	97,392	13,776	5151	004	913	COUNTY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-508	FEE	STATION ENTRANCE	-	161,007	8,015	5149	001	903	USA	PARTIAL TAKE	N/A
ES-508A	EASEMENT	SUBSURFACE EASEMENT	70'	161,007	1,683	5149	001	903	USA	PARTIAL TAKE	N/A
ES-509	EASEMENT	CONSTRUCTION STAGING/EASEMENT	-	161,007	27,112	5149	001	903	USA	PARTIAL TAKE	N/A
ES-510	FEE	STATION ENTRANCE	-	5,330	5,330	5149	008	031	TRIBUNE COMPANY	FULL TAKE	200 S BROADWAY, LOS ANGELES, CA 90012
ES-511	FEE	STATION ENTRANCE	-	8,340	8,340	5149	008	030	TRIBUNE COMPANY	FULL TAKE	208 S BROADWAY, LOS ANGELES, CA 90012
ES-512	FEE	STATION ENTRANCE	-	25,824	25,824	5149	008	032	TRIBUNE COMPANY	FULL TAKE	201 S SPRING ST, LOS ANGELES, CA 90012
ES-513	FEE	STATION ENTRANCE	-	18,561	18,561	5149	007	006	GRACE FAMILY TRUST	FULL TAKE	206 S SPRING ST, LOS ANGELES, CA 90012
ES-514	FEE	CONSTRUCTION STAGING	-	12,740	12,740	5149	007	005	GRACE FAMILY TRUST	FULL TAKE	212 S SPRING ST, LOS ANGELES, CA 90012
ES-514A	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	275	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-514B	EASEMENT	SUBSURFACE EASEMENT	50'	19,075	281	5149	006	011-151	108 W STREET LLC 2ND	PARTIAL TAKE	108 W 2ND ST #102, LOS ANGELES, CA 90012
ES-514C	EASEMENT	SUBSURFACE EASEMENT	40'	6,296	325	5149	026	024	OLD CATHEDRAL LLC	PARTIAL TAKE	114 E 2ND ST, LOS ANGELES, CA 90012
ES-514D	EASEMENT	SUBSURFACE EASEMENT	40'	7,619	20	5149	026	023	OLD CATHEDRAL LLC	PARTIAL TAKE	200 S MAIN ST, LOS ANGELES, CA 90012
ES-515	FEE	STATION AND CONSTRUCTION STAGING	-	17,890	17,890	5161	018	007	401 2ND STREET, LLC	FULL TAKE	401 E 2ND ST, LOS ANGELES, CA 90012
ES-516	FEE	STATION AND CONSTRUCTION STAGING	-	43,664	27,233	5161	018	020	401 2ND STREET, LLC	FULL TAKE	N/A
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ES-522	FEE	STATION AND CONSTRUCTION STAGING	-	2,119	2,119	5161	018	009	VOLK TRUST	FULL TAKE	N/A
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ES-530	FEE	PORTAL STRUCTURE	-	2,089	1,054	5173	007	905	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-531	FEE	RETAINING WALL	-	106,640	675	5173	007	901	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-532	FEE	RETAINING WALL	-	106,640	934	5173	007	901	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-533	FEE	RETAINING WALL	-	375,302	12,444	5173	006	900	LA CITY DEPT. OF WATER & POWER	PARTIAL TAKE	N/A
ES-534	FEE	RETAINING WALL	-	23,131	1,953	5173	001	901	METRO	PARTIAL TAKE	N/A
ES-535	FEE	STREET RELOCATION	-	88,807	14,889	5173	011	902	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-536	FEE	STREET RELOCATION	-	85,884	6,706	5173	012	906	CITY OF LOS ANGELES	PARTIAL TAKE	N/A
ES-537	FEE	STREET RELOCATION	-	4,806	401	5163	003	002	HEWITT ST LOFTS LLC	PARTIAL TAKE	710 E 1ST ST, LOS ANGELES, CA 90012
ES-538	FEE	STREET RELOCATION	-	4,607	411	5163	003	003	HIROSHIMA KENJINKAI OF SC	PARTIAL TAKE	712 E 1ST ST, LOS ANGELES, CA 90012

DRAFT

REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE JAN 2010

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

Metro

CDM

PROJECT MANAGER

PB

REGIONAL CONNECTOR TRANSIT CORRIDOR
ADV. CONCEPTUAL ENGINEERING
FULLY UNDERGROUND LRT ALTERNATIVE
LITTLE TOKYO VARIATION 2
ROW PLAN
PARCELS DATA TABLE

CONTRACT NO
DRAWING NO R-511
REV
SCALE
SHEET NO

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX J

STATION PLANNING TOOLKIT

State Clearinghouse Number: 2009031043

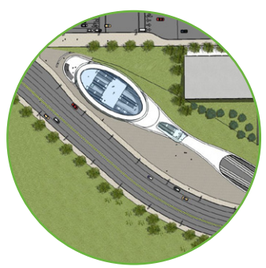
Metro

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT

STATION PLANNING TOOLKIT

CDM IBI GROUP

SEPTEMBER 11, 2009
METRO REGIONAL CONNECTOR TRANSIT CORRIDOR STUDY, PHASE 2



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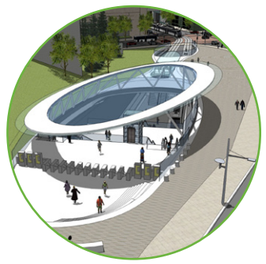

INTRODUCTION

TOOLKIT PURPOSE....3
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1.0

◀ Precedent – de la Concorde Transit Station, Laval QB

1.0 INTRODUCTION

1.1 TOOLKIT PURPOSE

This toolkit provides streetscape and station design guidelines for the proposed Regional Connector Transit Corridor Project. It emphasizes the station sites and structures and pays particular attention to design decisions affecting how the system fits within the existing downtown.

This document builds upon the Metro Regional Connector Urban Design Report and is based on an analysis and distillation of best practices gleaned from guidelines developed for other transit systems, in conjunction with recommendations arising from the team's evaluation of the specific context and requirements of this project.

These guidelines do not contain rigid requirements or numerous specific dimensions. Rather, they outline key elements and design objectives for transit-system design in relation to its setting. The elements of this 'Toolkit' are intended to be applied to the design of the Regional Connector Transit Corridor Project and to support the decisions that Metro makes in concurrence with existing City of Los Angeles plans and policies.

Consistent with these plans, the introduction of the Regional Connector is seen as an opportunity to improve the downtown pedestrian environment. By integrating its stations within the urban fabric, future development will be encouraged in a pattern that promotes walking, transit use, environmental stewardship and a sense of community.

1.2 GOALS & OBJECTIVES

▶REINTEGRATE DOWNTOWN INTO THE LARGER CITY CONTEXT

A downtown core that is accessible from anywhere in the city and active around the clock becomes a natural destination location for residents and tourists.

▶PROMOTE MULTI-MODAL TRANSPORTATION

Transit systems designed to be fast, affordable and visually appealing, provide the public with a welcome alternative to commuting by car.

▶PEDESTRIANIZE THE DOWNTOWN

Urban streets lined by mixed-use development, vibrant streetscapes and public spaces create safe and enjoyable pedestrian travel to daily amenities.

▶GREEN THE DOWNTOWN

Greenery adds interest, ornamentation and continuity between urban spaces, while performing a valuable role in the reduction of noise and air pollution.

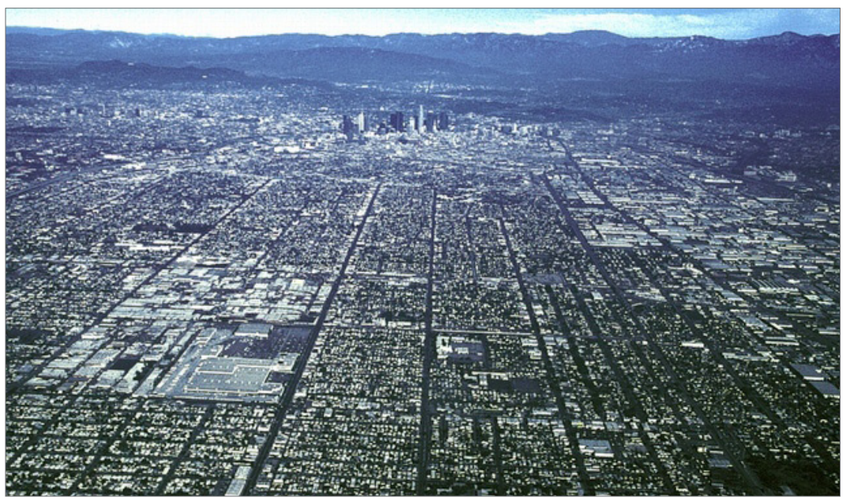
▶ESTABLISH A SENSE OF PLACE

The concept of placemaking acknowledges and builds upon a neighborhood's unique character through its architectural mix and street-side atmosphere.

By integrating its stations within the urban fabric, future development will be encouraged in a pattern that promotes walking, transit use, environmental stewardship and a sense of community.

◀ (Left / Right) Historic Broadway, Los Angeles

◀ Los Angeles Freeways



◀ Aerial of Los Angeles Today

1.3 LOCAL CONTEXT

1.3.1 HISTORY

Los Angeles' history of growth cannot be separated from its history of transportation. The two grew together, intertwining with and encouraging the growth of the other. The city's setting – a vast basin bordered by the Pacific Ocean, the mountains and the desert – permitted unbridled outward growth. This sprawl eventually led to an over-reliance on the automobile.

The city's use of rail, both heavy and light, has fluctuated over time. Rail travel enjoyed popularity in the 1900s, when the first five railways and the addition of the local electric railways (red cars) provided a number of commuter-rail options. However, in the mid-1920s the automobile made its debut and began to replace trains as the preferred mode of transportation. Freeway networks were built parallel to the first five tracks. Except for a brief period during World War II, the use of rail steadily declined. By 1959, only the Los Angeles to Long Beach Trolley remained but, two years later, it too ceased operations.

In the mid-1980s, after many failed attempts at introducing mass rail transit, the Los Angeles County Transportation Commission and Southern California Rapid Transit District began to reassemble the rail right-of-ways abandoned years earlier. Today, a radial network of rail transit lines once more serves the city. The Metro Rail system consists of over 73 miles of track.

The Regional Connector will increase commuter options, allowing transit passengers to access the Metro Blue Line, the Metro Gold line and the Metro Expo Line without a transfer from one system to the next. The Regional Connector will facilitate the integration of LRT, bus and passenger-rail service in the region, increasing the effectiveness of the entire mass transit system.

The Regional Connectors timing is right. The car culture that once typified North American cities – and particularly Los Angeles – is becoming a thing of the past. Increased awareness of the need to reduce greenhouse gases has prompted citizens to voluntarily carpool, cycle, walk and take public transit instead of driving. The simultaneous move towards controlling urban sprawl has sparked a renewed interest in the quality of urban life.

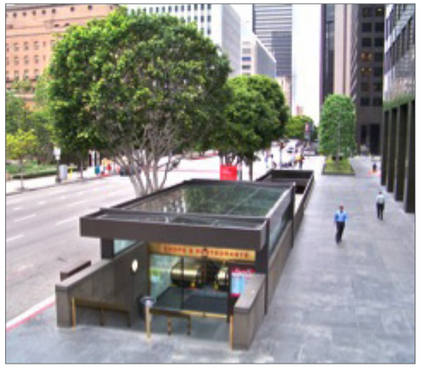
Downtown Los Angeles underwent its own recent overhaul with the introduction of major civic drawing points like the Staples Center, the Walt Disney Concert Hall and the Cathedral of Our Lady of the Angels. Plans underway, including the Grand Avenue project, will make the downtown even more of a destination. Already, this increased activity in the city center has made it a much more attractive place in which to live, work and play.

Another influence comes from Latin American urban design, which leans heavily towards lively urban plazas and pedestrian promenades. This influence in Los Angeles is further driving the move away from car culture and towards pedestrian culture.

1.3.2 CLIMATE

Los Angeles has a dry-summer subtropical climate characterized by 263 sunshine days per year on average and only 35 days of precipitation. The period of May through October is warm to hot and dry with average high temperatures of 74 – 84°F. The winter season includes minimal frost and lower temperatures that range from 73 – 48°F. The key to enjoying the outdoors in the city is the ability to escape from excessive heat and the occasional rain shower. Waiting areas and public spaces must offer escape from exposure to the sun.

Downtown Los Angeles happens to be one of the most favored climates in North America for the growing of subtropical plants. From a landscape architecture perspective, there is opportunity to provide protection from the elements with plant screens, walls and canopies.



◀ (Left) Financial District – Existing Metro Center; and (Right) 5th & 6th at Flower Station At-Grade

◀ Financial District – Existing Plaza

◀ Financial District – Existing Streetscape

1.4 DOWNTOWN DISTRICTS

The urban grid of streets and blocks throughout most of Downtown LA are based on a 'superblock' scale of generally 300' × 600'. The grid layout is inclined diagonally at a 26° angle off the cardinal grid of the rest of the city, following the original Spanish grid of El Pueblo de la Reina de Los Angeles.

The alignment has been subdivided into three major 'districts' within the downtown – the Financial District, Bunker Hill District and Historic Core / Little Tokyo District. These character zones will provide a 'jumping-off point' for developing themes and treatments for the streetscape. Please refer to Fig. 1 on page 7 and Fig. 2 on page 8, which illustrate all of the identified districts in downtown Los Angeles.

1.4.1 FINANCIAL DISTRICT

The Financial District extends throughout the lower and upper west Bunker Hill areas on the north and generally to Seventh Street METRO Center area on the south. The District is adjacent to the Harbor / Pasadena I-110 Freeway on the west and extends generally to Grand Avenue and beyond (see Fig. 1 and 2 for context).

The area encompasses more than 19 million sq. ft. in existing development, primarily high-rise office towers, hotels, the Los Angeles Central Library and Maguire Gardens Landscaped Art Park & Plaza, the Westin-Bonaventure Hotel / Conference Center and numerous existing high-rise office buildings surrounding the Fifth and Flower Street intersection, as well as the adjacent upper Bunker Hill concentration of office towers.

The segment of Flower Street, between Third and Fourth Streets, is flanked by the (±) 50' tall World Trade Center podium on the west and the (±) 60' tall Bank of America podium building on the east. Both podium buildings enclose parking garages and are internally oriented to vertical circulation cores with no significant street level pedestrian access, entrances or exits, along the length of the frontages of this segment of Flower Street.

Significant employment centers include the Bank of America Headquarters tower, the 444 Flower Street tower, the Westin-Bonaventure Hotel, the World Trade Center, the Marriott Hotel, the Figueroa Courtyard low-rise office complex and other job centers. Significant residential development includes the existing 990 dwelling units within the Bunker Hill Towers complex north of Third Street, and the 606 dwelling unit Promenade Towers residential complex, located at the NWC of Second Street and Figueroa, for a nearby residential total of 1,596 dwelling units.

1.4.2 BUNKER HILL DISTRICT

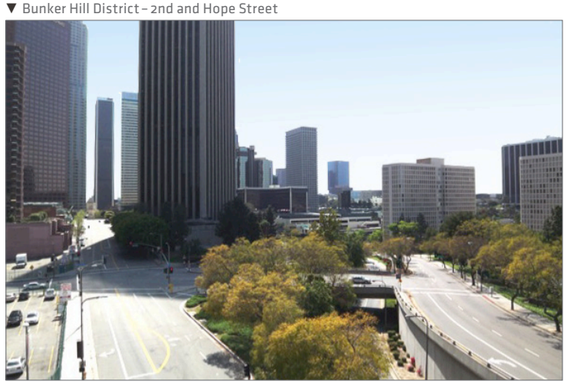
Significant cultural attractions in the immediate vicinity include Disney Hall, the Music Center with the Chandler Pavilion, Mark Taper Forum, Ahmanson Theater complex, the Cathedral of Our Lady of the Angels and the new Civic Park.

Major job centers include the LA Department of Water and Power Headquarters at the northwest corner of Hope and First Streets, the Los Angeles County Hall of Justice Courthouse, the County Administration Offices flanking the new Civic Park, the Colburn School of Performing Arts, MOCA, and Phases I & II of The Grand Avenue mixed-use office, residential, hotel and retail / entertainment development complex directly across Grand Avenue. Other nearby Bunker Hill employment destinations include the Bank of America Headquarters tower, the California Plaza towers, and the Wells Fargo Bank towers on upper Grand Avenue, all within a 5 to 6 minute walking range (see Fig. 1 and 2 for context).

With up to 2,660 dwelling units proposed for The Grand Avenue Project at build-out, the local residential neighborhood will include the existing 990 dwelling units Bunker Hill Towers residential complex, 391 dwelling units Grand Tower apartments, and the 217 dwelling units Museum

▼ Bunker Hill District – Disney Music Hall

▼ Bunker Hill District – 2nd and Hope Street



◀ Historic Core / Little Tokyo District – Existing Pedestrian Bridge

◀ (Left) Historic Core / Little Tokyo District – Existing Public Art; and (Right) Los Angeles City Hall.

Tower apartments near Second and Olive Streets, for a proposed total of 4,258 dwelling units, all within a 3 to 6 minute walking range of the proposed station.

1.4.3 HISTORIC CORE / LITTLE TOKYO DISTRICT

Within a 5 to 6 minute walking range to the north, the quarter mile radii along the second street transit corridor encompass approximately 80% of the Civic Center Federal, State, County and City Government employment centers and the related public destinations along the north side of First Street between Hill Street and Alameda Street.

This includes the site for a proposed new Federal Courts and U.S. Government office tower between Hill and Broadway, the L.A. Times / Mirror Square office buildings between Broadway and Spring, the new LAPD Headquarters building between Spring and Main Streets, the Caltrans Headquarters building between Main and Los Angeles Streets, the Kyoto Grand Hotel & Gardens complex, the Weller Court Shopping Plaza at the corner of Second and San Pedro Streets, approximately 80% of the Amended Little Tokyo Redevelopment Project Area (RPA) and the Little Tokyo / Arts District.

Also within a 5 to 6 minute walking range lie the proposed site of the 50-story, mixed-use Zen Residential Tower at the northeast corner of Hill and Third Streets, and the north portion of the Historic Core District, which includes numerous historic resources such as the Million Dollar Theater building, Grand Central Market, Angels Flight, the Bradbury Building and Biddy Mason Park, and proposed new buildings such as the Medallion Project, a 200 dwelling units mixed-use development at the southeast corner of Third and Main Streets.

Vibiana's Garden is located at the southeast corner of Main and Second and plans include the proposed Vibiana Place mixed-use development on the south side of the Vibiana property. The Vibiana site area also includes a proposed Little Tokyo Recreation Center on Los Angeles Street between Second and Third Streets. The Little Tokyo Branch Library is located at the southwest corner of Second and Los Angeles Streets, and represents the west gateway into the Little Tokyo Community RPA.

The quarter-mile radius around the proposed Little Tokyo Station includes the City Hall and Civic Center. Other predominant uses within Little Tokyo Station area are retail shopping, hotel and hospitality uses, international banking, financial and commercial offices, historic resources, temples, churches, cultural and institutional services, and most recently, a rapidly increasing number of medium to high-density residential and mixed-use infill development projects (see Fig. 1 / 2 for context).

The existing land use pattern within the original Little Tokyo RPA is largely a reflection of development that has occurred since 1970. Plans are in place to revitalize and preserve a mixed-use, full service community that continues to serve as the cultural, religious, social and commercial center of the Japanese American Community in Southern California.

In addition, the Little Tokyo Block 8 Mixed-Use Development (MXD) Project is presently in construction to include 750 dwelling units, with 50,000 sq. ft. of ground floor commercial space, 40,000 sq. ft. of landscaped open space and pedestrian paseos and parking for more than 1,000 cars, plus an additional 600 public parking spaces to serve the local area.

▼ Historic Core / Little Tokyo District – Panorama

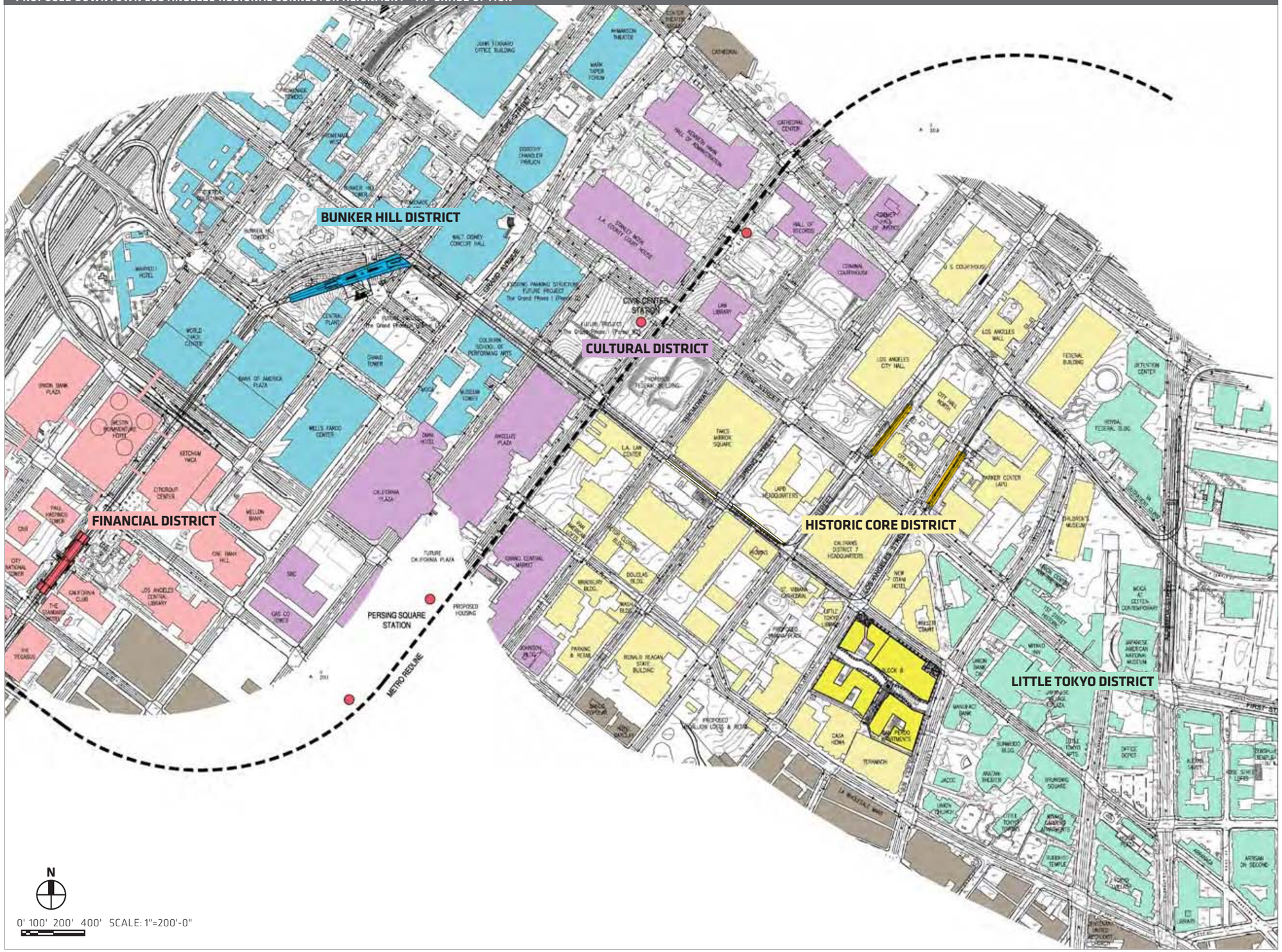
FIG. 1

PROPOSED DOWNTOWN LOS ANGELES REGIONAL CONNECTOR ALIGNMENT – UNDERGROUND OPTION

◀ This map illustrates the identified 'districts' in downtown Los Angeles, providing a 'jumping-off point' for developing themes and treatments for the streetscape.

FIG. 2

PROPOSED DOWNTOWN LOS ANGELES REGIONAL CONNECTOR ALIGNMENT – AT-GRADE OPTION



◀ This map illustrates the identified 'districts' in downtown Los Angeles, providing a 'jumping-off point' for developing themes and treatments for the streetscape.

DESIGN GUIDELINES

URBAN DESIGN 10
STATION DESIGN 13
LANDSCAPE ARCHITECTURE 28

4.0

◀ Application of CPTED principles along retail high streets and TOD centers.

"A city is not buildings alone.
It is the spaces between that matter most."

–Prof. Jan Gehl, Life Between Buildings

2.0 DESIGN GUIDELINES

2.1 URBAN DESIGN

2.1.1 URBAN DESIGN PRINCIPLES

Great cities of the world are known not for their architecture alone but for the quality of their urban spaces – places where people willingly congregate to see and be seen. Urban design might, therefore, be defined as the art of forming connections between people and places, or between movement and urban form, within the Public Realm.

The underlying principles of good urban design focus on providing for the safety, convenience and comfort of the pedestrian in an environment that is lively and engaging, aesthetically pleasing, reflective of the local context, infused with meaning and historical relevance, economically viable and environmentally sustainable.

The Urban Design section of this Station Planning Toolkit sets forth a series of design principles and guidelines aimed at ensuring that the public spaces associated with stations deliver on their responsibility to contribute positively to the public realm. They are based upon best practices and / or industry standards from other similar projects, applied with careful consideration for the local context. At issue is the opportunity to use the advent of the Regional Connector as a catalyst to deliver quality urban spaces that contribute positively to a vibrant downtown.

Section 2.0 Design Guidelines deals both with Urban Design – a look at the broader context of the elements of urban placemaking and station design – with an understanding that their common ground is that the transit plaza surrounding each station entry can serve prominently as the center of neighborhood focus.

The underlying principles of good urban design focus on providing for the safety, convenience and comfort of the pedestrian in an environment that is lively and engaging, aesthetically pleasing, reflective of the local context, infused with meaning and historical relevance, economically viable and environmentally sustainable.

2.1.1.1 WALKABILITY & PEDESTRIAN ACCESS TO PUBLIC TRANSIT

To make an interconnected network of streets and sidewalks work, careful consideration of the interface between the automobile and the pedestrian is needed. Above all, pedestrians must be given priority and ensured safety to encourage the level of pedestrian use that supports transit. In this revamped model of priority, the following hierarchy should be respected in all planning activities:

- (1) Pedestrians;
- (2) Cyclists;
- (3) Transit; and
- (4) Automobiles.

2.1.1.2 COMMUNITY PARTICIPATION

Through consultation with residents and stakeholders, station area planning should accommodate a wide range of supporting benefits for local communities. Physical improvements to the public realm are insufficient on their own to create a truly lively, healthy urban environment. In addition, it is critical that the community be actively engaged by providing opportunities for public events and celebrations. The City of Los Angeles is exemplary in providing such opportunities, as evidence by the list of events contained in the Appendix.

To make an interconnected network of streets and sidewalks work, careful consideration of the interface between the automobile and the pedestrian is needed.

◀ Conventional Street

◀ Traffic Calmed Street

◀ Pedestrian-Oriented Intersection

2.1.1.3 SAFETY

Designing for safety is particularly important in transit areas where citizens are occasionally required to wait for extended periods, particularly in evening hours. The solution is to design the environment to optimize natural surveillance. The greater the pedestrian activity on the street, the safer the street is likely to be.

2.1.2 URBAN DESIGN COMPONENTS

2.1.2.1 BLOCKS

A grid-based street network is the fundamental building block of the urban environment and allows for a diversity of different street types and flexible lot patterns. At the heart of the grid is the block.

▶GUIDELINES

- Human scale blocks with shorter lengths are ideal to accommodate pedestrian travel.
- Provide a continuous network of pedestrian sidewalks and pathways throughout the station area connecting to surrounding neighborhoods and open spaces. This network comprises a variety of routes, enabling multiple user experiences and shorter travel distances.

2.1.2.2 STREETS & INTERSECTIONS

Streets are multi-functional spaces, designed for the safe, convenient and efficient mobility of all users – pedestrians, bicyclists, transit riders and motorists – in balance. Intersections must be safe and friendly to pedestrians and cyclists, but also allow for steady automobile travel.

The pedestrian, bicycle and vehicle realms should be clearly defined and separated to make negotiating intersections as safe and simple as possible.

▶PEDESTRIAN FEATURE GUIDELINES

- Reduce curb radii to the minimum possible to encourage lower turning speeds and to decrease the crossing distance for pedestrians.
- Extend high quality sidewalk finishes through the intersection, providing a strong cue to drivers that the crosswalk is part of the pedestrian realm.
- Locate pedestrian crossings at intersections, as close to natural 'desire' lines as possible to minimize jaywalking.
- Encourage mid-block crossings with curb extensions on blocks of more than 600' long.
- Maintain clear view corridors along streets connecting to the transit station and major civic landmarks.
- Allow signalization to favor transportation modes in the following order of priority: pedestrians, cyclists, automobiles.
- Orient street furniture, lighting, signage and landscaping towards the pedestrian.
- Avoid barriers as a means of controlling pedestrian flow as they create the feeling that the street belongs to cars first and pedestrians second. They reduce visibility for children and those in wheelchairs and give drivers a false sense of security.
- Street level pedestrian activities enhance the public realm and are the urban design priority for creating great streetscapes. In cases where pedestrian access requires grade separation with pedestrian bridges or underpass features, these facilities should be carefully designed to enhance pedestrian activity and safety and include pedestrian amenities such as joint uses, cafés and other retail amenities.

FIG. 3

TECHNICAL CONSIDERATIONS

▶TRAFFIC CALMING MEASURES

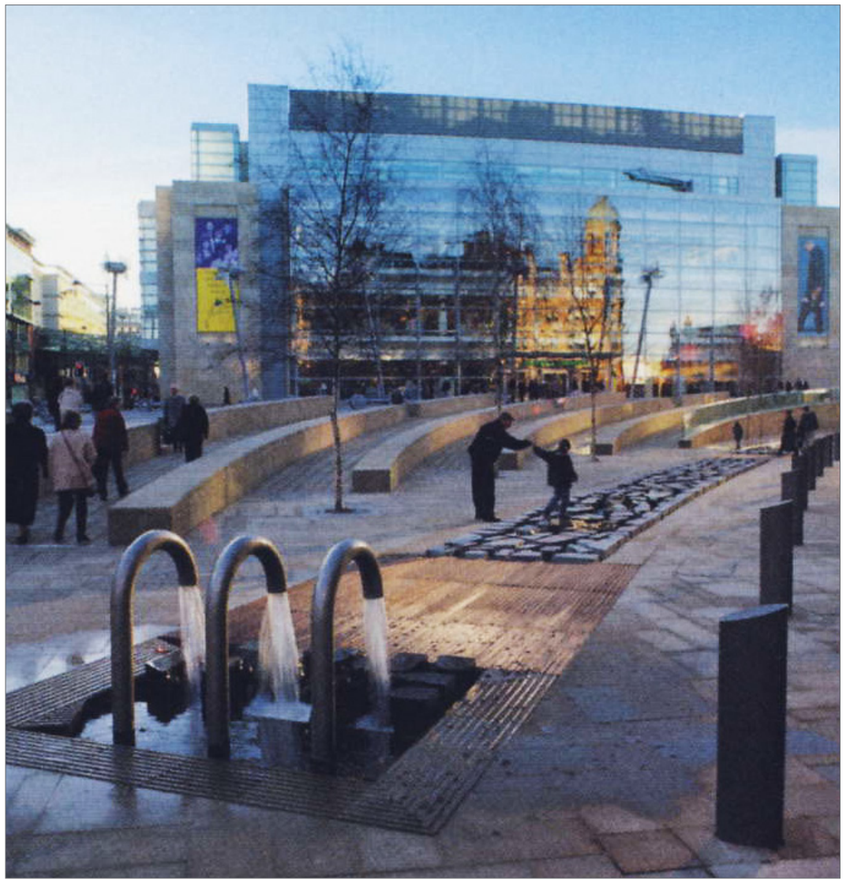
HORIZONTAL DEFLECTION

- Narrow Lanes (Less Than 12' in Width)
- Chicanes
- Mid-Block Extensions
- Traffic Circles
- Designated Bicycle Lanes

VISUAL CUES

- On-Street Parking
- Signage
- Regularly Spaced Trees
- Light Standards
- Banner Poles
- Medians

◀ Open spaces provide urban relaxation areas and places to interact.



◀ Architecture of adjacent building is oriented to the public plaza.

▶VEHICULAR FEATURE GUIDELINES

- Restrict traffic speeds to 30 miles per hour or less.
- Use on-street parking as a means to calm traffic. It provides a barrier between moving vehicles and the sidewalk and reduces the need for structured and at-grade private parking.
- Encourage further traffic calming through horizontal deflection methods and visual cues (see Fig.3 for details).
- Where possible, limit streets to a maximum of four lanes in width. Where the street is four lanes or greater, provide a center median with a pedestrian refuge.
- Create clear sight lines between driver and pedestrian. While it may seem counter-intuitive, reducing barriers and separations between cars and pedestrians, to a certain degree, actually forces drivers to be more cautious.

▶BICYCLE FEATURE GUIDELINES

- Connect local cycling routes to regional networks whenever possible. Bicycle lanes should be a minimum width of 5' and located along the outside edges of the street. Where designated bicycle lanes are not possible or desired, the vehicle lane closest to the curb should contain an additional 3' of width for cyclists.
- Locate bicycle stop lines slightly ahead of automobile stop lines at intersections to allow motorists to more easily acknowledge cyclists.

2.1.2.3 OPEN SPACES

A diversity of public places, including open spaces and civic uses, encourages social interaction and community participation.

▶GUIDELINES

- Place public parks, pocket parks and green spaces at intervals to situate downtown residents within a five-minute walking distance from inviting, usable open space.
- Comprise streetscapes of a variety of design elements – streets, sidewalks, building frontages, front yards. They create a pleasurable pedestrian experience and form the physical infrastructure of placemaking.

2.1.2.4 ARCHITECTURE

Architectural design of stations and related structures should be of high quality, carefully calibrated to respond to the local character of individual station areas and downtown neighborhoods. Individual architectural solutions are encouraged within the context of local character and compatible building massing.

Each station area should be developed as a unique environment, transforming a utilitarian transit node into a community gateway and a vibrant mixed-use hub of activity.

▶GUIDELINES

- Encourage properly conceived, strategically placed mixed-use development to combine disparate uses such as 'big box food stores and high-rise urban residential units' into single developments.
- Integrate transit stations with adjacent development where feasible.
- Where stations are in close proximity to, or integrated with, existing historic buildings, care should be taken to respect building character.

◀ Precedent – Underground Transit Station, Munich, Germany.

◀ Precedent – At-Grade Transit Station, Amsterdam, Holland.

◀ Station plaza's offer efficient pedestrian circulation and contribute to community life.

2.2 STATION DESIGN

2.2.1 STATION DESIGN PRINCIPLES

The principles described herein are to be applied in addition to Metro's existing design standards.

▶STATION IDENTITY

A station character that works in harmony with the local context will set the tone for future development. This character can be extracted by overall design, furnishings, signage and public art.

▶AMENITIES FOR PASSENGERS & NON-PASSENGERS ALIKE

Station areas should act as a community focal point for the station area, providing a meeting place whether or not the users arrived by public transit.

▶PATRON ORIENTATION

A system's smooth functioning relies on the ability of patrons to easily navigate a station both at regular times and in the case of an emergency. Unobstructed station access and thoughtful signage is crucial.

▶EFFICIENCY

Standardizing station components like electrical and mechanical systems and selecting materials designed to have a long life span promotes cost savings and environmental efficiency.

2.2.2 STATION DESIGN COMPONENTS

2.2.2.1 STATION PLAZAS

Transit stations should be designed not only for their primary function of travel to and from a community, but also as a center for community life. Station plazas are key components of the transit system, aiding in the development of a positive identity and providing a strong sense of place. They are key to providing good circulation and passenger flow in and out of the stations. Station plazas also facilitate wayfinding and orientation for users new to the system.

▶GUIDELINES

- Allow the station area to feature a generous, well-designed transit plaza to accommodate not only passengers, but also activities for the general public.
- Place transit stops near high-activity areas like high retail streets and public places.
- Encourage ancillary services, such as retail kiosks, in transit waiting areas to generate pedestrian activity.
- Facilitate the provision of public amenities and services, such as retail locations, information kiosks, seating areas, meeting places and event venues.

2.2.2.2 COMPLEMENTARY USES

Complementary uses are activities other than the transit facilities or their direct support facilities that provide additional services to patrons. They add security, amenity and identity to the station. These services can provide a profitable location for businesses and additional revenue for the transit system. They may include private facilities (convenience stores, day-cares, pharmacies, news stands, eateries) or public facilities (meeting halls, community centers, neighborhood parks).

▶GUIDELINES

- Conform complementary uses to all applicable and appropriate codes, local ordinances, regulations, standards and recommendations.
- Ensure that complementary uses are appropriate for the specific station location and provide needed services for the surrounding community.
- Design the façades of complementary uses to enhance the character of the site, to be compatible with the station architecture and to not interfere with the rail station's identity.
- Do not permit complementary uses to impinge on any station or site functions.

◀ Elevators increase accessibility to underground stations.

◀ Ramps are encouraged at all minor grade changes.

2.2.2.3 PROVISIONS FOR DISABLED USERS

People with disabilities, those 65 years old and older, the temporarily disabled and patrons with transitory conditions – the parent with a stroller, the expectant mother, the shopper carrying parcels, the traveller with baggage – must be carefully considered in station design. The specific issues that must be considered in facility design are orientation, horizontal travel, vertical travel, use of fare collection equipment, transfer from the platform to the transit vehicle and egress under emergency conditions (see Fig. 4). In most instances, provisions for the mobility disadvantaged fall within normal practice or existing code requirements. The majority of requirements can be incorporated through design at little or no additional cost.

▶GUIDELINES

- Ensure elevators comply with all applicable codes and standards.
- Clearly identify mobility-disadvantaged accessible entrances and other system elements, such as parking spaces, rest rooms and vehicle doors.
- Make all primary entrances to transit facilities accessible to the mobility-disadvantaged.
- Design circulation spaces that permit the unassisted movement of the mobility-disadvantaged through the facility, yet still integrate with general patron flow.
- Position and mount all equipment to which the public has access in such a way that wheelchair occupants can use the controls without assistance.
- Identify essential public facilities within transit facilities in a method appropriate for the blind and partially sighted.
- Ensure elevators, where employed, are accessible to the mobility-disadvantaged on the level that they use to enter the building, and at all levels normally used by the general public.
- Avoid potential hazards, due to abrupt changes in floor level, ground and floor surfaces and gratings.
- Identify platform edges by using a band of pavement at least 2' wide with a clearly contrasting texture and color. Tactile warning strips should be used to identify this potential dangerous area for the blind.

2.2.2.4 SECURITY & VANDALISM

Security and safety concerns the ability to protect the public from site hazards, prevent dangerous situations and guard against destruction of property.

▶GUIDELINES

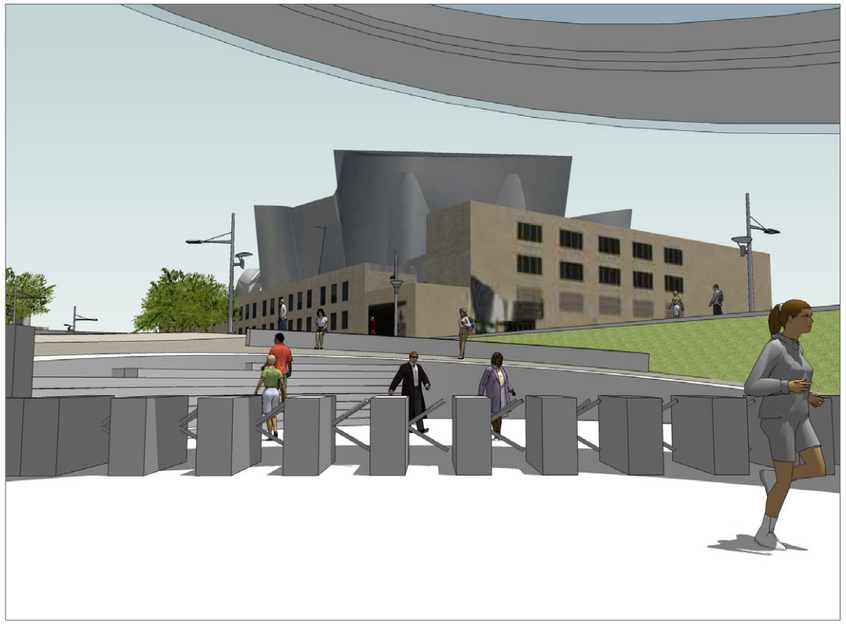
- Assign proper lighting to all areas of the site open to the public.
- Avoid designs with obstructions or 'hiding spots'.
- Identify and equip high security areas with appropriate security measures (fences, cameras, security personnel, etc.)
- Select design materials with reduced susceptibility to vandalism as well as those easy to clean, replace or repair.

FIG. 4

TECHNICAL CONSIDERATIONS

▶AREAS OF CONSIDERATION FOR THE DISABLED

- Parking
- Entrances
- Signage
- Grade Changes
- Protrusions
- Warning Systems, Both Audio and Visual
- Vertical Circulation
- Surfaces
- Guardrails
- Hardware
- Restrooms
- Control Buttons – Height
- Drinking Fountains
- Landscape / Pedestrian Zone Relationships



◀ Passenger circulation is easily understood and unobstructed.

◀ Adequate space surrounding vending and ticketing areas is necessary for efficient circulation.

2.2.2.5 HORIZONTAL STATION CIRCULATION

Passenger traffic is composed of two distinct groups: regular patrons and infrequent users. Once passenger flows have been established and the majority of patrons become familiar with the process, many directional problems will be eliminated. The initial goals should be to provide easily understood patron orientation, unobstructed access to and from station platforms and sufficient space to accommodate projected growth.

▶GUIDELINES

- Ensure pedestrian circulation is safe, easily understood and non-conflicting.
- Create station circulation systems that provide safe passage to and from the station platform and, in the case of a subterranean station, the mezzanine.
- Clearly label station entries.
- Encourage right-hand circulation patterns and the separation of passenger flows moving in opposite directions.
- Avoid cross-flow circulation and dead-end conditions.
- Ensure compliance with the National Fire Protection Association (NFPA) Standard 130 at exits.
- Provide a minimum of 7' – 6' clear at all platform edges.
- Include adequate space surrounding vending / ticketing areas as not to obstruct circulation.
- Provide a minimum queuing distance at high-traffic areas (see Fig. 5 for details).

FIG. 5

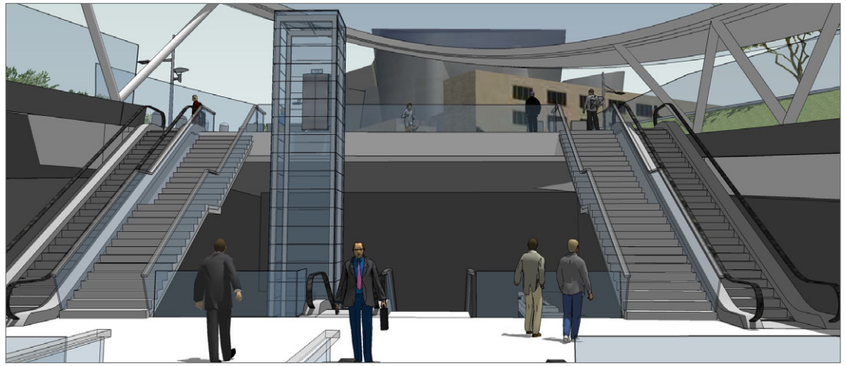
TECHNICAL CONSIDERATIONS

▶QUEUING DISTANCES

Provide the following minimum queuing distance at the following areas:

- Ticketing / Fare Vending = 8' – 0'
- Escalator = 20' – 0'
- Elevator = 12' – 0'
- Stair = 15' – 0'

◀ Safe and efficient vertical station circulation.



◀ Weather protected outdoor escalators.

2.2.2.6 VERTICAL STATION CIRCULATION

Vertical access to station platforms will typically be by stairs and ramps and, in the case of underground stations, by escalators and elevators as well. The priorities in designing a station's vertical components should be safety, convenience, accessibility for the disabled, security and ease of maintenance.

▶STAIR GUIDELINES

- Construct stairs of non-combustible materials.
- Use non-slip surfaces on treads, risers and landings.
- Include a trough to one or both sides of stairs to facilitate cleaning.
- Provide a ramp where a change in elevation is less than 18".
- Keep stair width to a minimum of 6' to accommodate:
  - » Opposite (up-down) flow of pedestrian traffic and a passing lane;
  - » Convenience for persons carrying packages and / or children; and
  - » Different anthropometric sizes.
- Conform stair elements to the guidelines outlined in Fig. 6.

▶RAMP GUIDELINES

- Construct ramps of non-combustible materials with a non-slip surface.
- Keep the ramp slope within the parameters of 1' in 20' (5%), with a maximum slope of 1' in 12' (8%).
- Ensure that the distance between landings does not exceed 30'. Requirement for railings, handrails and headroom are as noted for stairs in Fig. 6.
- Ensure a width minimum of 6' – 0" and a landing length of 5' – 0".

▶ELEVATOR GUIDELINES

- Employ only fully automatic, hydraulically operated models.
- Size interiors to accommodate wheelchairs, stretchers for emergencies and maintenance equipment.
- Ensure a rated minimum capacity of 3,500 lbs.
- Ensure controls that accommodate wheelchair-bound as well as sight and hearing impaired patrons.
- Locate elevators near parking for people with disabilities in stations with parking facilities.

▶ESCALATOR GUIDELINES

- Weather-protect any escalators that may be used outdoors.
- Provide escalators that are two speeds and reversible. They must be equipped with an emergency stop connected to the fire alarm system to enable an emergency exit route when stopped.
- Adhere to the following escalator dimensions:
  - » Width = nominal 48" minimum measured between balustrades and 27" above nosing of step treads.
  - » Slope = 30°
  - » Headroom = same as stairs (refer to Fig. 6 for details).

FIG. 6

TECHNICAL CONSIDERATIONS

▶STAIR FEATURES

TREADS & RISERS: GENERAL

- When parallel to adjoining escalator, tread to riser relationship should be a component of 30°.
- Ratio of riser to treads: 2R + T = 24 to 25 (where R = Riser, T = Tread).
- Tread and riser dimensions should be uniform in any one stair.

RISERS

- Maximum = 7".
- Recommended = 6 – ½".
- Limit number of risers in a single run to 18 at public stairs.

TREADS

- Minimum size = 11".
- Treads exposed to weather should have a 1% slope downward toward nosing.

▶LANDINGS

- Straight run stair minimum length = 4'.
- Return stair minimum length = width of stairs.
- Avoid concealed reverse landings.
- Ramp landing length = 5".

▶HANDRAILS

- Diameter = 1-¼" minimum to 2" maximum.
- Distance from wall = 1-½".
- Height from top of tread at nosing to top of handrail:
  - » Adult = 30" minimum to 34" maximum; and
  - » Child = 24".
- Continuous from top to bottom of stairs including landings. Locate on both sides of stairs. Extend 12" beyond the top riser and 22" beyond the bottom riser.
- Intermediate handrail required when width of stairway is over 88".
- Return ends to wall or turn down 90°.
- Grip surface to be uninterrupted by handrail supports.
- Handrails may extend a maximum of 3½" into width of stairs.

▶GUARDRAILS

If guardrails are not solid, any opening should be sized to allow a maximum of a 4" sphere to pass through.

▶HEADROOM

- Measured from perpendicular to the tread nosing.
- Public stairs = minimum of 7'-6".
- Service stairs = minimum of 9'-0".
- 9'-0" for maintenance (to avoid finger prints).
- Continuous soffits = 10'-0".

▶TACTILE WARNINGS

Locate before top and bottom risers. Start at a minimum of 24" from the stair nosing.

◀ Canopies shelter passengers from the sun and rain.

◀ Transparent enclosures increase visibility and security.

◀ Solar paneled canopies protect from the sun while harnessing its energy to power the platform.

2.2.2.7 WEATHER PROTECTION

Protecting the patron from exposure to extreme summer heat and winter rain and wind is a major factor in the architectural design of the station as well as in maintenance and security issues. Each station type has its own particular weather protective situations. The at-grade stations are more exposed and may need more extensive provisions for the patrons as well as for mechanical equipment. Underground stations will require protection at patron entries and for vertical circulation equipment such as elevators and escalators.

▶GUIDELINES

- Incorporate canopies into the station design as effective shelter from the sun and rain. They should slope to a drain or gutter and, as an additional sustainability feature, can be made to empty into a bioswale or water feature. Canopy design should fit with the surrounding architecture.
- Design enclosures to be transparent or semitransparent for visibility and security. The bottoms of enclosure partitions should be open for drainage and to prevent the collection of wind-blown debris.
- Situate station amenities on the leeward side of buildings for protection against wind.
- Use existing vegetation on site, such as trees, as buffers against adverse weather. Architectural and landscaping elements can also be used to reduce glare from low horizontal sun angles.
- Protect against building up-draft and the Venturi effect on wind caused by large buildings.
- Ensure that protective devices do not obscure visibility, inhibit security or interfere with patron circulation.

◀ Selected materials should be safe, durable and attractive.

2.2.2.8 MATERIALS & FINISHES

This section discusses design criteria for the selection of materials and finishes for the public areas within the system. Consideration is placed on comfort and attractiveness as well as safety, durability and cost. Refer to Fig. 7 for detailed guidelines on materials selection.

▶GUIDELINES

- Minimize hazards from fire and smoke by using materials with low burning rates and non-toxic characteristics. Materials must comply with all code requirements.
- Ensure proper attachment and bond strengths to reduce hazards from dislodgement due to temperature change, vibration, impact, wind, aging, etc.
- Provide non-slip material at entrance stairways, platform edges and other areas exposed to weather elements.
- Use materials that will provide long and economical service with wear, strength and weathering qualities that resist the effect of abrasion, impact, temperature changes and sunlight. Use only materials whose appearance and color can be maintained throughout their useful life.
- Select materials that are stain resistant, that hide minor soiling and on which casual vandalism can be easily erased with normal maintenance procedures. Materials should be easily cleaned in a single operation with standard cleaning equipment and cleaning agents. Repair and replacement should be considered in the selection of materials.

FIG. 7

TECHNICAL CONSIDERATIONS

▶MATERIALS SELECTION

Stations should be designed to create a feeling of warmth, attractiveness and quality, and to instill in transit patrons a civic pride that will encourage good housekeeping and good behavior.

SURFACE

Materials should be hard, dense, non-porous, non-staining, acid and alkali-resistant for long life and low maintenance. Surfaces within reach of the public, up to 8' above the floor, should be more resistant to damage than is necessary for surfaces above that point.

COLOR

Colors should be predominantly light in tone to aid in maintaining high illumination levels, but with sufficient contrasts and accents to provide visual interest and warmth, as well as to conceal minor soiling.

TEXTURE

Smooth surfaces are preferred over rough ones for ease in cleaning and because they are less prone to catch settling dust. Rough surfaces are desirable where a non-slip feature is important and in areas that are difficult to reach for cleaning, because even though these surfaces may accumulate dust, they will not appear dusty.

UNIT SIZE

Units should be large enough to reduce the number of joints, yet small enough to facilitate replacement if damaged. Monolithic materials may be used if they have inherent soil-hiding characteristics and can be easily repaired in an unnoticeable fashion.

JOINTS

Small, flush joints should be provided. Since joints are a major source of maintenance problems, they should be limited in number and should be of the best possible materials. Horizontal joints should not be raked, but be flush or tooled concave. To prevent cracking, monolithic materials should have adequate control joints and expansion joints at proper spacing. The use of easily damaged joint covers or soft joint filler materials should be avoided.

COST

Costs should be within budget of the station and should be consistent with long life, frequency and expense of maintenance, convenience, replacement considerations and overall aesthetic and functional qualities.

AVAILABILITY

Materials should be provided in sufficient quantity that their delivery and / or installation, whether for one or several stations with concurrent completion schedules, will not involve cost penalties or delays for either materials or labor.

NON-PROPRIETARY MATERIALS

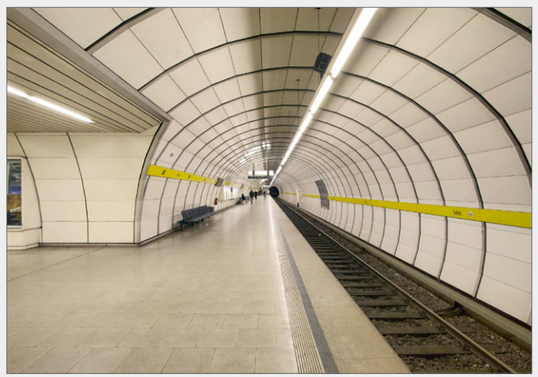
To obtain competitive bids, proprietary items should be used only where it is established that no other materials exist which will meet the particular design requirements. All other items should be specified on a 'performance specification' basis.

INSTALLATION STANDARDS

Materials should be detailed and specified to be installed in accordance with industry standards and the manufacturer's printed directions for long life, low-maintenance installations.

FLAMMABILITY

Interior finishes should meet the requirements of the Uniform Building Code (UBC), Chapter 42, as well as NFPA 130 and all other applicable codes. The finishes for all exit ways should be Class I as defined by the UBC, and Class A as defined by NFPA 130. Platforms, concourses, corridors, stairways and vestibules should be considered exit ways. Finishes in all other areas should be Class II as defined by the UBC, and Class B as defined by NFPA. Combustible adhesives and sealants may be used when they meet the requirements stated above.



◀ Turnstile areas should be large enough to accommodate peak hour volumes.

◀ Secured ancillary facilities must be provided accordingly.

2.2.2.9 FARE COLLECTION & CONTROL

One of first things encountered upon entering a station is the fare collection and control area. These areas may serve single or multiple entrances and are often at or near the confluence of multiple paths of travel. To prevent congestion and confusion, access must be simple, direct and easily navigated, and the space allocated must be sufficiently generous to easily accommodate peak travel volumes – when congestion and passenger confusion are even more likely. Conflicting movements between arriving and departing passengers must be avoided.

The layout of this area is critical, as it presents the potential to create a serious bottleneck in passenger flow through the station. Passengers, especially new or infrequent riders, must orient themselves, read and understand system signage and schedule information, choose their direction of travel, determine the fare required and access passes or money. Riders who hesitate due to confusion tend to stop moving and can create a traffic jam even before they arrive at turnstiles, making it all the more important to provide plenty of space and to arrange information and services with the novice traveler in mind.

▶GUIDELINES

- Queuing distances and space provided for the fare collection area should be based on projected future peak volumes, as opposed to average daily volumes, as smooth passenger flow is most critical at these peak travel times.
- Information displays (schedules, system maps, etc.) should be located as near the station entry as possible and well before the fare gates. At larger stations, duplicates of this information should also be located near the fare gates, but out of the path of travel to allow infrequent or new riders to confirm directions and double check information without blocking other passengers.
- The customer service kiosk should be prominently located with generous queuing space provided on both the 'free' and 'fare paid' sides.
- Lighting, HVAC and structural elements should be located so as not to block travelers' view of information displays.
- Information displays, lighting, HVAC and structural elements should be located well out of reach of passengers.

2.2.2.10 EMPLOYEE & ANCILLARY FACILITIES

Ancillary facilities are the non-public areas that support and sustain transit operations. These facilities are much more likely to be required for underground stations and space should be provided accordingly. Ancillary facilities may include:

- Traction power facilities;
- Station power and electrical rooms;
- Heating, ventilating and air-conditioning (HVAC) rooms;
- Mechanical rooms;
- Storage facilities;
- Maintenance and Janitorial rooms;
- Communications rooms; and
- Transit personnel offices, lounges and restrooms.

▶GUIDELINES

- The design of ancillary and support facilities is contingent upon the functional requirements of the individual spaces and their locations. However, their design must be subordinate to the public transit-related functions of the station.
- Ancillary and support facilities should be provided with secure and restricted access to and from the station's public spaces.
- In general, access points to these facilities should be consolidated to minimize security equipment, simplify access control, and minimize potential disruption of the public space.
- Ancillary facilities should also be located away from platforms, perhaps on mezzanine levels, and near appropriate vertical transportation systems, suitable for staff access and equipment removal and installation.

◀ Secured bike storage facilities will encourage people to use active modes of transportation.

◀ Platforms must provide safe and clear circulation routes between trains and exits.

2.2.2.11 BICYCLE FACILITIES

The use of bicycles to access transit stations should be encouraged, and connections to bike paths and routes should be carefully considered as part of the station planning process. As an incentive to bike riders, easily accessible, well designed and secure facilities should be provided on-site. Also consider providing other services, such as storage facilities for personal belongings, as well as maintenance and repair services.

▶GUIDELINES

- Storage facilities should be covered and situated on a hard, well-drained surface near the station entry, with proper illumination and clear signage.
- Allow sufficient space for expansion of bike storage facilities.
- Avoid conflicts with pedestrians, auto and bus services.
- Provide lockable storage options, including secure stanchions and bicycle lockers.
- Consider security issues and local regulations regarding visual transparency / opacity of storage lockers, etc.
- Provide security monitoring of bicycle storage areas.

2.2.2.12 PLATFORMS

The station platform is one of the most important elements of the station and must be carefully designed. It should provide safe, easily navigated, unobstructed access to and from train loading areas.

Platforms are sized to accommodate specific car lengths, future expansion and the anticipated passenger load levels, site availability and the placement of circulation elements. The platform must accommodate multiple passenger circulation functions including travel along its length, boarding, disembarking, queuing to board, queuing to access elevators, escalators and stairs and waiting for trains.

Due to the presence of large, potentially fast-moving trains, the platform can be a dangerous place and safety is a prime consideration. Passenger safety can be enhanced through the clarity of the physical layout and the size of the platform, as well as through the use of durable, non-slip surfaces, tactile banding at platform edges and other safety features.

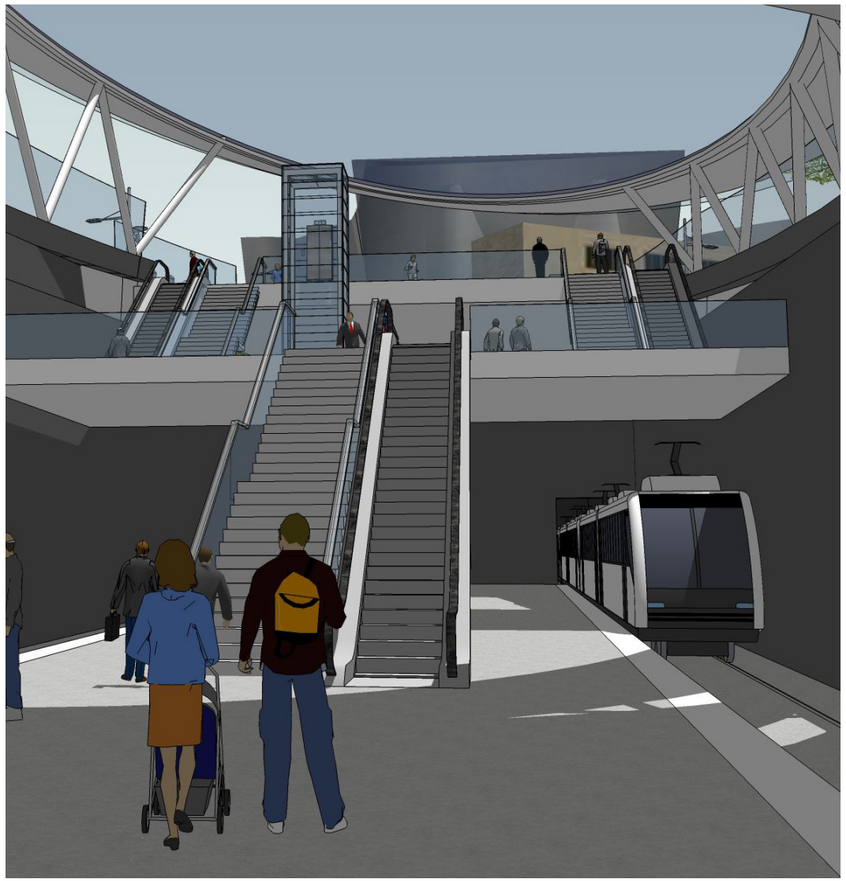
Determining factors in establishing size:

- Train length and anticipated growth;
- Width of vertical circulation elements;
- Clear minimum distances required between platform edge and obstructions;
- Platform safety edge;
- Passenger volumes;
- ADA requirements;
- Additional buffer zone;
- Additional space required during peak travel times;
- Projected increase in passenger volume; and
- Emergency exiting requirements.

▶GUIDELINES

- Avoid conflicting circulation patterns.
- Support safe passenger circulation and access to and from trains.
- Facilitate timely clearing of platform.
- Minimize need for passengers to make decisions on platform, causing hesitation and obstructing flow of traffic.
- Locate access points and vertical circulation elements to evenly distribute vehicle loading and unloading points.
- Minimize visual obstructions, avoid alcoves and hidden areas.
- Ancillary or non-transit functions should not be located on the platform as they may obstruct, inhibit or impede circulation.
- Maintain a clearly delineated, direct path for emergency egress, with easy access to exits or areas of refuge.

◀ Mezzanines increase security by offering opportunities to observe the platform below.



◀ Mezzanines also allow more natural light to filter down to the platform.

2.2.2.13 MEZZANINES

The station mezzanine is one of the primary experiences for transit riders and should provide a welcoming setting that enhances the experience of public transit. The mezzanine also offers the opportunity to present an expression of the station character and the design theme of the transit system through the use of artwork, graphics and other design features.

The mezzanine should ensure the smooth flow of pedestrian traffic, comfortably accommodating multiple passenger circulation routes and facilitating passenger orientation and control. Mezzanines may contain ticket purchase and fare collection turnstiles, directional signage and transit system information, as well as non-public or ancillary spaces such as station agent business centers and security control mechanical and ventilation equipment.

Some influences on mezzanine location include the number of entrances, passenger volume, platform length and code requirements. In some cases, multiple mezzanines may be required.

▶GUIDELINES

- The mezzanine should be bright, airy, open, spacious and filled with natural light.
- Establish a strong visual connection between the mezzanine and the platform to assist in passenger orientation.
- Provide clear, unobstructed access to and from station platforms.
- Access points and vertical circulation elements should be conveniently located.
- Ensure sufficient space is provided to accommodate peak periods and projected growth in ridership.
- Allow sufficient queuing space at elevators, stairs and escalators.
- Minimize travel distances and the number of horizontal and vertical transitions.
- Separate opposite passenger flows when possible.
- Minimize the need for passengers to make decisions on the platform, causing hesitation and obstructing traffic flow.
- Maintain clearly delineated, direct paths for emergency egress, with easy access to exits or areas of refuge.

2.2.2.14 UNDERGROUND CONNECTIONS

Underground connections link remote entries to the station. Their primary advantage is that they can slightly extend the 'reach' of a station and provide an alternate means of access, allowing some passengers to avoid crossing busy streets.

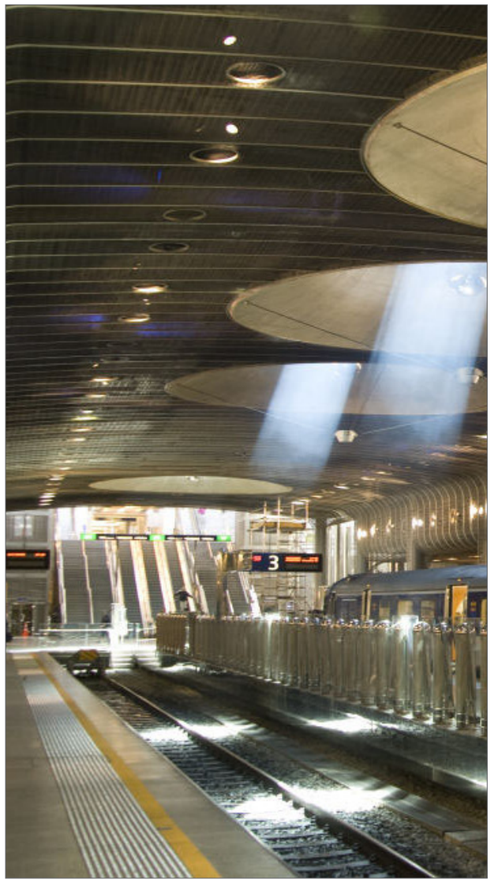
However, by 'removing' transit riders from the street level, and allowing passengers to disperse from the station without engaging in street activity, underground connections can dilute pedestrian activity in the proximity of the station, compromising the effectiveness of casual supervision ('eyes on the street') and actually diminishing pedestrian safety. Moving people from the more open, active street into a tunnel may also have a negative effect on local retail and services and ultimately on the vitality of the station area.

Tunnels also increase the cost of a station and while they may seem to help 'solve' the problem of getting people across a busy street, the same dollars spent on upgrading the streetscape and improving the pedestrian crossing experience may have a much more positive impact on the pedestrian environment.

Tunnels, especially in off-peak travel times, can also be dangerous and care must be taken to include security monitoring equipment, further adding to station cost. If provided, tunnels must be large and bright enough to feel safe and to provide as positive an experience for the transit user as possible.

Unfortunately, while underground connections may seem to offer convenience and safety, they have more negative impacts than positive. For these reasons, pedestrian tunnels should be avoided whenever possible.

◀ Combine artificial and natural light to improve station aesthetics.



◀ (Left) Natural lighting can make underground stations feel larger than they are in reality; (Right) Proper lighting increases safety at night.

◀ Example of on-street solar lighting.

2.2.2.15 LIGHTING

Proper illumination of a site requires both natural and artificial light. When used in conjunction with one another, they can provide high quality, efficient lighting. Lighting levels are dependent on the needs of the particular function being illuminated, the availability and quality of natural light, the intensity of fixtures used and the hours of operation. Site lighting should enhance the quality of the facility both functionally and aesthetically.

▶GUIDELINES

- Conform electrical design to the latest editions of all appropriate applicable standards and codes.
- Identify and satisfy appropriate levels of illumination for all site functions (see Fig. 8 for details).
- Ensure that the light and lighting elements are acceptable for their intended use and physical context.
- Provide proper lighting of all platforms, waiting areas, circulation paths and parking areas to deter criminal activity.
- Illuminate any dangerous site elements (eg. stairs, ramps, platform edges).
- Explore the use of natural light and natural lighting elements. Natural and artificial lighting should be used in conjunction to develop an aesthetically pleasing lighting scheme.
- Consider whether lighting infringes upon neighboring uses. Buffering or shielding elements can be utilized to resolve certain conflicts.
- Establish a system-wide standard bulb, and possibly fixture type, to promote energy savings and cost efficiency.
- Design fixtures and electrical service to meet both long and short-term energy conservation goals.

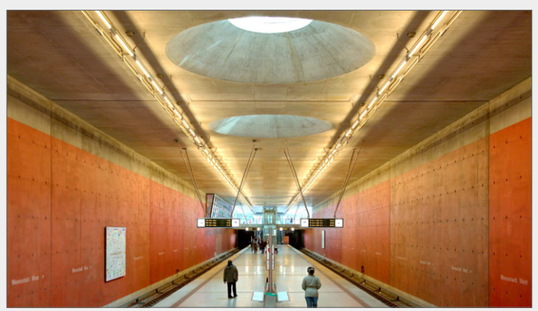
FIG. 8

TECHNICAL CONSIDERATIONS

▶ILLUMINATION LEVELS

Minimum average maintained illumination levels for various areas should be as indicated in the tables based on an update to the Design Criteria. Maintained foot-candle values should be measured as follows:

- For train-ways, in a horizontal plane at the tunnel floor.
- For site and above-grade station areas, in a horizontal plane at-grade.
- For all others, in a horizontal plane 30" above the finished floor.



◀ Proper signage is visible and conveys information quickly.

◀ Signage gives clear directions for complicated information.

◀ An example of a clearly identified emergency evacuation route.

2.2.2.16 SIGNAGE

Signage consists of all graphics and visual images provided to direct or convey information about a facility to its patrons. Signage should clearly and quickly convey information about a site or facility. It must be legible, consistent, sequential and appropriate. There are three basic types of signage:

- **Systems & Information Signage:** To identify the transit system and inform patrons of its operations.
- **Station Signage / Wayfinding:** To inform, direct or alert patrons to site facilities.
- **Advertising:** Space rented to private companies as a revenue source for the system.

▶GUIDELINES

- Refer to Metro's Design Criteria to determine the exact placement, height and structural support system for systems and information and wayfinding signage.
- Ensure ability of signage to convey information quickly and clearly. Signs should conform to the following criteria for legibility:
  - » Signage must be simple, clear and concise for quick identification.
  - » Pictographic signage, such as international symbols, should be used for basic functions (eg., restrooms, directory, etc.).
  - » Text signage must be of appropriate size, color and contrast from its background to be legible. Appropriate signs should be designed to standards for the visually impaired.
  - » Signage must be located and illuminated so as to be easily read with minimal distraction from other elements.
- Standardize signage to ensure consistent size, shape, color and content throughout the system.
- Locate signage for similar functions at consistent locations from site to site.
- Utilize a modular system where practicable to contribute to clarity and consistency as well as enabling ease of placement, modification, maintenance and repair.
- Consider the prevalent direction of pedestrian movement so that signage may be arranged in appropriate sequence.
- Position signage at or before points of decision and organized in a pattern that is predictable from station to station.
- Use signage of appropriate character to create harmony with the station and site design.
- Allow signage to take precedence over artwork where conflicts occur.
- See Fig. 9 for more details concerning site-specific signage.

FIG. 9

TECHNICAL CONSIDERATIONS

▶SITE-SPECIFIC SIGNAGE

STATIONS

- Primary Information
- Station Entrances
- Ticket Dispensers
- Patron Routes to Platforms
- Station Identification (Platform)
- Secondary Information
- System Use Instructions
- Transit Interconnections
- Services (Telephones, etc.)
- Routes to Other Facilities (Concessions, Hotels, etc.)
- Escalator / Stair Directives
- Exit Routes
- Handicapped Routes
- Entry / Use Restrictions
- No Smoking
- Emergency Equipment

STATION SITES

- Bus or Other Public Transportation Modal Interfaces
- Kiss-and-Ride Facilities
- Park-and-Ride Facilities
- Taxi Zones
- Surrounding Traffic Patterns and Requirements
- Adjacent Buildings and Uses

SYSTEM SYMBOL & OFF-SITE SIGNAGE

- Legends
- Station Identification
- Vehicle Destinations
- Fare Zones
- Systems Use Instructions
- Exit Routes
- Routes to Other Facilities
- Pictograms
- Feeder Bus / Other Transit Mode Interconnections
- Entrance Routes
- Services (Telephone, etc.)
- Handicapped Routes
- Escalator / Stairs Directives
- Entry Restrictions
- Restrooms
- No Smoking

◀ Seating can be functional as well as aesthetically pleasing.

◀ Public art brings creativity and culture into transportation systems.

2.2.2.17 SEATING

Although the stay at each station is transient in nature, the amenities provided should enhance the use of the system and encourage continued patronage (see. Fig. 10). Aside from offering necessary comfort and convenience, seating and other station furnishings should add color and visual appeal to the station environment.

▶GUIDELINES

- Employ modular or standardized systems to ease maintenance, repair and replacement of items.
- Discourage seating use as a sleeping platform.
- Select sloped, perforated or folding seating to avoid catching rainwater and spilled liquids.

2.2.2.18 PUBLIC ART

Artwork integrated into the design and development of stations and sites mitigates the adverse impacts related to construction, enhances the environment and promotes public acceptance of and appreciation for the transit system.

▶GUIDELINES

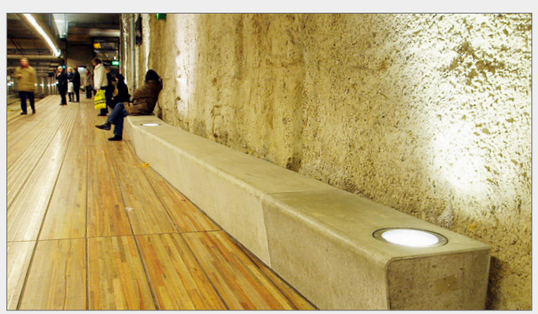
- Use local public art resources to promote city interests. Work with local arts committees and community representatives to review all art. Assist artists in designing technically competent artwork, which can be placed in the public environment. Refer to Metro's Public Art Program for more information.
- Include artists on the station design team to identify opportunities early in the station design process and integrate artwork seamlessly into the design.
- Develop a comprehensive policy toward defining the artwork program as related to the rail system.
- Develop a methodology for estimating the cost of artwork and managing the artwork budget.

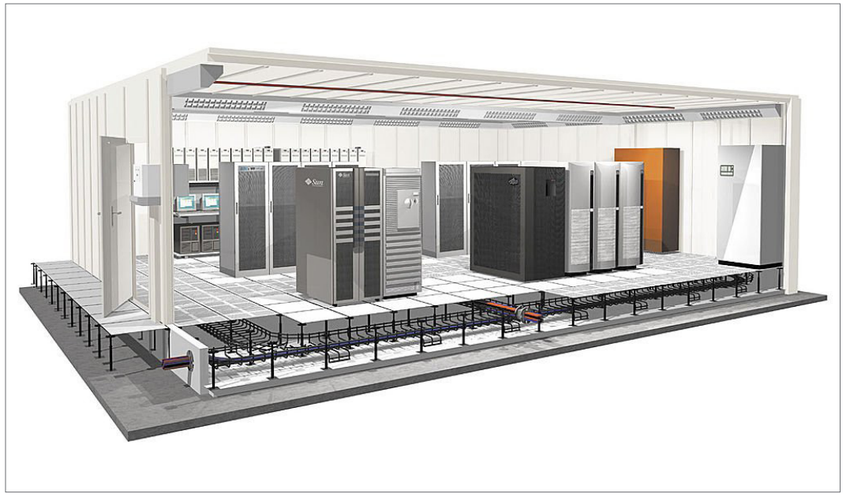
FIG. 10

TECHNICAL CONSIDERATIONS

▶STATION FURNITURE

- Seating
- Leaning Rails
- Trash Receptacles
- Bike Racks / Lockers
- Phone Booths
- Automatic Teller Machines (ATMs)
- Newspaper Dispensers
- Ticket Kiosks
- Advertising Display Framework
- Wind Screens
- Electronic Signage
- Pamphlet Dispensers





◀ Adequate staff and security facilities contribute to a well-managed transit system.

◀ Staff ticket booths should be well-lit, ventilated and comfortable.

2.2.2.19 SUPPORT FACILITIES

Support facilities include all ancillary functions necessary for the operations of the rail transit systems which require physical accommodations (see Fig. 11). Certain functions can be accommodated with standard modules and these can be assigned to specific station locations.

▶GUIDELINES

- Provide requirements for ancillary structures necessary to station and transit system operation.
- Utilize a planning module in designing all support facilities to facilitate standardization of components and furnishings, to save costs and to provide design consistency among stations.
- Ensure the planning module is a minimum 8' × 8' dimension. Depending upon functional requirements, the module may be increased in 4' increments. A standardized module can accommodate a variety of functions.

2.2.2.20 RETAIL / VENDING

A retail facilities plan associated with transit facilities will be established by Metro. Specific vending policies are not established.

FIG. 11

TECHNICAL CONSIDERATIONS

▶SUPPORT FACILITY TYPES

STAFF SECURITY ROOMS
Located at subway stations and specific designated stations. These rooms are located directly off the concourse in an inconspicuous location with a view of the fare vending area.

COMFORT STATIONS
Located at terminus and intermodal transfer stations; these rooms provide toilet facilities for staff and transit operators and will be located at selected stations.

CUSTODIAL ROOMS
Custodial rooms are required at each subway station and selected aerial or at-grade stations.

TRASH ROOMS
Trash rooms are required at each subway station and should be located at the mezzanine level adjacent to the elevator, and (as required), at selected aerial and at-grade stations.

◀ (Left) Air conditioning and heating shafts should be on the roof of transit stations or hidden from view; (Right) Bike racks can be stationed on top of exposed ventilation grates on the ground.

◀ Stations can be designed to provide natural ventilation with minimal equipment, like this station in Tokyo, Japan.

2.2.2.21 MECHANICAL EQUIPMENT

This section outlines general criteria related to functional and design requirements for the Environmental Control Systems (ECS) to provide Heating, Ventilating and Air Conditioning (HVAC) for the rail system with the goal of promoting uniformity of design and to standardize mechanical components of the Metro rail system (see Fig. 12). Mechanical criteria will cover the design of the following ECS:

- Ventilating;
- Heating;
- Air conditioning;
- Drainage for track and inside structures;
- Gratings and miscellaneous metals;
- Fire protection systems;
- Plumbing;
- Escalators; and
- Elevators.

▶GUIDELINES

- Ensure the design complies with local, state and national codes. The general standards for transit design are contained in the requirements of the National Fire Protection Association (NFPA) Standard 130, Fixed Guideway Transit Systems. Design will follow the most stringent of applicable codes and / or industry practices.
- Maintain an acceptable environment for patrons, operators and maintenance personnel by providing HVAC systems for ancillary rooms, subway station platforms, concourse areas, mezzanines and concession areas. These HVAC systems should also prolong the life of equipment through proper control of temperature, pressure and humidity.
- Design the ventilation system to not only offer a healthy and comfortable atmosphere for patrons, but also to provide environmental control in the event of an emergency. In achieving these ends, the system should not be intrusive at the surface level. Thus, the ventilation system should provide for the following:
  - » Supply of fresh air.
  - » Removal of heat and control of air temperatures.
  - » Control and removal of heat, smoke and fumes during an emergency to provide safe evacuation and assist in fire control.
  - » Minimum environmental impact at the surface.

FIG. 12

TECHNICAL CONSIDERATIONS

▶ENVIRONMENTAL CONTROL SYSTEMS

Environmental control systems to control temperature, air velocity, rate of air pressure change, dust, odors and the spread of smoke during fire emergencies should be provided as prescribed here.

AT-GRADE STATIONS

HVAC systems should be provided for the ancillary rooms and for concession areas. ECS will not be provided for patron areas unless:

- The architecture of the station requires ventilation for smoke control; or
- The ECS is part of a joint development project.

SUBWAY STATIONS

HVAC systems for platform and mezzanine areas, concession areas, and the ancillary rooms should be provided. An under-platform exhaust (UPE) system could be provided to supplement emergency ventilation and to capture a portion of the heat released by the trains in stations during both normal and congested operations.

SUBWAY TUNNEL

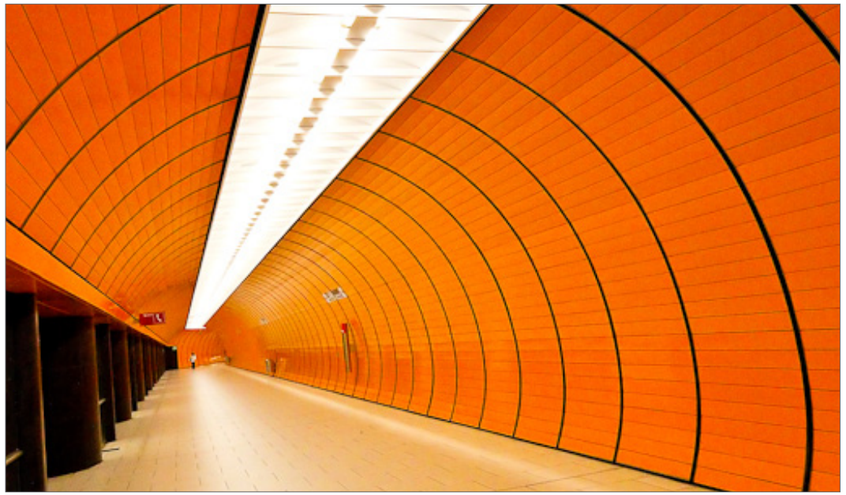
Emergency ventilation shafts that terminate at or above grade at each end of the station and between two stations should be provided. The ventilation shafts should be equipped with reversible fans, fan dampers, sound attenuators and bypass dampers for forced ventilation during congested or emergency operations. Tunnel booster fans should be provided so that the effects of airflow short-circuiting from tunnel to tunnel are reduced during both congested and emergency operations.

MISCELLANEOUS WAYSIDE STRUCTURES

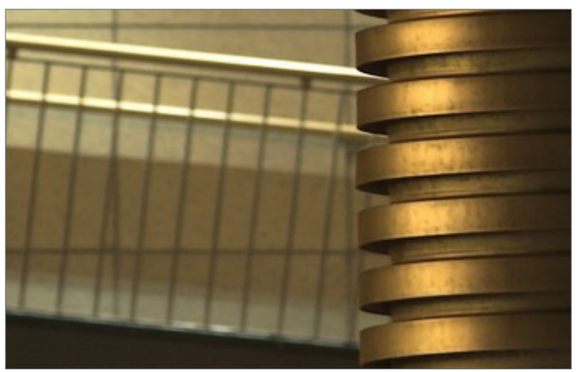
HVAC systems should be provided for the ancillary rooms in miscellaneous wayside structures.

TRACTION POWER SUBSTATIONS

HVAC systems should be provided for traction power substation structures and rooms.



◀ Electrical systems must power standard lighting as well as emergency lighting.



2.2.2.22 ELECTRICAL

This section outlines general criteria related to functional and design requirements for the electrical systems required for underground and at-grade stations, as well as support facilities (see Fig. 13). These guidelines have the goal of promoting uniformity of design and standardization of electrical components in the system. Electrical criteria will cover the design of the following facilities:

- Electrical distribution (3 phase primary) system;
- Lighting;
- HVAC systems;
- Emergency power substation systems;
- Traction power subway substation auxiliary power connections;
- Maintenance yards and shops;
- Elevators and escalators;
- Fare vending;
- Illuminated signing;
- Public telephones;
- Grounding system;
- Lighting protection system;
- Supervisory and control systems;
- Raceway systems;
- Power to signal and communications facilities; and
- Provisions for future growth in the system.

▶GUIDELINES

Electrical design should conform to the latest editions of all appropriate applicable standards and codes (refer to the International Building Code [IBC] and local and state regulations for more information).

FIG. 13

TECHNICAL CONSIDERATIONS

▶INCOMING ELECTRICAL SERVICE REQUIREMENTS

The required electrical energy for the auxiliary power and lighting systems of Metro facilities will be furnished by a single power source. Two primary feeders should serve each subway station and the train control center. One primary feeder should serve each aerial and at-grade facility (see Support Facilities). Each passenger station should have a facility power supply room. Traction power substations will have separate utility power sources.

ELECTRICAL LOADS

Electrical loads connected to auxiliary power equipment should be defined as either non-essential or emergency.

Non-Essential Loads: Non-essential loads are loads which, if de-energized, would have minor effect on patron safety and no effects on system safety.

Essential Loads: Essential loads are loads which, if lost, would have a detrimental effect on patron and / or system safety. See National Fire Protection Association (NFPA) Standard 130 for more information.

ELECTRICAL DISTRIBUTION

General: Primary feeder power should be transformed where required to the nominal A80/277 volts for distribution.

Unit Substation Service: Entry from the utility company should contain a primary-fused disconnect switch or a circuit breaker for the utility primary at '0480/277 volt dry-type transformer. Where it is feasible, 480/277 volt three-phase power can be supplied from the utility company directly to the switchgear without the need of transformers.

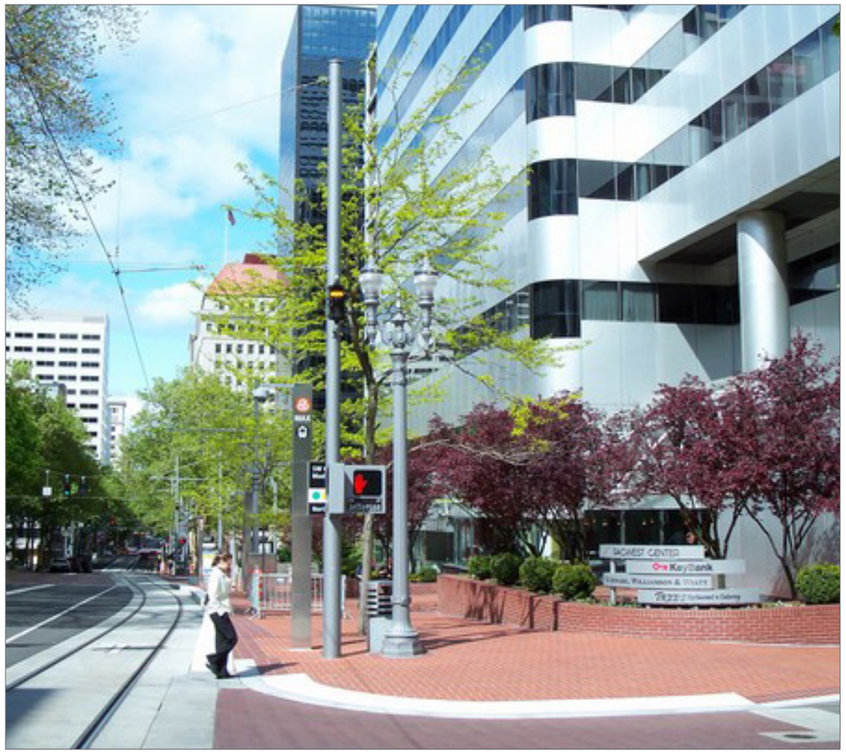
EMERGENCY POWER SYSTEMS

Train Control Center: The emergency power system for the train control center should meet the requirements of station Signaling Systems (NFPA 71) and utilize an uninterruptible power supply (UPS).

Subway Stations: Subway stations should include emergency power systems:

- An uninterruptible power supply.
- An uninterruptible power supply for a part of the emergency lighting (in the public areas of station only), including emergency exit stair lights and exit signs.
- A standby engine-generator capable of supplying essential power loads and all emergency lighting in the station as well as emergency functions (eg. sump station for tunnel) normally supplied from that station.

◀ Physical cues, materials and textures help create successful urban environments.



◀ Landscaped intersection.

2.3 LANDSCAPE ARCHITECTURE

Landscape architecture is a synthesis of arts, sciences, technical philosophies and practices that seek to care for people in a holistic, creative and sustainable manner. While these guidelines attempt to address all of the philosophies and practices to some degree, the 'tool kit' emphasizes the design of the urban environment in regard to the health, safety and welfare of the citizens and visitors of Los Angeles. The ultimate goal is to improve the pedestrian environment by defining a safe, contextually integrated transportation system that is efficient, convenient and facilitates the concept of stimulating and creating an extraordinary downtown urban environment.

2.3.1 LANDSCAPE ARCHITECTURE PRINCIPLES

2.3.1.1 IMPROVED VISUAL CUES & WAYFINDING

Many physical elements are orchestrated to improve visual cues, wayfinding and create a successful urban environment. Street trees, sidewalks, lighting, comfortable seating, legible signage and other amenities are components of the composition that create a safe, well-defined and enjoyable environment for people. Several of the basic design concepts considered when creating such an environment include line, form, texture, color, variety, rhythm, harmony, balance, emphasis and light.

2.3.1.2 SUSTAINABILITY

Sustainable design is the philosophy and practice of designing the built environment and planning for public services to comply with the principles of economic, social and ecological sustainability.

The values of sustainable design include:

- Meet the needs of the present without compromising the quality of life of future generations.
- Maintain economic growth while producing an absolute minimum of pollution, repairing environmental damages of the past, producing less waste and extending opportunities to live in a pleasant and healthy environment.
- Meet human needs by maintaining a balance between development, social equality, ecology, and economics.
- Demand systematic consideration to a project's environmental impacts, energy use, natural resource consumption and economic and social implications.
- Realize that sustainability is best addressed at the inception of a project and continues to be relevant throughout the planning, programming, design, construction, and ownership phases.

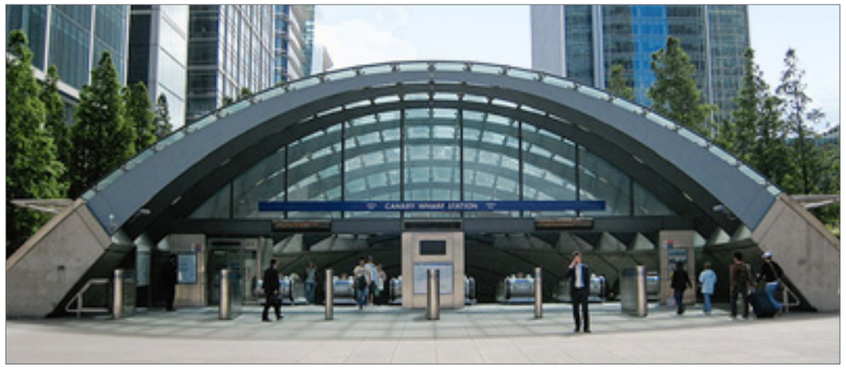
The 'Green Street' concept is an instrumental element of the proposed Regional Connector Transit Corridor project. 'Green Streets' are a sustainable stormwater strategy that meets regulatory compliance and resource protection goals by using a natural systems approach to manage stormwater, reduce flows, improve water quality and enhance watershed health *(Source: Portland Bureau of Environmental Services)*.

2.3.1.3 CLIMATE-APPROPRIATENESS

Los Angeles' favorable marine climate encourages the indoor-outdoor relationship of people, their dwelling spaces and their environment. The Sunset Western Garden Book defines the Los Angeles Downtown area as Zone 23 and is one of the most favored garden climates in North America for the growing of subtropical plants. The climate is characterized by an air- drained thermal belt with 85% of the seasonal conditions being influenced by the Pacific Ocean and 15% from the Interior (Santa Ana winds). The winter season includes minimal frost and low temperatures range from 38 – 23°F. The USDA Plant Hardiness Zone Map defines the area as zone 9A with an average annual minimum temperature of 20 – 26°F. The lowest recorded temperature at the Los Angles Civic Center is 28°F.

The 'Green Street' concept is an instrumental element of the proposed Regional Connector Transit Corridor project.

◀ Streetscape



◀ Station Entrance

◀ Train Portal Structure

2.3.2 LANDSCAPE ARCHITECTURE COMPONENTS

2.3.2.1 STATION AREAS & STREETSCAPES

The three major components of the Regional Connector are: (1) Stations and Station Entrances; (2) Train Portal Structures; and (3) Streetscapes.

▶STATIONS & STATION ENTRANCES

Landscape architectural spaces that are typically associated with stations and station entrances include plazas and pocket parks. Plazas are typically an open urban public space, similar to a city square or a large courtyard and are usually surrounded by buildings. Plazas adjacent to stations are a gathering or focal point for human activity and the primary use is to safely and efficiently facilitate the circulation of pedestrians to and from the station. Additional uses may include retail sales, passive recreation and cultural events. Pocket parks are small parks accessible to the public that provide greenery, passive recreation and sometimes a children's playground. Parks may be created to enhance a monument, historic marker or an art project. Parks also provide areas for wildlife habitat.

LAYOUT

The recommended layout of a pedestrian area (sidewalk or plaza adjacent to the street) at the street level includes an access zone, a continuous 'walkway zone', a parkway zone and depending on adjacent land uses may include a 'transitional or amenity zone'.

The access zone is 18" – 24" from the face of the curb including a 6" curb and a masonry, often granite or brick band. The parkway zone is adjacent to the access zone and is ideally a continuous 'green street' stormwater treatment system designed to collect, retain or treat runoff. The parkway zone may integrate and include site furnishings. The 'transition or amenity zone' may include landscape planting and site furnishings depending on adjacent land uses.

STATION & STATION PORTAL PLANTING MATERIAL GUIDELINES

The following are guidelines unique to stations and are in addition to the General Landscape Planting Material Guidelines:

- Trees may be planted with regular spacing and / or in straight rows to define and direct pedestrian routes, draw attention to the plaza and frame views out of the plaza.
- Extend the plaza tree configuration into the adjacent right of way (ROW) or streetscape for continuity.
- Plant trees in quantity to provide shade and cool the area.
- Plant trees to define the public space or spaces.
- Plant a single species or trees that are similar in character for definition and special effect.
- Some variety in the selection of species may be appropriate to provide additional color, texture and fragrance.

▶TRAIN PORTAL STRUCTURES

The train portal structure defines the transitional space of the train tunnel from below-grade to above-grade. Landscape design for these areas is both ornamental and functional. Safety is the greatest concern around portals and ultimately deterring pedestrian circulation away from a train portal is preferable.

LAYOUT

The recommended landscape layout of a train portal structure is primarily a landscape zone. Formal geometry that creates a bold statement is recommended to harmonize with the urban landscape.

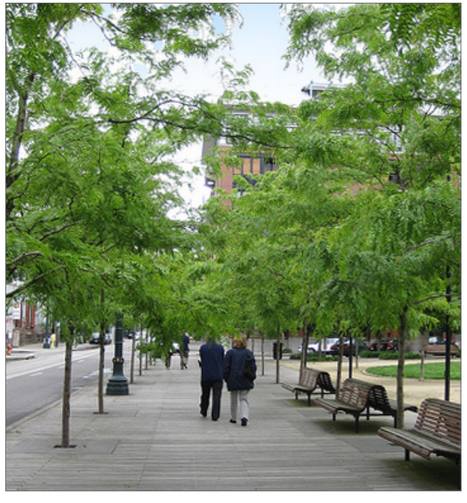
PLANTING MATERIAL GUIDELINES

The following are guidelines unique to train portal structures and are in addition to the General Landscape Planting Material Guidelines:

- Trees should be formally planted in a bosque and draw attention to the presence of the portal.
- Trees may relate to adjacent street trees in regard to layout but vary significantly in shape, color and texture to draw attention.

◀ Pedestrian streetscape with adjacent plaza.

◀ Examples of raised streetscape planter strips.



◀ Examples of different pedestrian streetscape treatments.

- Visual screening of unsightly views and noise buffering with shrubs should be sought.
- Screening and / or fencing with shrubs can add to safe circulation around or away from portals.
- The portal may present opportunities to integrate 'green street' applications.

▶STREETSCAPES

The streetscape is the composition of elements in and adjacent to a street that defines the urban form and includes elements such as building forms and styles, landscape materials, street furniture, paving etc. The streetscape along the Regional Connector and the adjacent streetscapes are the unifying element of the project that integrates all other urban design components.

LAYOUT

Streetscapes may include adjacent plazas and pocket parks and include the following recommended zones:

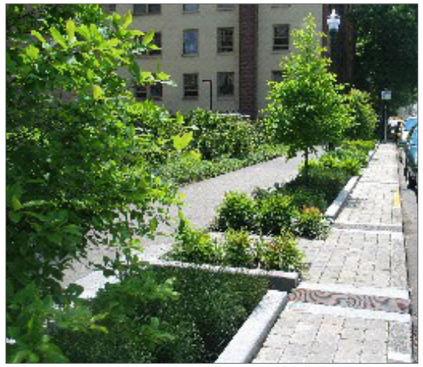
- An 'access zone' immediately adjacent to the curb;
- A 'parkway zone';
- A continuous 'walkway zone'; and
- Depending on adjacent uses, may include a 'transitional or amenity zone'.

The access zone is a minimum 18" – 24" from the face of the curb including a 6" curb and a masonry, often granite or brick band. The parkway zone is adjacent to the access zone and is, ideally, a continuous 'green street' stormwater treatment system designed to collect, retain or treat stormwater runoff. The parkway zone may however integrate and include site furnishings. The transition or amenity zone may include landscape planting and site furnishing depending on the adjacent land uses.

PLANTING MATERIAL GUIDELINES

The following are guidelines unique to streetscapes. Otherwise, please see the General Planting Material Guidelines for further direction.

- Trees should have the same characteristics on both sides of the streets.
- A planting strip may be appropriate in a streetscape taking the form of a large area between the sidewalk and the curb and where pedestrian circulation volumes are low and a 'green street' planter is not applicable.
- In addition to trees, the streetscape planting strip may include shrubs, groundcovers and turf (turf is recommended to be used sparingly or in a very unique design solution).
- Planting strips should be at least 5' wide to accommodate irrigation systems and to provide adequate room for healthy tree root systems.
- For planter strips that are less than 5' wide and where 'green street' planters are not an option, groundcovers or paving may be considered. Preferred groundcover widths are between 2' to 4'. Pervious paving is recommended where widths are less than 2' and where pedestrian traffic occurs.
- Streetscape planter strips should not be elevated above curbs except to provide positive drainage.



◀ Raingardens collect water from impervious surfaces to support landscaped planters.

◀ Green roofs absorb energy from the sun and cool the building below.

◀ Green walls give character to otherwise blank surfaces.

2.3.2.2 ECO FEATURES

▶'GREEN STREET' INFILTRATION PLANTERS OR RAINGARDENS

A raingarden is a planted depression or swale that allows rainwater runoff to be absorbed from impervious urban surfaces like roofs, driveways, walkways and compacted lawn areas. Runoff is reduced by allowing stormwater to soak into the ground 'on-site' instead of flowing into storm drains and surface waters which promote erosion, water pollution, flooding and diminished groundwater.

Native plants are recommended for raingardens primarily for maintenance purposes as they generally don't require fertilizer and are more tolerant of the local climate, soil and water conditions. A selection of wetland edge vegetation, such as wildflowers, sedges, rushes, ferns, shrubs and small trees, absorb excess water flowing into the raingarden. Water filters through soil layers before entering the groundwater system. Root systems enhance infiltration, moisture redistribution, and diverse microbial populations involved in biofiltration. Also, through the process of transpiration, raingarden plants return water vapor into the atmosphere.

Ferns, grasses – especially 'native' grasses – and sedges are excellent plant materials for a raingarden. These plants love the sun and can exist in a variety of shapes, sizes and shades of green. Ferns require specific consideration as they require shade from a street tree, structure or building.

▶ECOROOF – GREEN ROOF

A green roof is a roof of a building or structure that is partially or completely covered with a vegetation system. The system is typically composed of sedum, herbs, grasses and / or bulbs. The plants grow in a layer of engineered growing medium or soil. The vegetation and medium are contained by a waterproofing membrane and may also include additional layers such as a root barrier and drainage and may include an irrigation system.

▶GREEN WALL

There are two major categories of green walls: (1) green façades; and (2) living walls.

Green façades are wall systems where climbing plants or cascading groundcovers are trained to cover specially designed supporting structures. Plant materials can be rooted at the base of the structures, in intermediate planters or on rooftops. Green façades can be attached to existing walls or built as freestanding structures. Living walls (also called biowalls, 'mur' vegetal or vertical gardens) are composed of pre-vegetated panels or integrated fabric systems that are affixed to a structural wall or frame. Modular panels can be comprised of polypropylene plastic containers, geotextiles, irrigation and growing medium and vegetation. This system supports a great diversity of plant species, including a mixture of groundcovers, ferns, low shrubs, perennial flowers and edible plants. Living walls perform well in full sun, shade and interior applications, and can be used in both tropical and temperate locations.

Based on current applications and data from the experience of green roofs, green walls can offer considerable cost savings to both the public and private sectors. For example, the reintroduction of vegetation into cities has been correlated with the reduction of the urban heat island effect, and therefore will reduce energy consumption. Cities are cooler and quieter through shading, evaporative transpiration and the absorption of sound by green walls *(Source: Things You Need to Know About Green Walls, By Randy Sharp, MBCSLA, MCSLA, ASLA, LEED AP, July 1, 2007, Building Design and Construction)*.

▶BIOSWALES

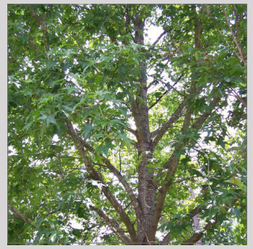
'Urban' bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides (less than 6%) and filled with vegetation, compost and / or riprap. The waters flow path, along with a wide and shoulder ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Depending upon the geometry of land available, a bioswale may have a meandering or almost straight channel alignment. Runoff from a bioswale is typically conveyed to a stormwater system.

▶PLANT MATERIALS

Landscape plant materials are living, dynamic, sustainable natural systems that define form, space and order in the urban environment. The design intent for the use of plant material is to provide for the health safety and welfare of people and our environment. Plant material also adds interest, ornamentation and when thoughtfully located, can provide aesthetic continuity, reduce noise and reduce pollution. Relief from exposure to the elements and to unsightly elements may be achieved by landscape screens and tree canopies. All planting material should fit the climate, design character and maintenance requirements for which they are planted. Urban environments present unique challenges to the health of vegetation including the effects of pollution, and damage from pedestrians, maintenance and automobiles. Specific site conditions must be fully understood prior to plant selection. Micro-climates and soil conditions are key factors that determine where and which plant material will thrive. Ultimately, plant material should be selected that is safe, maintenance friendly and use / treat water efficiently and effectively.

FIG. 14

RECOMMENDED STREET TREES



▶AMERICAN SWEETGUM
LIQUIDAMBAR STYRACIFLUA

- Medium-sized tree growing 65 to 115' tall, with a trunk up to 6.5' in diameter.
- The leaves look somewhat similar to maples; are a dark green and glossy, and in most cases turn orange, red, and purple colors in autumn.

▶CALIFORNIA FAN PALM
WASHINGTONIA FILIFERA

- Native to Southern California;
- Grows up to 75' in good growing conditions.
- When the leaves die they bend downwards and form a skirt around the trunk.

▶TORREY PINENUT
PINUS TORREYANA

- A broad, open-crowned pine growing 25 to 50' tall with long needles growing in groups of five.
- Grows slowly in dry, sandy soil.

▶INDIAN LAUREL FIG
FICUS NITIDA

- A small to medium-sized evergreen tree with smooth gray bark, aerial roots, upright growing branches and very dense foliage.
- Grows 30 to 60' tall, with a 30' spread; does well in full sun.

▶LONDON PLANE
PLATANUS X HISPANICA

- Large deciduous tree growing from 65 to 115' tall, with a trunk up to 10' or more in circumference.
- Its leaves are thick and stiff-textured and the bark is usually pale grey-green and smooth.

2.3.3 GENERAL LANDSCAPE PLANTING MATERIAL GUIDELINES

2.3.3.1 TREES

Trees are generally the most monumental and enduring of the plant materials and can ultimately determine the success of a landscape design. Significant to trees are their presence, character and role in the landscape. Trees vary in shape, color, texture and scale, and can be a focal point in the form of a specimen or massed to define a space. They can frame and / or screen views, noise and wind, and provide shelter in the form of shade and wildlife habitat. Trees can be a valuable component of stormwater treatment and management and help to clean the air. Specific to urban design, trees can unify districts visually and create continuous pedestrian-scale spaces that link commercial and non-commercial streets and neighborhoods. The urban environment is more comfortable and safe when there are trees to provide shade, beauty and amenity. For recommended street trees, please see Fig. 14 (left).

▶LOCATION

- Protect and preserve existing trees to be saved.
- The placement of street trees should respond to the use of the street as well as adjacent land uses. A variety of species that have similar characteristics are encouraged for continuity and to avoid the challenges of over planting a single species.
- Plant only a single species where the design concept is to unify an area.
- Plant trees for mature growth that will fit a space or define the desired public space.
- Consider mature tree size and maintenance while designing to avoid conflicts with signs, lights, overhead and underground utilities, utility poles and fire hydrants. Ensure that trees have adequate room to grow.
- Plant trees 25' on center for most species. Reduced spacing may be appropriate depending on the space and species.
- When planting or replacing trees adjacent to existing trees, select new trees of similar characteristics to those being replaced including form, scale, texture, and color.
- Maintain minimum sight triangle and corner triangle distances for safe view of oncoming traffic and pedestrians.
- Trees must not interfere with visibility of traffic control devices, especially at intersections.
- Trees adjacent to alleys should be located per code.
- Trees should be located a minimum of 54" from the face of the curb.
- The location of trees should not conflict with the performance of street lights. Individual species and site conditions will vary.
- All trees should be located and adjusted as necessary to ensure the drivers visibility of regulatory signs.

▶SIZE

- Trees should be large enough when planted to provide beneficial shade and meet the design criteria for which they are intended (eg. street trees should define the clear route of travel and when appropriate create a sense of separation from automobile circulation).
- Street trees in tree grates (high pedestrian traffic areas) should be 3" caliper minimum with high branching for a variety of reasons, including pedestrian safety.
- The branching height of mature trees on the pedestrian side of the street should be no less than 8' above the sidewalk.
- The branching height of mature trees on the automobile traffic side of the street should be no less than 13' – 6" above the sidewalk. Special consideration should be given to the location and maintenance of trees adjacent to bus stops.

▶SELECTION

- Street trees should be thornless and fruitless to minimize pedestrian hazards and maintenance. The form should ideally be single trunked with upright growth. Trees should be strong wooded, resistant to disease and insects and have a medium to long life expectancy.
- Trees selected to be located adjacent to station area identification signage and retail store fronts should not obstruct signage.
- Trees that require minimal water should be considered. Irrigation must be designed to deliver the appropriate amount of water to each tree with minimal waste until the tree is established (typically two years). Ideally, trees will provide water quality treatment characteristics as a component of a stormwater drainage treatment system.
- Small varieties of thornless and fruitless trees may be used where lower branching habit will not interfere with pedestrians, vehicles or driver visibility.

FIG. 15

RECOMMENDED SHRUBS

▶BUSH POPPY
DENDROMCON RIGIDA / D. HARFORDII

- A native California evergreen shrub growing up to 6' tall.
- Can be maintained at 3'.
- Leaves are blue-gray-green and the bush is covered in yellow blooms.
- Very drought tolerant once established.

▶CLEVELAND SAGE
SALVIA CLEVELANDII

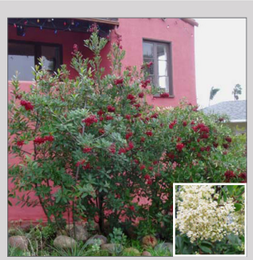
- A California native with graceful silvery-green leaves, arching branches, and whorls of purple flowers in spring and summer.
- Grows up to 4' tall.

▶COFFEEBERRY
RHAMNUS CALIFORNICA

- Attractive native California shrub, 6 to 8' high.
- Bears black berries and tolerates all soil types.
- Ideal as a background or screen plant.

▶REDBERRY
RHAMNUS CROCEA

- Medium evergreen California native shrub.
- Grows 4 to 10' tall, as wide as it is tall.
- Tight clusters of small, waxy, pinkish-white flowers give way to red berries in springtime.



▶CHRISTMAS BERRY, HOLLY BERRY OR TOYON
HETEROMELES ARBUTIFOLIA

- This California native is an evergreen shrub that produces delicate white flowers and large clusters of red berries that birds love.
- Can be pruned into a small tree.

2.3.3.2 SHRUBS – DESIGN PRINCIPLE

Shrubs are the most varied and versatile of planting materials and provide numerous shapes, colors and textures. Shrubs can be ornamental and often massed to define space. They frame and / or screen views, help buffer noise and screen against wind. Shrubs are also elemental in stormwater treatment and stormwater management and help clean the air. Specific to urban design, shrubs must be carefully selected and located so as not to create unsafe conditions (eg. define spaces that are not defensible and feel unsafe). Shrubs can unify districts visually and create continuous pedestrian-scale spaces that link commercial and non-commercial streets and neighborhoods. Shrubs make the urban environment more comfortable and safe by providing beauty and streetscape amenity.
For recommended shrubs, please see Fig. 15 (left).

▶LOCATION

- Locate shrubs to define focal point (eg. specimen planting).
- Massing / grouping: locate masses or groups of shrubs to be a focal for ornament.
- Locate shrubs to screen unsightly views, wind and noise.
- Locate shrubs to provide fencing for safety.
- Locate shrubs to define access and circulation routes.

▶SIZE

Anticipate full growth. However, the installed plant size should be large enough and in quantity to provide the intended effect.

FIG. 16

RECOMMENDED GROUNDCOVER & CLIMBING VINES

▶BEACH STRAWBERRY
FRAGARIA CALIFORNICA / FRAGARIA CHILOENSIS

- Forms lush, compact mat 4-6" high.
- Glossy dark green leaves and white flowers.
- Mow or cut back annually to force new growth.

▶GERMANDER OR WALL GERMANDER
TEUCRIUM CHAMAEDRYS OR T. X LUCIDRYS

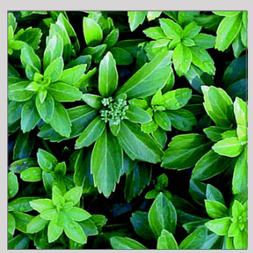
- This plant can be sheared into a neat groundcover or allowed to grow to a full height (about 1').
- Produces lavender flowers in the spring.

▶ASIAN JASMINE OR IVORY STAR JASMINE
TRACHELOSPERMUM ASIATICUM

- Evergreen, vining groundcover up to 20' across.
- Has glossy, dark green leaves and pale yellow, pinwheel-shaped flowers with a jasmine scent.

▶SAN DIEGO MARSH ELDER
IVA HAYESIANA

- This fast-growing native is widely used for slope coverage and erosion control.
- Grows 1 to 2' tall and 4 to 6' across with inconspicuous flowers.
- Summer watering will help maintain a more lush appearance.
- Prune annually.



▶PACHYSANDRA
PACHYSANDRA TERMINALIS

- Grows slowly but has a crisp, neat growth form.
- New foliage is bright green, changing to dark green with age.
- Small white flowers on 1 to 2" spikes.
- Withstands shade and is widely used under trees.

Note: The species listed are preferred for their dependability, relative low maintenance and drought resistance.

2.3.3.3 GROUNDCOVER & CLIMBING VINES – DESIGN PRINCIPLE

Groundcovers and vines provide functional and aesthetic benefits. Visual effects include consistent form, texture, color and seasonal color. Groundcovers define circulation routes when combined with trees and shrubs, can cover large areas and can facilitate the separation of pedestrians and automobiles. Vines can also function as groundcovers, however they are more effective on walls and / or structures, particularly as a component of a green wall system.

Groundcovers and vines are used to create a consistent carpet of plant material. Mixed species for ornament are not necessarily appropriate for urban design. For groundcovers to be successful they must create a tight, dense planting. Groundcovers require minimal water and maintenance once established, however, they will require adequate water and maintenance until they are established and will tolerate only minimal foot traffic.

Turf, if planted, should be planted on prepared soil from sod or seed using water conserving sod or seed. Seeding allows for greater turf selection but requires approximately six months of regular maintenance to become established. Newly seeded areas require protection from pedestrians and must be kept moist until the seed germinates.

For recommended groundcover and climbing vines, please see Fig. 16 (left).

FIG. 17

RECOMMENDED PERENNIAL GRASSES

▶SAN DIEGO SEDGE
CAREX SPISSA

- This large sedge has a form similar to that of an ornamental grass.
- Produces gray leaves to 5 feet tall and yellow, grass-like flowers in the spring.

▶CALIFORNIA FESCUE
FESTUCA CALIFORNICA

- Flowering stalks rise to 5' above large clumped grass (2-3' tall) in late spring, early summer.
- Striking appearance and good adaptability, with clumps holding their shape well throughout the year.

▶DEER GRASS
MUHLENBERGIA RIGENS

- This large, perennial, California native has dense clusters of narrow, bright green leaf blades and tall, slender flower stalks.
- Bold enough to be used as a focal point of the garden.
- Once established, is extremely drought tolerant.

▶GIANT WILD RYE
LEYMUS CONDENSATUS

- Large clumping grass 4-5' across and reaches 6-8' tall in bloom.
- Distinct silver-gray foliage.
- Prune annually to encourage new growth.

▶BLUE OAT GRASS
HELICTOTRICHON SEMPERVIRENS

- Evergreen, bright blue-gray, with narrow leaves in fountain-like clump.
- Grows 2-3' high and wide.
- Stems bear straw-colored flower clusters.

Note: The species listed are preferred for their dependability, relative low maintenance and drought resistance.

2.3.3.4 PERENNIAL GRASSES – DESIGN PRINCIPLE

Perennial grasses, like shrubs, are varied and versatile planting materials. Grasses provide numerous shapes, colors and textures. Grasses can be ornamental and / or massed to define space and can also frame and / or screen views, noise and wind. Grasses are also elemental in stormwater treatment and management and help to clean the air. Specific to urban design, grasses must be carefully selected and located to not create unsafe conditions (eg. define spaces that are not defensible and feel unsafe). Grasses can, however, help to unify districts visually and create continuous pedestrian-scale spaces that link commercial and non-commercial streets and neighborhoods. Grasses also make the urban environment more comfortable and safe by providing beauty and amenity. For recommended perennial grasses, please see Fig. 17 (left).

▶LOCATION

- Locate grasses to define focal point (eg. specimen planting).
- Locate masses or groups of grasses to be a focus, or for ornament.
- Locate grasses for screening of unsightly views, wind and noise.
- Locate grasses to provide fencing for safety.
- Locate grasses to define access and circulation routes.

▶SIZE

Anticipate full growth. However, the installed plant size should be large enough and in quantity to provide the intended effect.

2.3.3.5 ANNUALS – DESIGN PRINCIPLE

Annual and perennial flowers are not recommended except in planter pots and or in hanging baskets.

◀ Site furnishings can double as seating and planters.

◀ Seating with lighting.

◀ (Left) Banner pole; (Right) Green wall.

2.3.4 SITE FURNISHINGS

Site furnishings are functional, attractive and important components of the urban landscape. Site furnishings promote safety by defining circulation routes and activating spaces. Combinations of site furnishings vary with use and will contribute to the definition and potential unity of spaces. A thoughtful composition of furnishings will provide comfort and articulate an aesthetic identity. High quality materials and finishes should be specified to provide beauty, durability and minimize maintenance.

▶DESIGN GUIDELINES TYPICAL OF ALL SITE FURNISHINGS

- Design and selection should be complementary to the design intent of the project and vernacular, or other furnishings.
- Design and materials must be durable, high quality and low maintenance.
- Furnishings must be mounted securely to paving or structure and per manufactures specification unless otherwise specified.
- Refer to ADA standards, uniform building code and local code for minimum code requirements.

▶DESIGN PRINCIPLES & GUIDELINES SPECIFIC TO INDIVIDUAL URBAN DESIGN ELEMENTS

The following are design principles and guidelines specific to individual urban design elements and in addition to the Design Guidelines Typical of All Site Furnishings previously defined.

2.3.4.1 GATEWAY MARKERS & BANNER POLES

Gateway markers and banner poles should be designed as a component of a unified family of site furnishings that are designed to define a district or neighborhood. The unification of components embraces all furnishings. Vertical elements are commonly the most prominent and include but are not limited to gateway markers, lighting and signage. Design considerations include layout, proportion, selection of materials and detail design. Ultimately, the scale of a design is developed for the pedestrian. However, the mass transit and motor vehicles need to be considered in regard to design speeds and visibility. A variety of scales may also be considered in regard to the program of the space, the architecture and a hierarchy of entrances.

▶DESIGN GUIDELINES

- Locate to be unobtrusive yet visible and adjacent to primary circulation.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.2 WALLS

Walls primarily facilitate grade change (retaining walls) and definition of space, and they direct or screen views and / or weather. Walls further define circulation and depending on their height, can provide seating opportunities. Safety concerns focus on excessive height and the appropriate safeguards when grade transitions exceed 30". The design and layout of walls in a pedestrian-friendly urban landscape should never create indefensible or unsafe conditions. In addition to environmental benefits, green walls can add interest, ornament, reduce scale and provide continuity when transitioning from urban spaces to buildings.

▶DESIGN GUIDELINES

- See Design Guidelines Typical of All Site Furnishings.

◀ Seating on the side, facing activity.

◀ Paving defines scale, order and identity.

◀ Seating, surfacing and tree grates contribute to an area's identity.

2.3.4.3 SEATING

Perhaps more than any other furnishing, seating activates urban spaces. Seating is typically adjacent to pedestrian routes and may provide a place to rest, socialize and enjoy the urban landscape. Seating may be located in shady places, sunny places and oriented towards interesting or scenic vistas. Seating can also function as walls and planters. The dimensions of the following guidelines are included as they are recognized as standards. Creativity is encouraged as long as health, safety and welfare criteria are met.

▶DESIGN GUIDELINES

- Seating height: 16" – 18" high.
- Seating depth: 16" for seats without backs and 14" with backs.
- Walls or ledges may be 12" – 20" high and ideally 16" wide.
- Walls designed for seating on both sides should be 30" wide.
- Seating orientation should back to a wall or mass and not to major circulation routes. Additional orientations include back-to-back, face-to-face for conversation and if solitary, perpendicular to circulation routes.
- Locate seating 3' clear of circulation.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.4 SURFACING

Paving is an important element in urban design and a component of the framework for organization, articulation and the safe design of spaces. Permeable paving is an environmentally conscious consideration and applicable when site conditions are appropriate. Non-slip textures, colors and patterns that clearly define uses and circulation should be considered. The design concept may consider the paving as neutral background or may be ornate to create a focal point or a pattern to define order, scale and identity. The application may be designed to define a single space or perhaps add continuity to two or more spaces.

▶DESIGN GUIDELINES

- Emphasize circulation routes.
- Style (eg. formal, informal, organic).
- Cost and maintenance: material, installation, maintenance.
- Construction and strength / use: rigid or flexible pedestrian, vehicular.
- Bonding and jointing: visual, practical, structural.
- Material selection relative to context.

2.3.4.5 TREE GRATES

Tree grates are an appealing application for protecting trees and maintaining a continuous grade around trees. Their design can include artwork that expresses the local community and should be designed to complement other furnishings and ultimately unify the urban landscape. Special applications may include the articulation of green street planters with specially designed grates to accommodate pedestrian seating, bike racks and other site furnishings.

▶DESIGN GUIDELINES

- Tree grates should be at least 6' × 6' and fit the tree planter opening.
- Ideally, the design of the tree grate should relate to the paving pattern and site furnishings. Openings in the design of the tree grate pattern cannot exceed ¼".
- The design of the tree grate must allow for adequate tree growth.
- Tree grates should be securely attached, but designed for easy removal for maintenance.
- See also Design Guidelines Typical of All Site Furnishings.

◀ Typical handrail for stairs.

◀ Simple and elegant trash receptacle.

◀ Bollards help to separate cars from the pedestrian realm.

◀ Bike racks present an opportunity to reflect the character of the local community through their design. This bicycle rack is integrated with the metal grate / ventilation shaft.

2.3.4.6 FENCING & RAILINGS

Fencing and railings may protect people from unsafe conditions, further define circulation and separate uses. Fencing and railings also facilitate definition of space and may direct or screen views and / or weather. They also provide an opportunity for ornament and artistic expression and should relate to the vernacular of other furnishings. Rails may be used for leaning instead of seating to accommodate short-term respite.

▶DESIGN GUIDELINES

- Handrail height is typically 32".
- Guardrail height is typically 48".
- Guardrails adjacent to bike ramps are typically 52".
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.7 TRASH RECEPTACLES

Trash receptacles provide an opportunity for ornament and artistic expression and should relate to the vernacular of furnishings. Their location should be easily accessible for use and maintenance. Their functional design should facilitate effective storage of refuse and recycling.

▶DESIGN GUIDELINES

- Locate adjacent to activity nodes in sight of, but not adjacent to, seating areas.
- Trash receptacles should be securely constructed and anchored, but designed for easy removal of waste.
- Trash receptacles should be unobtrusive yet visible.
- Receptacles should include covered tops and sealed bottoms.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.8 BOLLARDS

Bollards may protect people from unsafe conditions, control circulation, separate uses and subtly facilitate definition of space. They also provide an opportunity for ornament, artistic expression and should relate to the vernacular of furnishings. Bollards may include lighting.

▶DESIGN GUIDELINES

- Locate 2½' from curb face.
- Locate 36" clear of each other and any other furnishings.
- Locate 60" clear of each other for primary circulation.
- Some bollards may be removable for maintenance and emergency access.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.9 BIKE RACKS

Bike racks are an efficient application for bike storage. Their design can include artwork that expresses the character of the local community and should be designed to complement other furnishings and ultimately unify the urban landscape. Special applications may include the articulation of green street planters with specially designed racks to accompany pedestrian seating and other site furnishings.

▶DESIGN GUIDELINES

- Locate in close proximity to mass transit stations, but do not allow bike racks to interfere with circulation.
- The rack must be designed to allow both the frame and one wheel to be simultaneously secured to the structure.
- See also Design Guidelines Typical of All Site Furnishings.

◀ Kiosks provide useful information and showcase advertisements about the city.

◀ Artwork encourages discussion about creativity and public space.

◀ (Left) Planting pots offer flexibility to a landscape; (Right) Parking meters should be efficiently placed and unobtrusive.

2.3.4.10 KIOSKS

Kiosks may be considered to be a part of wayfinding signage. However, they may also include temporary and / or seasonal information. Kiosks are located adjacent to pedestrian routes and should attract attention. Kiosks should be well lit and accessible from all sides. Their design can include artwork that expresses the local community character and should be designed to complement the other furnishings.

▶DESIGN GUIDELINES

- Kiosks are unique and should be used sparingly.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.11 PUBLIC ART

Public art is an engaging expression of community character. Applications are limitless.

DESIGN GUIDELINES

- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.12 FOUNTAINS

Fountains incorporate the design element of water into the landscape and provide an interesting opportunity to articulate reflected light and sound. Fountains may be for drinking and / or amenity and should be easy to locate along pedestrian routes. They may also be the focal point of an urban space.

2.3.4.13 VENDORS CARTS

Vendor carts provide an extraordinary opportunity to active the urban environment by providing a variety of food and goods. Their mobility allows them to operate regularly or intermittently and can facilitate a daily lunch routine or conversely, a seasonal event or festival.

▶DESIGN GUIDELINES

- Locate to be unobtrusive yet visible and adjacent to primary circulation routes for easy accessibility.
- Cluster and locate carts together and in an organized manner.
- Locate without any interference to the pedestrian circulation system.

2.3.4.14 NEWSPAPER RACKS

In addition to dispensing publications, newspaper racks may be located to control circulation, separate use, and subtly facilitate definition of space.

▶DESIGN GUIDELINES

- Locate to be unobtrusive yet visible and adjacent to primary circulation routes for easy accessibility.
- Cluster and locate newspaper racks with other elements in an organized manner 2½' from curb face or against a wall.
- Locate without any interference to the pedestrian circulation system.

2.3.4.15 PLANTING POTS & CONTAINERS

Planting pots and containers provide an opportunity to add greenery where the permanent location of plant material may not be feasible or desirable. They may protect people from unsafe conditions, control circulation, separate uses, and subtly facilitate definition of space. They also provide an opportunity for ornament and artistic expression, and should relate to the vernacular of furnishings.

▶DESIGN GUIDELINES

- Locate to be unobtrusive yet visible and adjacent to primary circulation routes to further define circulation and ornament.
- Cluster and locate planters / racks with other elements in an organized manner.
- See also Design Guidelines Typical of All Site Furnishings.

2.3.4.16 MAILBOXES, PARKING METERS, UTILITY BOXES, METERS & MANHOLES

Coordinate with the responsible entities to organize utility location and structures as effectively and efficiently as possible.

2.3.4.17 PERMITTING

Per jurisdictional requirements.

2.3.4.18 MAINTENANCE REQUIREMENTS

Per jurisdictional requirements.

APPENDIX

SPECIAL EVENTS SCHEDULE FOR DOWNTOWN LOS ANGELES 41

APPENDIX

SPECIAL EVENTS SCHEDULE FOR DOWNTOWN LOS ANGELES

The following listed events passed in 2008.
These events were held in the downtown Central Business Area, in the following locations:

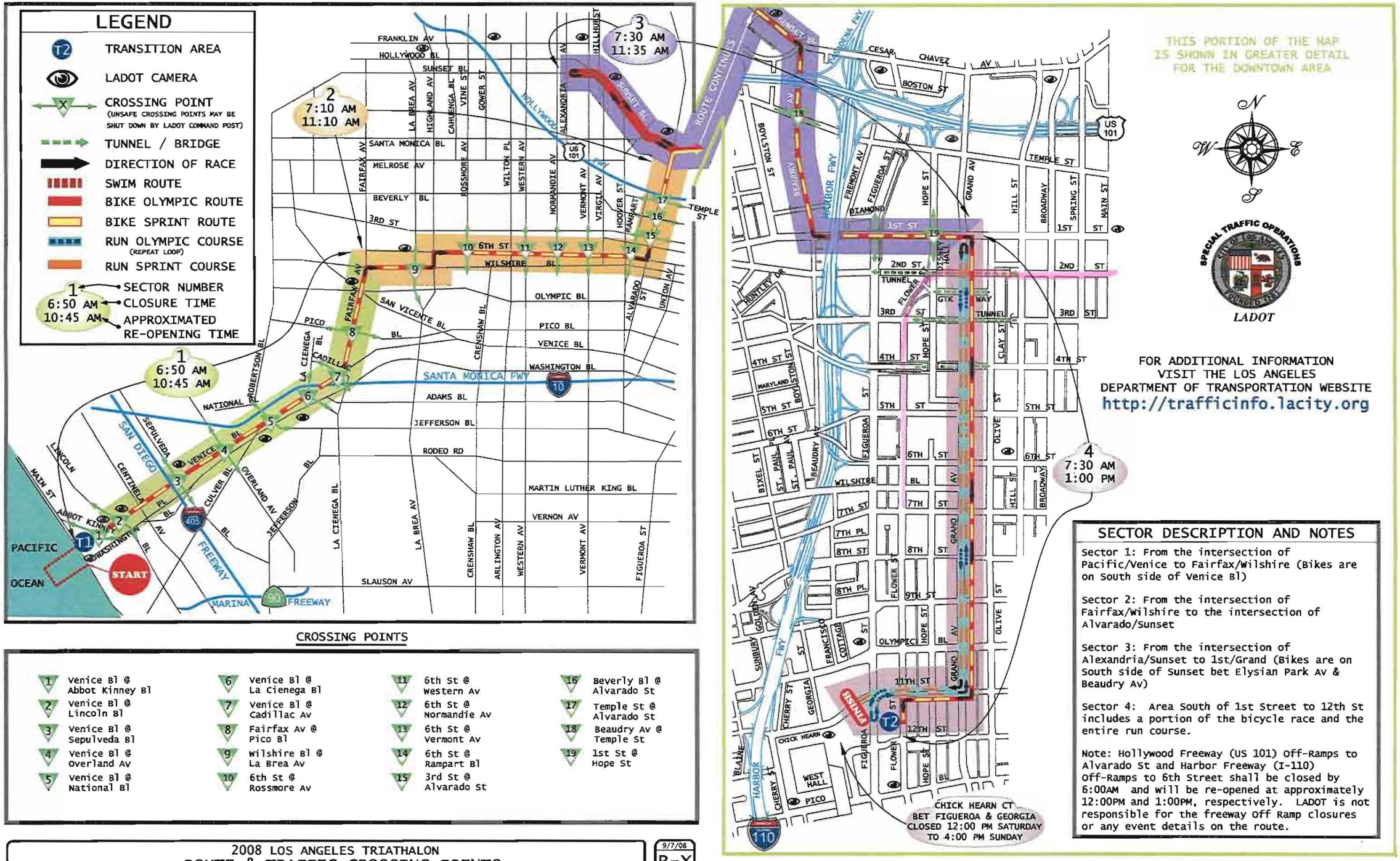
- Flower Street from 7th Street to 2nd Street
- 2nd Street from Flower to Alameda
- Main Street and Los Angeles Street to 2nd Street and Temple

TITLE OF EVENT	EVENT DATE	START TIME	END TIME	CLOSED STREETS
Annual Golden Dragon Parade	2/9/2008			Along Broadway and Hill Street. Details?
LA Marathon	3/1/2008	evening		the area bounded by 3rd Street, Grand Avenue, 5th Street and Flower Street will be closed to install the Marathon Finish Line Stage
LA Marathon	3/2/2008	3:00 AM	11:59 PM	(1) Day of the Event Street Closures: On Sunday, March 2, 2008 starting at 2:00AM, the Los Angeles Department of Transportation (LADOT) will start closing streets along the Bike Tour, Marathon and 5k routes. The Bike Tour route will be secured by 5:30AM for a 5:50AM start. The Marathon route will be secured by 7:30AM for the 7:50AM wheelchair race and 8:17AM Marathon. To meet scheduling some streets may be closed earlier. (2) Freeway Off Ramp Closure: To meet scheduling some freeway off ramps may be closed earlier. The contractor for the LA Marathon will start closing freeway off-ramps beginning at 12:01 AM on Sunday, March 2, 2008 with the exception of the Harbor Freeway (I-110) Northbound 3rd Street (East) off-ramp which will be closed at 9:00PM on Saturday, March 1, 2008. The event does not require the closure of any freeway on-ramps. (3) Pre-Marathon Street Closures: Beginning on Saturday March 1st at 5AM, Flower Street bet 5th and 6th Streets and at 9:00PM, Flower St bet General Kosciuszko Way and 5th St and 3rd St tunnel bet Hill St and Figueroa St will be closed on in preparation for the end of the race. All streets will be re-opened by Midnight Sunday, March 2, 2008. Bike and 5K Assembly Area Closures: Figueroa Street between Exposition Boulevard and Martin Luther King Boulevard will be closed at 12:01AM on Sunday, March 2, 2008 and will be re-opened by noon on Sunday. Bike Tour Route Re-Opening: The segments of the Bike Tour route that do not overlap with the Marathon route will re-open by 8:30AM on Sunday, March 2, 2008. 5K Route Re-Opening: The segments of the 5K route that do not overlap with the Marathon route will reopen by 10:00AM on Sunday, March 2, 2008. *See map for course*
Womans' March Against the War	3/8/2008	10:30 AM	11:59 PM	Olympic and Broadway.
Saint Patrick Day Parade*	3/17/2008	8:30 AM	2:00 PM	2nd Street closed from Spring to Los Angeles Street *See map for parade route*
March Against Iraq War*	3/18/2008	7:00 AM	5:00 PM	
March Against HR 4437*	3/25/2008	9:00 AM	3:00 PM	
United Farm Workers Rally*	3/26/2008	10:30 AM	7:30 PM	
Annual Cherry Blossom Festival*	4/3/2008			Set-Up
Annual Cherry Blossom Festival*	4/4/2008			San Pedro Street between 1st & 3rd; Second Street between Los Angeles & Central
Annual Cherry Blossom Festival*	4/5/2008			San Pedro Street between 1st & 3rd; Second Street between Los Angeles & Central

Fiesta on Broadway/ Cinco de Mayo*	4/25/2008	7:00 PM	11:59 PM	Broadway between 1st and Temple Streets
Fiesta on Broadway/ Cinco de Mayo*	4/26/2008	12:00 AM	11:59 PM	North-South Streets: Broadway closed from Temple to 11th Street, Hill Street closed from 6th to Olympic Street, Main Street closed from 9th to 11th Street
Fiesta on Broadway/ Cinco de Mayo*	4/27/2008	12:00 AM	11:59 PM	East-West Streets: 1st, 2nd, 3rd, 4th, 5th, & 6th Streets closed between Spring and Hill Street. 7th, 8th, 9th, & Olympic Streets closed from Main to Olive
Fiesta on Broadway/ Cinco de Mayo*	4/28/2008	12:00 AM	5:00 AM	
May Day: May 1st Day of Action in Support of Worker's Rights	5/1/2008	11:00 AM	2:00 PM	Downtown Los Angeles traffic will be severely impacted during the pm peak hours within the quadrants of Broadway from Pico Boulevard to Temple Street and 5th Street between Alameda Street and Figueroa Street.
May Day: Immigrant Rights	5/1/2008	11:00 AM	3:00 PM	The Harbor Freeway (I-110) off ramps to 6th Street will be closed at 2:00pm
May Day: Full Rights for Immigrants	5/1/2008	11:00 AM	3:00 PM	Assembly area street closures are likely to begin at 10:30 am: Park View Street between 7th Street and Wilshire Boulevard and Broadway between 9th Street and Olympic Boulevard; Olympic Boulevard between Main Street and Hill Street. At approximately 1:30pm, LADOT engineers will gradually begin securing the march route.
May Day: Legalize LA	5/1/2008	12:30 PM	8:00 PM	*See map for route of participants*
Children Day Festival (Día del Niño)*	5/16/2008			
Children Day Festival (Día del Niño)*	5/18/2008			
Relay for Life Downtown*	8/1/2008	5:00 PM		Westside lane of Main Street between 1st Street and Temple; etc.
Relay for Life Downtown*	8/2/2008		8:00 AM	Westside lane of Main Street between 1st Street and Temple; etc.
National Night Out*	8/5/2008	6:00 PM	10:00 PM	1st Street, between San Pedro and Alameda (Little Tokyo)
Nisei Week	8/16/2008	11:00 AM	7:00 PM	San Pedro between 2nd and 3rd Streets (please see 2007 schedule of street closures for more detailed summary from LA City webite)
Downtown Film Festival's "green" programming	8/17/2008	12:00 PM	10:00 PM	along Grand Avenue between 2nd and 4th Street on Bunker Hill
Nisei Week	8/17/2008	11:00 AM	9:00 PM	11:00 AM - 4:00 PM San Pedro between 2nd and 3rd Streets. 5:00 PM - evening, Grand Parade
Nisei Week	8/24/2008	4:00 PM		1st Street between Central Avenue and San Pedro, Street Dancing
LA Triathlon	9/7/2009	3:30 AM	evening	In order to secure the cycle and run courses, street closures by the Department of Transportation will begin as early as 3:30am. Participants cross 2nd St via Grand Ave. Hollywood Freeway (US 101) Off-Ramps to Alvarado Street and Harbor Freeway (I-110) Off-Ramps to 6th Street shall be closed by 6:00AM and will be re-opened at approximately 12:00PM and 1:00PM, respectively. *See map for course*

60th Primetime Emmy Awards	9/21/2008	all day	all day	Council Motion: Street Closures are as follows: - Chick Hearn Ct bet Cherry and Figueroa Sts from 6:00 AM, Monday, Sept 15, 2008 thru 12:00 AM(midnight) on Wednesday, Sept 24, 2008. For the following closures, local and emergency access must be maintained at all times. - 11th St bet Figueroa and Flower Sts from 6:00 AM, Sunday, Sept 21, 2008 thru 12:00 AM, Monday, Sept 22, 2008. - 12th St bet Figueroa and Flower Sts from 6:00 AM, Sunday Sept 21, 2008 thru 12:00 AM, Monday, Sept 22, 2008. - Cherry St bet Pico and Olympic Bls from 6:00 AM, Sunday, Sept 21, 2008 thru 2:00 AM, Monday, Sept 22, 2008. - Figueroa St bet Venice and Olympic Bls from 6:00 AM, Sunday, Sept 21, 2008 thru 12:00 AM, Monday, Sept 22, 2008. - Flower St bet Pico Bl and 9th St from 6:00 AM, Sunday, Sept 21, 2008 thru 12:00 AM, Monday, Sept 22, 2008. - Pico Bl bet Flower and Cherry Sts from 6:00 AM, Sunday, Sept 21, 2008 thru 12:00 AM, Monday, Sept 22, 2008
Grand Avenue Festival	9/28/2008	11:00 AM	5:00 PM	Council Motion: Street Closures are as follows: -Grand Ave from First St to Hope Pl, from 1:30 PM, Saturday Sept 27, 2008 to 11:59 PM, Sunday, Sept 28, 2008, except for emergency vehicles. A twenty foot Fire Lane will be established and maintained on the west side of Grand Ave from First St south to Hope Pl. -Grand Ave East Sidewalk from First St to Second St, from 9:00 AM, Saturday Sept 27, 2008 to 11:59 PM, Sunday, Sept 28, 2008. -Grand Ave from Temple St to First St from 8:00 PM, Saturday, Sept 27, 2008 to 7:00 PM, Sunday, Sept 28, 2008 except for emergency vehicles. Local traffic will be allowed to access the Music Center and County Parking Lots. -First St bet Hope St and Olive St, from 9:00 AM , Sunday, Sept 28, 2008 to 7:00 PM, Sunday, Sept 28, 2008. -Second St bet Hope St and Grand Ave from 1:30 PM, Saturday, Sept 27, 2008 to 11:59 PM, Sunday, Sept 28, 2008. -Second St bet Olive St and Grand Ave from 9:00 AM, Saturday, Sept 27, 2008 to 11:59 PM, Sunday, Sept 28, 2008. -Third St bet Hope St and Grand Ave from 1:30 PM, Saturday, Sept 27, 2008 to 11:59 PM, Sunday, Sept 28, 2008
Detour Music Festival	10/4/2008	12:00 PM		Spring between Aliso and 2nd, Main between Aliso and 2nd, and Temple between Broadway and Los Angeles, 1st between Broadway and Los Angeles
Step Out: Walk to Fight Diabetes	10/26/2009	9:00 AM	11:59 PM	Walk starts and ends at City Hall
Old Bank District Holiday Block Party*	12/6/2008	2:15 PM	11:59 PM	The evening will see 4th street closed between Spring and Main, as well as Main street shut between 4th and 5th.
Weekly Farmer's Markets				
650 W. 5th Street	Wednesday	11:30 AM	2:00 PM	5th Street between Grand and Flower Streets
Little Tokyo	Thursday	10:00 AM	2:00 PM	1st Street between Main Street and Spring Street
7th and Figueroa	Saturday	10:00 PM	4:00 PM	In plaza or closing off a street?

* Listed Events are from Lieutenant Kenneth Hill Special Events Unit of the City of Los Angeles in his report for TTTA titled Special Event in Downtown Los Angeles, on April 10, 2009

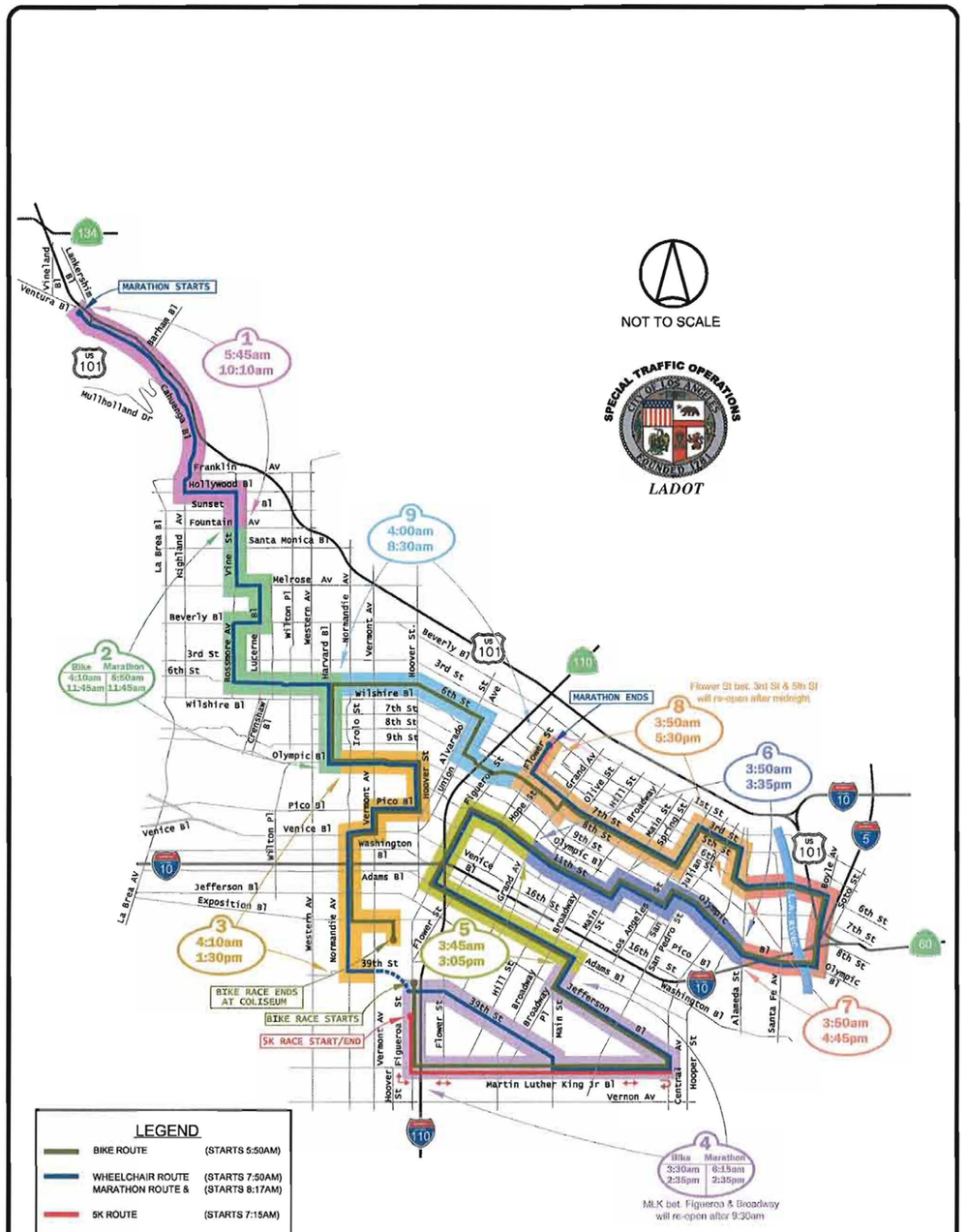

LEGEND
TRANSITION AREA
LADOT CAMERA
CROSSING POINT
(UNSAFE CROSSING POINTS MAY BE SHUT DOWN BY LADOT COMMAND POST)
TUNNEL / BRIDGE
DIRECTION OF RACE
SWIM ROUTE
BIKE OLYMPIC ROUTE
BIKE SPRINT ROUTE
RUN OLYMPIC COURSE
(REPEAT LOOP)
RUN SPRINT COURSE
1
6:50 AM
10:45 AM
SECTOR NUMBER
CLOSURE TIME
APPROXIMATED RE-OPENING TIME
2
7:10 AM
11:10 AM
3
7:30 AM
11:35 AM
4
7:30 AM
1:00 PM
THIS PORTION OF THE MAP IS SHOWN IN GREATER DETAIL FOR THE DOWNTOWN AREA
FOR ADDITIONAL INFORMATION
VISIT THE LOS ANGELES
DEPARTMENT OF TRANSPORTATION WEBSITE
http://trafficinfo.lacity.org
SPECIAL TRAFFIC OPERATIONS
LADOT
SECTOR DESCRIPTION AND NOTES
Sector 1: From the intersection of Pacific/Venice to Fairfax/Wilshire (Bikes are on South side of Venice Bl)
Sector 2: From the intersection of Fairfax/Wilshire to the intersection of Alvarado/Sunset
Sector 3: From the intersection of Alexandria/Sunset to 1st/Grand (Bikes are on South side of Sunset bet Elysian Park Av & Beaudry Av)
Sector 4: Area South of 1st Street to 12th St includes a portion of the bicycle race and the entire run course.
Note: Hollywood Freeway (US 101) Off-Ramps to Alvarado St and Harbor Freeway (I-110) Off-Ramps to 6th Street shall be closed by 6:00AM and will be re-opened at approximately 12:00PM and 1:00PM, respectively. LADOT is not responsible for the freeway Off Ramp closures or any event details on the route.
CHICK HEARN CT
BET FIGUEROA & GEORGIA
CLOSED 12:00 PM SATURDAY
TO 4:00 PM SUNDAY
START
FINISH
PACIFIC OCEAN
MARINA FREEWAY
SANTA MONICA FWY
HOLLYWOOD FWY
HARBOR FWY
SAN DIEGO FWY
ROUTE CONTINUES

CROSSING POINTS

1 Venice Bl @ Abbot Kinney Bl	6 Venice Bl @ La Cienega Bl	11 6th St @ Western Av	16 Beverly Bl @ Alvarado St
2 Venice Bl @ Lincoln Bl	7 Venice Bl @ Cadillac Av	12 6th St @ Normandie Av	17 Temple St @ Alvarado St
3 Venice Bl @ Sepulveda Bl	8 Fairfax Av @ Pico Bl	13 6th St @ Vermont Av	18 Beaudry Av @ Temple St
4 Venice Bl @ Overland Av	9 Wilshire Bl @ La Brea Av	14 6th St @ Rampart Bl	19 1st St @ Hope St
5 Venice Bl @ National Bl	10 6th St @ Rossmore Av	15 3rd St @ Alvarado St	

2008 LOS ANGELES TRIATHALON
ROUTE & TRAFFIC CROSSING POINTS

9/7/08
R-X

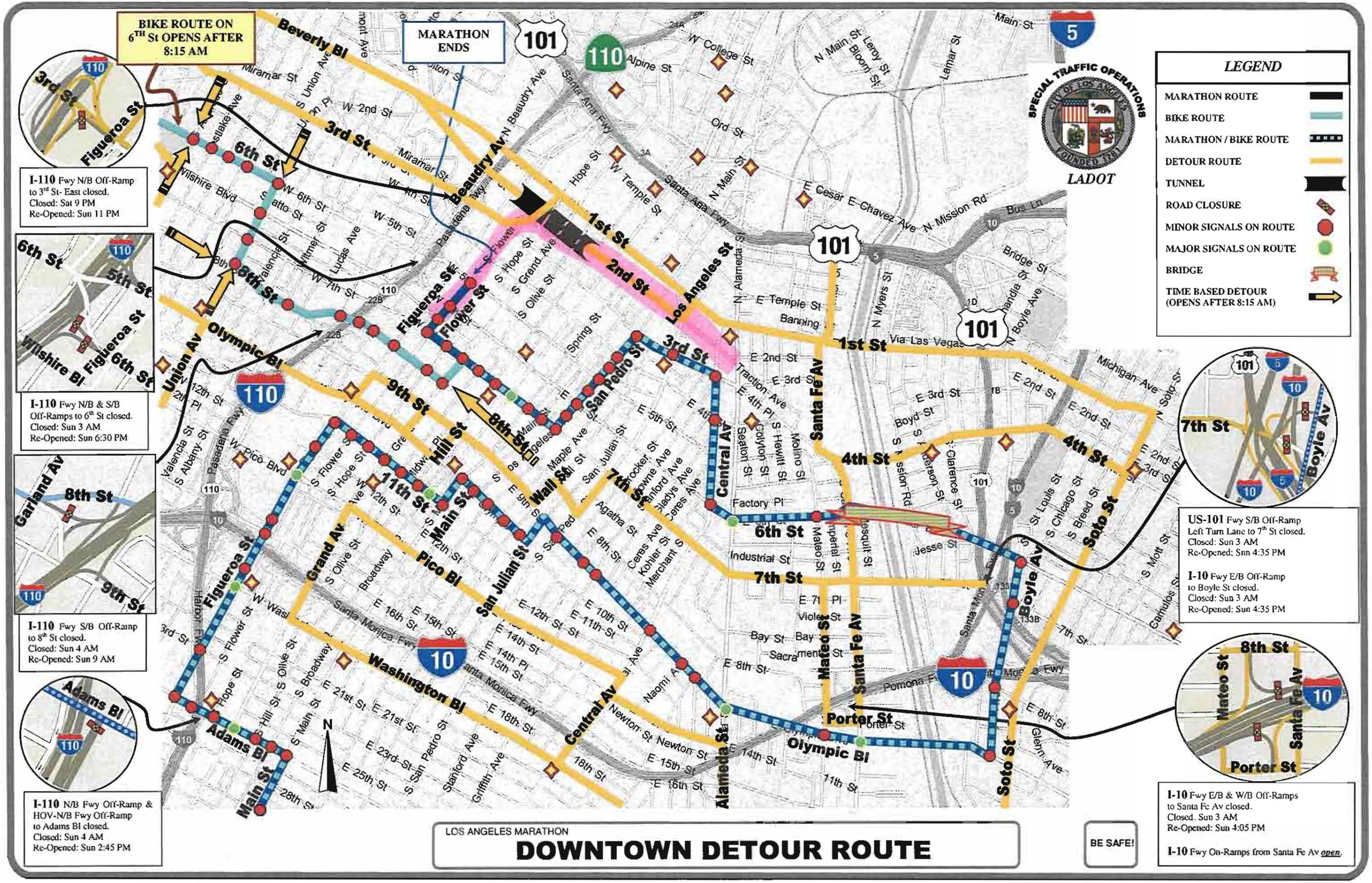


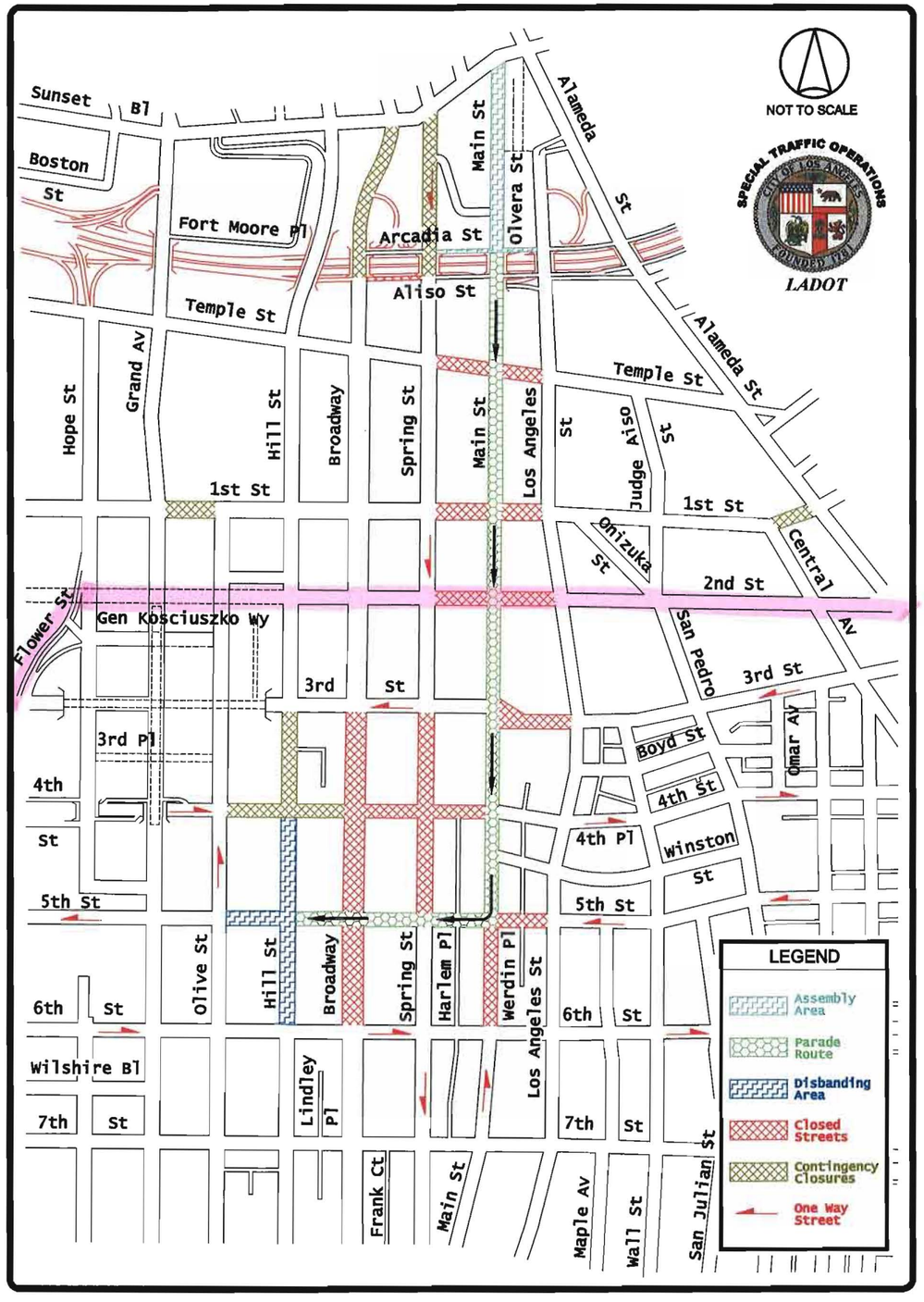
2008 LOS ANGELES MARATHON

ENGINEERING SECTORS (APPROXIMATED CLOSURE & OPENING TIME)

3-2-08

T


BIKE ROUTE ON 6TH St OPENS AFTER 8:15 AM
MARATHON ENDS
I-110 Fwy N/B Off-Ramp to 3rd St- East closed.
Closed: Sat 9 PM
Re-Opened: Sun 11 PM
I-110 Fwy N/B & S/B Off-Ramps to 6th St closed.
Closed: Sun 3 AM
Re-Opened: Sun 6:30 PM
I-110 Fwy S/B Off-Ramp to 8th St closed.
Closed: Sun 4 AM
Re-Opened: Sun 9 AM
I-110 N/B Fwy Off-Ramp & HOV-N/B Fwy Off-Ramp to Adams Bl closed.
Closed: Sun 4 AM
Re-Opened: Sun 2:45 PM
US-101 Fwy S/B Off-Ramp Left Turn Lane to 7th St closed.
Closed: Sun 3 AM
Re-Opened: Snn 4:35 PM
I-10 Fwy E/B Off-Ramp to Boyle St closed.
Closed: Sun 3 AM
Re-Opened: Sun 4:35 PM
I-10 Fwy E/B & W/B Off-Ramps to Santa Fe Av closed.
Closed. Sun 3 AM
Re-Opened: Sun 4:05 PM
I-10 Fwy On-Ramps from Santa Fe Av open.
LEGEND
MARATHON ROUTE
BIKE ROUTE
MARATHON / BIKE ROUTE
DETOUR ROUTE
TUNNEL
ROAD CLOSURE
MINOR SIGNALS ON ROUTE
MAJOR SIGNALS ON ROUTE
BRIDGE
TIME BASED DETOUR (OPENS AFTER 8:15 AM)
SPECIAL TRAFFIC OPERATIONS
LADOT
LOS ANGELES MARATHON
DOWNTOWN DETOUR ROUTE
BE SAFE!
Beverly Bl
3rd St
6th St
Wilshire Blvd
Beaudry Av
1st St
2nd St
Los Angeles St
Figueroa St
Flower St
Olympic Bl
8th St
9th St
11th St
Hill St
Main St
San Pedro St
Central Av
Alameda St
Santa Fe Av
Soto St
Boyle Av
Grand Av
Pico Bl
San Julian St
Washington Bl
Wall St
Union Av
Garland Av
Adams Bl
Porter St
7th St
4th St
Alpine St
Ord St
Hope St
Temple St
Spring St
Olive St
Grand Ave
Lucas Ave
Witmer St
Valencia St
Albany St
Maple Ave
Broadway
Agatha St
Ceres Ave
Kohler St
Merchant St
Naomi Ave
Newton St
Stanford Ave
Griffith Ave
Traction Ave
Factory Pl
Jesse St
Violet St
Bay St
Sacramento St
Pomona Fwy
Santa Monica Fwy
Harbor Fwy
Pasadena Fwy
Santa Ana Fwy
Via Las Vegas
Banning
Bus Lp
Bridge St
Michigan Ave
Glenn Ave
Lamar St
Main St
Leroy St
Bloom St
Myers St
Boyle Ave
Mission Rd
Cesar E Chavez Ave
College St
Miramar St
Wall St
Maple Ave
Molino St
Malott St
Imperial St
Lesuit St
Mateo St
Santa Fe Av
Soto St
Boyle Av
Porter St
7th St
8th St
Garland Av
Adams Bl
Figueroa St
Flower St
Hope St
Olive St
Broadway
Hill St
Main St
Pico Bl
Grand Av
Olympic Bl
Wilshire Bl
3rd St
6th St
5th St
7th St
Boyle Av
Mateo St
Santa Fe Av
Porter St
8th St
N
101
110
10
5



ST. PATRICK'S DAY PARADE

TMP

C

MAY 1ST IMMIGRATION & LABOR MARCH AND RALLY AREA CLOSURES AND TIMES

SPECIAL TRAFFIC OPERATIONS
CITY OF LOS ANGELES FOUNDED 1781
LADOT

N
W E
S
NOT TO SCALE

C
2:30pm
8:00pm
Contingency - Only if crowd exceeds route capacity

C
2:00pm
5:00pm
Contingency - Only if crowd exceeds route capacity

C
10:00am
3:00pm
Contingency - Only if crowd exceeds assembly area storage capacity

E
Per LADOT Command Post
Emergency Closure Only If Needed

10:00am
10:00pm

R
2:30pm-6:30pm
2:30pm-8:00pm

E
Per LADOT Command Post
Emergency Closure Only If Needed

A
1:15pm-2:30pm
10:00am-3:00pm

R
1:15pm-3:00pm
1:15pm-4:00pm

R
2:00pm-3:30pm
2:00pm-4:30pm

A
11:00am-3:30pm
10:00am-4:00pm

C
10:00am
4:00pm
Contingency - Only if crowd exceeds Broadway storage capacity

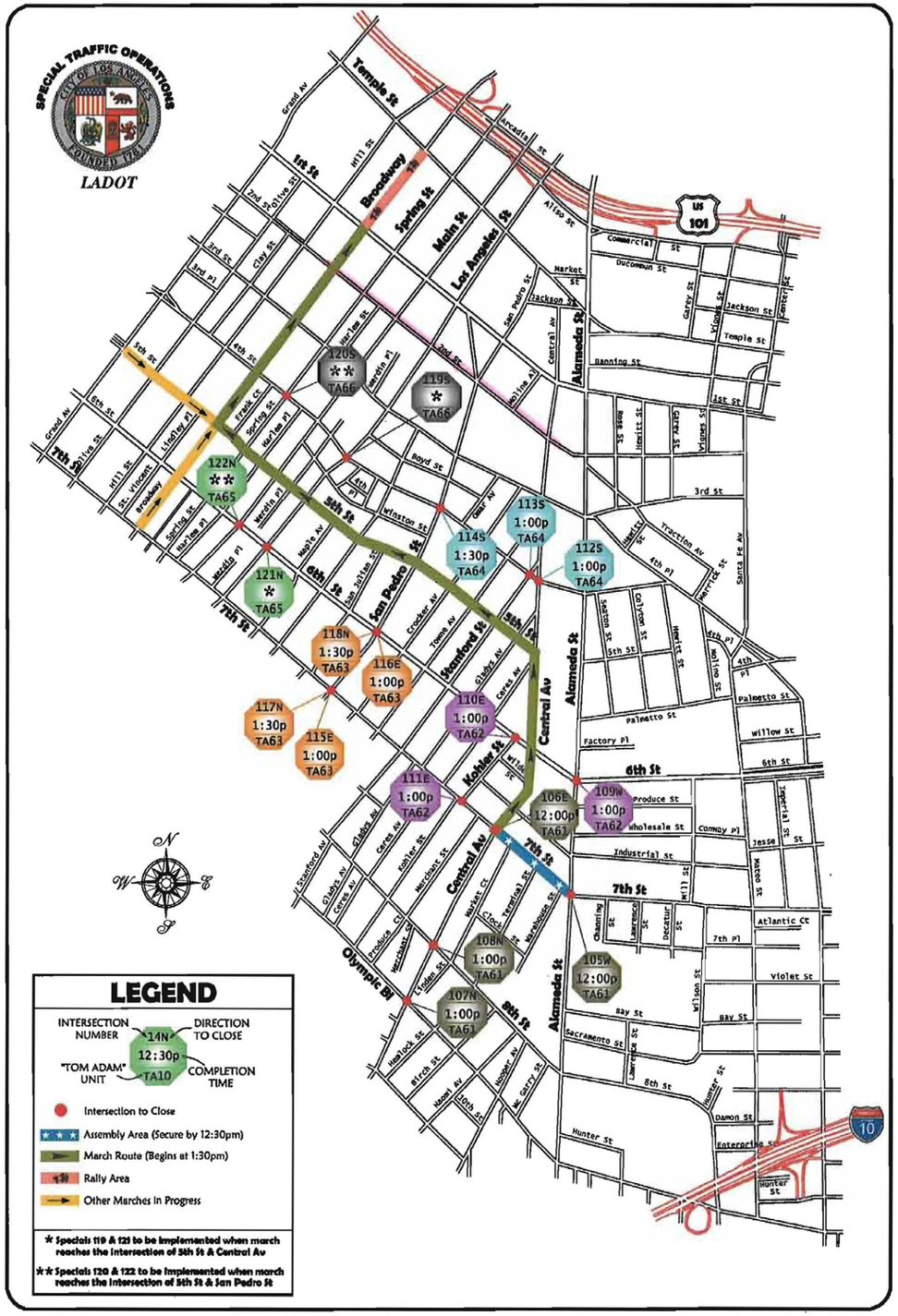
LEGEND
- Assembly Area 1
- Assembly Area 2
- March Route 1
- March Route 2
- Rally Area

CATEGORY:
A - Assembly Area
R - Route
C - Contingency
E - Emergency
- Rally Area

R
1:15pm-2:30pm
10:00am-3:00pm

ESTIMATED CLOSURE & RE-OPENING TIME
* IF EVENT STARTS ON TIME AND CROWD IS 30,000 OR LESS

ESTIMATED CLOSURE & RE-OPENING TIME
* IF EVENT DOES NOT START ON TIME AND/ OR CROWD EXCEEDS 30,000



TRANSPORTATION MANAGEMENT PLAN **2008**

LEGALIZE L.A. DEMONSTRATION MARCH AND RALLY

TMP

6-29-07 - This day's Council session - Motion - Perry Mover 2007 / Garcetti - The Nisei Week Foundation is sponsoring the 67th Annual Festival during the week of August 18-26, 2007 in Little Tokyo. This oldest ethnic celebration in the country is a major event for the Japanese American community, and draws a large crowd from all over the City. The event will include a Nisei Week Grand Parade, Ondo Street Dancing, Street Arts Festival, Taiko Gathering, Car Show, and the 12th Annual Tofu Festival, and many art and cultural exhibits and demonstrations. Nisei Week, a non-profit corporation made up of volunteers from the community, is requesting City assistance in closing selected streets in the Little Tokyo area, providing traffic control, cleaning the streets, and using City parking lots during the Festival. Approval of this request will mean that an estimated $4,700 in fees and salary costs will be absorbed by the City. (Contact: Commander Terry Hara: 213/687-7193 fax 213/687-6510).

THEREFORE MOVE that the 2007 Nisei Week celebration, sponsored by the Nisei Week Japanese Festival, be declared a Special Event, and the involved City departments (and any unforeseen City agencies that may be involved) be requested to waive all fees, costs, and requirements, except insurance.

FURTHER MOVE that pursuant to Ordinance No. 150567 relating to temporary street closures, the following be made, subject to the supervision of the Director of the Bureau of Street Services:

Friday, August 17, 2007, 9:00 a.m. to Monday, August 20, 2007 12:30 p.m., for the Tofu Festival:

- San Pedro Street between First and Third Streets

Saturday, August 18, 2007, between 6:00 a.m. to Monday, August 20, 2007, 12:30 p.m., for the Tofu Festival:
* Second Street between Los Angeles Street and Central Avenue
* Astronaut Ellison Onizuka Street between First and Second Streets

Sunday, August 19, 2007, 2:00 p.m. to 10:00 p.m. for the Nisei Week Grand Parade:
* Astronaut Ellison Onizuka Street between First and Second Streets
* First Street between Alameda and Los Angeles Streets
* Los Angeles Street between First and Second Streets
* Second Street between Alameda and Los Angeles Streets
* Central Avenue between First and Fourth Streets
* Third Street between Alameda and San Pedro Streets
* San Pedro Street between Second and Third Streets

Friday, August 24, 2007 9:00 a.m. to Monday, August 27, 2007, 2:30 p.m., for the Street Arts Festival:
* San Pedro Street, between Second and Third Streets.

Sunday, August 26, 2007, 11:00 a.m. to 8:00 p.m., for Obon Street Dancing and Closing Ceremony:

- First Street, between Alameda and San Pedro Streets.

FURTHER MOVE that the Bureau of Street Services be directed to: (1) sweep the affected streets after the Tofu Festival, Parade, Street Arts, and Obon Street Dancing; (2) provide push brooms, trash cans and liner; and (3) furnish the necessary traffic control devices barricades, cones, and flashers for the street closures. Traffic control devices will be provided with the understanding that Nisei Week will pick-up and return them to the Bureau of Street Services.

FURTHER MOVE that the Police Commission be requested to issue a no-fee Special Event Permit Application for the Nisei Week Grand Parade, Car Show, and Street Arts Festival.

FURTHER MOVE that the Department of Transportation be directed to post "Temporary No Parking" signs with appropriate times and date designations on the affected streets and provide traffic control personnel and traffic cones, as required, and assist in closing the streets for the various events.

FURTHER MOVE that the Department of Transportation allow its Parking Lots A, B, C, Mangrove Lot A1753 (located at 414 E Temple Street) be used for the Car Show from Friday, August 17, 2007 at 6:00 p.m. to Saturday, August 18, 2007 at 10:00 p.m.; and allow its Cathedral Place Lot D1755 (located at 237 S Los Angeles Street) be used all day for the Tofu Festival, on Saturday and Sunday, August 18 and 19, 2007.

FURTHER MOVE that Department of General Services allow the employee parking Lot No. 7 located on Judge John Aiso Street, south of Temple Street be used by Nisei Week Festival participants, all day, Saturday and Sunday, August 18 and 19, 2007, and again on Saturday and Sunday, August 25 and 26, 2007; and allow the City Hall East parking P-3 and P-4 be used all day on Saturday and Sunday, August 18 and 19, 2007 and again Saturday and Sunday, August 25 and 26, 2007.
6-29-07 - File to Council and Legislative Processing Clerk for placement on next available Council agenda
7-6-07 - Council Action - Motion ADOPTED
7-13-07 - File in files

From the City Website:
http://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=vcfi.dsp_CFMS_Report&rptid=99&cfnumber=05-1327

CDM

TED TOKIO TANAKA ARCHITECTS

IBI GROUP

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX K

DESCRIPTION OF CONSTRUCTION

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Description of Construction

April 30, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

ONE GATEWAY PLAZA

LOS ANGELES, CA 90012

State Clearinghouse Number: 2009031043

This technical memorandum was prepared by:

CDM
523 West Sixth Street
Suite 400
Los Angeles, CA 90014

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ACRONYMS

EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPB	Earth Pressure Balance
LRT	Light Rail Transit
MSE	Mechanically Stabilized Earth
SEM	Sequential Excavation Method
TBM	Tunnel boring machine
TPSS	Traction power substations
TSM	Transportation Management System
UG	Underground

1.0 INTRODUCTION

This description of construction is based on information known to date about construction of the Regional Connector Transit Corridor project. Construction specifics are rarely known before design. For purposes of the Draft Environmental Impact Statement/Draft Environmental Impact Report DEIS/DEIR, maximum potential impact is analyzed using a reasonable worst case approach to describe the potential impacts. For example, several possible construction staging areas may be analyzed, even though not all of them would be used. This approach means that the environmental analysis can be relied on regardless of which sites are ultimately selected. Analyzing potential "maximum impact," also allows the environmental process to identify potential constraints and mitigation.

Four light rail transit (LRT) construction scenarios are analyzed: the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, and the Fully Underground LRT Alternatives – Variation 1 and Variation 2. A description of the construction activities and locations anticipated for each of these build alternatives is provided in Section 2, Construction Methods Overview.

2.0 CONSTRUCTION METHODS OVERVIEW

The construction of the Regional Connector Transit Corridor project would use conventional construction techniques and equipment currently used in the southern California region and the United States. Depending on the alternative (at-grade emphasis, underground emphasis, or fully underground alternative) more or less at-grade or underground construction would be employed. Major project elements include construction of guideway and trackwork, at-grade station platforms, underground stations, crossovers, tunnels, a grade separation at Alameda Street, pedestrian bridges, installation of specialty system work such as traction power, communications and signaling. These facilities would be constructed in existing geologic conditions ranging from siltstone to alluvium. Some of these facilities would be located in close proximity to existing structures and utilities. The equipment used in construction would include graders, drilling equipment, bulldozers, cranes, concrete trucks, pumping equipment, flat bed trucks, dump trucks to haul dirt, forklift, tunnel boring machines, and other types of excavators such as clamshell, and rail mounted cars to transport spoil material within the tunnels. Spoil materials would be hauled away from the work sites by dump trucks to disposal sites.

Much of the information presented in this section was included in the Conceptual Engineering Design Report prepared for the Regional Connector Alternatives Analysis dated September 2008.

The various work activities would be performed over an estimated four- to five-year construction period. The major elements associated with the build alternatives are anticipated to consist of the following:

At-Grade Emphasis LRT Alternative

- Construction of about 1,600 feet of cut and cover tunnel along Flower Street between the existing 7th Street/Metro Center Station and the open cut portal just south of the proposed station at 2nd and Hope Streets.
- Construction of a cut and cover underground station and crossover along Flower Street between 6th and 5th Streets (Flower/6th/5th Street Station).
- Construction of an open cut underground station at 2nd and Hope Streets.
- Construction of a pedestrian bridge connecting Grand Avenue to the 2nd/Hope Street Station.
- Construction of a connection into the existing 2nd Street tunnel from the 2nd/Hope Street Station area. This would require supporting the existing tunnel, breaking into

the tunnel, and construction of new supports for the openings into the tunnel. Installation of trackwork would be completed inside the existing tunnel to allow one lane of vehicular and two directions of LRT traffic.

- Construction of approximately one mile of at-grade trackwork, demolition of the roadway section being displaced by the LRT trackway, preparation of the track bed, construction of the supporting track slab, and laying of rail, along 2nd, Main, Los Angeles, and Temple Streets to the Little Tokyo/Arts District Station.
- Construction of overhead catenary systems including overhead catenary wire, support brackets, feeder cables, and other electrical components or alternative power distribution systems and street lighting where required.
- Construction of traction power substations (TPSS) adjacent to the right-of-way along at-grade segments, or as part of the station boxes along underground segments. The substations deliver electricity to the overhead catenary systems, and can fit in rooms or standalone buildings of 5,000 square feet or less.
- Construction of two at-grade, high floor station platforms using typical "cast-in-place" or precast concrete construction methods: one on Main Street and one on Los Angeles Street. Both stations would be located just north of 1st Street and would have single direction platforms.
- Construction of an underpass and pedestrian bridge at the intersection of Alameda Street and Temple Streets. The Pedestrian Bridge Type Selection Report will be prepared during the Preliminary Design phase and the type of bridge construction will be identified in that report.
- Modification of the existing Mechanically-Stabilized Earth (MSE) embankment north of the Little Tokyo/Arts District Station, east of Alameda Street.

Underground Emphasis LRT Alternative

- Construction of about 2,200 feet of cut and cover tunnel along Flower Street between the existing 7th Street/Metro Center Station and the proposed 2nd/Hope Street Station.
- Construction of a cut and cover underground station along Flower Street between 4th and 5th Streets (Flower/5th/6th Street Station) and reconstruction of the existing pedestrian bridge.
- Construction of the 2nd/Hope Street Station using either the Sequential Excavation Method (SEM) or the open cut method.

- Construction of a pedestrian bridge connecting Upper Grand Avenue to the 2nd/Hope Street Station.
- Demolition of existing structures at construction staging sites and station entrance areas including the Office Depot at the construction staging/ Tunnel Boring Machine (TBM) launch site north of 2nd Street from Alameda Street to approximately 300 feet west of Central Avenue.
- Construction of temporary retaining walls and portal structures on 2nd Street between Central Avenue and Alameda Street. The portal structure area would also be used for the TBM launch shaft.
- Construction of about 0.65 mile of (twin) tunnel by TBM along 2nd Street from the launch shaft at Central Avenue/2nd Street westward towards 2nd/Hope Street Station.
- Construction of a cut and cover underground station along 2nd Street either between Los Angeles and Main Streets (Los Angeles Street Option) or between Broadway and Spring Streets (Broadway Option).
- Construction of an underpass and pedestrian bridge at the intersection of Alameda and 1st Streets, and construction of a roadway bridge on 1st Street over Alameda Street. The construction would include retaining walls, a pedestrian bridge structure and utility relocations. The Pedestrian and Roadway Bridge Type Selection Report will be prepared during the Preliminary Design phase and the type of bridge construction will be identified in that report.
- Construction of emergency, ventilation, and entrance shafts for 2nd/Hope Street Station.
- Relocation or support-in-place of a major storm drain along 2nd Street.
- Construction of overhead catenary systems, including overhead catenary wire, support brackets, feeder cables, and other components or alternative power distribution systems, and street lighting where required.

Fully Underground LRT Alternative – Variation 1

- The proposed alignment is generally the same as the Underground Emphasis LRT Alternative, except as noted below. Trains would continue to travel underground northeast from under the intersection of 2nd Street and Central Avenue to just east of the intersection of Alameda and 1st Streets, making 1st and Alameda a fully grade separated intersection. Alameda Street would remain at-grade.

- A three-way junction would be constructed underground beneath the 1st and Alameda Streets intersection.

- Construction of two portals. One portal would be constructed along 1st Street east of Alameda (East Portal) to allow a connection to the Metro Gold Line to the east. 1st Street would be widened to the north to accommodate the portal. The widening would initiate at Alameda Street and continue east, tapering down significantly as it crosses Hewitt Street to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

- The second portal would allow for a connection to the Metro Gold Line to the north (north portal to Pasadena). It would be constructed northeast of the existing Little Tokyo/Arts District Station. The portal would be connected to the 1st and Alameda junction by a new tunnel crossing beneath Temple Street and the property proposed for the Nikkei Development (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the existing Little Tokyo/Arts District station and tracks.

- An additional underground station would be constructed within the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue, (2nd Street/Central Avenue Station).

- The 2nd Street Station/Los Angeles Street Option would not be part of this alternative. The 2nd Street Station/Broadway Option would be constructed.

- Reconstruction of the existing embankment from Little Tokyo/Arts District Station to the south US 101 bridge abutment is required for the earlier transition to all underground alternatives.

- Cut and cover section would begin west of Central Avenue to the Office Depot site (also referred to as "Block 6" by the CRS). A center platform station is constructed at this site, with tracks to the north and east proceeding at the same grade.

- North and East portals are wide enough to accommodate out-bound and in-bound trains in a single structure.

Fully Underground LRT Alternative – Variation 2

- This alternative is similar to Variation 1, except as noted below. The cut and cover section would begin west of Central Avenue to the Office Depot site – similar to Variation 1. However, in Variation 2, the tunnels transition to an "over and under" configuration to eliminate tracks crossing at the same elevation within the wye. The 2nd Street/Central Avenue Station would be a side platform station with the northbound platform above the eastbound. The portal structures along 1st Street

would be staggered to allow transition from the upper and lower platform grade to the street.

Elements Common to All Build Alternatives

- Use of building protection measures such as underpinning or ground improvement combined with a geotechnical monitoring program as required to monitor and protect structures identified for such measures.
- Relocation, modification, or protection in place of existing utilities in the path of the planned excavations for street level trackwork, tunnels, portals, and stations. The extent of utility relocation is generally greater for the Underground Emphasis LRT Alternative and Fully Underground LRT Alternative.
- Construction of underground duct banks for electrical power feeds and for signaling/communications systems.
- Removal or relocation of structures at construction staging sites and area around station entrances, where necessary.
- Construction of a connection to the existing 7th Street/Metro Center Station.
- Cut and cover construction on Flower Street between Wilshire Boulevard and 3rd Street.
- Construction of entrances to the underground stations.
- Construction of urban design enhancements within 1,000 feet around stations and portals.
- Construction of surface and subsurface drainage systems.
- Construction of traction power substations with electrical power feeds.
- Installation of traffic signals and train control improvements.
- Construction of trackwork complete with preparation of track bed, track slab, rail, fasteners, and infill concrete in street level areas.
- Installation of the overhead catenary system, which includes wires, poles, support brackets, feeders, and other components. Currently, catenary (two-wire configuration) is being assumed for all of the alternatives, but this may need to be changed during further design phases.

- Construction of station finishes, such as canopies, fare vending equipment, station furniture, ramps, elevators, escalators, landscaping, and all other amenities necessary for a functional station.
- Conducting system integration testing including existing operating lines.
- Conducting simulated revenue operation test runs and final commissioning of the system.

Maps of each build alternative are provided in Figure 3-1 through 3-3.

The tunnel and stations would be constructed with a number of tunneling techniques, depending on the geological and environmental conditions, cost, schedule, alignment, and other factors. The following sections describe the main methods that would be employed in construction of the major elements noted above.

2.1 Cut and Cover Construction and Open-Cut Construction

This is a very common construction method for underground facilities and it entails excavating down from the ground surface. A temporary excavation support is provided to stabilize the ground and excavation is carried out inside the supported area. Temporary concrete decking can be placed over the cut immediately following the first lift of excavation (at about 12 to 15 feet below ground surface) to allow traffic to pass above. Once the deck is in place, excavation and internal bracing would continue to the required depth. Once the desired construction is completed inside the excavated area, the excavation is backfilled and the surface is restored permanently. Temporary excavation support and retaining walls are installed before significant excavation commences. Depending on the depth of excavation and ground conditions, the excavation support could consist of reinforced concrete drilled-in-place piles (tangent pile wall), secant pile wall, sheet pile wall, soldier piles and lagging, or slurry walls. These wall systems are braced with internal struts or supported by tiebacks as the excavation progresses. Tiebacks consist of horizontal or inclined wire strands or steel rods installed in drilled holes in the ground behind the wall. One end of the tieback is secured to the wall and the other end is anchored to stable ground to provide sufficient resistance and to limit ground movement.

Figure 2-1 illustrates a schematic of the sequence associated with a cut and cover construction.

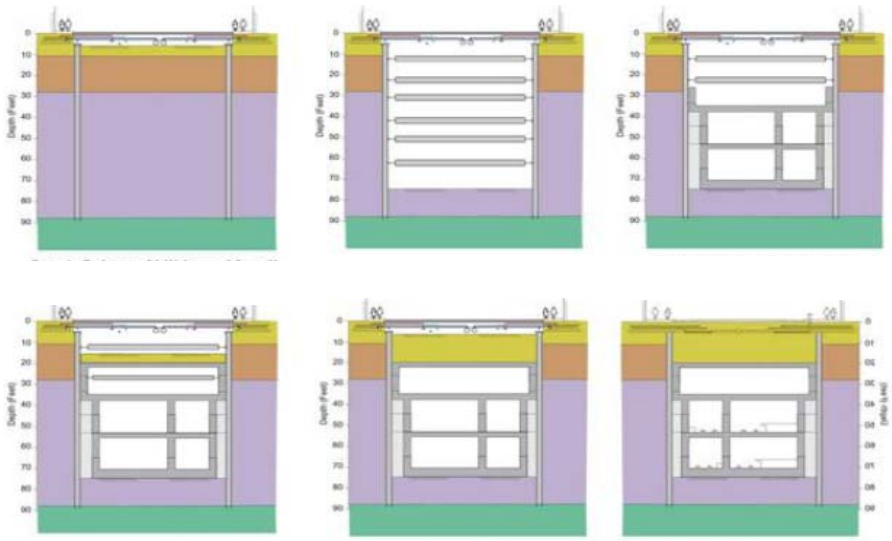

Figure 2-1: Typical Cut and Cover Construction

Open cut construction is similar to cut and cover construction, except temporary decking is not used.

All underground stations and some portions of the tunnel alignment would be constructed using the cut and cover technique, except the 2nd/Hope Street station under the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative, and the 2nd Street/Central Avenue station under the Fully Underground LRT Alternative. The 2nd/Hope Street Station may be constructed using the Sequential Excavation Method (SEM) as will be described in Section 2.3, or the open cut method. Also, the 2nd Street/Central Avenue Station on the Fully Underground LRT Alternative would be constructed using the open cut method.

Many of the existing structures adjacent to the alignment have underground basements that utilized temporary shoring and tieback systems during their original construction. The tiebacks were typically left in place and decommissioned after basement construction, in general accordance with local practice in the City of Los Angeles and southern California. These abandoned/decommissioned tiebacks could be encountered under many parts of Flower Street since the existing deep basement/parking garage used tiebacks to support the original excavations during construction. Steel tieback cables could pose a problem for tunnel

boring machines. The cut and cover method provides greater flexibility and the ability to overcome underground obstructions more easily than the TBM method. These obstructions would potentially be problematic for TBM excavation on Flower Street due to the shallow depths of the tunnels, which is partly why cut and cover construction is planned for this area. On 2nd Street, the TBM tunnel alignment would be deeper, and would pass beneath these underground obstructions. The presence of abandoned tiebacks in conjunction with the shorter length of the alignment between stations favors the cut and cover method along Flower Street for all build alternatives.

Typical cut and cover construction activities used on the Metro Gold Line Eastside Extension project from initial excavation through decking as viewed from the surface are shown on Figure 2-2.

Figure 2-2. Typical Cut and Cover Construction Activities

2.1.1 Construction of Retaining Walls

Cut and cover construction begins with the identification and relocation of utilities in the project area. Once the utilities are relocated, construction of temporary retaining walls would be required to support the soils laterally for excavation of the cut and cover tunnel, the underground stations, and the underpass to the required depths. Depending on the depth of excavation, the ground conditions, the proximity of adjacent structures to the proposed construction, building foundation type, and the potential for construction-induced ground movement, an appropriate temporary support method would be selected. Construction activities related to each potential temporary support method are described below.

2.1.1.1 Soldier Pile and Lagging

Soldier pile and lagging walls are a type of shoring system typically constructed along the perimeter of excavation areas to hold back the soil around the excavated pit. This support system consists of installing soldier beams (vertical steel beams) at regular intervals and placing precast panels or other lagging materials in between the beams to form the retaining wall. Pre-auguring would likely be necessary for installation of the soldier piles, to eliminate pile driving which would cause vibration and noise. Pre-auguring involves drilling holes for each pile from the street surface.

Figure 2-3. Typical Soldier Pile Installation

The construction sequence would start with the contractor occupying one side of the street to install one line of soldier piles while the other side would remain open for traffic. The equipment required for installation of the soldier piles would include drill rigs, concrete trucks, cranes, and dump trucks.

A soldier pile wall is generally used where groundwater is not a hazard or where grouting, or dewatering can be used to mitigate leakage between piles. A typical soldier pile installation and soldier pile and lagging with cross bracing for the Mariachi Station on the Metro Gold Line Eastside Extension project are shown in Figure 2-3.

2.1.1.2 Tangent Pile Walls

Tangent pile walls consist of contiguous drilled piles touching each other. This system can provide a temporary support which can then be converted into a permanent structure. The contiguous wall generally provides a better groundwater seal than the soldier pile and lagging system, but some grouting or dewatering could still be needed to control leakage between piles. Similar to the soldier pile installation described above, the contractor would occupy one side of the street and drill the piles sequentially to form the retaining wall. The equipment required for installation of the tangent pile wall includes drill rigs, concrete trucks, cranes, and dump trucks.

2.1.1.3 Secant Pile Walls

This system is similar to the tangent pile wall but the piles have some overlap, facilitating better water tightness and rigidity. The method consists of boring and concreting the primary piles at centers slightly less than twice the pile diameter. Secondary piles are then bored in between the primary piles, prior to the concrete achieving much of its strength. The completed secant pile wall for the Barnsdall

Figure 2-4. Secant Pile Wall for the Barnsdall Shaft in Hollywood

Shaft in Hollywood for the Red Line project is shown on Figure 2-4.

2.1.1.4 Diaphragm/Slurry Walls

Diaphragm/slurry walls are underground structural elements commonly used for retention systems and permanent foundation walls. Diaphragm walls are constructed inside trenches which are kept open by filling them with bentonite slurry. The structural elements are lowered into the slurry filled trench and concrete is pumped from the bottom of the trench, displacing the slurry. Construction is done in discontinuous sections such that no two adjacent panels are worked on simultaneously. Stop-end pipes are placed vertically at each end of the primary panel to form joints for adjacent secondary panels. Panels are usually 8 to 20 feet long, with widths varying from two to five feet

Slurry wall construction would occur in stages, working on one side of the street at a time. Once the excavation of a section is complete, a steel reinforcement cage is placed in the center of the panel. Concrete is poured in one continuous operation through one or more tremie pipes (pipes that inject concrete below the slurry) that extend to the bottom of the trench. The tremie pipes are extracted as the concrete rises; however, the discharge end of the tremie pipe always remains embedded in the fresh concrete. The slurry that is displaced by the concrete is saved and reused for subsequent panel excavations. As the concrete sets, the end pipes are withdrawn. Similarly, secondary panels are constructed between the primary panels to create a continuous wall.

Diaphragm walls have been constructed in virtually all soil types to provide a watertight support system in addition to greater wall stiffness to control ground movement. Diaphragm walls may in some cases be used as the permanent wall. However, diaphragm walls are generally not adaptable to utility crossings and all utilities crossed by the wall would require relocation. The equipment required for installation of the slurry wall includes clamshell excavator or rotary head, concrete trucks, slurry mixing equipments, cranes, slurry treatment plant, and dump trucks. The bentonite slurry would require disposal after a number of cycles.

2.1.2 Excavation and Decking

After installation of the temporary shoring support system and initial excavation, the contractor would proceed with installation of the deck beams, followed by multiple sequences of excavation and installation of cross bracing or tieback systems. Using pre-cast concrete panels (decking) allows traffic and pedestrian circulation to resume after the initial excavation since they would be installed flush with existing street or sidewalk levels. Deck installation would require lane and night street closures at the cut and cover areas. Concrete decking would be installed in progressive stages. Portal construction would follow similar construction methods as for the station excavations and retaining walls but the portal would remain permanently open and thus no decking would be used during construction.

2.2 Tunnel Boring Machine (TBM)

The portion of the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative to be bored with TBM along 2nd Street would consist of twin tunnels with outside diameters of up to about 22 feet. TBMs are large-diameter horizontal drills that continuously excavate predominantly circular tunnel sections. Different machine types are designed for different geological conditions. The excavated materials are removed through the tunnel using hopper type rail cars or by a conveyor system. As the machine advances, both the ground in front of the machine and the hole it creates are continually supported by the machine shield and pre-cast concrete tunnel liners. This method creates a tunnel with little or no disruption at the surface, and is especially suitable for creating a circular opening at greater depths that would not be practical for cut and cover construction. When the concrete tunnel liner segments have rubber gaskets between them, water is prevented from entering the tunnel and excavation can proceed below the ground water level.

The TBM requires a launching shaft to start the tunneling operation. The launching shaft for the TBM would be planned near the east end of the project, on 2nd Street between Central Avenue and Alameda Street. From there, the machine would bore westward along 2nd Street towards the 2nd/Hope Street Station site, passing through the proposed 2nd Street Station area at either Broadway or Los Angeles Streets. The TBM would be dismantled and retrieved through a vertical shaft created by cut and cover method adjacent to the 2nd/Hope Street Station. It would then be transported back to the launching shaft, reassembled, and repeat its journey for the second twin tunnel. Alternatively, two TBMs could be launched at the same time.

Tunnel driving operations consist of a series of activities. The TBM is advanced a small distance (typically 4 to 5 feet) by means of hydraulic jacks, which push against the previously installed tunnel lining ring. The jacks are retracted and another tunnel lining ring is erected. The machine is advanced and the process is repeated until the entire length of tunnel has been excavated. The pre-cast concrete liners are fabricated off-site and delivered by truck to the site. Segment loads are estimated to be 6 to 10 truck loads per day for the duration of tunneling based on an average excavation rate of 30 to 50 feet per day. Several days' production of segments is generally stored at the worksite to allow continuous tunneling. Tunneling operation is typically continuous, occurring seven days a week with two 10-hour shifts per day.

Excavated material (spoils) is taken to the rear of the TBM by a screw conveyor and deposited on a conveyor belt. The conveyor belt drops the spoils into mine cars, which are then taken back to the launching shaft by a locomotive operating on temporary rail tracks fastened to the bottom of the tunnel. At the shaft, the mine cars are lifted out by a crane or hoist and the material is loaded into trucks for off-site disposal or temporarily stockpiled at the site for later disposal. Alternatively, belt conveyor systems could be used to transport spoils, through the tunnel and/or from the shaft to the surface.

On the Metro Gold Line Eastside Extension project, Earth Pressure Balance (EPB) TBMs were successfully used to mine about 1.4 miles of tunnel, comparable in length and diameter to the proposed LRT build alternatives. The excavation method for EPB shield TBM is based on the principle that tunnel face support is provided by the excavated spoil itself. Tunneling for the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternatives would encounter both alluvial soils, where the profile is relatively shallow, and weathered siltstone/shale bedrock of the Fernando or Puente Formations. Groundwater may be perched on the Fernando Formation or other clay layers. Gassy tunneling conditions are also anticipated based on previous Metro studies for the Red Line and adjacent building investigations. EPB TBMs are generally well suited for mining in soft ground with these variable soil, groundwater, and methane conditions and may also be adapted for harder materials.

The excavated soil in an EPB TBM is contained in a chamber behind the cutting wheel by a bulkhead as shown in Figure 2-5. The "earth pressure" in this chamber balances the external soil and groundwater load which in turn minimizes movement of the ground in front of the TBM. The screw conveyor restricts the rate of soil removed from the chamber to maintain the earth pressure. Non-toxic, biodegradable conditioners added to the soils in the chamber improve material flow and handling characteristics.

For the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative, an alternative tunnel boring approach is possible that would use a single, larger diameter tunnel instead of two smaller diameter tunnels. A single large TBM could be used to bore one tunnel big enough to contain both tracks and possibly the station platforms. Further studies will determine if such an approach would be feasible for the Regional Connector.

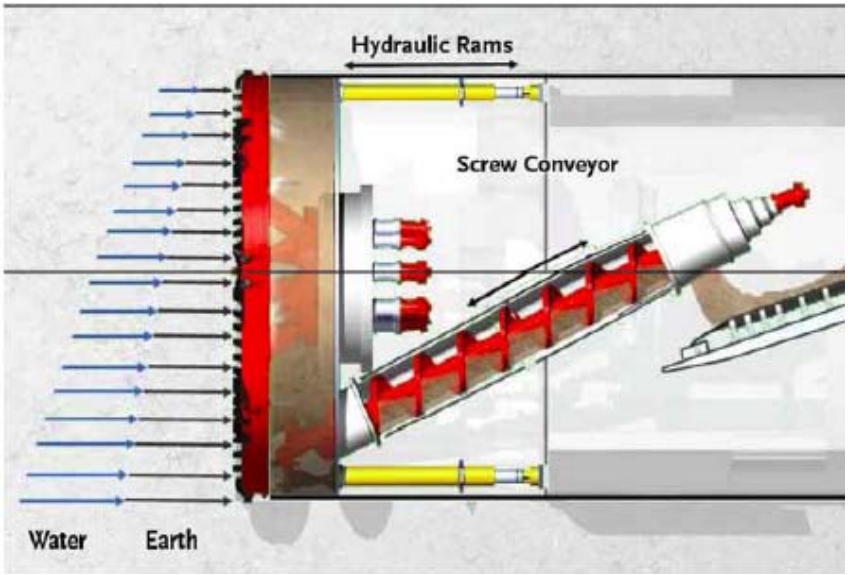

Figure 2-5: Schematic of EPB TBM

2.3 Sequential Excavation Method (SEM)

Because of the depth of the 2nd/Hope Street Station for the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternatives, Sequential Excavation Method (SEM) construction may be considered as an alternative to the open cut method. The open cut technique may be less cost effective than SEM due to the station depth. Application of the SEM would have less surface interruption since the excavation would be performed mostly underground and accessed via a vertical shaft. Sequential excavation and support methods call for the ground to be excavated incrementally in small areas and supported with steel supports advanced beyond the opening and shotcrete (sprayed concrete) as shown on the schematic diagram on Figure 2-6. Analysis of both open cut and SEM will be undertaken for the 2nd/Hope Street Station.

Generally, SEM is applied for large non-circular tunnels or short tunnels where TBMs are not economical or feasible. All operations would be conducted from an access shaft for spoils removal and future entrance(s). The sequence of excavation for the SEM method would be determined during design stage and controlled and modified as needed during construction based on actual conditions encountered. After all the predetermined sequence areas are excavated and supported as shown on Figure 2-6, the larger area of the station or tunnel would be completed. Whereas TBMs can only excavate a fixed (circular) shape, the sequential method permits a tunnel of horseshoe or sub-rounded shape. This construction technique is considered in special instances where the planned depth, shape, or length of the tunnel may not be cost effective using more traditional methods. In addition to the 2nd/Hope Street Station, SEM is also under consideration for approximately 350 feet of the curved portion of the alignment west of the station.

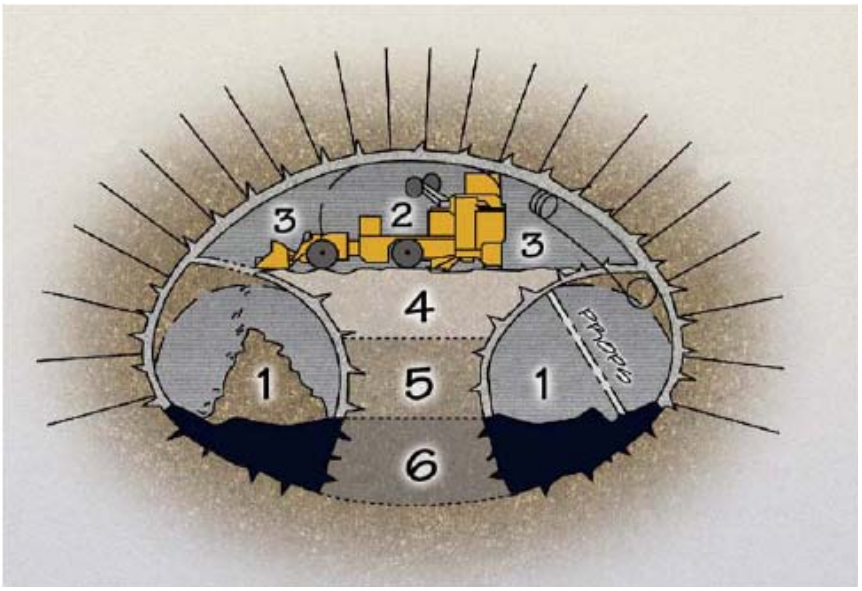

Figure 2-6: Typical SEM Excavation Sequence

3.0 CONSTRUCTION SCENARIOS

This section outlines the details of the preliminary construction scenario for the Build Alternatives. There would be no major construction activities under the No Build and TSM Alternatives, and no major adverse construction effects are anticipated. Accordingly, the focus of the construction impacts analysis is on the At-Grade Emphasis LRT, the Underground Emphasis LRT, and Fully Underground LRT Alternatives – Variations 1 and 2.

All alternatives include the construction of new facilities, operations, and maintenance. Key site conditions that would likely affect construction activities are also discussed. Conditions and elements common to both alternatives are described once in the general scenario below. Other elements unique to each alternative are addressed in the specific scenario description.

3.1 General Construction Scenario

The construction duration for either of the build alternatives would be approximately a four- to five-year period. Surface streets would be impacted for approximately 24 to 48 months.

LRT construction could begin simultaneously at several locations along the selected route to accommodate areas requiring lengthy construction times, such as tunnels, underground stations, and grade separation segments, so that the various segments can be brought to completion at approximately the same time.

Many contractors specializing in various methods of construction would be working on the project for the full duration of construction. Construction would involve the methods most suitable for each segment of the project including cut and cover/open cut excavation for tunnel and stations, potential use of SEM for the 2nd/Hope Street Station (and possibly a portion of the tunnel to the west) on the Underground Alternatives, and TBM tunneling for portions of the Underground Alternatives beneath 2nd Street.

In some areas, it may be necessary to use protective measures to support existing building foundations before tunnel or station excavation, to provide structures with adequate rigidity and support, and to reduce potential for damage caused by construction-induced movement. Protective measures are described in Section 4.3.

To provide an understanding of the likely steps involved, the anticipated construction activities are described below. This potential construction sequence does not imply that the construction activities would be performed in this order or in a linear sequence. Actual construction is a complex process with many simultaneous activities taking place. Some of the construction methods and sequences would be at the discretion of the construction contractor.

3.1.1 Utility Relocation and Street Closures

The first step in cut and cover construction would involve closing off approximately half of the street in the affected area using barriers and sidewalk sheds, or street and sidewalk protection. Approximately two to three blocks would be closed at a time and this would occur in stages, alternating between the opposite sides of the street.

After closure of portions of the streets, the contractor would relocate, modify, or protect in place all existing utilities and underground structures that could conflict with excavations for street level trackwork, tunnels, portals, station structures, and the grade separations. Shallow utilities, such as maintenance holes or pull boxes, which would interfere with guideway excavation work, would require relocation. Utilities would be modified and moved away from the proposed facilities. Temporary interruptions in services (several hours) could be experienced during re-location or re-routing of utilities. Depending on the extent of utility relocation work, the estimated construction durations are two to four months for a two-block segment of construction activities. Some of the major utilities (greater than 18-to 24-inch diameter) such as the storm drain on 2nd street and the 72-inch storm drain on Flower Street may have more complex construction sequences and schedules for relocations and/or utility supports.

The age of the downtown area and the existing narrow streets, in combination with the locations of the proposed stations, station entrances, and other appurtenant structures means that, in many instances, conflicting utilities would need to be relocated. Utilities, such as high pressure water mains and gas lines, which could pose a potential hazard during cut and cover and open cut station construction, and which are not to be permanently relocated away from the work site, would be re-routed temporarily to prevent accidental damage to the utilities, construction personnel, and the adjoining community.

3.1.2 Other Activities Prior to Major Construction

In addition to utilities, other potential obstructions along the proposed alignments have been identified. These include the former Pacific Electric tunnel perpendicular to the Flower Street alignment approximately 150 feet south of the intersection of Flower and 4th Streets, the pier columns for the 4th Street bridge and ramps, and the caisson foundations associated with Grand Avenue bridge. Further research is needed to determine whether these obstructions would need to be relocated, or whether the proposed alignments would need to be adjusted to avoid the obstructions. Any necessary relocations would need to be performed before tunnel construction begins.

Other preconstruction activities would also be carried out at each site prior to major excavation at stations and tunnels. Documentation of existing conditions prior to construction is common practice to establish a reference to measure ground movements. There are a variety of monitoring systems that could be installed. For the most part, these are

non-intrusive activities such as surveying and photo and video documentation. However, in some areas, more elaborate measurement systems involving drill rigs may be installed. Some activities like potholing or installation of geotechnical instrumentation may require temporary, partial street closures and the use of drilling equipment and excavators.

Site clearance and demolition of existing structures at the construction staging areas would also be necessary before major construction can begin.

Traffic detours and truck routes would be required during construction. When construction would affect existing streets, traffic control measures would be implemented to help mitigate the effects of construction activities while maintaining reasonable construction progress. This may involve temporary, partial or full street closures, full or partial sidewalk closures, and detour routes. Traffic management plans would be prepared during subsequent design phases in coordination with the agencies involved to minimize disruption to traffic during construction.

3.1.3 Construction Staging Areas

Temporary easements, typically a portion of the sidewalk, traffic lanes, and parking areas would be required at various locations for construction staging. Construction within the streets is also envisioned where no off-street area can be identified for worksites and/or access to underground excavations.

Prior to underground construction, work sites and staging areas may require clearing and building demolition in some areas. Demolition equipment typically includes bulldozers and loaders. The street alongside the stations and track areas, supplemented by adjacent off-street areas, would be used for construction staging and for equipment and material storage.

The following is a list of anticipated staging areas that may be used during At-Grade Emphasis LRT Alternative construction. The anticipated footprints of each area are delineated in the Draft Construction Staging Sites drawings and in
Figure 3-1:

- Flower/6th/5th Street Station
- 2nd/Hope Street Station
- Main/1st Street Station (southbound)
- Main/Los Angeles Street Station (northbound)
- Temple and Alameda Junction

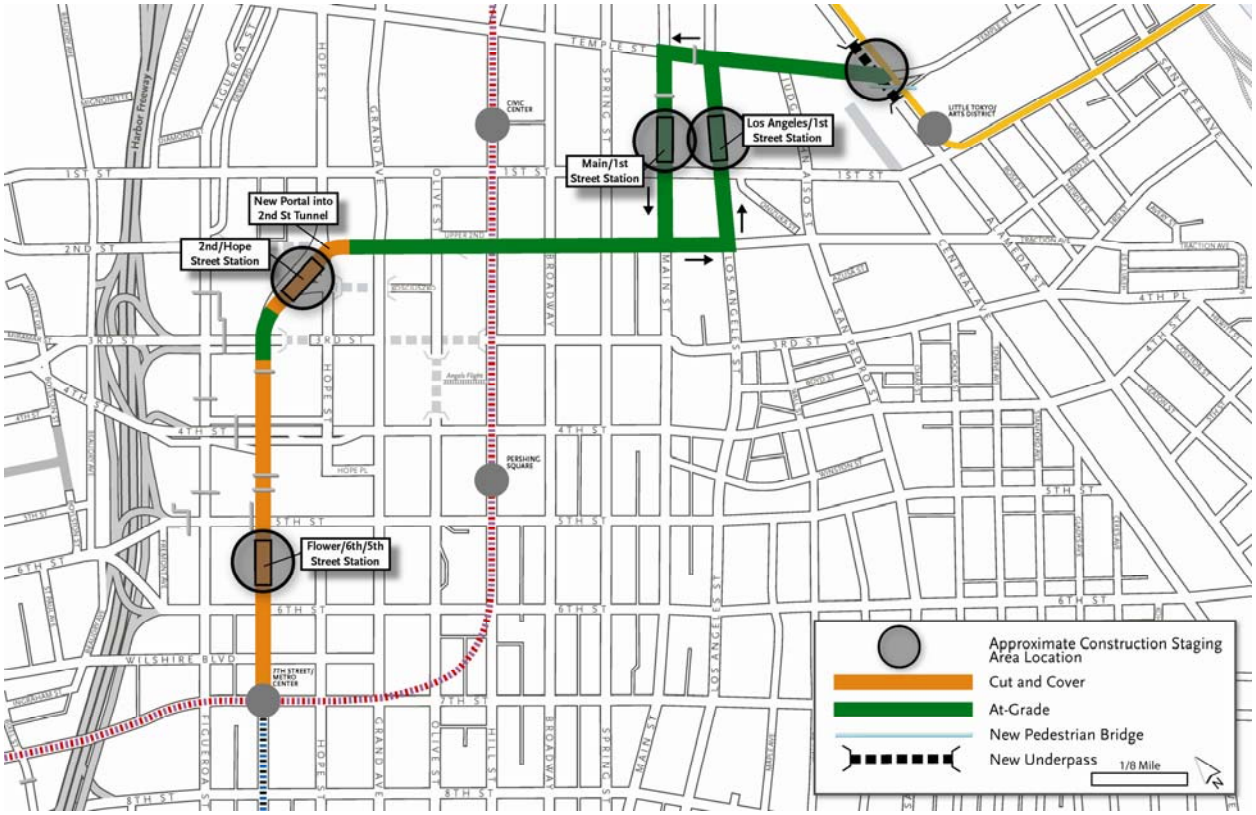

Figure 3-1. At-Grade Emphasis LRT Alternative – Construction Staging Site Locations and Construction Methods

For the Underground Emphasis and Fully Underground LRT Alternatives, the following is a list of possible staging areas. The footprints of the anticipated sites are shown in the Draft Construction Staging Sites drawings and in Figure 3-2 and Figure 3-3:

- Flower/5th/4th Street Station
- 2nd/Hope Street Station
- 2nd Street Station (Los Angeles Street Option, Underground Emphasis Alternative only)
- 2nd Street Station (Broadway Option)
- 1st and Alameda Junction

For excavated materials, haul routes to disposal sites would be predetermined by agreement with local authorities before construction. They would follow streets and highways forming the safest or shortest route with the least adverse effect on traffic, residences, and businesses.

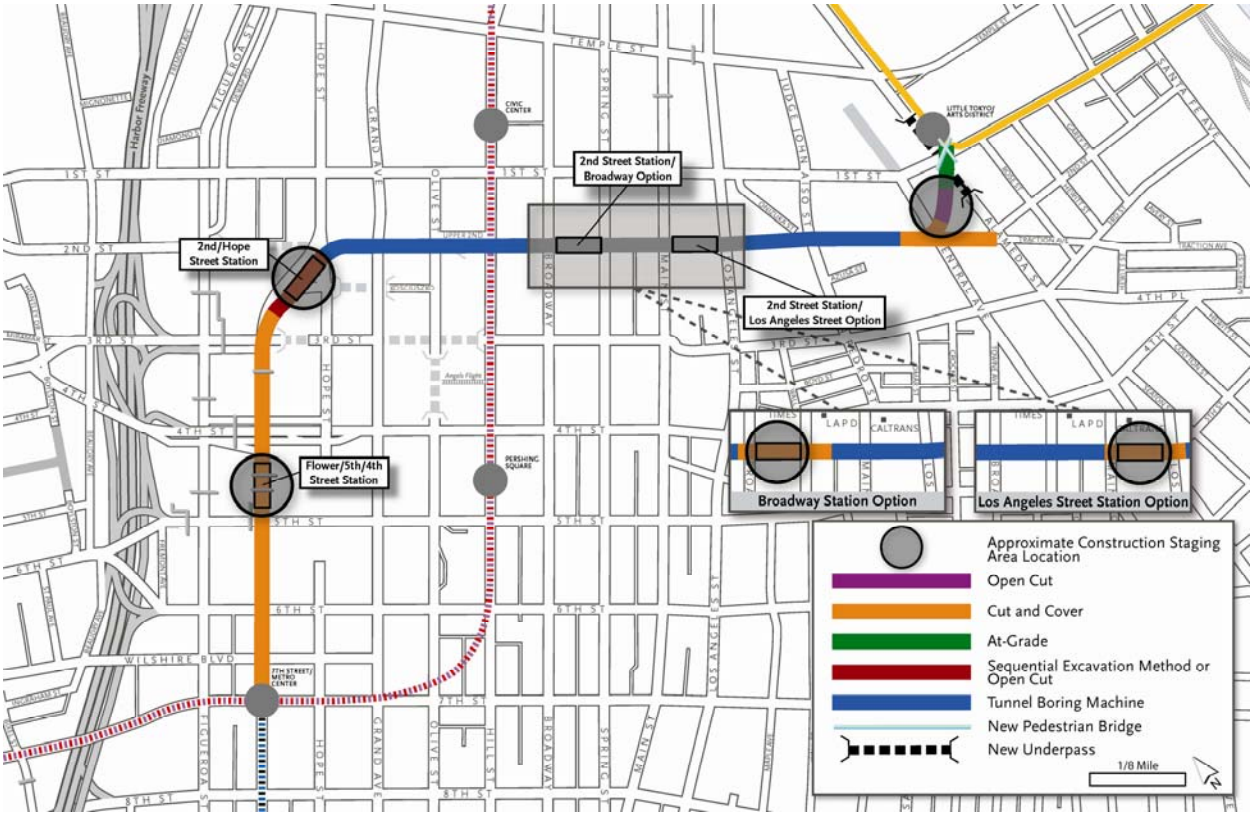

Figure 3-2. Underground Emphasis LRT Alternative –
Construction Staging Site Locations and Construction Methods

Figure 3-3. Fully Underground LRT Alternatives – Construction Staging Site Locations and Construction Methods

Table 3-1, Table 3-2 and Table 3-3 provide a summary of the construction activities for the At-Grade Emphasis Underground Emphasis, and Fully Underground LRT Alternatives, respectively. These tables summarize the type of activity, the estimated duration for each activity, the type of equipment anticipated, the quantities of earth removal that may be transported, the estimated truck trips per day, and the estimated number of workers for each activity.

Table 3-1. Construction Activity Summary for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	6-12	X	X	X	X				<1,000	<500	10	20-30
Flower Street Cut and Cover Tunnel	24-48	X	X	X	X	X	X	X	70,000	12,000	20-30	20-30
Flower/6th/5th Cut and Cover Station	24-48	X	X	X	X	X	X	X	50,000	9,500	20-30	20-30
Portal on Flower South of 3rd	12-18	X	X	X	X	X	X	X	20,000	3,500	20-30	20-30
Portal northeast of Flower and 3rd	TBD	X	X	X	X	X	X	X	10,600	4,000	20-30	20-30
2nd/Hope Street Open Cut Station	24-28	X	X	X	X	X	X	X	55,000	17,500	20-30	20-30
New Portal into 2nd Street Tunnel	TBD	X	X	X	X	X	X	X	40,000	11,700	TBD	TBD
Surface Trackwork	12-18	X	X	X	X	X		X	10,000	8,000	5-10	5-10

Table 3-1. Construction Activity Summary for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Main and Los Angeles At-Grade Stations	12-18	X	X	X	X	X	X	X	<1,000	1,500	5-10	5-10
Temple and Alameda Junction	24-36	X	X	X	X	X	X	X	65,000	12,000	15-20	20-30
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 3-2. Construction Activity Summary for the Underground Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	12-18	X	X	X	X				1,000	1,000	10-20	20-30
Flower Street Cut and Cover Tunnel	24-48	X	X	X	X	X	X	X	280,000	27,750	20-30	20-30
Flower/5th/4th St Cut and Cover Station	24-48	X	X	X	X	X	X	X	105,000	26,000	15-20	20-30
Cut and Cover Approach to 2nd/Hope Street Station	24-48	X	X	X	X	X	X	X	30,000	5,500	15-20	20-30
2nd/Hope Street Station (SEM)	24-48	X	X	X	X	X		X	50,000	8,250	10-15	20-25
2nd/Hope Street Station (Open Cut)	24-48	X	X	X	X	X	X	X	147,500	17,250	20-30	20-30
2nd Street TBM Tunnel	24-48	X	X	X	X	X		X	120,000	Precast Segments	35-70	15-20

Table 3-2. Construction Activity Summary for the Underground Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
2nd Street Cut and Cover Station (Broadway Option)	24-48	X	X	X	X	X	X	X	200,000	47,250	15-20	15-20
2nd St. Cut and Cover Station (Los Angeles Street Option)	24-48	X	X	X	X	X	X	X	175,000	48,500	15-20	15-20
Portal	12-24	X	X	X	X	X	X	X	20,000	7,500	5-10	15-20
TBM Launch Site	2-4	X	X	X	X	X	X	X	20,000	N/A	5-10	15-20
1st and Alameda Junction	24-36	X	X	X	X	X		X	65,000	12,000	15-20	20-30
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 3-3. Construction Activity Summary for Fully Underground LRT Alternative – Little Tokyo Variation 1

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	12-18	X	X	X	X				1,000	1,000	10-20	20-30
Flower Street Cut and Cover Tunnel	24-48	X	X	X	X	X	X	X	280,000	27,750	20-30	20-30
Flower/5th/4th St Cut and Cover Station	24-48	X	X	X	X	X	X	X	105,000	26,000	15-20	20-30
Cut and Cover Approach to 2nd/Hope Street Station	24-48	X	X	X	X	X	X	X	30,000	5,500	15-20	20-30
2nd/Hope Street Station (SEM)	24-48	X	X	X	X	X		X	50,000	8,250	10-15	20-25
2nd/Hope Street Station (Open Cut)	24-48	X	X	X	X	X	X	X	147,500	17,250	20-30	20-30
2nd Street TBM Tunnel	24-48	X	X	X	X	X		X	120,000	Precast Segments	35-70	15-20

Table 3-3. Construction Activity Summary for Fully Underground LRT Alternative – Little Tokyo Variation 1

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
2nd Street Cut and Cover Station (Broadway Option)	24-48	X	X	X	X	X	X	X	200,000	47,250	15-20	15-20
Cut and Cover Tunnel from TBM to 2nd/Central Avenue Station	12-24	X	X	X	X	X	X	X	20,000	TBD	15-20	15-20
2nd /Central Avenue Open Cut Station	18-36	X	X	X	X	X	X	X	55,000	TBD	20-30	15-20
Open Cut/Cut and Cover from 2nd/Central Avenue to East Portal	12-24	X	X	X	X	X	X	X	45,000	TBD	15-20	15-20
Open Cut/Cut and Cover from 2nd/Central Avenue to North Portal	12-24	X	X	X	X	X	X	X	95,000	TBD	15-20	15-20
TBM Launch Site	2-4	X	X	X	X	X	X	X	20,000	TBD	5-10	15-20
Improvements near 1st and Alameda Streets	12-24	X	X	X	X	X		X	N/A	TBD	15-20	15-20
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 3-4. Construction Activity Summary for Fully Underground LRT Alternative – Little Tokyo Variation 2

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
Pre-Construction	4-6						X	X	N/A	N/A	5	10-20
Site Preparation	12-18	X	X	X	X				1,000	1,000	10-20	20-30
Flower Street Cut and Cover Tunnel	24-48	X	X	X	X	X	X	X	280,000	27,750	20-30	20-30
Flower/5th/4th St Cut and Cover Station	24-48	X	X	X	X	X	X	X	105,000	26,000	15-20	20-30
Cut and Cover Approach to 2nd/Hope Street Station	24-48	X	X	X	X	X	X	X	30,000	5,500	15-20	20-30
2nd/Hope Street Station (SEM)	24-48	X	X	X	X	X		X	50,000	8,250	10-15	20-25
2nd/Hope Street Station (Open Cut)	24-48	X	X	X	X	X	X	X	147,500	17,250	20-30	20-30
2nd Street TBM Tunnel	24-48	X	X	X	X	X		X	120,000	Precast Segments	35-70	15-20

Table 3-4. Construction Activity Summary for Fully Underground LRT Alternative – Little Tokyo Variation 2

Activity	Duration (months)	Construction Equipment							Soil (CY)	Concrete (CY)	Truck Trips per Day	Workers per Day
		Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed				
2nd Street Cut and Cover Station (Broadway Option)	24-48	X	X	X	X	X	X	X	200,000	47,250	15-20	15-20
Cut and Cover Tunnel from TBM to 2nd/Central Avenue Station	12-24	X	X	X	X	X	X	X	25,000	TBD	5-10	15-20
2nd/Central Avenue Open Cut Station	18-36	X	X	X	X	X	X	X	80,000	TBD	15-20	15-20
Open Cut/Cut and Cover from 2nd/Central Avenue to East Portal	12-24	X	X	X	X	X	X	X	90,000	TBD	20-30	15-20
Open Cut/Cut and Cover from 2nd/Central Avenue to North Portal	12-24	X	X	X	X	X	X	X	125,000	TBD	15-20	15-20
TBM Launch Site	2-4	X	X	X	X	X	X	X	20,000	TBD	5-10	15-20
Improvements near 1st and Alameda Streets	12-24	X	X	X	X	X		X	N/A	TBD	15-20	15-20
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

3.2 At-Grade Emphasis LRT Alternative

Construction of the At-Grade Emphasis LRT Alternative is anticipated to consist of the following major activities:

- Relocation and protection of major utilities. The largest utility that would be encountered is the 72-inch storm drain between 4th and 5th Street. A list of the major utilities that could be affected and potential solutions is presented in Table 3-5.

Table 3-5. At-Grade Emphasis LRT Alternative – List of Affected Utilities

Utilities Affected	Feasible Alternatives
72-inch storm drain (SD) beneath Flower Street	Move SD to the west and reconnect with existing pipe
SD lateral that connects to the 72-inch SD across the intersection of 4th Street and Flower Street is assumed to be in conflict at the portal. Diameter of lateral is unknown	Being reviewed
18-inch SD lateral that connects a Catch Basin (CB) to the 72-inch SD is in conflict with the portal.	Reconnect this CB across 4th Street to the proposed 15-inch SD.

- Cut and cover construction of a connection to the existing 7th Street/Metro Center Station Blue Line tail tracks near the intersection of Flower/6th Streets.
- Construction of approximately 200 feet of cut and cover tunnel at 0.3 percent slope near the intersection of Flower and 6th Streets from the connection point to the existing 7th Street/Metro Center Station and the proposed Flower/6th/5th Station.
- Construction of a cut and cover station on Flower Street between 6th and 5th Streets. The station would be constructed in front of the City National Tower complex. Invert elevation at the station varies from 235 to 238 with a 0.95 percent slope.
- Construction of a cut and cover tunnel at 6 percent slope along Flower Street from the Flower/6th/5th Station to the portal just south of 3rd Street.
- At-grade track construction near the intersection of Flower and 3rd Street. Construction of a portal structure at the northeast corner of Flower and 3rd Streets and open cut

tunnel for approximately 200 feet to the 2nd/Hope Street Station. The portal structure would vary in height from approximately 10 feet to about 30 feet.

- Construction of an open cut station at 2nd and Hope Streets with an entrance to serve the Bunker Hill area. The station structure would be approximately 600 feet long and 42 feet high.

- Construction of a pedestrian bridge from Upper Grand Avenue to the 2nd/Hope Street Station.

- Cut and cover construction of a connection into the existing 2nd Street Tunnel. Connection to the existing tunnel would require major construction work, including installation of the shoring system for soil removal, removal of soil load above the 2nd Street tunnel crown (~ 45ft), reinforcement of the tunnel structure and installation of supporting elements at the location of the new openings. This could require full or partial tunnel closures and closures of the street above during the construction period.

- Installation of tracks and overhead catenary systems in the eastern 800 feet of the 2nd Street tunnel and cut and cover tunnel area. The construction of trackwork includes preparation of track bed, track slab, rail installation, fasteners, and infill concrete. The overhead systems include wires, support brackets, feeders, and other components or alternative power distribution systems, and street lighting where required.

- Construction of an at-grade alignment on the south side of 2nd Street between the 2nd Street tunnel and Main Street. At Main Street, northbound track continues on 2nd Street to Los Angeles Street, while the southbound track curves north onto Main Street. This segment would require the same installation of tracks and overhead catenary systems as described for the 2nd Street tunnel.

- Installation of a single track for the southbound traffic on Main Street. The southbound single track alignment would turn from the south side of 2nd Street to the east side of Main Street. It would continue north on Main Street and turn east onto East Temple Street. This segment would require installation of tracks and overhead catenary systems as described previously. In addition, the at-grade overhead system would be supported on poles, which are typically spaced approximately 100 to 200 feet apart. A typical pole installation for the Metro Gold Line Eastside Extension project is shown on Figure 3-4.

- Construction of the Main Street southbound station. A single platform station would be located on the east side of the Main Street north of 1st Street. Construction of high floor station platforms would be completed using typical “cast-in-place” or pre-cast concrete construction methods.

- Installation of a northbound single track on Los Angeles Street from 2nd Street to Temple Street. The northbound single track alignment would continue on south side of 2nd Street between Main Street and Los Angeles Street, before turning north onto the east side of Los Angeles Street. It would then continue on Los Angeles Street and turns east onto Temple Street. This stage would require installation of tracks and overhead catenary systems including poles, overhead catenary wires, support brackets, feeders, and other components as needed.

- Construction of the Los Angeles Street northbound station. A single platform station would be located on the east side of Los Angeles Street just north of 1st Street. Construction of high floor station platforms would be completed using typical "cast-in-place" or pre-cast concrete construction methods.

- Construction of a connection to the existing Metro Gold Line tracks at Temple and Alameda Streets. The southbound and northbound single tracks would meet at the corner of Temple and Los Angeles Streets. The double tracks would continue east on Temple Street to San Pedro Street, after which they continue to the south side of Temple Street for approximately 300 feet before reaching a 3-way (wye) junction just west of Alameda Street. Tracks would branch to the north and south at this point to meet the Metro Gold Line tracks just north of the little Tokyo Station. A portion of the Gold Line is supported on mechanically stabilized earth (MSE) embankment from north of Temple Street to the US 101 bridge. The embankment would require some modification and reconstruction to accommodate the Regional Connector at the junction with Alameda Street.
- Construction of an underpass at the intersection of Temple and Alameda Streets that would carry Alameda Street through traffic beneath Temple Street and the new rail junction.
- Construction of a pedestrian bridge above the Alameda underpass that spans the intersection of Alameda and Temple Streets. Due to its irregular shape, the bridge substructures would likely be constructed at several spots in and around the intersection and be integrated into the Alameda underpass structure. Bridge construction would involve heavy construction equipment including crane(s) for erection of the superstructure.
- Construction of urban design enhancements within 1,000 of the centerlines of the stations and portals.

Figure 3-4. Typical Drilling and Installation of Pole

3.3 Underground Emphasis and Fully Underground LRT Alternatives

Construction of the Underground Emphasis and Fully Underground Alternatives would be similar with the exception of the sections east of Central Avenue. The major similar activities are anticipated to consist of the following:

- Relocation and protection of major utilities including the 72-inch storm drain between 4th and 5th Street and the 11.5 feet by 13 feet rectangular reinforced concrete storm drain along 2nd Street. A list of major utilities that could be affected and potential solutions are presented in Table 3-6 and Table 3-7.
- Construction of the tunnel and portal access to the tunnels would require taking the property bounded by 1st and 2nd Streets between Central Avenue and Alameda Street. The existing Office Depot building would be demolished, cleared, and grubbed. Removal of any asbestos in the demolition debris would be addressed in accordance with local standards. Temporary construction trailers would be brought in for the work site offices. This activity would involve dozers and other equipment needed for demolition and site preparation.
- Site clearance and demolition of existing structures within the construction staging areas.
- Cut and cover construction of a connection to the existing 7th Street/Metro Center Station Blue Line tail tracks.

Table 3-6. Underground Emphasis LRT Alternative– List of Affected Utilities

Utilities Affected	Feasible Alternatives
72" SD beneath Flower Street is potentially in conflict with stair ways/elevators of proposed station.	Relocate to the west of the station and reconnect with existing line.
24" SD in conflict with Emergency Exit Shaft at 2nd/Hope Street Station shown on current proposed drawing	Move location of Emergency Shaft (being evaluated by design team)
Reinforced Concrete Box Culvert along 2nd Street at proposed station limits	The existing box culvert has dimension of 11.5 by 13 feet with an invert within 20 feet of the existing grade. The culvert would be in conflict with the Underground Emphasis LRT

Table 3-6. Underground Emphasis LRT Alternative– List of Affected Utilities	
Utilities Affected	**Feasible Alternatives**
and near the portal	Alternative. Methods consist of maintaining the culvert on 2nd Street and temporarily supporting the affected culvert within the cut and cover construction for the station and near the portal. The temporary support could consist of hanging/suspending the culvert at the top of the temporary decking during station construction. Another alternative would be to replace the concrete box culvert with temporary multiple HDPE pipes with equivalent capacity and suspending them at the temporary decking during station construction. Similarly, the affected portion near the portal could be temporarily suspended near the top of the open cut portal. The temporary measures would be replaced with a permanent box culvert at the end of tunnel construction. If relocation to 3rd Street is preferred, it could take 12 to 18 months. Either partial/full closure of 3rd Street and re-routing of traffic to adjacent streets would be required.
75 inch Storm Drain Alameda Street	TBD

Table 3-7. Fully Underground LRT Alternatives– List of Affected Utilities	
Utilities Affected	**Feasible Alternatives**
72" SD beneath Flower Street is potentially in conflict with stair ways/elevators of proposed station.	Relocate to the west of the station and reconnect with existing line.
24" SD in conflict with Emergency Exit Shaft at 2nd/Hope Street Station shown on current proposed drawing	Move location of Emergency Shaft (being evaluated by design team)
Reinforced Concrete Box Culvert along 2nd Street at proposed station limits and near the portal	The existing box culvert has dimension of 11.5 by 13 feet with an invert within 20 feet of the existing grade. The culvert would be in conflict with the Underground Emphasis LRT Alternative. Methods consist of maintaining the culvert on 2nd Street and temporarily supporting the affected culvert within the cut and cover construction for the station and near the portal. The

Table 3-7. Fully Underground LRT Alternatives– List of Affected Utilities	
Utilities Affected	**Feasible Alternatives**
	temporary support could consist of hanging/suspending the culvert at the top of the temporary decking during station construction. Another alternative would be to replace the concrete box culvert with temporary multiple HDPE pipes with equivalent capacity and suspending them at the temporary decking during station construction. Similarly, the affected portion near the portal could be temporarily suspended near the top of the open cut portal. The temporary measures would be replaced with a permanent box culvert at the end of tunnel construction. If relocation to 3rd Street is preferred, it could take 12 to 18 months. Either partial/full closure of 3rd Street and re-routing of traffic to adjacent streets would be required.

- Construction of approximately 760 feet of cut and cover tunnel along Flower Street between the existing 7th Street/Metro Center Station and the Flower/5th/4th Station. The invert of cut and cover tunnel is at approximately elevation +236 feet.

- Construction of the Flower/5th/4th Station between 5th and 4th Streets. The station would be constructed using the cut and cover method. The station invert is at approximate elevation of +232 feet with existing ground at approximately +292 feet. The station would be located adjacent to the underground parking structure of the Bonaventure Hotel as well as the parking structure to the east (CitiGroup Building). Construction of this station would require relocation of the existing 72-inch reinforced concrete storm drain pipe between 5th and 4th Streets.

- Reconstruction of the existing pedestrian bridge across Flower Street just north of 5th Street.

- Cut and cover construction along Flower Street from the 4th Street to north of 3rd Street to the 2nd/Hope Street Station. This segment of cut and cover would include both straight and curved segments. The construction of straight portion of the cut and cover may impact the 4th Street overpass bridge foundation and mitigation measurements could be required to reinforce this overpass bridge foundation. There is also a possibility that the curved tunnel section could be constructed by SEM. The invert of the cut and cover tunnel is at approximately elevation +236 feet.

- Construction of the 2nd/Hope Street Station with the open cut method. The station is approximately 405 feet long. Based on preliminary design drawings, the station is over 100 feet below grade with station invert elevation at 230 feet and the existing ground surface elevation between 335 and 360 feet. It is anticipated that a portion of the 2nd/Hope Street Station construction would likely be performed under groundwater. The station design would also include at least three shafts for entrance, emergency exit, and ventilation purposes. The station would be constructed in close proximity to a chilled water plant with a deep caisson foundation. Because of the depth of 2nd/Hope Street Station, SEM is being considered in addition to the cut and cover method. Excavation could have an impact on the stability of the caisson foundation and would be evaluated during design. Mitigation measures could require underpinning of the existing foundation.

- Construction of a pedestrian bridge from Upper Grand Avenue to the 2nd/Hope Street Station.

- Relocation of a large 11.5 feet x 13 feet reinforced box culvert storm drain that currently runs underneath 2nd Street. This box culvert would be in conflict with the proposed entry shaft and cut and cover section near Central Avenue. In addition, the culvert would also be in conflict with the proposed station construction on 2nd Street. The affected segment of the storm drain would need to be relocated or temporarily supported. Alternatives are being reviewed and coordinated with the County of Los Angeles Department of Public Works.

- Tunnel construction shaft by the cut and cover method: A tunnel construction shaft is necessary to assemble the TBM and to start construction of both the east and west bound tunnels along 2nd Street. The construction shaft to begin the TBM drive would be excavated on 2nd Street near Central Avenue. TBMs should start in a straight line and at adequate depth, so the proposed staging area to the north of 2nd Street and Central Avenue cannot be used for TBM mining due to the necessary depth and orientation for the TBMs. The construction shaft would extend along 2nd Street and be approximately 650 feet long and 65 feet wide. Once the TBM is advanced, a portion of construction shaft would be covered by a temporary deck to facilitate normal traffic along Central Avenue. The TBM would be lowered into the construction shaft by a crane and would mine from the shaft along 2nd Street westward from Central Avenue to the 2nd/Hope Street Station. The TBM would be retrieved west of Bunker Hill at the cut and cover section near the 2nd/Hope Street Station.

- An alternative to launching the TBMs from the 2nd and Central Streets area would be to launch them from the 2nd/Hope Street Station and mine towards the Central Avenue shaft. In this scenario, the excavated materials from the tunneling would be removed from the 2nd/Hope Street worksite.

- Once the construction shaft is completed, the TBM would be assembled in the shaft to start boring the tunnel. An EPB TBM would likely be used to construct two (twin) bored tunnels between the portal and the 2nd Street Station either near Los Angeles Street or Broadway. The tunnel invert elevations along this segment range between 200 to 220 feet and ground surface elevations range between approximately 268 to 282 feet. The bored tunnel along this segment would pass in close proximity to several buildings on both sides of the alignment. Major structures in this area include the Weller Court shopping mall basement, Union Bank building, and Japanese Village Plaza. If later evaluations determine that these could be impacted by tunnel construction activities, mitigation measures would be developed to reinforce and protect these buildings. Depending on further evaluation, the retail stores or multi-story buildings between San Pedro Street and Central Avenue could also require mitigation since they are supported on shallow foundations. Further evaluations in subsequent phases would help determine the level of protection required. An alternative tunnel boring approach is possible that would use a single, larger diameter tunnel instead of two smaller diameter tunnels. A single large TBM could be used to bore one tunnel big enough to contain both tracks and possible the station platforms. Further studies will determine if such an approach would be feasible for the Regional Connector.

- Cut and cover construction for the proposed station on 2nd Street. The proposed station would be located between Main and Los Angeles Streets (Los Angeles Street Option) with an alternate station between Broadway and Spring Streets (Broadway Option). The existing storm drain within the station excavation area would either be protected in-place or relocated. Construction of the cut and cover station would require installation of temporary shoring and installation of deck beams to allow support concrete deck panels to resume on 2nd Street. Excavation could continue under the cover deck to the required depth. The buildings in close proximity include: Kyoto Grand Hotel and Caltrans underground parking on the north side and the Little Tokyo Library and St. Vibiana Cathedral Annex on the south side. The excavation for the station entrance on the south side would likely require a more rigid shoring system (e.g. Tangent piles) for additional protection of adjacent structures. The TBM could be transported through the station. For the alternate station between Broadway and Spring Street, protection/relocation of the storm drain as well as installation of the temporary shoring system would also be required prior to excavation. The major building in the vicinity of this station is the LA Times basement to the north of 2nd Street.

- After being transported through the station excavation, the TBM would continue to mine the twin bored tunnels west of either Main or Broadway Streets towards the Bunker Hill area. The bored tunnel along this segment would be excavated underneath the existing Red Line Tunnels near the intersection with Hill Street. In

addition, a portion of the basement for the historic Thomas Higgins building (located at the southwest corner of Main and 2nd Streets) is anticipated to be above the tunnel alignment. Other major buildings in the vicinity of the alignment including the LA Times and the LA Police Department parking structures could be impacted by tunnel construction activities and may require mitigation measures to reinforce and protect them.

- Construction of urban design enhancements within 1,000 feet of the centerlines of the stations and portals.

3.3.1.1 At-Grade Emphasis only:

- Cut and cover construction of a section of the tunnel beneath 2nd Street west of Central Avenue: This section of portal would be finished after completion of bored tunnels to facilitate the emergence of the tracks to grade level (i.e. The portal).

- Grade separation of Alameda Street at 1st Street would allow uninterrupted vehicular traffic below the new tracks. This construction would consist of lowering of Alameda Street, construction of retaining walls to support above ground facilities and a pump house to pump storm water that could accumulate in the depressed roadway. A permanent bridge would be constructed over Alameda Street to facilitate traffic on 1st Street and to support the new tracks. Utilities to be relocated include a 75-inch storm drain running in Alameda Street.

- Construction of a pedestrian bridge over Alameda underpass. This bridge would span the intersection of Alameda and 1st Street to provide pedestrian access across the intersection and to the existing Little Tokyo/Arts District Station. Due to its irregular shape, the bridge substructures would likely be constructed at several spots in and around the intersection and likely be integrated into the Alameda underpass structure. Bridge construction would involve heavy construction equipment including crane(s) for erection of the superstructure.

- Construction of the curved U-section of the portal between 2nd and 1st Streets. This would be constructed using open cut technique. Since it is traversing the primary construction yard, it would likely be done in the later phases of construction. Work within the yard for this relatively shallower excavation would have limited impact on surrounding areas.

3.3.1.2 Fully Underground LRT Alternative – Variation 1:

- Cut and cover construction of a section of the tunnel beneath 2nd Street west of Central Avenue. This cut and cover section would continue into the Office Depot site where an open cut underground station with a center platform configuration would be built.

This station may be completely underground, or constructed as an open below-grade station with no roof.

- Grade separation of the LRT tracks from Alameda Street using a cut and cover structure for continuing the tracks underground from the station across Alameda Street with a wye or crossing diamond under Alameda Street to allow train movements either eastbound to 1st Street or northbound toward Union Station. Temporary decking (pre-cast concrete panels) would be used to support Alameda Street, 1st Street and the existing Gold Line tracks to the east.

- Construction of the underground sections from Alameda street and portal structures by cut and cover and open cut methods would occur along 1st Street from the east side of Alameda to about Hewitt street and on the Nikkei property along the east side of the Little Tokyo/Arts District Station to just north of Temple Street. U-shaped sections or retaining walls would be used for the transition structure to the surface.

- Prior to construction of the portal and retaining structures along 1st Street, the street would require permanent relocation to the north of its existing location between Alameda Street and about Garey Street.

- Existing Gold Line tracks would be relocated to north and south of the new portals.

- Reconstruction of the existing MSE Wall to slope more steeply to the portal entrance north of Temple Street. If trains between the Gold Line Eastside Extension and Union Station are to remain in service during construction, a temporary track or "shoofly" would be added for single track operations between the Little Tokyo/Arts District Station and the US-101 Bridge. It is estimated that existing traffic lanes along Alameda would have to be reduced to a total of 3-12 ft lanes during construction.

3.3.1.3 Fully Underground LRT Alternative – Variation 2

- As for Variation 1, requires cut and cover construction of a section of the tunnel beneath 2nd Street west of Central Avenue. This cut and cover section would continue into the Office Depot site where an open cut underground station with a split-level side platform configuration would be built. For Variation 2, the station would be deeper and narrower with side platforms on separate levels.

- Grade separation of the tracks from Alameda Street would use a cut and cover structure for continuing the tracks underground – in over and under configuration to avoid tracks crossing at the same elevation. Because the east and west bound tracks are at different elevations at the turnout (switch) location, they transition to the surface in a "staggard" location along 1st Street. The eastbound portal is further to the east – beginning at Hewett Street with the U section ending east of Garey Street. The

westbound portal begins between Alameda and Rose Street and ends just east of Hewett Street.

- Like Variation 1, construction of the portal and retaining structures along 1st Street, would require permanent relocation of 1st Street to the north of its existing location between Alameda Street and about Garey Street.

- Reconstruction of the existing MSE Wall to slope to portal entrance north of Temple Street is also required for Variation 2. If trains between the Gold Line Eastside Extension and Union Station are to remain in service during construction, a temporary track or "shoofly" would be added for single tracking operations between the Little Tokyo/Arts District Station and the US-101 Bridge. It is estimated that existing traffic lanes along Alameda would have to be reduced to a total of 3-12ft lanes during construction.

- Support in place of the existing Gold Line tracks were they cross the proposed underground sections along 1st street and just south of Little Tokyo/Arts District Station

4.0 CONSTRUCTION ACTIVITIES

4.1 Typical Cut and Cover and Open Cut Construction

Cut and cover methods will be common to all LRT alternatives. Once the staging area and the utility relocations have been completed, the contractor(s) can begin the major construction activities including cut and cover construction for the stations and the tunnels. The cut and cover construction described below is applicable to all LRT Alternatives.

All underground stations would be built with the cut and cover technique. A potential exception is the 2nd/Hope Street Station where the SEM method is considered an option for the construction due to its greater depth. A typical cut and cover construction would start with installation of a temporary shoring system with the methods described in Section 2.

Prior to installation of a temporary ground support system, dewatering may be required at underground stations and/or tunnel sites in alluvium to temporarily lower the groundwater level below the excavation depth or to an impermeable layer. This facilitates installation of soldier piles or other type of shoring systems which are not watertight, improves soil stability, and allows excavation in dry conditions. Groundwater would be pumped from wells installed around the perimeter of the excavation. If contaminated water is encountered, it would be treated at the site or hauled to a treatment facility. At the completion construction of the stations, pumping would be discontinued and groundwater levels would return to their natural level. The need for dewatering would be evaluated after geotechnical investigations have been completed. Although anticipated to be minor, the effect of dewatering on adjacent structures would be determined during design.

Once shoring is in place, excavation can begin. Concrete decking would be installed after the initial lift of excavation to restore traffic on the street above. The excavation and internal bracing/tieback installation would be performed within the excavation to the designed depth. Decking would require lane closures at the excavation area and is typically performed at night to minimize traffic impact. Once the deck is in place, the excavation and internal bracing continues below the decking to the required depth.

Open cut construction is similar to cut and cover construction, but does not include temporary decking.

Sequences described for underground station construction could be up to 48 months and is applicable to both alternatives. Based on the anticipated volume of excavation for the cut and cover tunnel and stations, it is estimated that an average of 20 to 30 dump trucks per day would be required to haul and dispose of the excavated soils during excavation cycles.

4.2 Ground Surface Settlement Resulting from Tunneling and Underground Excavation

During TBM tunneling some ground loss would occur in the alluvial soils potentially producing surface settlement. The amount of settlement measured at the surface would be a function of the tunnel depth, size, number of tunnels, distance between adjacent tunnels, TBM design and tunneling techniques, and geology. Ground movements possibly resulting in surface settlement could also occur during SEM for stations or tunnels. The amount of settlement would be a function of the sequence of excavation, amount of ground support, and thickness of shotcrete support, each of which are adjusted during mining to control ground settlement.

Underground excavation for stations and tunnel using the cut and cover technique would result in ground relaxation and deformation of the retained earth. The magnitude of ground movement depends on the strength of the alluvial soils/bedrock and the rigidity of the shoring system.

For TBM tunneling and SEM, the width of the potential settlement zone is approximately two times the depth of the tunnel invert. For cut and cover excavation, the zone potentially susceptible to ground movement generally extends a lateral distance approximately one to one-and-the-half times the depth of the excavation. Accordingly, structures located within these settlement/deformation zones would be further evaluated for potential impact and required mitigation measures.

4.3 Protection of Existing Structures

The alignment of the Regional Connector LRT project and stations have been planned to minimize construction near or beneath the existing structures. However, there are areas where this cannot be avoided such as adjacent to the basement of the Higgins building at the southwest corner with the intersection of 2nd and Main Streets for the Underground Emphasis LRT Alternative. In addition, a majority of the existing structures of either side of the alignment on Flower and 2nd Streets would be close to the excavation sites or the tunnel alignment. Building assessments would be necessary as part of the pre-construction evaluation of existing structures along the alignment. During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. The geologic conditions will influence design and construction methods specified for stations and tunnels as well as foundations, and protection of existing facilities.

Before any construction, a survey of structures within the anticipated zone of construction influence would be conducted in order to establish baseline conditions. A monitoring plan

would be developed and adhered to during construction to ensure appropriate measures are taken to address any construction-induced movement.

If assessments indicate the necessity to protect nearby structures, additional support for the structures by underpinning or other ground improvement techniques would be required prior to the underground construction. A preliminary list of the buildings along Flower and 2nd Streets potentially located within the influence zone is tabulated in Table 4-1.

Table 4-1. Preliminary List of Structures Potentially Affected by Tunneling, Cut and Cover, and Open Cut Operations

Address	Current Name	Nearby Construction
*550 S. Flower Street, Los Angeles, CA 90017	The Standard Hotel	Cut & Cover
*538 S. Flower Street, Los Angeles, CA 90017	California Club	Cut & Cover
Bridge Pier at 4th and Flower Streets	N/A	Cut & Cover
Hope and 3rd Streets	Bunker Hill Plaza	Cut & Cover or SEM
Hope and 3rd Streets	Chilled Water Distribution	Cut & Cover or SEM
*111 S. Grand Avenue, Los Angeles, CA 90012	Walt Disney Concert Hall	Cut & Cover
*On 2nd Street Between Figueroa and Broadway Streets	2nd Street Tunnel	Cut & Cover
2nd Street between Olive and Hill Streets	Angelus Plaza	TBM
*202 W. 1st Street, Los Angeles, CA 90012	Los Angeles Times Building	Cut & Cover
2nd Street between Spring and Main Streets	Los Angeles Police Department (New)	TBM
*108 W. 2nd Street, Los Angeles, CA 90012	Higgins Building	TBM
*214 S. Main Street, Los Angeles, CA 90012	St Vibiana's Cathedral	TBM or Cut & Cover

Table 4-1. Preliminary List of Structures Potentially Affected by Tunneling, Cut and Cover, and Open Cut Operations

Address	Current Name	Nearby Construction
2nd Street between Los Angeles and San Pedro Streets	Weller Court	TBM
2nd Street between San Pedro Street and Central Avenue	Union Bank	TBM
2nd Street between San Pedro Street and Central Avenue	Retail Structures	TBM or Cut & Cover
*355-369 E. 1st Street, Los Angeles, CA	Japanese American National Museum	Cut & Cover
Alameda Street	Existing Little Tokyo/Arts District Station	Cut & Cover

**Historic*

Some of the buildings along the alignment are considered historic (denoted by *). It should be noted that not all buildings on the list would require mitigation. For buildings adjacent to cut and cover construction, it is anticipated that the shoring system in conjunction with internal bracing could provide a relatively rigid temporary support for the proposed excavation that would result in deformation generally within the tolerable limits of the structures. Evaluations during future phases will help determine the appropriate levels of monitoring, protection, and mitigation measures required during construction.

To reduce surface settlement and the potential for ground loss and soil instability (sloughing, caving) at the tunnel face due to tunneling, pressure-face TBMs and pre-cast, bolted, gasketed lining systems would be employed. In combination with the face pressure, the grout would be placed immediately behind the TBM, in the annular space between the installed precast concrete liners (tunnel rings) and the excavated ground. The pressure-face TBM can tunnel below the groundwater table without requiring dewatering or lowering of the groundwater table.

Where conditions warrant, for example, shallow tunnels directly below sensitive structures or utilities, additional methods to reduce settlement would be specified. Following is brief summary of the various types of protective methods that could be employed along the alignment.

Permeation grouting to improve the ground prior to tunneling

Chemical (sodium silicate) or cement based grouts are injected into the ground to fill voids between soil particles – typically sandy soils - and provide greater strength and stand-up time for the soil. This grout can be placed through pipes from the surface before the tunnel reaches the grouted area, from pits or shafts adjacent to the grouted area, or in some instances from the tunnel face. In this latter case, the tunneling machine must be stopped for a period of time to drill grout placement pipes, pump grout, and allow the grout to set. The permeation grouting method has been used successfully for the Metro Red Line in instances where the tunnel passed under potentially sensitive or important structures such as the US 101 freeway (downtown, Hollywood and at Universal City).

Compaction grouting as the tunnel is excavated

This method involves injection of a stiff "grout," typically sand with small amounts of cement, above the tunnel crown as the tunnel advances. The grout densifies soil above the tunnel crown and replaces some of the lost ground, and thereby preventing settlement from propagating to the surface. This method was used in several instances for the Metro Red Line project in the Downtown Los Angeles area and along portions of Hollywood Boulevard.

Compensation Grouting

Compensation grouting involves carefully controlled injection of grout between underground excavations and structures requiring protection from settlement. For tunnel applications, the pipes for grouting are installed above the intended tunnel position, in advance of tunneling. A key component in controlling compensation grouting is careful monitoring of both structure and ground movements to allow the timing and quantities of grout injected to be optimized. Grout injection can take place before, during, and after tunneling activity by reusing the grout pipes.

For grouting methods, surface preparation would likely be required (removal of landscaping etc.) to allow space for drilling equipment, installation of grout pipes, and injection of grout. In cases where large structures are directly over the tunnel, access into the building or basements, where basements exist, could be required for grouting operations, and use of the building could be limited during the grouting operations. After grouting is completed, the area would be restored to its existing condition.

Underpinning

Underpinning involves supporting the foundations of an existing building by carrying its load bearing element to deeper levels than its previous configuration. This helps protect the building from settlement that may be caused by construction work in the soils near that foundation. It permanently extends the foundations of a structure to an appropriate level beyond the range of influence of the construction activity. This can be accomplished by providing deeper piles adjacent to or directly under the existing foundation and transferring the building foundation loads onto the new system.

4.4 At-Grade Emphasis LRT Alternative Construction Activities

4.4.1 Surface Trackwork

Trackwork construction involves demolition of the roadway section being displaced by the LRT trackway, preparation of the track bed, construction of the supporting track slab, and laying of rail. Foundations for overhead wires poles may be installed with the track installation. At this stage of construction, affected traffic lanes would be closed, which would effectively eliminate all mid block turns and street parking. Typical drilling of the shaft for the catenary pole and track installation are relatively shallow.

Given the urban context, approximately 2-block segments of the roadway are likely to be reserved for construction activities to achieve economies of scale and minimize the schedule. Rails would be brought to the site by trucks, stockpiled at designated storage areas, welded into rail strings and moved into place as work progresses. Construction durations for a 2-block segment are estimated to be two to four months to complete trackwork in each roadway segment. Periodic lane closures, typically on just one side of the work zone, would be required for delivery of materials and other construction activities such as concrete pours. Construction of station platform slabs would likely be included in line segment contracts and would be coordinated with trackwork installation within each segment.

During construction within a segment, cross streets and alleyways may also be temporarily closed. Major cross streets would require partial closure, usually half of the street at a time, while utilities are relocated, if necessary, for surface stations and constructing the light rail trackbed. Depending on allowable working hours, full blocks may require closures during excavation, preparation of subgrade, drilling for soldier pile installation, and track foundation placement. Closures would be staggered to facilitate traffic control. Where streets are not fully closed, two-way traffic would be allowed on half of the street. After the trackbed is constructed across a local street and the roadway is restored to its permanent condition, vehicles can resume planned traffic patterns (e.g. 2nd street would have single direction traffic).

Rails would be brought to the sites by truck, and local rail storage areas would be necessary for short-term storage and to facilitate placement of rails. Equipment used for construction of surface tracks (and surface stations) would be similar to what is required for relocation of utilities with the addition of track-laying equipment, paving machines, concrete mixers, and concrete finishers.

4.4.2 Grade Separation at Alameda and Temple Streets

As previously described in the construction scenarios, an underpass would be constructed near the intersection of Temple and Alameda Streets that would allow through traffic on Alameda Street to continue beneath Temple Street and the new rail junction. In addition, a pedestrian bridge would be constructed above the Alameda underpass that spans the

intersection of Alameda and Temple Streets. Bridge construction would involve heavy construction equipment including crane(s) for erection of the superstructure. The work would involve installation of an appropriate shoring system followed by excavation to the required depth of the underpass. Lane closures and traffic rerouting would be required for the duration of the construction.

Currently, an existing modular wall system provides support for the existing rails. Lowering Alameda Street in this area would require either underpinning the existing wall, or constructing a new, higher wall to replace the existing wall.

4.4.3 At-Grade Stations

The at-grade stations on Main and Los Angeles could be constructed simultaneously with other segments of the alternative, although the construction contractor may elect to construct them sequentially. Materials would be delivered to staging areas and station sites for the proposed construction via the shortest and safest route from the freeway. These stations would be constructed from standard building materials such as concrete, steel, aluminum, and heavy plastic, which are durable and resistant to vandalism. The stations would be similar to the existing Blue Line and Gold Line stations.

4.4.4 Underground Station

The underground station section in the At-Grade Emphasis LRT Alternative would be constructed using cut and cover methods as described in Section 4.5.1

4.4.5 Connection to the Existing 2nd Street Tunnel

Connection to the existing 2nd Street tunnel would require major construction work, including installation of a temporary shoring system, construction of retaining walls to support soil removal, reinforcement of the tunnel structure, and installation of supporting elements at the location of the new openings.

4.4.6 Operating Systems Installation

Operating systems for the LRT include traction power, an overhead catenary system, communications, and signal system. Catenary systems consist of poles connected to drilled shaft foundations with overhead wires to supply power to the trains. The power would include substations to provide direct power to the trains. These include ground systems and prefabricated units which are placed on foundation slabs by crane and connected to the system. Construction equipment would include highrail vehicles for installation of the wires from the guideway area. While wires are strung at cross streets, temporary street closures of a few hours during nighttime are anticipated. Traction power substation (TPSS) equipment would also need to be installed adjacent to the alignment along at-grade segments, or within station boxes along underground segments.

4.4.7 Permanent Constructed Features

The permanent constructed features of the At-Grade Emphasis LRT Alternative would include the following:

- Tunnel beneath Flower Street
- Station entrances near 5th Street between 6th and 5th Streets
- Portal on Flower Street south of 3rd Street
- At-grade tracks across the intersection of 3rd and Flower Streets
- Portal at the northeast corner of 3rd and Flower Streets
- Pedestrian bridge from Upper Grand Avenue to the 2nd/Hope Street Station
- New portals into the existing 2nd Street tunnel
- Tracks in 2nd Street tunnel
- At-grade tracks along 2nd Street from Hill to Los Angeles Streets, tracks on Main and Los Angeles Streets between 2nd and Temple Streets, and tracks on Temple between Main and Alameda Streets
- At-grade one-way stations at 1st and Main Streets and 1st and Los Angeles Streets
- Pedestrian Bridge landings near Temple and Alameda Streets.
- Underpass and 3-way (wye) junction at Temple and Alameda Streets
- Urban design enhancements within 1,000 feet of the centerlines of stations and portals

4.5 Underground Emphasis LRT and Fully Underground LRT Alternatives

The following methods apply to all of the underground alternatives. Table

4.5.1 Underground Station Construction

The underground stations as well as the portals would be constructed by cut and cover with decking for streets and open cut methods. A possible exception to the these methods would be the excavation for the 2nd/Hope Street Station and possibly the adjacent curved tunnel section between the station and Flower Street where mining with the SEM method is also under consideration due to its depth. The stations need to be deep to avoid utilities and

existing underground structures, including the existing Red Line tunnels, access to station platforms, structure thickness, and for cover over the tunnels extending from the stations. Station widths are about 60 feet to include trackways and center platforms. Portals are designed to accommodate the twin tracks, and traffic flow around the portal.

4.5.2 Construction of Station and Final Portal Structures

The construction sequence for the final station structure would include construction of the foundation base slab, followed by the installation of exterior walls and any interior column elements. Slabs are poured as the columns and intermediate floor and roof wall pours progress. Portal structures would use similar construction methods involving placement of concrete inverts, walls, and walkways. Station entrance locations are generally used as access points to the underground station during the construction process. Exterior entrances would be constructed after the station structure has been completed.

During station construction, approximately 5 to 10 concrete trucks per day should be anticipated for normal operation. Occasional large pours would be needed at the station depending on the construction sequencing and schedule, potentially requiring 30 to 40 trucks per day. The larger pours are expected to be performed at night to ensure supply of concrete and to minimize traffic impacts. Other support and delivery trucks, approximately up to 10 to 20 trucks per day, would also be anticipated during the duration of construction to bring materials such as rails, structural steel, and mechanical and electrical equipment. Approximately 25 to 50 workers are anticipated at each station site during construction. Once station structure work is complete, the station excavation will be backfilled and permanent roadway will be constructed.

Construction of 2nd/Hope Street Station using the SEM method would require construction of an access shaft to commence the excavation, remove the spoils, and to deliver shotcrete and other necessary construction materials. In addition, construction using the SEM method may require a variety of special measures, such as dewatering, forepoling, grouting (regular grouting or horizontal jet grouting), compressed air, and face bolts.

4.5.3 Grade Separation at Alameda and 1st Streets

Similar to the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would require the construction of a grade separation at 1st and Alameda Streets. This construction would include the lowering of Alameda Street and allow uninterrupted traffic flow below 1st Street. The construction would include retaining walls, a pump station, and a 1st Street bridge across Alameda to allow traffic on 1st Street and support LRT trains.

In addition, the work would include the construction of a pedestrian bridge over the Alameda underpass. Related construction activities would be similar to those described in Section 4.4.2.

4.5.4 Operating Systems Installation

Construction equipment would include highrail vehicles for installation of overhead catenary system wires from the guideway area along the at-grade segment of the alignment. The wires would be suspended from poles installed within or adjacent to the right-of-way. While wires are strung at the intersection of 1st and Alameda Street, temporary street closures of a few hours during nighttimes are anticipated. TPSS equipment would also need to be installed within station boxes along the underground segments.

4.5.5 Permanent Constructed Features

The permanent constructed features of the Underground Alternatives are shown in Table 4-2.

Table 4-2. Permanent Features, Underground Alternatives

	Underground Emphasis LRT Alternative	Fully Underground LRT Alternative – Version 1	Fully Underground LRT Alternative – Version 2
Tunnel beneath Flower and 2nd Streets	✓	✓	
Station entrance near 5th Street, south side of Flower Street	✓	✓	
Station entrances, shafts, and pedestrian bridge at 2nd/Hope Street Station	✓	✓	
Station entrances on the south side of 2nd Street either between Main/Los Angeles Streets or Broadway/Spring Street	✓	✓	
Pedestrian Bridge landings near 1st and Alameda Streets	✓	X	X
Underpass and at-grade wye junction at 1st and Alameda Streets	✓	X	X
Underground three-way junction beneath 1st and Alameda Streets	✓	✓	✓

Table 4-2. Permanent Features, Underground Alternatives

	Underground Emphasis LRT Alternative	Fully Underground LRT Alternative – Version 1	Fully Underground LRT Alternative – Version 2
Underground Station at 2nd Street and Central Avenue	X	✓	✓
Portal between Alameda Street, Central Avenue, 1st, and 2nd Streets	✓	✓	✓
Urban design enhancements within 1,000 of the centerlines of stations and portals	✓	✓	

4.6 Ventilation Shafts and Emergency Exits

The subway segments would include a number of ventilation and emergency exit areas for the below grade segment in the vicinity of the subway stations. The stations would house emergency ventilation fan shafts as well as separate emergency exit shafts at both ends of the stations. Ventilation fans are used for extracting smoke from tunnels and stairs for evacuation in the event of an emergency such as a fire in the underground areas. The exact location of these facilities would be determined during the final design. These shafts are constructed as extensions of the station excavation, using cut-and-cover construction methods.

4.7 Construction Personnel and Parking

The estimated number of construction personnel for different activities are as summarized in Tables 3-1 and 3-2. Arrangement for offsite parking locations would be required for the construction workers and transportation would be provided at the beginning and end of shifts to transport workers to work areas.

4.8 Hauling of Soil

With the decking installed and the utilities supported, the major excavation work for the station box can proceed. The method of removing material from the job site is usually a choice made by the contractor. A typical operation would be for bulldozers and/or overhead loaders to move material to a central pickup point or several such points, where a bucket from

a crane or a vertical or diagonal conveyor belt can hoist the material and place it into waiting trucks or a loading hopper. Spoils from station sites would be moved out from under the deck onto an off street work site or closed lane and loaded from there into hauling trucks. Occasionally spoils loading in the street during excavation and the initial drilling of soldier piles and deck installation could be required. Spoils from tunnel construction would be transported through the bored tunnels to the shaft site for loading onto trucks. An example of TBM spoils being removed from a tunnel at a construction staging site is depicted in Figure 4-1.

Excavated soils and excess material would be transported off-site to approved disposal sites along designated routes. Testing of materials would be required prior to transportation. Depending on the test results of the soils, disposal options could include the following sites:

California Hazardous (metals) Class I facilities:

- Waste Management Inc., Kettleman City, CA
- Clean Harbors Environmental Services, Buttonwillow, CA
- Veolia Environmental Services, Azusa, CA
- US Ecology Nevada, Inc., Beatty, NV

Non-hazardous, Total Petroleum hydrocarbon-containing wastes:

- Thermal Processing Systems Treatment, Adelanto, CA

Non-hazardous soil:

- Philadelphia Recycling, Mira Loma, CA
- Municipal landfills
- Other locations identified by the contractor

4.9 Street and Site Restoration

After the cut and cover underground station structures have been completed and the roof slab allowed to cure for a specified period, backfilling can begin. During backfilling operations, utilities would be restored to their permanent locations. Where sidewalks have been demolished due to cut and cover construction, they would be restored. After backfilling, the

permanent street would be constructed and the sidewalks and pavement restored to City standards. Contractor work sites would be restored for future use in a similar manner.

It is anticipated that partial street closures would be required during backfilling and site restoration.

Figure 4-1: Wet Soil at Surface EPB TBM

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX L

TRANSPORTATION

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Transportation Technical Memorandum

Transit, Traffic Circulation, Parking, and Non-motorized Transportation

April 1, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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State Clearinghouse Number: 2009031043

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ACRONYMS

AA	Alternatives Analysis
ADT	Average Daily Traffic
AM	Morning
AVTA	Antelope Valley Transit Authority
CALTRANS	California Department of Transportation
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
HCM	Highway Capacity Manual
JANM	Japanese American National Museum
LADOT	Los Angeles Department of Transportation
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NEPA	National Environmental Policy Act
OCTA	Orange County Transportation Authority
PM	Afternoon

TBM	Tunnel boring machine
TRB	Transportation Research Board
TSM	Transportation Management System
v/c	Volume to capacity ratio
VPD	Vehicles Per Day

1.0 SUMMARY

This technical memorandum addresses potential transportation impacts of the Regional Connector Transit Corridor project, and is one of a series of technical reports prepared in support of the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the project. The project would directly link the 7th Street/Metro Center Station (the Metro Blue Line and future Metro Expo Line termini located at 7th and Figueroa Streets) to the Little Tokyo/Arts District Station (Metro Gold Line Station) at 1st and Alameda Streets. By linking the Metro Expo Line, Metro Gold Line and Metro Blue Line, Metro could provide continuous service across the region in two different directions: north-south between the Cities of Azusa and Long Beach and east-west between the City of Santa Monica and I-605 without the need for passengers to transfer.

The alternatives evaluated for the Regional Connector Transit Corridor project include:

- No Build Alternative
- Transportation System Management (TSM) Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT - Little Tokyo Variation 1
- Fully Underground LRT - Little Tokyo Variation 2

Section 2.0 of this report describes the history and background of the Regional Connector Transit Corridor Project in greater detail. This section also provides more detail on the proposed alternatives and describes the basis of this transportation evaluation.

The traffic analysis methodology used significance thresholds established by the City of Los Angeles Department of Transportation (LADOT). The alternatives are analyzed for the horizon year of 2035.

Traffic count data were collected at 85 intersection locations and 66 roadway segments. An existing conditions analysis was performed for each component of the transportation environment, which consists of transit, traffic circulation, parking and other non-motorized modes such as pedestrians and bicycles.

An on-street parking inventory was also performed for roadway segments that would be affected by the proposed alignment to identify the number of parking and loading spaces that

may potentially be displaced due to short-term construction activity and long-term project impacts.

Potential impacts for each alternative are detailed by each component of the transportation environment in Section 5.0. Future conditions were developed each project alternative to determine potential project-related impacts, potential mitigation measures, and any residual impacts after mitigation.

The At-Grade Emphasis LRT Alternative would have greater impacts on transit, traffic circulation, parking and other modes than for the other build alternatives (excluding the No Build and TSM Alternatives). With respect to traffic circulation, Table 1-1 summarizes the number of intersections with levels of service (LOS) E and F during the AM and PM peak hours in the horizon year of 2035.

Table 1-1. Number of Intersections with Levels of Service (LOS) E and F in 2035

Alternative Under Consideration	AM Peak Hour		PM Peak Hour	
	LOS E	LOS F	LOS E	LOS F
No Build	6	8	13	15
TSM	6	8	12	16
At-Grade Emphasis	7	13	12	25
Underground Emphasis	7	9	13	17
Fully Underground – Little Tokyo Variation 1	7	8	13	14
Fully Underground – Little Tokyo Variation 2	7	8	13	14

Intersections that exceed the significance threshold when compared to the No Build Alternative are considered to be impacted by the proposed project. The number of potentially impacted intersections for each alternative under consideration are summarized in Table 1-2. Potential mitigation measures are proposed in Section 6.0 and the number of intersections that remain impacted (residual impacts) after implementation of the proposed mitigation measures are also shown in Table 1-2.

In summary, no unavoidable significant adverse impacts have been identified if mitigation measures are implemented for transit, parking, pedestrians, and bicycles. Traffic circulation may experience impacts under all build alternatives—one or more intersections would

continue to be impacted to significant levels (residual impacts) after mitigation during one or both peak traffic hours (morning and afternoon).

Table 1-2. Number of Impacted Intersections With and Without Mitigation

Alternative Under Consideration	Impacted Intersections		Impacted After Mitigations	
	AM Peak	PM Peak	AM Peak	PM Peak
No Build	-----	-----	-----	-----
TSM	8	9	0	0
At-Grade Emphasis	18	26	11	15
Underground Emphasis	3	7	2	3
Fully Underground – Little Tokyo Variation 1	1	3	1	0
Fully Underground – Little Tokyo Variation 2	1	3	1	0

2.0 INTRODUCTION

2.1 Background

The Regional Connector Transit Corridor project is a vital core piece of public transit infrastructure that would enhance investments already made in the region's light rail system. It would link four distinct travel corridors covering over 50 miles across the County through the center of downtown Los Angeles.

The Los Angeles County Metropolitan Transportation Authority (Metro) has envisioned this connection for nearly two decades beginning in the late 1980s/early 1990s. At that time the Long Beach and Pasadena light rail branches were envisioned to connect in downtown Los Angeles and operate as a single line. However, the downtown segment was not built, and passengers must currently transfer to the Metro Red or Purple Lines to move between the two branches, or to reach many major central business district destinations.

Increased transit ridership, traffic congestion, and major regional developments occurring in downtown Los Angeles have created a need to tie the light rail system together. The recent opening of Metro's Gold Line to East Los Angeles and planned openings of the extension to Azusa and the Metro Expo Line to Santa Monica further emphasize this need.

The Regional Connector Transit Corridor project offers a direct high-capacity link to tie the regional branches of Metro's LRT system together through downtown. It would directly link 7th Street/Metro Center Station to the Little Tokyo/Arts District Station.

The Regional Connector project would include three to four new downtown stations and create direct light rail transit connections between the Cities of Long Beach and Azusa and I-605 and the City of Santa Monica without the need to transfer. It would also provide passengers with direct transit into the heart of the business and civic districts. Metrolink, Amtrak, and Metro Red and Purple Line passengers would have an option to transfer to the Long Beach-Azusa and I-605-Santa Monica trains and reach portions of the downtown area not presently served by Metro Rail.

The Regional Connector would provide transit benefits residents across the County, and can be accomplished by constructing just 1.8 miles of dual tracks. The proposed project would provide faster, more transit destinations by providing greater access to the downtown area and mobility region-wide.

2.2 Alternatives Considered

An Alternatives Analysis planning process was undertaken to identify and screen potential transportation alternatives in light of the project purpose and transportation need, goals, and objectives within the Regional Connector Transit Corridor project area. This process was

completed and approved by Metro in January 2009 and included community and public agency feedback at meetings and public workshops.

The alternatives analyzed in this technical memorandum emerged from this planning process, and were confirmed and refined based on public input from the scoping process. All of the approved alternatives were analyzed in this technical memorandum for the horizon year of 2035. Each of the alternatives is described in the following subsections.

2.2.1 No Build Alternative

The No Build Alternative, as defined by the Federal Transit Administration (FTA), represents the baseline case and consists of existing and committed elements of the region's transportation plan, excluding the proposed Regional Connector Transit Corridor project. Consequently, the No Build Alternative is focused on preservation of existing services. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is identified in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line to Santa Monica, the Metro Crenshaw Line, the Metro Purple Line to Westwood, and the Metro Gold Line to Azusa will have opened and bus services will have been reorganized and expanded to provide connections with these new rail lines. Otherwise, the transit network within the project area would be largely the same as it is now except for potential improvements to frequency of service.

2.2.2 Transportation System Management (TSM) Alternative

The TSM Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. The buses may also have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles.

Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. Each route would operate every 2.5 minutes during the peak hours and every 5 minutes during the off-peak hours. The proposed two routes are:

- *Upper Grand Route (Grand/Temple/Los Angeles Alignment)* - From the 7th Street/Metro Center Station, buses would proceed east on 7th Street, north on Olive Street, west on 5th Street, north on Grand Avenue, east on Temple Street, and then north on Los Angeles Street to Union Station. As a variation, buses could use Alameda Street between Temple Street and Union Station to allow a stop at Temple and Alameda Streets, near the Little Tokyo/Arts District Station. The alignment is assumed to follow the same route as part of the existing LADOT DASH Route B

service, proceeding from 7th Street/Metro Center Station to Union Station using Grand Avenue, Temple Street, and Los Angeles Street. Shuttle buses would run less than 8 minutes apart and cover the Bunker Hill and Civic Center areas.

- *Lower Grand Route (Figueroa/Flower/2nd/3rd/Alameda Alignment)* - This route would use the existing northbound bus-only lanes on Figueroa Street and mixed flow lanes on 2nd and 3rd Streets that are lightly used by other bus lines. From 7th Street/Metro Center Station, buses would proceed north on Figueroa Street, west on 2nd Street, and north on Alameda Street to Union Station. To return to the 7th Street/Metro Center Station, buses would travel south on Alameda Street, west on 3rd Street, and south on Flower Street. The alignment passes by both the Little Tokyo/Arts District Station and Union Station, and provides coverage of Little Tokyo and the southern edge of the Civic Center.

2.2.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets, including three new station locations. This alternative extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, surfaces to an at-grade alignment north of 4th Street, crosses 3rd Street at grade, enters Bunker Hill through a tunnel, and turns northeast, entering through a new entrance into the existing 2nd Street Tunnel.

The alignment continues at grade along 2nd Street and splits into a one-way at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). The tracks then head east on Temple Street, realign into a dual-track configuration just east of Los Angeles Street, and connect to the Metro Gold Line in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street. The three stations identified for this alternative include an underground station south of 5th Street under Flower; an underground station between 2nd/Hope and 3rd /Flower; and an at-grade southbound only station on Main Street and an at-grade northbound only station on Los Angeles Street – both are located on the eastern side of the streets between Temple and 1st Streets.

Due to the high volume of trains that would traverse the Regional Connector and high traffic volumes on Alameda Street, an automobile underpass and potential pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets. This would eliminate potential pedestrian-train and automobile-train conflicts. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill.

This alignment includes both underground and at-grade configurations, with 46 percent of the route underground, serving the Civic Center, Grand Avenue, and the Financial District. Conversion of 2nd Street between Hill Street and Los Angeles Street to a pedestrian-friendly transit mall is assumed. However, local access would be maintained to serve the adjacent businesses and office buildings.

To implement this alternative, the number of traffic lanes on 2nd Street would be reduced to one westbound lane between Hill Street and Main Street and on-street parking would be eliminated. As a result, traffic is likely to divert to adjacent parallel streets such as 1st Street, 3rd Street for westbound through traffic, and 4th Street for eastbound through traffic. The roadway capacity along these adjacent parallel streets would remain unchanged from current conditions. Vehicular traffic congestion along these streets would likely increase.

For the at-grade segments of this alternative, the two LRT tracks would typically occupy a 26-foot-wide surface right-of-way bordered by mountable curbs. It is expected that this width would increase at station areas. Vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections, with signal cycle length and phasing modified to provide adequate green time for LRT vehicles to safely cross.

For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted. Trains would operate on a north-south route between Azusa and Long Beach, running every five minutes during the peak hours. Trains would also operate on an east-west route between the vicinity of I-605 and Santa Monica, running every five minutes during the peak hours. This would yield trains running at every 2.5 minutes in each direction through the project area.

2.2.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would be completely underground, except for a single at-grade crossing at the intersection of 1st and Alameda Streets. The alignment would have three new station locations.

This alternative would connect directly to the tracks at the 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street Tunnel and the 2nd Street roadway to Central Avenue. There are three underground stations identified for this alternative. One underground station is located between 4th and 5th Streets under Flower; a second underground station is located between 2nd/Hope and 3rd/Flower Streets; and a third station can be located along 2nd Street either between Broadway and Spring or Los Angeles and Main Streets.

In the vicinity of Central Avenue the tracks would veer northeast into a new portal on private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. It is expected

that a portion of this property would be acquired to construct the portal and is one of two sites that could potentially be used as a staging area for tunnel construction beneath 2nd Street with a Tunnel Boring Machine (TBM).

The tracks would then enter the intersection of 1st and Alameda Streets at-grade in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative. Due to the high volume of trains that would traverse the Regional Connector and the high traffic volumes on Alameda Street, an automobile underpass and potential pedestrian overpass would be constructed at the intersection of 1st and Alameda Streets. This would minimize pedestrian-train and automobile-train conflicts. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill.

Due to its mostly underground configuration, the Underground Emphasis LRT Alternative would not dramatically compromise existing roadway capacity. The alignment of this alternative could affect surface traffic and pedestrian circulation at the intersection of 1st and Alameda Streets, where the LRT alignment would operate in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns.

The only exceptions would be 1) at Hope Street in the vicinity of General Thaddeus Kosciuszko Way, where two adjacent intersections would be consolidated into one intersection at South Hope and 2nd Streets; and 2) a permanent roadway reconfiguration involving the removal of one traffic lane along Flower Street in the vicinity of the Flower/5th/4th Street station to accommodate the station pedestrian portal entrances along the sidewalk.

Trains would operate on a north-south route between Azusa and Long Beach, running every five minutes during the peak hours. Trains would also operate on an east-west route between the I-605 and Santa Monica, running every five minutes during the peak hours. This would yield trains running at every 2.5 minutes in each direction within the Regional Connector segment.

2.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would provide four new stations and a direct, entirely underground connection from the 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend from the 7th Street/Metro Center Station under Flower Street to 2nd Street and then proceed east underneath the 2nd Street Tunnel and 2nd Street roadway to Central Avenue. At 2nd Street and Central Avenue, the tracks would continue underground heading northeast under 1st and Alameda Streets.

The four underground stations identified for this alternative include the underground station between 4th and 5th Streets under Flower Street; the underground station between 2nd/Hope and 3rd/Flower Streets; the underground station under 2nd Street between Broadway and Spring; and an underground station within the property bounded by 1st, 2nd, Central and Alameda Streets.

A three-way junction would be constructed underground beneath the 1st and Alameda Streets intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect to the tracks heading north to Azusa and east towards I-605. One portal would be located northeast of the Little Tokyo/Arts District Station rising to the surface within the City of Los Angeles Department of Water and Power Maintenance Yard and connecting to the existing LRT bridge over the US-101 freeway.

The second portal would be located within 1st Street between Alameda and Vignes Streets. The tracks would rise to the east within this second portal and connect at-grade to the existing tracks to East Los Angeles.

Again, the Fully Underground Alternative – Little Tokyo Variation 1 would be operated entirely underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center Station. A pedestrian bridge could be constructed between the 2nd/Hope Street Station and Upper Grand Avenue to enhance the connection to Bunker Hill.

Roadway reconfigurations would include:

- A permanent roadway reconfiguration consisting of the removal of one traffic lane and the parking on one side along Flower Street in the vicinity of the Flower/5th/4th Street station. Removal of this lane would accommodate the station pedestrian portal entrances along the sidewalk.
- Street widening and sidewalk modifications would be required on 1st Street in the vicinity of the portal.
- At Hope Street in the vicinity of General Thaddeus Kosciuszko Way, where two adjacent intersections would be consolidated into one at South Hope and 2nd Streets.
- The newly installed traffic signal at 1st and Hewitt Streets would be removed and therefore, through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Otherwise, the alignment would not affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge and vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns.

Trains would operate on a north-south route between Azusa and Long Beach, running every five minutes during the peak hours. Trains would also operate on an east-west route between the I-605 and Santa Monica, running every five minutes during the peak hours. This would yield trains running at every 2.5 minutes in each direction.

2.2.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is similar to Variation 1 except two portals instead of one, each containing one track, would rise to the east within the widened median of 1st Street. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. The same alterations to the roadways and traffic circulation would occur for this alternative as was described for the Fully Underground LRT Alternative – Little Tokyo Variation 1.

The four underground stations identified for this alternative include the underground station between 4th and 5th Streets under Flower Street; the underground station between 2nd/Hope and 3rd/Flower Streets; the underground station under 2nd Street between Broadway and Spring; and an underground station within the property bounded by 1st, 2nd, Central and Alameda Streets.

Trains would operate on a north-south route between Azusa and Long Beach, running every five minutes during the peak hours. Trains would also operate on an east-west route between the I-605 and Santa Monica, running every five minutes during the peak hours. This would yield trains running at every 2.5 minutes in each direction.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section describes the methodology and assumptions used to evaluate and analyze potential impacts to the transportation environment due to the proposed Regional Connector Transit Corridor project. The analysis evaluated transportation impacts from the project on transit, traffic circulation, parking, and other modes such as pedestrians and bicycles.

3.1 Standards of Significance

CEQA guidelines define "significant effect" or "significant impact" as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. There are few quantitative standards of significance related to transportation effects. The measurement and prediction of level of service at potentially affected intersections is a standard that is used to evaluate the significance of potential traffic impacts. Predicted changes in level of service provide indications of how well road-based movements may function under the different alternatives, which may have implications for vehicular traffic, and certain types of transit and non-motorized transportation.

Significant impacts generated by the build alternatives were identified by comparing results of the level of service analyses. Each future build alternative evaluated was compared to the No Build Alternative, which is considered the baseline condition. The reason for this comparison is to determine potential significant impacts due to the proposed project.

The threshold of significance used to identify significant traffic impacts under both NEPA and CEQA are based upon guidelines set forth by LADOT in the LADOT Traffic Study Policies and Procedures revised in March 2002. The significance threshold at an intersection is based on the amount of change in overall delay between an action alternative and the No Build Alternative. An intersection is considered to be significantly impacted by the project if the change in overall delay from the No Build Alternative is equal to or greater than the criteria shown in Table 3-1.

3.2 Project Area Evaluated

The project area is bounded by Figueroa Street on the west, the Santa Ana Freeway (US-101) on the north, Alameda Street on the east, and 8th Street on the south. Most of the roadway segments and intersections evaluated are located along the alignments of the proposed shuttle bus service for the TSM Alternative and the light rail transit service for the At-Grade Emphasis and Underground Emphasis Alternatives. In addition, this evaluation included locations on parallel adjacent arterials potentially affected by a potential shift in traffic caused by reducing the number of travel lanes along 2nd Street.

Table 3-1. Intersection Significance Threshold	
Final Intersection LOS with Project	**Change in Delay (in seconds) from the No Build Alternative**
LOS A	-----
LOS B	-----
LOS C	6.0
LOS D	4.0
LOS E	2.5
LOS F	2.5

Source: LADOT 2002

3.2.1 Roadway Network

Based on the City of Los Angeles' General Plan Circulation Element, roadways have functional classifications that range from Major Highway, to Secondary Highway, to Collector Street. A brief description of these types of roadways is provided below.

- A Major Arterial (Class I) has three full-time through lanes in each direction, one part time parking lane in each direction and one median/left turn lane with 12-foot sidewalks on both sides.
- A Major Arterial (Class II) has two full-time through lanes in each direction, one part time parking lane in each direction, and one median/left turn lane with 12-foot sidewalks on both sides. Pedestrian priority segments include 17-foot sidewalks on both sides.
- A Secondary Arterial has two full-time through lanes in each direction, all-day permitted parking, and one median/left turn lane with ten-foot sidewalks on both sides. Pedestrian priority segments include 15-foot sidewalks on both sides.
- A Standard Collector Street has one full time lane in each direction, one full-time parking lane in each direction and ten-foot sidewalks on both sides.

3.3 Evaluation Methodology

A potential list of roadway segments and intersection locations to be studied was identified and presented to the affected agencies including Metro and LADOT for review and

concurrence. The initial list consisted of 70 intersection locations; however, after LADOT's review, an additional 15 intersection locations were included in the traffic analysis.

Initial information was collected from LADOT, but it was determined that most of the available count data were older than 2 or 3 years. Therefore, new counts were conducted at all 85 intersection locations and 66 roadway segments. Daily traffic volumes along the roadway segments and the morning (AM) and afternoon (PM) peak period turning movement counts at each intersection were collected by traffic surveyors on a typical weekday when schools were in session.

Existing transit services within the project area that parallel the Regional Connector alignment were identified and tabulated to show destinations, existing headways, service characteristics, and operating time periods. An on-street parking evaluation was conducted to assess the number of spaces that may be removed due to each one of alternatives. The analysis included a field inventory of the number of available on-street parking and loading spaces and identification of peak period parking restrictions, if applicable.

Existing traffic operating conditions were evaluated by performing a level of service (LOS) analysis for the roadway segments and intersections. LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable level of service in urban areas. Table 3-2 defines each level of service and is based on each roadway's specific volume-to-capacity ratio.

Each study intersection was analyzed using the Highway Capacity Manual delay methodology for signalized and un-signalized intersection. The LOS designation is based on an overall average vehicle delay in seconds per vehicle. The LOS criteria thresholds for un-signalized intersection are different than those used for signalized intersections. Table 3-3 provides LOS definitions for un-signalized intersections, including all-way and two-way stop-controlled intersections.

Table 3-4 provides LOS definitions and thresholds used to measure the performance of signalized intersections, where the intersection's LOS designation is also based on overall average vehicle delay in seconds per vehicle.

Traffic forecasts were developed for the horizon year of 2035 by obtaining the travel demand forecasts from the Metro Corridors Base Model and post-processing the information to reflect the anticipated growth within the project area. Forecasts for the No Build Alternative would account for background growth in traffic due to additional regional and sub-regional land use development (cumulative projects) and population growth. These forecasts were used to perform the operational analysis for each horizon year alternative under consideration.

For each potentially impacted location, proposed mitigation measures were developed.

Table 3-2. Roadway Segment Level of Service Definitions

LOS	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. Free flow, light volumes.
B	0.601 - 0.700	VERY GOOD. Free to stable flow, light to moderate volumes.
C	0.701 - 0.800	GOOD. Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
D	0.801 - 0.900	FAIR. Approaches unstable flow, moderate to heavy volumes, limited freedom to maneuver.
E	0.901 - 1.000	POOR. Extremely unstable flow, heavy volumes, maneuverability, and psychological comfort extremely poor.
F	>1.000	FAILURE. Forced or breakdown conditions, slow speeds, tremendous delays with continuously increasing queue lengths.

Source: TRB 1980.

Table 3-3. Level of Service Definitions for Un-Signalized Intersections

LOS	Average Vehicle Delay (in seconds)
A	$\leq$ 10.0
B	> 10.0 and $\leq$ 15.0
C	> 15.0 and $\leq$ 25.0
D	> 25.0 and $\leq$ 35.0
E	> 35.0 and $\leq$ 50.0
F	> 50.0

Source: TRB 2005

Table 3-4. Level of Service Definitions for Signalized Intersections		
LOS	**Average Vehicle Delay (in seconds)**	**Definition**
A	≤ 10.0	EXCELLENT. No vehicle waits longer than one red light and no approach phase are fully used.
B	> 10.0 and ≤ 20.0	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	> 20.0 and ≤ 35.0	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	> 35.0 and ≤ 55.0	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	> 55.0 and ≤ 80.0	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 80.0	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: TRB 2005

4.0 AFFECTED ENVIRONMENT

This section identifies the existing conditions for each transportation component being evaluated. The transportation environment consists of transit, traffic circulation, parking, and other modes such as pedestrians and bicycles.

4.1 Transit

The Regional Connector is located within the central business district of downtown Los Angeles, which is characterized by the highest concentration of transit service in the county. Ten transit operators operate four existing rail lines (one rail line is under construction) and approximately 110 bus routes throughout the project area. Services vary considerably in speed, frequency and capacity.

The transit operators include Antelope Valley Transit Authority (AVTA), City of Gardena, City of Santa Clarita, City of Santa Monica (Big Blue Bus), Foothill Transit, LADOT, Metro, Montebello Transit, Orange County Transportation Authority (OCTA), and Torrance Transit. The type of service provided includes traditional line-haul bus service, peak-hour freeway express buses, and downtown circulator shuttles.

Although Metro and LADOT carry the majority of passengers, other operators provide peak-hour, peak direction commuter bus service as well. In addition to public transit services, several high-rise office tenants also offer shuttle bus service to Union Station for their employees.

Commuter rail service to downtown Los Angeles is provided primarily by Metrolink and Amtrak, with connections to Metro Rail service at Union Station, which is located 0.1 mile outside of the project area. Most passengers arriving at Union Station on Metrolink are bound for the central business district and presently use the Metro Red Line, LADOT DASH buses, or employer-provided shuttles to complete their trips.

Almost all streets in the downtown area are served during the peak hours, with bus service that has five minute or even higher frequency (headways). The bus service runs in a grid pattern with the predominant flow of passengers being in an east-west orientation, although there are also heavily utilized bus lines that run in the north-south direction. The most heavily-served streets are 1st Street, the 4th Street/5th Street couplet, Hill Street, Broadway, the Main Street/Spring Street couplet, and the Grand Street/Olive Street couplet.

Major bus routes paralleling the Metro LRT lines and providing connections between the project area and the region are shown in the following tables. Each table shows the limits of a bus routes' service, the operating period, and the peak hour frequency. Tables 4-1 and 4-2 summarize the bus routes paralleling the existing Pasadena Gold Line and the existing Gold Line to East Los Angeles service.

Table 4-1. Bus Routes Paralleling the Existing Pasadena Gold Line Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	78/79/ 378	Local/Limited Stop Bus	5AM-1AM	10 mins	Arcadia via Huntington Dr. and Las Tunas Dr.
Metro	94	Local/Limited Stop Bus	5AM-1AM	5 mins	Sylmar via San Fernando Rd. and Spring Street
Metro	485	Freeway Express Bus	5AM-12AM	20 mins	Altadena via El Monte Busway, Oak Knoll Av. and Lake Av.

Table 4-2. Bus Routes Paralleling the Existing Gold Line to East Los Angeles Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	18	Local Bus	24 Hours	3 mins	Wilshire Center - Montebello via 6th Street and Whittier Bl.
Metro	30/31/ 330	Local/Limited Stop Bus	24 Hours	4 mins	Pico-Rimpau - Monterey Park via Pico Bl. and E 1st Street
Metro	62	Local Bus	5AM-11PM	15 mins	Hawaiian Gardens via Telegraph Rd.
Metro	66/366	Local/Limited Stop Bus	4AM-1AM	2 mins	Wilshire Center - Montebello via 8th Street and Olympic Bl.
Metro	68/84	Local Bus	24 Hours	8 mins	West LA - Montebello via Washington Bl. and Cesar Chavez Av.
LADOT	Dash Boyle Heights/East LA	Dash	7AM-7PM	20 mins	Herbert & Whittier via Wabash, Gage Av. and Rowan

Table 4-2. Bus Routes Paralleling the Existing Gold Line to East Los Angeles Service					
Operator	**Line**	**Mode**	**Weekday Hours of Operation**	**Peak Hour Frequency**	**Route Description**
Montebello	40	Local Bus	5AM-10PM	8 mins	Montebello and Whittier via Beverly Bl.
Montebello	341	Limited Stop Bus	7AM-9AM 4PM-6PM	30 mins	Montebello and Whittier via Beverly Bl.
Montebello	342	Limited Stop Bus	7AM & 5PM	One Trip	Montebello and Whittier via Beverly Bl.
Montebello	343	Limited Stop Bus	7AM-8AM 5PM-6PM	30 mins	Montebello and Whittier via Beverly Bl.

Tables 4-3 and 4-4 summarize the bus routes paralleling the existing Blue Line service to Long Beach and the future Exposition Line service to Culver City.

Table 4-3. Bus Routes Paralleling the Existing Blue Line Service					
Operator	**Line**	**Mode**	**Weekday Hours of Operation**	**Peak Hour Frequency**	**Route Description**
Metro	48	Local Bus	5AM-11PM	7 mins	Avalon Green Line via Main Street and S. San Pedro Street
Metro	60	Local Bus	24 Hours	6 mins	Artesia Blue Line via Long Beach Bl.
Metro	760	Rapid Bus	5AM-8PM	8 mins	Long Beach Bl. Rapid Bus
Metro	445	Freeway Express Bus	5AM-7PM	30 mins	San Pedro via Harbor Transitway, 1st Street and Pacific Av.
Metro	446/447	Freeway Express Bus	5AM-12AM	15 mins	San Pedro via Harbor Transitway, Avalon Bl. and Pacific Av.

Table 4-4. Bus Routes Paralleling the Future Exposition Line Service

Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	4	Local Bus	24 Hours	7 mins	Santa Monica via Santa Monica Blvd.
Metro	10	Local Bus	5AM-12AM	7 mins	West Hollywood via Temple Street and Melrose Avenue
Metro	14	Local Bus	24 Hours	10 mins	Beverly Hills via Beverly Blvd./West LA via Adams Blvd.
Metro	20	Local Bus	24 Hours	4 mins	Santa Monica via Wilshire Blvd.
Metro	26/51/52/ 352	Local/ Limited Stop Bus	24 Hours	4 mins	Hollywood - Compton - Artesia Blue Line via Avalon Blvd.
Metro	28/83/84/ 328	Local Bus	5AM-1AM	8 mins	Century City via Olympic Blvd.
Metro	33/333	Local/ Limited Stop Bus	24 Hours	2 mins	Santa Monica via Venice Blvd.
Metro	35/335	Local/ Limited Stop Bus	4AM-12AM	10 mins	West LA via Washington Blvd.
Metro	37	Local Bus	4AM-1AM	10 mins	Beverly Hills via Beverly Blvd./West LA via Adams Blvd.
Metro	90/91	Local Bus	5AM-12AM	10 mins	Sunland via Foothill Blvd., Cañada Blvd., and Glendale Avenue
Metro	439	Freeway Express Bus	5AM-9PM	40-60 mins	Aviation Green Line via Culver City

Table 4-4. Bus Routes Paralleling the Future Exposition Line Service					
Operator	Line	Mode	Weekday Hours of Operation	Peak Hour Frequency	Route Description
Metro	487	Freeway Express Bus	6AM-9PM	30 mins	Sierra Madre Villa Gold Line via El Monte Busway
Metro	720	Rapid Bus	4AM-1AM	4 mins	Wilshire Blvd. - Whittier Blvd. Rapid
LADOT	CE437	Freeway Express Bus	7AM-9AM 4PM-6PM	15-30 mins	Venice/Marina del Rey/Culver City

4.2 Traffic Circulation

4.2.1 Roadway Network

The environment in which traffic was evaluated included the north-south major and secondary arterials between and including Arcadia Street and 8th Street, and the east-west major and secondary arterials between and including Figueroa Street and Alameda Street. This section describes the major arterials in the project area roadway network.

Figueroa Street – This is a major class II arterial according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a one-way northbound street south of 3rd Street and a two-way street north of 3rd Street. Figueroa Street currently carries about 19,300 to 32,100 vehicles per day (vpd).

Flower Street – This is a secondary roadway according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a one-way southbound street south of 4th Street and a two-way street north of 4th Street. The 7th Street/Metro Center Station is located at Flower and 7th Street. This roadway currently carries from 6,700 to 17,600 vehicles per day.

Grand Avenue – This is a major class II arterial according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a one-way southbound street south of 5th Street and a two-way street north of 5th Street. It currently carries about 12,300 to 22,500 vehicles per day.

Olive Street – This is a secondary roadway according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a one-way northbound street south of 5th Street and a two-way street north of 5th Street. It carries about 13,300 to 17,300 vehicles per day.

Main Street – This is a secondary roadway according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a one-way street running north in the project area and carries 11,000 to 12,200 vehicles per day.

Los Angeles Street – This is a secondary roadway according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a two-way street carrying 9,000 to 20,700 vehicles per day.

Alameda Street – This is a major class II arterial according to City of Los Angeles General Plan, and is oriented in a north-south direction. It is a two-way street carrying 26,800 to 34,000 vehicles per day.

Temple Street – This is a major class II arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a two-way street carrying 15,100 to 21,700 vehicles per day.

1st Street – This is a secondary arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a two-way street carrying 14,000 to 23,300 vehicles per day.

2nd Street – This is a secondary arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a two-way street carrying 11,700 to 17,100 vehicles per day.

3rd Street – This is a secondary arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a one-way westbound street east of Flower Street and a two-way street west of Flower Street. It carries about 17,800 to 20,800 vehicles per day.

5th Street – This is a secondary arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a one-way westbound street and carries about 21,200 to 22,200 vehicles per day.

7th Street – This is a secondary arterial according to City of Los Angeles General Plan, and is oriented in an east-west direction. It is a two-way street carrying 16,700 to 19,700 vehicles per day.

4.2.2 Traffic Count Locations

Traffic counts were conducted to determine existing traffic operating conditions in the project area and develop future traffic projections for the 2035 horizon year analysis. Twenty four-hour tube counts were taken at 66 roadway segments and AM and PM peak period manual turning movement counts were conducted at 85 intersections. The roadway segment analysis was performed using average daily traffic (ADT) volumes taken from the tube counts and compared to the roadway capacity based on the City's General Plan designations. The intersection analysis was performed using the Synchro software to develop AM and PM peak hour operating conditions. Data collection was conducted on representative weekdays (Tuesday, Wednesday, or Thursday) between April and May 2009.

4.2.3 Existing (2009) Roadway Segment Operating Conditions

In April and May of 2009, daily 24-hour machine counts were collected at 66 roadway segment locations along 13 streets within the downtown Los Angeles area. Each roadway segment was analyzed to determine daily traffic operations and level of service. Table 4-5 presents capacities, volumes, volume-to-capacity ratios and corresponding levels of service for each roadway segment location analyzed in the project area.

According to the analysis, two roadway segments experience an existing LOS F traffic operating condition. These segments are located on 3rd Street between Hill Street and Broadway, and Broadway and Spring Street. One roadway segment, Alameda Street between Temple Street and 1st Street, currently experiences an LOS E condition. The remaining roadway segments operate at levels of service D or better.

Table 4-5. Existing Daily Roadway Analysis

Cross Street (n/o, w/o)	Facility Type	No. of lanes	Volume	Capacity	V/C Ratio	LOS
Figueroa Street						
2nd Street	Major Class II	5	19,300	40,000	0.48	A
3rd Street	Major Class II	6	11,100	48,000	0.23	A
4th Street	Major Class II	7	30,400	59,500	0.51	A
5th Street	Major Class II	5	30,500	42,500	0.72	C
6th Street	Major Class II	5	32,100	42,500	0.76	C

Table 4-5. Existing Daily Roadway Analysis						
Cross Street (n/o, w/o)	**Facility Type**	**No. of lanes**	**Volume**	**Capacity**	**V/C Ratio**	**LOS**
Wilshire Blvd.	Major Class II	5	31,500	42,500	0.74	C
7th Street	Major Class II	4	25,300	34,000	0.75	C
Flower Street						
3rd Street	Secondary	4	6,700	28,000	0.24	A
5th Street	Secondary	6	15,100	45,000	0.34	A
6th Street	Secondary	4	14,100	30,000	0.47	A
Wilshire Blvd.	Secondary	4	17,600	30,000	0.59	A
7th Street	Secondary	4	17,000	30,000	0.57	A
Grand Avenue						
Temple Street	Major Class II	4	22,500	32,000	0.70	C
1st Street	Major Class II	4	22,100	32,000	0.69	B
2nd Street	Major Class II	4	17,500	32,000	0.55	A
3rd Street	Major Class II	4	13,500	32,000	0.42	A
4th Street	Major Class II	4	12,300	32,000	0.38	A
Olive Street						
6th Street	Secondary	5	17,300	37,500	0.46	A
7th Street	Secondary	4	13,300	28,000	0.47	A
Main Street						
Temple Street	Secondary	4	11,300	28,000	0.40	A
1st Street (1-Way)	Secondary	3	12,200	22,500	0.54	A

Table 4-5. Existing Daily Roadway Analysis						
Cross Street (n/o, w/o)	**Facility Type**	**No. of lanes**	**Volume**	**Capacity**	**V/C Ratio**	**LOS**
2nd Street (1-Way)	Secondary	3	11,000	22,500	0.49	A
Los Angeles Street						
Arcadia Street	Secondary	4	9,000	28,000	0.32	A
Temple Street	Secondary	5	20,700	35,000	0.59	A
1st Street	Secondary	4	19,000	28,000	0.68	B
2nd Street	Secondary	4	19,600	28,000	0.70	C
Alameda Street						
Arcadia Street	Major Class II	6	27,700	48,000	0.58	A
Temple Street	Major Class II	5	34,000	40,000	0.85	D
1st Street	Major Class II	4	29,000	32,000	0.91	E
2nd Street	Major Class II	4	27,200	32,000	0.85	D
3rd Street	Major Class II	5	26,800	40,000	0.67	B
Temple Street						
Alameda Street	Major Class II	3	15,100	24,000	0.63	B
Judge John Aiso Street	Major Class II	4	15,700	32,000	0.49	A
Los Angeles Street	Major Class II	4	16,800	32,000	0.53	A
Main Street	Major Class II	4	15,600	32,000	0.49	A
Spring Street	Major Class II	4	17,100	32,000	0.53	A
Broadway	Major Class II	4	16,000	32,000	0.50	A
Grand Avenue	Major Class II	4	21,700	32,000	0.68	B

Table 4-5. Existing Daily Roadway Analysis						
Cross Street (n/o, w/o)	**Facility Type**	**No. of lanes**	**Volume**	**Capacity**	**V/C Ratio**	**LOS**
1st Street						
Alameda Street	Major Class II	4	14,000	32,000	0.44	A
Central Avenue	Major Class II	4	15,500	32,000	0.49	A
Judge John Aiso Street	Major Class II	5	16,200	40,000	0.41	A
Los Angeles Street	Major Class II	6	17,400	48,000	0.36	A
Main Street	Major Class II	5	17,100	40,000	0.43	A
Spring Street	Major Class II	5	20,000	40,000	0.50	A
Broadway	Major Class II	5	20,900	40,000	0.52	A
Hill Street	Major Class II	5	23,300	40,000	0.58	A
2nd Street						
Alameda Street	Secondary	3	12,000	21,000	0.57	A
Central Avenue	Secondary	2	11,700	14,000	0.84	D
San Pedro Street	Secondary	2	12,500	14,000	0.89	D
Los Angeles Street	Secondary	3	11,800	21,000	0.56	A
Main Street	Secondary	3	12,200	21,000	0.58	A
Spring Street	Secondary	4	13,600	28,000	0.49	A
Broadway	Secondary	3	14,200	21,000	0.68	B
Figueroa Street	Major Class II	4	17,100	32,000	0.53	A
3rd Street						
Alameda Street	Secondary	4	19,900	30,000	0.66	B

Table 4-5. Existing Daily Roadway Analysis						
Cross Street (n/o, w/o)	Facility Type	No. of lanes	Volume	Capacity	V/C Ratio	LOS
Central Avenue	Secondary	4	19,500	30,000	0.65	B
San Pedro Street	Secondary	4	17,800	30,000	0.59	A
Los Angeles Street	Secondary	3	18,700	22,500	0.83	D
Main Street	Secondary	3	18,800	22,500	0.84	D
Spring Street	Secondary	2	19,200	15,000	1.28	F
Broadway	Secondary	2	19,700	15,000	1.31	F
Flower Street	Secondary	4	20,800	30,000	0.69	B
5th Street						
Grand Avenue	Secondary	5	21,200	37,500	0.57	A
Flower Street	Secondary	6	22,200	45,000	0.49	A
7th Street						
Grand Avenue	Secondary	4	16,700	28,000	0.60	A
Flower Street	Secondary	5	19,700	35,000	0.56	A

4.2.4 Existing (2009) Intersection Peak Hour Traffic Conditions

Turning movement counts were collected at 85 intersection locations in the Regional Connector project area in order to assess current peak hour traffic operating conditions. The selected intersections are located both along the proposed LRT alignment and along adjacent streets, where potential shifts in traffic patterns may take place due to the proposed project. All intersections are currently signalized except for the 1st Street and Dewap Street intersection. All traffic count data were taken on a representative weekday (Tuesday, Wednesday, or Thursday) when schools were in session, there was no public holiday, and there were no unusual or adverse weather conditions.

Each study intersection was analyzed to determine peak hour operations and level of service. The project area roadway network was developed using the Synchro version 7.0 software after physical and operational characteristics for each study intersection was input. The Synchro output provides the level of service for signalized and un-signalized intersections along with an associated overall average vehicle delay in seconds per vehicle.

The existing conditions intersection analysis shows that only the Figueroa Street and Wilshire Boulevard intersection is operating at LOS F in the PM peak hour. All other intersections currently operate at LOS D or better during both the AM and PM peak hours. The results of the existing AM and PM LOS analysis and delay at each of the study intersections are presented in Table 4-6.

Table 4-6. Existing Intersection Level of Service (LOS) Analysis

No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Grand Avenue / 1st Street	C	24.9	C	27.6
2	Hill Street / 1st Street	B	16.6	C	27.8
3	Broadway / 1st Street	B	15.3	B	16.1
4	Spring Street / 1st Street	B	14.2	B	11.5
5	Main Street / 1st Street	B	11.7	C	21.4
6	Los Angeles Street / 1st Street	B	11.7	B	17.6
7	Judge John Aiso Street / 1st Street	A	8.8	B	13.6
8	Central Avenue / 1st Street	A	5.5	A	8.8
9	Alameda Street / 1st Street	B	17.1	C	28.8
10	Figueroa Street / 2nd Street	B	19.8	C	30.4
11	Grand Avenue / 2nd Street	B	10.3	B	13.1
12	Hill Street / 2nd Street	B	13.5	B	11.8
13	Broadway / 2nd Street	B	14.5	B	15.5

Table 4-6. Existing Intersection Level of Service (LOS) Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
14	Spring Street / 2nd Street	B	15.3	B	12.0
15	Main Street / 2nd Street	B	10.4	B	16.8
16	Los Angeles Street / 2nd Street	B	11.4	B	18.5
17	San Pedro Street / 2nd Street	B	11.3	B	13.6
18	Central Avenue / 2nd Street	A	7.4	A	8.3
19	Alameda Street /2nd Street	B	10.2	B	13.8
20	Figueroa Street / 3rd Street	C	27.9	D	45.0
21	Flower Street / 3rd Street	B	19.3	B	10.4
22	Grand Avenue / 3rd Street	A	6.7	A	9.8
23	Hill Street / 3rd Street	B	18.3	B	18.7
24	Broadway / 3rd Street	C	23.9	B	18.1
25	Spring Street / 3rd Street	C	22.3	B	13.7
26	Main Street / 3rd Street	B	13.6	B	15.7
27	Los Angeles Street / 3rd Street	B	14.2	B	15.1
28	San Pedro Street / 3rd Street	A	10.0	A	9.0
29	Central Avenue / 3rd Street	B	12.1	B	11.5
30	Alameda Street / 3rd Street	C	21.6	B	12.9
31	Figueroa Street / 4th Street	B	13.2	B	13.3
32	Flower Street / 4th Street	C	20.3	D	44.6
33	Grand Avenue / 4th Street	A	2.7	A	4.4

Table 4-6. Existing Intersection Level of Service (LOS) Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
34	Figueroa Street / 5th Street	B	12.8	C	25.4
35	Flower Street / 5th Street	B	13.9	B	16.6
36	Grand Avenue / 5th Street	B	14.7	C	24.3
37	Olive Street / 5th Street	B	15.4	B	17.7
38	Figueroa Street / 6th Street	C	30.8	D	43.6
39	Flower Street / 6th Street	B	14.8	B	19.0
40	Hope Street / 6th Street	A	6.0	B	10.7
41	Grand Avenue / 6th Street	B	13.0	B	15.2
42	Olive Street / 6th Street	B	12.6	C	20.0
43	Figueroa Street / Wilshire Blvd.	C	21.3	F	117.1
44	Flower Street / Wilshire Blvd.	B	14.5	C	22.4
45	Figueroa Street / 7th Street	B	19.3	C	27.4
46	Flower Street / 7th Street	A	8.9	B	19.8
47	Hope Street / 7th Street	A	7.7	B	10.5
48	Grand Avenue / 7th Street	B	12.9	B	17.9
49	Olive Street / 7th Street	B	12.0	B	16.1
50	Figueroa Street / 8th Street	B	13.5	C	20.5
51	Flower Street / 8th Street	A	9.4	B	18.8
52	Hope Street / Temple Street	C	23.6	C	30.6
53	Grand Avenue / Temple Street	C	29.8	D	38.4

Table 4-6. Existing Intersection Level of Service (LOS) Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
54	Hill Street / Temple Street	B	17.6	C	33.1
55	Broadway / Temple Street	C	20.3	C	21.8
56	Spring Street / Temple Street	B	14.5	B	12.8
57	Main Street / Temple Street	A	8.8	B	19.5
58	Los Angeles Street / Temple Street	B	12.5	B	14.7
59	Judge John Aiso Street / Temple Street	A	7.5	A	9.7
60	Alameda Street / Temple Street	C	22.8	C	34.4
61	Los Angeles Street / Aliso Street	B	11.1	B	15.8
62	Alameda Street / Aliso Street	C	20.1	C	24.0
63	Los Angeles Street / Arcadia Street	B	11.7	B	12.3
64	Alameda Street / Arcadia Street	C	22.9	B	15.8
65-1	Alameda Street / N. Los Angeles Street	B	13.3	B	10.5
65-2	Alameda Street / S. Los Angeles Street	A	4.4	B	10.6
66	Dewap Rd. / 1st Street	A	2.7	B	12.1
67	Olive Street / 1st Street	B	11.7	B	17.8
68	Hope Street / 1st Street	D	35.8	C	25.6
69	S. Hope Street / 2nd Street	A	7.0	B	12.2
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	15.1	B	17.7
71	Broadway / Arcadia Street	A	9.7	B	12.6
72	Spring Street / Arcadia Street	B	12.5	A	9.0

Table 4-6. Existing Intersection Level of Service (LOS) Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
73	Main Street / Arcadia Street	A	8.1	B	11.3
74	Broadway / Aliso Street	B	12.8	B	11.5
75	Spring Street / Aliso Street	A	9.1	A	9.7
76	Main Street / Aliso Street	A	5.9	B	11.6
77	Hill Street / 4th Street	B	11.5	B	17.0
78	Olive Street / 4th Street	B	14.2	C	24.2
79	Broadway / 4th Street	A	9.1	B	15.0
80	Spring Street / 4th Street	A	9.9	B	14.9
81	Main Street / 4th Street	A	7.2	C	20.3
82	Los Angeles Street / 4th Street	A	7.9	B	19.2
83	San Pedro Street / 4th Street	A	6.3	B	11.4
84	Central Avenue / 4th Street	A	7.3	B	14.3
85	Alameda Street / 4th Street	A	8.3	C	32.2

4.3 Parking

A comprehensive field survey was performed to collect the number of on-street parking spaces, loading spaces, and driveways that may be affected due to the proposed Regional Connector project. The street segments within each proposed alignment were surveyed to identify the existing number of parking spaces and associated peak period parking restriction information. Along the alignments, parking regulations permit a number of on-street parking spaces in one or both directions during the AM and PM peak hours. Current on-street parking, loading, and driveway information are summarized in Table 4-7.

4.4 Other Modes

Depending on the alternative being considered, areas that may have potential impacts on pedestrians and bicyclists include streets and intersections where the proposed LRT has an at-grade profile. These areas include Flower Street between 4th and 3rd Streets, 2nd Street between Hill and Los Angeles Streets, Main and Los Angeles Streets between Temple and 2nd Streets, Temple Street between Main and Alameda Streets, and Alameda Street between Aliso and 2nd Streets.

Table 4-7. Existing Parking Information						
Roadway Segment	East/North Side			West/South Side		
	Parking Spaces	Loading Spaces	Driveways	Parking Spaces	Loading Spaces	Driveways
Flower Street						
8th Street to 7th Street	14	2	1	8	0	3
7th Street to Wilshire Blvd.	0	1	2	0	0	1
Wilshire Blvd. to 6th Street	4	4	0	0	0	1
6th Street to 5th Street	0	0	3	0	4	2
5th Street to 4th Street	13	0	3	0	6	2
4th Street to 3rd Street	0	5	1	5	0	3
2nd Street						
Hill Street to Broadway	0	0	0	9	1	0
Broadway to Spring Street	0	0	1	0	0	2
Spring Street to Main Street	0	0	0	6	4	1
Main Street to Los Angeles Street	0	0	0	8	0	1
Los Angeles Street to Judge John Aiso Street	6	0	3	0	0	1

Table 4-7. Existing Parking Information						
Roadway Segment	East/North Side			West/South Side		
	Parking Spaces	Loading Spaces	Driveways	Parking Spaces	Loading Spaces	Driveways
Judge John Aiso Street to Central Avenue	18	5	1	20	1	2
Central Avenue to Alameda Street	4	0	2	4	0	1
Hope Street						
3rd Street to Gen. Thaddeus Kosciuszko Way	3	0	2	9	0	0
Gen. Thaddeus Kosciuszko Way to 2nd Street	0	0	1	0	0	0
Main Street						
2nd Street to 1st Street	0	4	2	0	0	1
1st Street to Temple Street	0	7	0	0	6	2
Los Angeles Street						
2nd Street to 1st Street	0	10	1	0	4	2
1st Street to Temple Street	0	0	1	0	7	1
Temple Street						

Table 4-7. Existing Parking Information						
Roadway Segment	East/North Side			West/South Side		
	Parking Spaces	Loading Spaces	Driveways	Parking Spaces	Loading Spaces	Driveways
Main Street to Los Angeles Street	4	0	0	0	0	0
Los Angeles Street to Judge John Aiso Street	0	0	0	0	0	3
Judge John Aiso Street to Alameda Street	0	4	1	12	0	1
Alameda Street						
2nd Street to 1st Street	10	0	1	0	0	2
1st Street to Temple Street	0	0	0	0	3	1
Temple Street to Aliso Street	0	0	0	0	0	1

4.4.1 Pedestrians

In urban settings, sidewalks are recommended to be 6 to 9.8 feet wide. The space closest to the curb allows for a buffer against moving traffic as well as space for street hardware, including light poles and street signs. The City of Los Angeles' guidelines recommend secondary arterial sidewalk widths of between 9 and 10.7 feet. In addition, all of the signalized intersections along the proposed LRT alignments currently have pedestrian call buttons. Crossing tracks at uncontrolled locations is prohibited and signs are placed to guide pedestrians to the nearest safe crossing at a signalized crosswalk location.

4.4.2 Bicycles

The Metro bicycle plan has designated 1st Street as a future Commuter Bikeway. This is defined as a hybrid of a Class II and Class III bikeway. Class II bikeways are designated striped lanes on surface streets, and Class III bikeways are unstriped bike routes that are designated by green "bike route" signage. Commuter Bikeways are unstriped routes that utilize a wide curb lane where parking is prohibited during peak hours. On 1st Street, the Commuter Bikeway would utilize the curb lane during peak periods when parking is prohibited. During off-peak hours, bicyclists ride in the traffic stream to avoid opening car doors.

5.0 IMPACTS

This section identifies operational and construction effects of the proposed project for each of the alternatives under consideration. The forecasts used to perform the operational analysis account for background growth in traffic due to cumulative projects, additional regional and sub-regional land use development, and population and employment growth.

5.1 Operational Impacts

The following sections describe future operational effects and conditions by alternative. The analysis was performed for the horizon year of 2035.

5.1.1 No Build Alternative

5.1.1.1 Transit

By horizon year 2035, several Metro Rail lines will be operating in the region. These transit services are included in the current adopted 2009 Metro Long Range Transportation Plan. As a result of the new rail lines, some bus services would be reorganized to minimize duplication of services. The Metro Corridors Base Model that was used to develop the travel demand forecasts takes these service changes into consideration. It also includes changes such as service cancelations based on the performance index, reducing service duplication by restructuring and truncating bus lines, and providing an efficient operational mix between Rapid and local bus service.

Transit service under the No Build Alternative would be focused on preserving existing services and projects. By horizon year 2035, the Metro Exposition Line to Santa Monica would be in service and some bus line service would have been reorganized and restructured to provide connections with the new rail lines. Otherwise, the transit network within the project area would be largely the same as it is now. The total daily system wide linked trips for the entire bus and rail system is projected to be about 1,717,100. A linked trip consists of one person making a one-way trip, which may include the use of multiple transit vehicles on the transit system. The daily urban rail boardings for this alternative would be 258,500 at the Metro Blue Line, Metro Gold Line, and Metro Expo Line stations combined. A single boarding is defined as one person getting on one transit vehicle. Consequently, a linked trip can be comprised of multiple boardings.

It is anticipated that the current bus service would predominantly remain the same through the year 2035 under the No Build Alternative in the project area. There would be increased headways for some of the heavily travelled lines. In addition, increases along the lines listed in Tables 4-1 through 4-4 would help feed more passengers into the downtown area and into the project area.

Transit patrons would continue to transfer twice to the Metro Red and Purple Lines through downtown to make a complete east-west or north-south trip. It is expected that transit service performance through the downtown area would likely decrease due to increased traffic congestion. This may make travel via transit a less attractive option for patrons traveling across downtown between Santa Monica and the I-605 vicinity or from Azusa to Long Beach. For those transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient. As a result, without significant improvements in transit service under the No Build Alternative, there would be a negative impact upon those that rely on the public transit system for east-west and north-south travel through the downtown area.

5.1.1.2 Traffic Circulation

Traffic forecasts were developed for horizon year 2035 by obtaining the Metro model projections for the no build condition and post-processing the information to reflect the anticipated growth within the project area. The resulting forecasts for the No Build Alternative account for background growth in traffic due to additional regional and sub-regional land use development (cumulative projects) and population growth. Using these year 2035 forecasts, an operational analysis was performed for the No Build Alternative. Based on the post-processed results of the long-range traffic projections, the growth factors at the 85 study intersections ranged from 1.30 to 1.57 over a 26-year period. This equates to a compounded average annual growth rate of 1 to 1.75 percent.

Future no build conditions (without the LRT) were analyzed; resulting traffic operating conditions and corresponding morning and afternoon peak hour LOS are presented in Table 5-1. This analysis assumed no improvements to the existing roadway system and the existing intersection lane configurations.

The results indicate that under no build conditions, 71 intersections would continue to operate at LOS D or better in the AM peak hour and 57 would continue to operate at LOS D or better in the PM peak hour. In the AM peak hour, six intersections would operate at LOS E and eight would operate at LOS F. In the PM peak hour, these numbers increase to 13 intersections operating at LOS E and 15 operating at LOS F. Intersections operating at LOS E or F are shown in bold.

5.1.1.3 Parking

The No Build Alternative would have no impact on the number of on-street parking and loading spaces in the project area. However, by 2035 increased growth in the area will lead to increased parking demand on the already strained parking resources. This may lead to increased and costly parking requirements for new developments in the area, potential changes in land-use choices that are not consistent with neighborhoods or communities in the project area, or increased parking prices to quell demand.

5.1.1.4 Other Modes

The No Build Alternative would have no impacts on bicycle or pedestrian facilities within the project area. However, increased traffic congestion and deterioration of LOS for traffic segments and intersections would result in performance deterioration of bicycle and pedestrians movements along the project corridor.

Table 5-1. 2035 No Build Alternative: Intersection Level of Service Analysis

No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Grand Avenue / 1st Street	**E**	**65.3**	**E**	**56.2**
2	Hill Street / 1st Street	C	24.1	**E**	**67.2**
3	Broadway / 1st Street	C	24.0	C	30.5
4	Spring Street / 1st Street	B	17.3	B	15.7
5	Main Street / 1st Street	B	16.5	D	53.0
6	Los Angeles Street / 1st Street	B	16.6	**F**	**102.9**
7	Judge John Aiso Street / 1st Street	B	13.9	C	21.1
8	Central Avenue / 1st Street	A	5.8	B	14.1
9	Alameda Street / 1st Street	D	44.4	**F**	**97.6**
10	Figueroa Street / 2nd Street	C	25.8	**F**	**120.7**
11	Grand Avenue / 2nd Street	B	13.6	B	16.7
12	Hill Street / 2nd Street	B	19.7	B	19.9
13	Broadway / 2nd Street	B	18.4	C	20.6
14	Spring Street / 2nd Street	C	25.3	B	14.5
15	Main Street / 2nd Street	B	12.9	C	33.9
16	Los Angeles Street / 2nd Street	B	14.8	C	34.4

Table 5-1. 2035 No Build Alternative: Intersection Level of Service Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
17	San Pedro Street / 2nd Street	B	14.5	B	19.1
18	Central Avenue / 2nd Street	A	9.9	B	10.2
19	Alameda Street / 2nd Street	B	15.9	C	33.1
20	Figueroa Street / 3rd Street	**F**	**98.5**	**F**	**140.9**
21	Flower Street / 3rd Street	C	28.4	B	15.7
22	Grand Avenue / 3rd Street	A	9.6	B	13.3
23	Hill Street / 3rd Street	**E**	**58.7**	D	48.5
24	Broadway / 3rd Street	**F**	**86.9**	**E**	**65.7**
25	Spring Street / 3rd Street	**F**	**87.8**	**E**	**55.9**
26	Main Street / 3rd Street	C	22.7	D	39.1
27	Los Angeles Street / 3rd Street	**E**	**67.1**	C	23.9
28	San Pedro Street / 3rd Street	C	23.7	B	13.9
29	Central Avenue / 3rd Street	C	25.2	B	15.3
30	Alameda Street / 3rd Street	**F**	**82.9**	**E**	**57.1**
31	Figueroa Street / 4th Street	B	18.0	B	19.4
32	Flower Street / 4th Street	D	39.6	**F**	**91.5**
33	Grand Avenue / 4th Street	A	3.0	A	4.6
34	Figueroa Street / 5th Street	B	16.5	**E**	**71.6**
35	Flower Street / 5th Street	C	22.3	C	20.8
36	Grand Avenue / 5th Street	C	21.8	**E**	**58.5**

Table 5-1. 2035 No Build Alternative: Intersection Level of Service Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
37	Olive Street / 5th Street	C	20.8	**E**	**61.6**
38	Figueroa Street / 6th Street	**F**	**104.0**	**F**	**98.4**
39	Flower Street / 6th Street	C	32.6	C	31.9
40	Hope Street / 6th Street	A	7.3	B	16.2
41	Grand Avenue / 6th Street	B	16.4	C	22.3
42	Olive Street / 6th Street	B	18.8	C	31.8
43	Figueroa Street / Wilshire Blvd.	**E**	**61.6**	**F**	**206.8**
44	Flower Street / Wilshire Blvd.	D	41.0	D	44.2
45	Figueroa Street / 7th Street	C	24.8	D	51.4
46	Flower Street / 7th Street	B	13.8	**F**	**131.6**
47	Hope Street / 7th Street	B	10.7	B	16.3
48	Grand Avenue / 7th Street	B	16.4	C	29.0
49	Olive Street / 7th Street	B	16.2	C	20.6
50	Figueroa Street / 8th Street	B	16.6	**F**	**94.2**
51	Flower Street / 8th Street	B	13.9	**F**	**91.8**
52	Hope Street / Temple Street	D	36.5	**E**	**60.2**
53	Grand Avenue / Temple Street	**F**	**94.4**	**F**	**106.6**
54	Hill Street / Temple Street	D	35.2	**F**	**95.1**
55	Broadway / Temple Street	**E**	**70.1**	**E**	**69.1**
56	Spring Street / Temple Street	C	27.5	B	18.6

Table 5-1. 2035 No Build Alternative: Intersection Level of Service Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
57	Main Street / Temple Street	B	11.4	C	30.2
58	Los Angeles Street / Temple Street	B	19.7	C	32.7
59	Judge John Aiso Street / Temple Street	A	5.6	B	15.7
60	Alameda Street / Temple Street	C	29.9	**E**	**77.1**
61	Los Angeles Street / Aliso Street	B	12.9	C	21.7
62	Alameda Street / Aliso Street	**F**	**88.5**	D	48.9
63	Los Angeles Street / Arcadia Street	B	14.4	B	16.3
64	Alameda Street / Arcadia Street	**E**	**64.7**	**F**	**148.5**
65-1	Alameda Street / Los Angeles Street N.	D	40.4	C	26.2
65-2	Alameda Street / Los Angeles Street S.	A	6.5	B	15.4
66	Dewap Rd. / 1st Street	A	5.7	**F**	**75.4**
67	Olive Street / 1st Street	B	16.1	C	25.1
68	Hope Street / 1st Street	**F**	**99.7**	**E**	**57.8**
69	S. Hope Street / 2nd Street	A	7.5	C	32.0
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	C	24.3
71	Broadway / Arcadia Street	B	12.8	D	45.2
72	Spring Street / Arcadia Street	B	16.3	B	10.4
73	Main Street / Arcadia Street	A	9.4	B	15.6
74	Broadway / Aliso Street	B	19.6	C	21.9
75	Spring Street / Aliso Street	B	11.4	B	11.1

Table 5-1. 2035 No Build Alternative: Intersection Level of Service Analysis					
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
76	Main Street / Aliso Street	A	6.8	B	16.5
77	Hill Street / 4th Street	B	18.3	D	45.4
78	Olive Street / 4th Street	B	17.0	**E**	**61.5**
79	Broadway / 4th Street	B	14.8	C	22.1
80	Spring Street / 4th Street	B	13.9	C	21.4
81	Main Street / 4th Street	B	11.8	C	34.7
82	Los Angeles Street / 4th Street	B	10.6	C	33.1
83	San Pedro Street / 4th Street	A	8.1	B	19.9
84	Central Avenue / 4th Street	A	8.2	B	19.6
85	Alameda Street / 4th Street	B	12.0	**F**	**131.1**

5.1.2 Transportation System Management (TSM) Alternative

5.1.2.1 Transit

The TSM Alternative proposes two express shuttle bus routes instead of light rail as a link between the 7th Street/Metro Center Station and Union Station. All provisions of the No Build Alternative would also be included.

The proposed shuttle buses would run every 2.5 minutes during peak hours and every 5 minutes during off-peak hours to move passengers efficiently between the two stations. They may have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles, to improve bus speeds. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. These shuttle routes would be operated by Metro.

For the TSM Alternative, the total daily system wide linked trips for the entire bus and rail system is projected to be about 1,722,400, which is a 5,300-trip increase over the No Build Alternative. A linked trip consists of one person making a one-way trip, which may include the use of multiple transit vehicles on the transit system. The daily urban rail boardings for this alternative is projected to be 258,000 at the Metro Blue Line, Metro Gold Line, and Metro Expo Line stations combined.

The TSM Alternative would improve the east-west and north-south connections between the stations, although transit patrons would still be required to transfer through downtown in order to make a complete trip.

This may make travel via transit a less attractive option for patrons traveling across downtown between Santa Monica and the I-605 vicinity or from Azusa to Long Beach. For those transit patrons that have no other travel options, travel times would increase and transit usage would be less convenient than projected under one of the LRT alternatives. As a result, there would be a negative impact upon those that rely on the public transit system for east-west and north-south travel through the downtown area.

Projections show a similar number of urban rail boardings as the No Build Alternative; however, the proposed shuttle bus service is projected to carry 42,700 daily boardings. It is expected that the theoretical carrying capacity would be approximately 3,400 passengers per hour in each direction using 30-foot shuttle buses; though 40-foot shuttle buses could also be used. This alternative would still result in a negative impact on transit-dependent users, though it would be a marginal improvement over the No Build Alternative.

The transit impacts identified under this alternative would be less than significant.

5.1.2.2 Traffic Circulation

The TSM Alternative would add two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. These buses would run frequently, operating at 2.5-minute headways during the AM and PM peak hours and every five minutes during the off-peak hours. The number of buses operating during the peak hour for each route was added to the no build traffic volume information of the affected intersections to yield a set of year 2035 intersection forecasts for the TSM Alternative. Intersection lane configurations for this alternative were assumed to be the same as for the No Build Alternative.

The results of the traffic analysis and corresponding AM and PM peak hour levels of service for this alternative are shown in Table 5-2. The table highlights in bold the intersections that exceed the significance threshold and are expected to be significantly impacted due to TSM Alternative.

The results indicate that under the TSM Alternative, 71 intersections would continue to operate at LOS D or better in the AM peak hour and 57 would continue to operate at LOS D or better in the PM peak hour. During the AM peak hour, six intersections would operate at LOS E and eight would operate at LOS F. In the PM peak hour, these numbers would increase to 12 intersections operating at LOS E and 16 operating at LOS F. Many of these intersections would operate at the same level of service as projected for the No Build Alternative.

Intersections that are considered to be impacted are those that have a significant negative change in LOS when compared to the No Build Alternative conditions. As defined in Section 3.1, the significance of an impact is related to the magnitude in the change in delay. Eight intersections would be impacted during the AM peak hour and nine intersections would be impacted during the PM peak hour. These impacts would be significant adverse effects of the TSM Alternative.

The traffic circulation impacts identified under this alternative would be significant.

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	68.8	**3.5**	**Yes**
2	Hill Street / 1st Street	C	24.1	C	24.1	0.0	No
3	Broadway / 1st Street	C	24.0	C	24.0	0.0	No
4	Spring Street / 1st Street	B	17.3	B	17.3	0.0	No
5	Main Street / 1st Street	B	16.5	B	16.5	0.0	No
6	Los Angeles Street / 1st Street	B	16.6	B	16.6	0.0	No
7	Judge John Aiso Street / 1st Street	B	13.9	B	13.9	0.0	No
8	Central Avenue / 1st Street	A	5.8	A	5.8	0.0	No
9	Alameda Street / 1st Street	D	44.4	D	45.4	1.0	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
10	Figueroa Street / 2nd Street	C	25.8	C	26.0	0.2	No
11	Grand Avenue / 2nd Street	B	13.6	B	13.8	0.2	No
12	Hill Street / 2nd Street	B	19.7	C	20.1	0.4	No
13	Broadway / 2nd Street	B	18.4	B	18.6	0.2	No
14	Spring Street / 2nd Street	C	25.3	C	26.6	1.3	No
15	Main Street / 2nd Street	B	12.9	B	13.0	0.1	No
16	Los Angeles Street / 2nd Street	B	14.8	B	15.3	0.5	No
17	San Pedro Street / 2nd Street	B	14.5	B	14.9	0.4	No
18	Central Avenue / 2nd Street	A	9.9	A	9.9	0.0	No
19	Alameda Street /2nd Street	B	15.9	B	17.2	1.3	No
20	Figueroa Street / 3rd Street	F	98.5	F	98.1	-0.4	No
21	Flower Street / 3rd Street	C	28.4	C	31.2	2.8	No
22	Grand Avenue / 3rd Street	A	9.6	A	9.9	0.3	No
23	Hill Street / 3rd Street	E	58.7	E	61.3	**2.6**	**Yes**
24	Broadway / 3rd Street	F	86.9	F	91.2	**4.3**	**Yes**
25	Spring Street / 3rd Street	F	87.8	F	92.0	**4.2**	**Yes**
26	Main Street / 3rd Street	C	22.7	C	23.5	0.8	No
27	Los Angeles Street / 3rd Street	E	67.1	E	70.6	**3.5**	**Yes**
28	San Pedro Street / 3rd Street	C	23.7	C	24.8	1.1	No
29	Central Avenue / 3rd Street	C	25.2	C	26.6	1.4	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
30	Alameda Street / 3rd Street	F	82.9	F	82.7	-0.2	No
31	Figueroa Street / 4th Street	B	18.0	B	18.1	0.1	No
32	Flower Street / 4th Street	D	39.6	D	40.3	0.7	No
33	Grand Avenue / 4th Street	A	3.0	A	3.0	0.0	No
34	Figueroa Street / 5th Street	B	16.5	B	16.6	0.1	No
35	Flower Street / 5th Street	C	22.3	C	24.8	2.5	No
36	Grand Avenue / 5th Street	C	21.8	C	22.7	0.9	No
37	Olive Street / 5th Street	C	20.8	C	20.7	-0.1	No
38	Figueroa Street / 6th Street	F	104.0	F	103.7	-0.3	No
39	Flower Street / 6th Street	C	32.6	C	33.7	1.1	No
40	Hope Street / 6th Street	A	7.3	A	7.3	0.0	No
41	Grand Avenue / 6th Street	B	16.4	B	16.4	0.0	No
42	Olive Street / 6th Street	B	18.8	B	19.0	0.2	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	E	64.4	**2.8**	**Yes**
44	Flower Street / Wilshire Blvd.	D	41.0	D	41.2	0.2	No
45	Figueroa Street / 7th Street	C	24.8	C	25.1	0.3	No
46	Flower Street / 7th Street	B	13.8	B	13.9	0.1	No
47	Hope Street / 7th Street	B	10.7	B	10.7	0.0	No
48	Grand Avenue / 7th Street	B	16.4	B	16.3	-0.1	No
49	Olive Street / 7th Street	B	16.2	B	16.5	0.3	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts							
No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
50	Figueroa Street / 8th Street	B	16.6	B	16.8	0.2	No
51	Flower Street / 8th Street	B	13.9	B	14.0	0.1	No
52	Hope Street / Temple Street	D	36.5	D	36.5	0.0	No
53	Grand Avenue / Temple Street	F	94.4	F	94.5	0.1	No
54	Hill Street / Temple Street	D	35.2	D	36.6	1.4	No
55	Broadway / Temple Street	E	70.1	E	71.1	1.0	No
56	Spring Street / Temple Street	C	27.5	C	27.8	0.3	No
57	Main Street / Temple Street	B	11.4	B	11.6	0.2	No
58	Los Angeles Street / Temple Street	B	19.7	C	20.5	0.8	No
59	Judge John Aiso Street / Temple Street	A	5.6	A	5.6	0.0	No
60	Alameda Street / Temple Street	C	29.9	C	31.2	1.3	No
61	Los Angeles Street / Aliso Street	B	12.9	B	13.1	0.2	No
62	Alameda Street / Aliso Street	F	88.5	F	99.0	**10.5**	**Yes**
63	Los Angeles Street / Arcadia Street	B	14.4	B	14.9	0.5	No
64	Alameda Street / Arcadia Street	E	64.7	E	65.3	0.6	No
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	47.0	**6.6**	**Yes**
65-2	Alameda Street / Los Angeles Street S.	A	6.5	A	7.0	0.5	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts							
No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
66	Dewap Rd. / 1st Street	A	5.7	A	5.7	0.0	No
67	Olive Street / 1st Street	B	16.1	B	16.1	0.0	No
68	Hope Street / 1st Street	F	99.7	F	99.7	0.0	No
69	S. Hope Street / 2nd Street	A	7.5	A	7.5	0.0	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	B	18.2	0.0	No
71	Broadway / Arcadia Street	B	12.8	B	12.8	0.0	No
72	Spring Street / Arcadia Street	B	16.3	B	16.3	0.0	No
73	Main Street / Arcadia Street	A	9.4	A	9.4	0.0	No
74	Broadway / Aliso Street	B	19.6	B	19.6	0.0	No
75	Spring Street / Aliso Street	B	11.4	B	11.4	0.0	No
76	Main Street / Aliso Street	A	6.8	A	6.8	0.0	No
77	Hill Street / 4th Street	B	18.3	B	18.3	0.0	No
78	Olive Street / 4th Street	B	17.0	B	17.0	0.0	No
79	Broadway / 4th Street	B	14.8	B	14.8	0.0	No
80	Spring Street / 4th Street	B	13.9	B	13.9	0.0	No
81	Main Street / 4th Street	B	11.8	B	11.8	0.0	No
82	Los Angeles Street / 4th Street	B	10.6	B	10.6	0.0	No
83	San Pedro Street / 4th Street	A	8.1	A	8.1	0.0	No
84	Central Avenue / 4th Street	A	8.2	A	8.2	0.0	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts							
No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
85	Alameda Street / 4th Street	B	12.0	B	12.0	0.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	57.5	1.3	No
2	Hill Street / 1st Street	E	67.2	E	67.2	0.0	No
3	Broadway / 1st Street	C	30.5	C	30.5	0.0	No
4	Spring Street / 1st Street	B	15.7	B	15.7	0.0	No
5	Main Street / 1st Street	D	53.0	D	53.0	0.0	No
6	Los Angeles Street / 1st Street	F	102.9	F	102.9	0.0	No
7	Judge John Aiso Street / 1st Street	C	21.1	C	21.1	0.0	No
8	Central Avenue / 1st Street	B	14.1	B	14.1	0.0	No
9	Alameda Street / 1st Street	F	97.6	F	100.8	**3.2**	**Yes**
10	Figueroa Street / 2nd Street	F	120.7	F	124.1	**3.4**	**Yes**
11	Grand Avenue / 2nd Street	B	16.7	B	16.9	0.2	No
12	Hill Street / 2nd Street	B	19.9	C	20.2	0.3	No
13	Broadway / 2nd Street	C	20.6	C	21.1	0.5	No
14	Spring Street / 2nd Street	B	14.5	B	14.7	0.2	No
15	Main Street / 2nd Street	C	33.9	D	35.0	1.1	No
16	Los Angeles Street / 2nd Street	C	34.4	D	36.7	2.3	No
17	San Pedro Street / 2nd Street	B	19.1	B	19.9	0.8	No
18	Central Avenue / 2nd Street	B	10.2	B	10.4	0.2	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
19	Alameda Street /2nd Street	C	33.1	D	36.9	3.8	No
20	Figueroa Street / 3rd Street	F	140.9	F	143.2	2.3	No
21	Flower Street / 3rd Street	B	15.7	B	15.7	0.0	No
22	Grand Avenue / 3rd Street	B	13.3	B	13.4	0.1	No
23	Hill Street / 3rd Street	D	48.5	D	51.7	3.2	No
24	Broadway / 3rd Street	E	65.7	E	68.3	**2.6**	**Yes**
25	Spring Street / 3rd Street	E	55.9	E	59.7	**3.8**	**Yes**
26	Main Street / 3rd Street	D	39.1	D	40.1	1.0	No
27	Los Angeles Street / 3rd Street	C	23.9	C	24.2	0.3	No
28	San Pedro Street / 3rd Street	B	13.9	B	14.0	0.1	No
29	Central Avenue / 3rd Street	B	15.3	B	15.5	0.2	No
30	Alameda Street / 3rd Street	E	57.1	E	56.9	-0.2	No
31	Figueroa Street / 4th Street	B	19.4	B	19.7	0.3	No
32	Flower Street / 4th Street	F	91.5	F	91.0	-0.5	No
33	Grand Avenue / 4th Street	A	4.6	A	4.6	0.0	No
34	Figueroa Street / 5th Street	E	71.6	E	73.5	1.9	No
35	Flower Street / 5th Street	C	20.8	C	21.3	0.5	No
36	Grand Avenue / 5th Street	E	58.5	E	63.1	**4.6**	**Yes**
37	Olive Street / 5th Street	E	61.6	E	61.4	-0.2	No
38	Figueroa Street / 6th Street	F	98.4	F	98.3	-0.1	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
39	Flower Street / 6th Street	C	31.9	C	32.3	0.4	No
40	Hope Street / 6th Street	B	16.2	B	16.2	0.0	No
41	Grand Avenue / 6th Street	C	22.3	C	22.3	0.0	No
42	Olive Street / 6th Street	C	31.8	C	31.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	208.7	1.9	No
44	Flower Street / Wilshire Blvd.	D	44.2	D	48.5	**4.3**	**Yes**
45	Figueroa Street / 7th Street	D	51.4	D	52.4	1.0	No
46	Flower Street / 7th Street	F	131.6	F	133.1	1.5	No
47	Hope Street / 7th Street	B	16.3	D	16.3	0.0	No
48	Grand Avenue / 7th Street	C	29.0	C	29.2	0.2	No
49	Olive Street / 7th Street	C	20.6	C	21.4	0.8	No
50	Figueroa Street / 8th Street	F	94.2	F	97.6	**3.4**	**Yes**
51	Flower Street / 8th Street	F	91.8	F	93.8	2.0	No
52	Hope Street / Temple Street	E	60.2	E	60.2	0.0	No
53	Grand Avenue / Temple Street	F	106.6	F	106.8	0.2	No
54	Hill Street / Temple Street	F	95.1	F	97.6	**2.5**	**Yes**
55	Broadway / Temple Street	E	69.1	E	73.3	**4.2**	**Yes**
56	Spring Street / Temple Street	B	18.6	B	18.9	0.3	No
57	Main Street / Temple Street	C	30.2	C	30.9	0.7	No
58	Los Angeles Street / Temple	C	32.7	C	34.0	1.3	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
	Street						
59	Judge John Aiso Street / Temple Street	B	15.7	B	16.0	0.3	No
60	Alameda Street / Temple Street	E	77.1	F	79.1	2.0	No
61	Los Angeles Street / Aliso Street	C	21.7	C	21.8	0.1	No
62	Alameda Street / Aliso Street	D	48.9	D	49.7	0.8	No
63	Los Angeles Street / Arcadia Street	B	16.3	B	16.4	0.1	No
64	Alameda Street / Arcadia Street	F	148.5	F	150.3	1.8	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	28.1	1.9	No
65-2	Alameda Street / Los Angeles Street S.	B	15.4	B	15.9	0.5	No
66	Dewap Rd. / 1st Street	F	75.4	F	75.4	0.0	No
67	Olive Street / 1st Street	C	25.1	C	25.1	0.0	No
68	Hope Street / 1st Street	E	57.8	E	57.8	0.0	No
69	S. Hope Street / 2nd Street	C	32.0	C	32.0	0.0	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	C	24.3	C	24.3	0.0	No
71	Broadway / Arcadia Street	D	45.2	D	45.2	0.0	No
72	Spring Street / Arcadia Street	B	10.4	B	10.4	0.0	No
73	Main Street / Arcadia Street	B	15.6	B	15.6	0.0	No

Table 5-2. Year 2035 TSM Alternative: Intersection LOS and Impacts							
No.	Intersection	No Build		TSM		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
74	Broadway / Aliso Street	C	21.9	C	21.9	0.0	No
75	Spring Street / Aliso Street	B	11.1	B	11.1	0.0	No
76	Main Street / Aliso Street	B	16.5	B	16.5	0.0	No
77	Hill Street / 4th Street	D	45.4	D	45.4	0.0	No
78	Olive Street / 4th Street	E	61.5	E	61.5	0.0	No
79	Broadway / 4th Street	C	22.1	C	22.1	0.0	No
80	Spring Street / 4th Street	C	21.4	C	21.4	0.0	No
81	Main Street / 4th Street	C	34.7	C	34.7	0.0	No
82	Los Angeles Street / 4th Street	C	33.1	C	33.1	0.0	No
83	San Pedro Street / 4th Street	B	19.9	B	19.9	0.0	No
84	Central Avenue / 4th Street	B	19.6	B	19.6	0.0	No
85	Alameda Street / 4th Street	F	131.1	F	131.1	0.0	No

5.1.2.3 Parking

The TSM Alternative would have no impact on the number of on-street parking and loading spaces within the project area where bus stops already exist. However, there is currently no bus service along portions of the Lower Grand route on 2nd Street, and up to 24 curb parking and loading spaces would need to be removed to accommodate new bus zones. The actual size of the bus zones would be determined pending further consultation with LADOT, and attempts would be made to minimize the number of parking spaces removed. However, the parking impacts identified for the TSM alternative would be significant.

5.1.2.4 Other Modes

The TSM Alternative has no impacts on bicycle or pedestrian facilities in the project area. Any impacts that could occur under this alternative would be less than significant.

5.1.3 At-Grade Emphasis LRT Alternative

5.1.3.1 Transit

The At-Grade Emphasis LRT Alternative includes a light rail alignment to provide a link between the 7th Street/Metro Center Station and Metro Gold Line at Temple and Alameda Streets. All of the provisions of the No Build Alternative would be included. The alignment east of 2nd and Hope Streets and the crossing at the 3rd and Flower Streets intersection would be at-grade and the remainder (Flower Street between 7th and 3rd Streets along with the station at 2nd and Hope Streets) would be underground.

The Regional Connector project would provide a direct east-west route between I-605 vicinity and Santa Monica and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. With this alternative, the existing Little Tokyo/Arts District Station would serve only east-west travel. Passengers originating in the communities of Little Tokyo and Arts District would need to board trains at the Main/Los Angeles couplet stations to make trips north and south, or board a train at Little Tokyo/Arts District Station and transfer after one stop.

For the At-Grade Emphasis LRT Alternative, the total daily system wide linked transit trips for the entire bus and rail system is projected to be about 1,729,400, which is a 12,300-trip increase over the No Build Alternative and a 7,000-trip increase over the TSM Alternative. Daily urban rail boardings for this alternative are projected to be 275,700 at the Metro Blue Line, Metro Gold Line, Metro Expo Line, and the proposed new Regional Connector stations combined. The projections show an increase of about 17,200 in urban rail boardings, which is a benefit of this alternative. It is also expected that the theoretical carrying capacity of the LRT system would be approximately 13,000 passengers per hour in each direction.

Bus operating speeds may decrease because of the proposed traffic lane reductions along Flower, 2nd, Main, Los Angeles, Temple, and Alameda Streets, which would negatively impact congestion on these streets. In addition, eastbound bus stops on 2nd Street would be displaced and buses traveling eastbound on 2nd Street would be shifted to adjacent roadways such as 1st or 4th Streets. Bus schedules would be adjusted to reflect modified traffic conditions and travel times. However, from an urban rail perspective, this alternative would have a significant benefit when compared to both the No Build and TSM Alternatives. In summary, the transit impacts identified under this alternative would be less than significant.

5.1.3.2 Traffic Circulation

The At-Grade Emphasis LRT Alternative consists of both at-grade segment and underground segments of the alignment. The primary at-grade segment runs along 2nd Street, splits to a one-way, one-track couplet on Main and Los Angeles Streets, then realigns into a dual-track configuration continuing on Temple Street and connecting with the existing Gold Line tracks

on Alameda Street. To accommodate at-grade operations, one traffic lane would be removed in each direction for the dual-track configuration on 2nd and Temple Streets and one traffic lane would be removed for the one-track couplet on Main and Los Angeles Streets. In addition, one traffic lane would be removed on Flower Street between 6th and 4th Streets to accommodate underground station pedestrian portals and two traffic lanes would be removed between 4th and 3rd Streets to accommodate the train portal.

Due to the narrow width of 2nd Street, only one westbound travel lane would be maintained to provide local business and driveway access and the two eastbound travel lanes between Hill and Main Streets would be eliminated. Consequently, eastbound through traffic would be diverted to 1st and 4th Streets and westbound through traffic would be diverted to 1st and 3rd Streets.

The proposed Alameda Street underpass at Temple Street would result in localized traffic shifts to adjacent intersections because some of the at-grade north-south turn movements from Alameda Street to Temple Street would be eliminated. These shifts in traffic patterns and roadway circulation are reflected in the year 2035 AM and PM peak hour traffic forecasts for the At-Grade Emphasis LRT Alternative and the reduction in traffic lanes is reflected in the intersection lane configurations.

The traffic signals along the LRT alignment would require modifications for at-grade operations to provide adequate time for the trains to safely clear an intersection. The intersection analysis accounts for this exclusive signal phase for LRT operations that would be necessary at most locations. The analysis incorporated an LRT green time phase ranging from 30 to 60 seconds, depending on the intersection and track configuration, to account for the safe movement of the trains through an intersection. The calculation of the LRT green time is based on the following assumptions:

- Operation of three-car trains at 5-minute headways per direction per route during peak hours, yielding trains every 2.5 minutes in each direction on the Regional Connector tracks.
- A three-car train length of approximately 270 feet.
- An average street running operating speed of 25 miles per hour with recognition that trains coming toward or leaving a station will be traveling at reduced speeds between 5 and ten miles per hour.
- An average cross-street width of 80 to 100 feet, depending on location.
- A safety clearance time of 20 seconds.

Future traffic operations were modeled with the Synchro software and the evaluation incorporated the AM and PM peak hour turn volumes, roadway geometrics, type of control, and signal phasing including the LRT component, where applicable. The results of the traffic analysis for this alternative and corresponding AM and PM peak hour levels of service are presented in Table 5-3. In addition, the table highlights in bold the intersections that exceed the significance threshold and would be significantly impacted due to the At-Grade Emphasis LRT Alternative.

The results indicate that under the At-Grade Emphasis LRT Alternative, 65 intersections would continue to operate at LOS D or better in the AM peak hour and 48 intersections would continue to operate at LOS D or better in the PM peak hour. In the AM peak hour, seven intersections would operate at LOS E and 13 intersections would operate at LOS F. In the PM peak hour, these numbers would increase to 12 intersections operating at LOS E and 25 operating at LOS F. Many of these intersections would operate at the same level of service as projected for the No Build Alternative.

Intersections that would be impacted include those that are projected to have a significant negative change in LOS when compared to the No Build Alternative conditions. As defined in Section 3.1, the significance of an impact is related to the magnitude in the change in delay. During the AM peak hour 18 intersections and during the PM peak hour 26 intersections would experience significant adverse impacts under the At-Grade LRT Alternative.

The table also shows that a number of intersections would improve from the No Build Alternative by virtue of a reduction in delays. During the AM peak hour, seven intersections show delay improvements and eight intersections show delay improvements during the PM peak hour.

In summary, the traffic circulation impacts identified under this alternative would be significant.

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	65.3	0.0	No
2	Hill Street / 1st Street	C	24.1	D	35.7	**11.6**	**Yes**

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
3	Broadway / 1st Street	C	24.0	C	23.9	-0.1	No
4	Spring Street / 1st Street	B	17.3	B	17.5	0.2	No
5	Main Street / 1st Street	B	16.5	C	23.5	**7.0**	**Yes**
6	Los Angeles Street / 1st Street	B	16.6	C	23.1	**6.5**	**Yes**
7	Judge John Aiso Street / 1st Street	B	13.9	B	13.5	-0.4	No
8	Central Avenue / 1st Street	A	5.8	A	5.9	0.1	No
9	Alameda Street / 1st Street	D	44.4	E	76.2	**31.8**	**Yes**
10	Figueroa Street / 2nd Street	C	25.8	C	25.8	0.0	No
11	Grand Avenue / 2nd Street	B	13.6	B	13.6	0.0	No
12	Hill Street / 2nd Street	B	19.7	F	496.7	**477.0**	**Yes**
13	Broadway / 2nd Street	B	18.4	C	32.5	**14.1**	**Yes**
14	Spring Street / 2nd Street	C	25.3	C	25.7	0.4	No
15	Main Street / 2nd Street	B	12.9	B	12.0	-0.9	No
16	Los Angeles Street / 2nd Street	B	14.8	E	77.8	**63.0**	**Yes**
17	San Pedro Street / 2nd Street	B	14.5	B	14.5	0.0	No
18	Central Avenue / 2nd Street	A	9.9	A	9.9	0.0	No
19	Alameda Street / 2nd Street	B	15.9	B	15.9	0.0	No
20	Figueroa Street / 3rd Street	F	98.5	F	98.5	0.0	No
21	Flower Street / 3rd Street	C	28.4	D	45.8	**17.4**	**Yes**

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
22	Grand Avenue / 3rd Street	A	9.6	A	9.6	0.0	No
23	Hill Street / 3rd Street	E	58.7	F	114.2	**55.5**	**Yes**
24	Broadway / 3rd Street	F	86.9	F	119.6	**32.7**	**Yes**
25	Spring Street / 3rd Street	F	87.8	F	104.9	**17.1**	**Yes**
26	Main Street / 3rd Street	C	22.7	D	36.0	**13.3**	**Yes**
27	Los Angeles Street / 3rd Street	E	67.1	F	88.7	**21.6**	**Yes**
28	San Pedro Street / 3rd Street	C	23.7	C	23.7	0.0	No
29	Central Avenue / 3rd Street	C	25.2	C	25.2	0.0	No
30	Alameda Street / 3rd Street	F	82.9	F	82.9	0.0	No
31	Figueroa Street / 4th Street	B	18.0	B	18.0	0.0	No
32	Flower Street / 4th Street	D	39.6	F	199.3	**159.7**	**Yes**
33	Grand Avenue / 4th Street	A	3.0	A	3.0	0.0	No
34	Figueroa Street / 5th Street	B	16.5	B	16.5	0.0	No
35	Flower Street / 5th Street	C	22.3	C	27.1	4.8	No
36	Grand Avenue / 5th Street	C	21.8	C	21.8	0.0	No
37	Olive Street / 5th Street	C	20.8	C	20.8	0.0	No
38	Figueroa Street / 6th Street	F	104.0	F	104.0	0.0	No
39	Flower Street / 6th Street	C	32.6	D	36.1	3.5	No
40	Hope Street / 6th Street	A	7.3	A	7.3	0.0	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
41	Grand Avenue / 6th Street	B	16.4	B	16.4	0.0	No
42	Olive Street / 6th Street	B	18.8	B	18.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	E	61.6	0.0	No
44	Flower Street / Wilshire Blvd.	D	41.0	D	41.0	0.0	No
45	Figueroa Street / 7th Street	C	24.8	C	24.8	0.0	No
46	Flower Street / 7th Street	B	13.8	B	13.8	0.0	No
47	Hope Street / 7th Street	B	10.7	B	10.7	0.0	No
48	Grand Avenue / 7th Street	B	16.2	B	16.2	0.0	No
49	Olive Street / 7th Street	B	16.2	B	16.2	0.0	No
50	Figueroa Street / 8th Street	B	16.6	B	16.6	0.0	No
51	Flower Street / 8th Street	B	13.9	B	13.9	0.0	No
52	Hope Street / Temple Street	D	36.5	D	36.5	0.0	No
53	Grand Avenue / Temple Street	F	94.4	F	94.4	0.0	No
54	Hill Street / Temple Street	D	35.2	D	35.2	0.0	No
55	Broadway / Temple Street	E	70.1	E	70.1	0.0	No
56	Spring Street / Temple Street	C	27.5	C	27.5	0.0	No
57	Main Street / Temple Street	B	11.4	C	23.9	**12.5**	**Yes**
58	Los Angeles Street / Temple Street	B	19.7	F	166.9	**147.2**	**Yes**
59	Judge John Aiso Street / Temple Street	A	5.6	B	19.2	13.6	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
60	Alameda Street / Temple Street	C	29.9	A	6.3	-23.6	No
61	Los Angeles Street / Aliso Street	B	12.9	B	12.6	-0.3	No
62	Alameda Street / Aliso Street	F	88.5	F	101.6	**13.1**	**Yes**
63	Los Angeles Street / Arcadia Street	B	14.4	B	14.4	0.0	No
64	Alameda Street / Arcadia Street	E	64.7	E	64.7	0.0	No
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	40.4	0.0	No
65-2	Alameda Street / Los Angeles Street S.	A	6.5	A	6.5	0.0	No
66	Dewap Rd. / 1st Street	A	5.7	A	5.7	0.0	No
67	Olive Street / 1st Street	B	16.1	B	16.1	0.0	No
68	Hope Street / 1st Street	F	99.7	E	69.0	-30.7	No
69	S. Hope Street / 2nd Street	A	7.5	B	11.1	3.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	A	7.2	-11.0	No
71	Broadway / Arcadia Street	B	12.8	B	12.8	0.0	No
72	Spring Street / Arcadia Street	B	16.3	B	16.3	0.0	No
73	Main Street / Arcadia Street	A	9.4	A	9.4	0.0	No
74	Broadway / Aliso Street	B	19.6	B	19.6	0.0	No
75	Spring Street / Aliso Street	B	11.4	B	11.4	0.0	No
76	Main Street / Aliso Street	A	6.8	A	6.8	0.0	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
77	Hill Street / 4th Street	B	18.3	F	215.8	**197.5**	**Yes**
78	Olive Street / 4th Street	B	17.0	B	17.0	0.0	No
79	Broadway / 4th Street	B	14.8	B	18.5	3.7	No
80	Spring Street / 4th Street	B	13.9	B	15.8	1.9	No
81	Main Street / 4th Street	B	11.8	B	13.4	1.6	No
82	Los Angeles Street / 4th Street	B	10.6	B	12.8	2.2	No
83	San Pedro Street / 4th Street	A	8.1	A	8.1	0.0	No
84	Central Avenue / 4th Street	A	8.2	A	8.2	0.0	No
85	Alameda Street / 4th Street	B	12.0	B	12.0	0.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	56.2	0.0	No
2	Hill Street / 1st Street	E	67.2	F	86.9	**19.7**	**Yes**
3	Broadway / 1st Street	C	30.5	D	53.6	**23.1**	**Yes**
4	Spring Street / 1st Street	B	15.7	B	16.4	0.7	No
5	Main Street / 1st Street	D	53.0	F	107.9	**54.9**	**Yes**
6	Los Angeles Street / 1st Street	F	102.9	F	126.2	**23.3**	**Yes**
7	Judge John Aiso Street / 1st Street	C	21.1	C	20.6	-0.5	No
8	Central Avenue / 1st Street	B	14.1	B	13.7	-0.4	No
9	Alameda Street / 1st Street	F	97.6	F	101.7	**4.1**	**Yes**

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
10	Figueroa Street / 2nd Street	F	120.7	F	120.7	0.0	No
11	Grand Avenue / 2nd Street	B	16.7	B	16.7	0.0	No
12	Hill Street / 2nd Street	B	19.9	F	438.9	**419.0**	**Yes**
13	Broadway / 2nd Street	C	20.6	C	30.5	**9.9**	**Yes**
14	Spring Street / 2nd Street	B	14.5	B	15.2	0.7	No
15	Main Street / 2nd Street	C	33.9	B	18.5	-15.4	No
16	Los Angeles Street / 2nd Street	C	34.4	E	55.2	**20.8**	**Yes**
17	San Pedro Street / 2nd Street	B	19.1	B	19.1	0.0	No
18	Central Avenue / 2nd Street	B	10.2	B	10.2	0.0	No
19	Alameda Street / 2nd Street	C	33.1	C	33.1	0.0	No
20	Figueroa Street / 3rd Street	F	140.9	F	140.9	0.0	No
21	Flower Street / 3rd Street	B	15.7	C	31.7	**16.0**	**Yes**
22	Grand Avenue / 3rd Street	B	13.3	B	13.3	0.0	No
23	Hill Street / 3rd Street	D	48.5	E	65.3	**16.8**	**Yes**
24	Broadway / 3rd Street	E	65.7	F	99.1	**33.4**	**Yes**
25	Spring Street / 3rd Street	E	55.9	F	87.7	**31.8**	**Yes**
26	Main Street / 3rd Street	D	39.1	D	50.7	**11.6**	**Yes**
27	Los Angeles Street / 3rd Street	C	23.9	D	41.9	**18.0**	**Yes**
28	San Pedro Street / 3rd Street	B	13.9	B	13.9	0.0	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
29	Central Avenue / 3rd Street	B	15.3	B	15.3	0.0	No
30	Alameda Street / 3rd Street	E	57.1	E	57.1	0.0	No
31	Figueroa Street / 4th Street	B	19.4	B	19.4	0.0	No
32	Flower Street / 4th Street	F	91.5	F	135.1	**43.6**	**Yes**
33	Grand Avenue / 4th Street	A	4.6	A	4.6	0.0	No
34	Figueroa Street / 5th Street	E	71.6	E	71.6	0.0	No
35	Flower Street / 5th Street	C	20.8	C	27.9	**7.1**	**Yes**
36	Grand Avenue / 5th Street	E	58.5	E	58.5	0.0	No
37	Olive Street / 5th Street	E	61.6	E	61.6	0.0	No
38	Figueroa Street / 6th Street	F	98.4	F	98.4	0.0	No
39	Flower Street / 6th Street	C	31.9	D	38.4	**6.5**	**Yes**
40	Hope Street / 6th Street	B	16.2	B	16.2	0.0	No
41	Grand Avenue / 6th Street	C	22.3	C	22.3	0.0	No
42	Olive Street / 6th Street	C	31.8	C	31.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	206.8	0.0	No
44	Flower Street / Wilshire Blvd.	D	44.2	D	44.2	0.0	No
45	Figueroa Street / 7th Street	D	51.4	D	51.4	0.0	No
46	Flower Street / 7th Street	F	131.6	F	131.6	0.0	No
47	Hope Street / 7th Street	B	16.3	B	16.3	0.0	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
48	Grand Avenue / 7th Street	C	29.0	C	29.0	0.0	No
49	Olive Street / 7th Street	C	20.6	C	20.6	0.0	No
50	Figueroa Street / 8th Street	F	94.2	F	94.2	0.0	No
51	Flower Street / 8th Street	F	91.8	F	91.8	0.0	No
52	Hope Street / Temple Street	E	60.2	E	60.2	0.0	No
53	Grand Avenue / Temple Street	F	106.6	F	106.6	0.0	No
54	Hill Street / Temple Street	F	95.1	F	95.1	0.0	No
55	Broadway / Temple Street	E	69.1	E	69.1	0.0	No
56	Spring Street / Temple Street	B	18.6	B	18.6	0.0	No
57	Main Street / Temple Street	C	30.2	F	147.0	**116.8**	**Yes**
58	Los Angeles Street / Temple Street	C	32.7	F	900.6	**867.9**	**Yes**
59	Judge John Aiso Street / Temple Street	B	15.7	F	124.5	**108.8**	**Yes**
60	Alameda Street / Temple Street	E	77.1	B	15.5	-61.6	No
61	Los Angeles Street / Aliso Street	C	21.7	D	48.1	**26.4**	**Yes**
62	Alameda Street / Aliso Street	D	48.9	F	91.1	**42.2**	**Yes**
63	Los Angeles Street / Arcadia Street	B	16.3	B	16.3	0.0	No
64	Alameda Street / Arcadia Street	F	148.5	F	148.5	0.0	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	26.2	0.0	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
65-2	Alameda Street / Los Angeles Street S.	B	15.4	B	15.4	0.0	No
66	Dewap Rd. / 1st Street	F	75.4	F	56.1	-19.3	No
67	Olive Street / 1st Street	C	25.1	C	25.1	0.0	No
68	Hope Street / 1st Street	E	57.8	D	51.8	-6.0	No
69	S. Hope Street / 2nd Street	C	32.0	C	27.4	-4.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	C	24.3	C	20.9	-3.4	No
71	Broadway / Arcadia Street	D	45.2	D	45.2	0.0	No
72	Spring Street / Arcadia Street	B	10.4	B	10.4	0.0	No
73	Main Street / Arcadia Street	B	15.6	B	15.6	0.0	No
74	Broadway / Aliso Street	C	21.9	C	21.9	0.0	No
75	Spring Street / Aliso Street	B	11.1	B	11.1	0.0	No
76	Main Street / Aliso Street	B	16.5	B	16.5	0.0	No
77	Hill Street / 4th Street	D	45.4	F	415.1	**369.7**	**Yes**
78	Olive Street / 4th Street	E	61.5	E	61.5	0.0	No
79	Broadway / 4th Street	C	22.1	E	67.6	**45.5**	**Yes**
80	Spring Street / 4th Street	C	21.4	C	29.3	**7.9**	**Yes**
81	Main Street / 4th Street	C	34.7	E	68.7	**34.0**	**Yes**
82	Los Angeles Street / 4th Street	C	33.1	D	35.6	2.5	No

Table 5-3. Year 2035 At-Grade Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		At-Grade Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
83	San Pedro Street / 4th Street	B	19.9	B	19.9	0.0	No
84	Central Avenue / 4th Street	B	19.6	B	19.6	0.0	No
85	Alameda Street / 4th Street	F	131.1	F	131.1	0.0	No

5.1.3.3 Parking

Portions of the At-Grade Emphasis LRT Alternative alignment would utilize existing roadway space for tracks, surface street stations, underground station pedestrian portals, and a roadway underpass on Alameda Street. There would be a reduction in traffic lanes and/or parking spaces along the street segments at these locations. The number of parking and loading spaces that would be removed was estimated based on the characteristics of each street segment and the proposed LRT street cross-sections. The expected impacts along each of the street segments that the alignment would traverse are discussed below.

Flower Street –Between 5th and 3rd Streets, seven of the 13 on-street parking spaces on the east side of the street and all five on-street parking spaces on the west side of the street would also be removed. Due to the relatively wide sidewalk, the loading spaces on both the east and west sides of the streets would be maintained by creating a loading bay area.

2nd Street – The LRT alignment would run on 2nd Street in an at-grade configuration between Hill and Los Angeles Streets. In this segment of the street there are no parking or loading spaces on the north side and parking and loading on the south side is prohibited during the AM and PM peak hours. Consequently, there would be no impacts to parking and loading during the peak hours. However, the 23 on-street parking spaces and five loading spaces on the south side of the street, which are currently available during the off-peak period (9 AM to 4 PM), would be eliminated to accommodate the LRT track configuration along with a travel lane to provide local business and driveway access.

Main Street – A single track would run on the east side of Main Street for southbound /westbound trains between 2nd and Temple Streets. The loading configuration on the west side of Main Street would be maintained; however, the 11 loading spaces on the east side of the street would be eliminated. In addition, there are two driveways on the east side of the street that provide access to the off-street parking for the Caltrans/LADOT building. These

could be maintained by providing adequate warning signage and other safety provisions to minimize potential train and vehicular conflicts.

Los Angeles Street – Similar to Main Street, a single track would run on the east side of Los Angeles Street for northbound/eastbound trains between 2nd and Temple Streets. The loading configuration on the west side of Los Angeles Street would be maintained; however, the 10 loading spaces on the east side of the street would be eliminated. In addition, two driveways on the east side of the street that provide access to adjacent businesses could be maintained by providing adequate warning signage and other safety provisions to minimize potential train and vehicular conflicts.

Temple Street – The LRT alignment would run at-grade in the center of Temple Street between Main and Judge John Aiso Streets and then shift to the south side of the street between Judge John Aiso and Alameda Streets. On the north side of the street, the four off-peak parking spaces between Main and Los Angeles Streets would be eliminated; however due to the shift of the tracks, the four loading spaces between Judge John Aiso and Alameda Streets would be maintained. On the south side of Temple Street, the 12 on-street parking spaces would be eliminated. In addition, the driveway on the south side of the street could be maintained by providing adequate warning signage and other safety provisions to minimize potential train and vehicular conflicts.

Alameda Street – The proposed Alameda Street underpass at Temple Street would impact the segment of the street between Aliso and 1st Streets. In this segment, the three bus tour loading spaces on the west side of the street adjacent to the Japanese American National Museum (JANM) would be eliminated. However, access to the JANM loading dock would be maintained.

The parking impacts identified under the At-Grade Emphasis LRT Alternative would not be considered adverse or significant.

5.1.3.4 Other Modes

For the At-Grade Emphasis LRT Alternative, the street and intersection locations where the LRT would have an at-grade profile include Flower Street between 4th and 3rd Streets, 2nd Street between Hill and Los Angeles Streets, Main and Los Angeles Streets between Temple and 2nd Streets, Temple Street between Main and Alameda Streets, and Alameda Street between Aliso and 2nd Streets. The alignment would utilize existing roadway space for tracks, surface street stations, underground station pedestrian portals, and a roadway underpass on Alameda Street. The reduction in travel lanes would impact bikeways and pedestrian crosswalks and sidewalks as it would traffic and transit.

The sidewalk along Flower Street between 6th and 3rd Streets and along 2nd Street between Hill and Los Angeles Streets would be maintained and could be widened. No pedestrian impacts

would be expected for the at-grade segments of the alignment. A station is proposed on each side of the one-way couplet on Main and Los Angeles Streets just north of 1st Street. At station areas, the LRT would be located near major signalized intersections, where pedestrian crosswalks are currently in place. The station layouts would be designed for pedestrian convenience and safety, leading to crosswalks at signalized intersections to guide pedestrians toward safe flow patterns.

The sidewalk and its associated width along Temple Street would be maintained. Where the tracks would cross Alameda Street, a pedestrian bridge is proposed to reduce potential conflicts between pedestrians, trains, and automobiles.

The possibility of conflicts between trains and pedestrians may also occur at the tunnel portal location on Flower Street south of 3rd Street where pedestrians could attempt to enter the tunnel during daytime operations or at night. Signing and surveillance would be utilized at tunnel portals to reduce the possibility of unauthorized tunnel entry. Potentially significant pedestrian safety issues associated with unauthorized pedestrian crossings of the tracks would be addressed during design and utilize Metro standards to minimize possible conflicts. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill.

The at-grade alignment would not directly impact designated bicycle routes. However, some of the through traffic currently on 2nd Street would be expected to shift onto 1st Street. Consequently, the flow of bicycle traffic could be impacted due to increased traffic volumes on 1st Street. Bicyclists could be traveling in a more congested environment due to the projected increase in traffic volumes on 1st Street.

Similarly, the proposed underpass at Alameda and Temple Streets would be expected to divert some local traffic to adjacent streets, such as Central Avenue, because of potential changes in traffic circulation patterns. Central Avenue is designated as a Class III bicycle route. Therefore, the flow of bicycle traffic could be impacted due to increased traffic volumes on Central Avenue as a result of this potential localized shift in traffic. Potential bicycle impacts identified under this alternative would be significant.

Transit stations would be provided with bike lockers and racks, increasing the bicycle facilities in the area and creating a positive impact. In addition, pedestrian level lighting at stations would improve the attractiveness and perception of safety, specifically in the evening hours, creating a positive effect for patrons and the community.

5.1.4 Underground Emphasis LRT Alternative

5.1.4.1 Transit

The Underground Emphasis LRT Alternative would include an underground light rail alignment to provide a link between the 7th Street/Metro Center Station and Metro Gold Line at 1st and Alameda Streets. All of the provisions of the No Build Alternative would be included.

The proposed alignment would surface to an at-grade configuration on Alameda Street at 1st Street. This alternative would provide a direct east-west route between Santa Monica and the I-605 vicinity and a direct north-south route between Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area.

The existing Little Tokyo/Arts District Station would serve only patrons traveling along the north-south route. Patrons from the Little Tokyo and Arts District communities would need to board a train at the proposed 2nd and Broadway station or the 2nd and Los Angeles station, whichever is selected, to travel east and west. Alternatively, patrons could board a train at the Little Tokyo/Arts District Station and transfer at the next stop.

For the Underground Emphasis LRT Alternative, the total daily system wide linked transit trips for the entire bus and rail system is projected to be about 1,732,000, which would be a 14,900-trip increase over the No Build Alternative and a 9,600-trip increase over the TSM Alternative. The daily urban rail boarding count for this alternative is projected to be 280,000 at the Metro Blue Line, Metro Gold Line, Metro Expo Line, and the proposed new Regional Connector stations combined. The projections show an increase of about 21,500 in urban rail boardings, which would be a positive impact of this alternative. The theoretical carrying capacity of the downtown LRT system would be approximately 13,000 passengers per hour in each direction under this alternative.

Bus operating speeds may increase due to proposed traffic lane reductions along Flower and Alameda Streets that would impact congestion on these streets. Bus schedules would be adjusted to reflect modified traffic conditions and travel times. However, from an urban rail perspective, this alternative shows a significant positive impact compared to both the No Build and TSM Alternatives. In summary, the transit impacts identified under this alternative would be less than significant.

5.1.4.2 Traffic Circulation

The Underground Emphasis LRT Alternative would be a predominantly underground alignment with one at-grade segment crossing Alameda Street to connect with the Gold Line tracks at the Little Tokyo/Arts District Station. To accommodate pedestrian portals to an underground station, one traffic lane would be removed on the east side of Flower Street

between 6th and 4th Streets. The proposed Alameda Street underpass at 1st Street would result in localized traffic shifts to adjacent intersections because some of the at-grade north-south turn movements from Alameda Street to 1st Street would be eliminated.

The at-grade segment of the Underground Emphasis LRT Alternative would require modifications to the traffic signal at 1st and Alameda Streets to provide adequate time for the trains to safely clear the intersection. In this area, some of the trains would be traveling at slow speeds because they would be approaching or leaving the Little Tokyo/Arts District Station.

These local shifts in traffic patterns and changes to the roadway circulation are reflected in the year 2035 AM and PM peak hour traffic forecasts for the Underground Emphasis LRT Alternative, and the proposed reduction in traffic lanes is reflected in the intersection lane configurations.

The results of the traffic analysis for this alternative and corresponding predicted AM and PM peak hour levels of service are presented in Table 5-4. In addition, the table highlights in bold the intersections that would exceed the significance threshold and that would be expected to be significantly impacted due to the Underground Emphasis LRT Alternative.

The results indicate that under the Underground Emphasis LRT Alternative, 69 intersections would continue to operate at LOS D or better in the AM peak hour and 55 would continue to operate at LOS D or better in the PM peak hour. In the AM peak hour, seven intersections would operate at LOS E and nine would operate at LOS F. In the PM peak hour, these numbers increase to 13 intersections operating at LOS E and 17 operating at LOS F. Many of these intersections would operate at the same level of service as projected for the No Build Alternative.

Intersections that would be impacted include those that are projected to have a significant negative change in LOS when compared to the No Build Alternative conditions. As defined in Section 3.1, the significance of an impact is related to the magnitude in the change in delay. Only three intersections during the AM peak hour and only seven intersections during the PM peak hour would experience significant adverse impacts of the Underground Emphasis LRT Alternative.

Table 5-4 also shows that a number of intersections would improve when compared to the No Build Alternative by virtue of a reduction in delays. During the AM peak hour, five intersections show delay improvements, while eight intersections show delay improvements in the PM peak hour. The Underground Emphasis LRT Alternative would increase the person-carrying capacity through the downtown transportation environment without adversely impacting overall traffic operations.

In summary, the traffic circulation impacts identified under this alternative would be significant.

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	65.3	0.0	No
2	Hill Street / 1st Street	C	24.1	C	24.1	0.0	No
3	Broadway / 1st Street	C	24.0	C	24.0	0.0	No
4	Spring Street / 1st Street	B	17.3	B	17.3	0.0	No
5	Main Street / 1st Street	B	16.5	B	16.5	0.0	No
6	Los Angeles Street / 1st Street	B	16.6	B	16.6	0.0	No
7	Judge John Aiso Street / 1st Street	B	13.9	B	14.8	0.9	No
8	Central Avenue / 1st Street	A	5.8	A	9.4	3.6	No
9	Alameda Street / 1st Street	D	44.4	A	6.1	-38.3	No
10	Figueroa Street / 2nd Street	C	25.8	C	25.8	0.0	No
11	Grand Avenue / 2nd Street	B	13.6	B	13.6	0.0	No
12	Hill Street / 2nd Street	B	19.7	B	19.7	0.0	No
13	Broadway / 2nd Street	B	18.4	B	18.4	0.0	No
14	Spring Street / 2nd Street	C	25.3	C	25.3	0.0	No
15	Main Street / 2nd Street	B	12.9	B	12.9	0.0	No
16	Los Angeles Street / 2nd Street	B	14.8	B	14.8	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
17	San Pedro Street / 2nd Street	B	14.5	B	14.0	-0.5	No
18	Central Avenue / 2nd Street	A	9.9	B	12.0	2.1	No
19	Alameda Street / 2nd Street	B	15.9	F	127.5	**111.6**	**Yes**
20	Figueroa Street / 3rd Street	F	98.5	F	98.5	0.0	No
21	Flower Street / 3rd Street	C	28.4	C	28.4	0.0	No
22	Grand Avenue / 3rd Street	A	9.6	A	9.6	0.0	No
23	Hill Street / 3rd Street	E	58.7	E	58.7	0.0	No
24	Broadway / 3rd Street	F	86.9	F	86.9	0.0	No
25	Spring Street / 3rd Street	F	87.8	F	87.8	0.0	No
26	Main Street / 3rd Street	C	22.7	C	22.7	0.0	No
27	Los Angeles Street / 3rd Street	E	67.1	E	67.1	0.0	No
28	San Pedro Street / 3rd Street	C	23.7	C	23.7	0.0	No
29	Central Avenue / 3rd Street	C	25.2	C	25.2	0.0	No
30	Alameda Street / 3rd Street	F	82.9	F	82.9	0.0	No
31	Figueroa Street / 4th Street	B	18.0	B	18.0	0.0	No
32	Flower Street / 4th Street	D	39.6	F	102.9	**63.3**	**Yes**
33	Grand Avenue / 4th Street	A	3.0	A	3.0	0.0	No
34	Figueroa Street / 5th Street	B	16.5	B	16.5	0.0	No
35	Flower Street / 5th Street	C	22.3	C	27.1	4.8	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
36	Grand Avenue / 5th Street	C	21.8	C	21.8	0.0	No
37	Olive Street / 5th Street	C	20.8	C	20.8	0.0	No
38	Figueroa Street / 6th Street	F	104.0	F	104.0	0.0	No
39	Flower Street / 6th Street	C	32.6	D	36.1	3.5	No
40	Hope Street / 6th Street	A	7.3	A	7.3	0.0	No
41	Grand Avenue / 6th Street	B	16.4	B	16.4	0.0	No
42	Olive Street / 6th Street	B	18.8	B	18.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	E	61.6	0.0	No
44	Flower Street / Wilshire Blvd.	D	41.0	D	41.0	0.0	No
45	Figueroa Street / 7th Street	C	24.8	C	24.8	0.0	No
46	Flower Street / 7th Street	B	13.8	B	13.8	0.0	No
47	Hope Street / 7th Street	B	10.7	B	10.7	0.0	No
48	Grand Avenue / 7th Street	B	16.2	B	16.2	0.0	No
49	Olive Street / 7th Street	B	16.2	B	16.2	0.0	No
50	Figueroa Street / 8th Street	B	16.6	B	16.6	0.0	No
51	Flower Street / 8th Street	B	13.9	B	13.9	0.0	No
52	Hope Street / Temple Street	D	36.5	D	36.5	0.0	No
53	Grand Avenue / Temple Street	F	94.4	F	94.4	0.0	No
54	Hill Street / Temple Street	D	35.2	D	35.2	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
55	Broadway / Temple Street	E	70.1	E	70.1	0.0	No
56	Spring Street / Temple Street	C	27.5	C	27.5	0.0	No
57	Main Street / Temple Street	B	11.4	B	11.4	0.0	No
58	Los Angeles Street / Temple Street	B	19.7	B	19.7	0.0	No
59	Judge John Aiso Street / Temple Street	A	5.6	A	7.5	1.9	No
60	Alameda Street / Temple Street	C	29.9	B	17.6	-12.3	No
61	Los Angeles Street / Aliso Street	B	12.9	B	12.9	0.0	No
62	Alameda Street / Aliso Street	F	88.5	F	93.2	**4.7**	**Yes**
63	Los Angeles Street / Arcadia Street	B	14.4	B	14.4	0.0	No
64	Alameda Street / Arcadia Street	E	64.7	E	64.7	0.0	No
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	40.4	0.0	No
65-2	Alameda Street / Los Angeles Street S.	A	6.5	A	6.5	0.0	No
66	Dewap Rd. / 1st Street	A	5.7	A	5.7	0.0	No
67	Olive Street / 1st Street	B	16.1	B	16.1	0.0	No
68	Hope Street / 1st Street	F	99.7	E	69.0	-30.7	No
69	S. Hope Street / 2nd Street	A	7.5	B	11.1	3.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	A	7.2	-11.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
71	Broadway / Arcadia Street	B	12.8	B	12.8	0.0	No
72	Spring Street / Arcadia Street	B	16.3	B	16.3	0.0	No
73	Main Street / Arcadia Street	A	9.4	A	9.4	0.0	No
74	Broadway / Aliso Street	B	19.6	B	19.6	0.0	No
75	Spring Street / Aliso Street	B	11.4	B	11.4	0.0	No
76	Main Street / Aliso Street	A	6.8	A	6.8	0.0	No
77	Hill Street / 4th Street	B	18.3	B	18.3	0.0	No
78	Olive Street / 4th Street	B	17.0	B	17.0	0.0	No
79	Broadway / 4th Street	B	14.8	B	14.8	0.0	No
80	Spring Street / 4th Street	B	13.9	B	13.9	0.0	No
81	Main Street / 4th Street	B	11.8	B	11.8	0.0	No
82	Los Angeles Street / 4th Street	B	10.6	B	10.6	0.0	No
83	San Pedro Street / 4th Street	A	8.1	A	8.1	0.0	No
84	Central Avenue / 4th Street	A	8.2	A	8.2	0.0	No
85	Alameda Street / 4th Street	B	12.0	B	12.0	0.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	56.2	0.0	No
2	Hill Street / 1st Street	E	67.2	E	67.2	0.0	No
3	Broadway / 1st Street	C	30.5	C	30.5	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
4	Spring Street / 1st Street	B	15.7	B	15.7	0.0	No
5	Main Street / 1st Street	D	53.0	D	53.0	0.0	No
6	Los Angeles Street / 1st Street	F	102.9	F	102.9	0.0	No
7	Judge John Aiso Street / 1st Street	C	21.1	F	133.2	**112.1**	**Yes**
8	Central Avenue / 1st Street	B	14.1	B	11.1	-3.0	No
9	Alameda Street / 1st Street	F	97.6	A	7.0	-90.6	No
10	Figueroa Street / 2nd Street	F	120.7	F	120.7	0.0	No
11	Grand Avenue / 2nd Street	B	16.7	B	16.7	0.0	No
12	Hill Street / 2nd Street	B	19.9	B	19.9	0.0	No
13	Broadway / 2nd Street	C	20.6	C	20.6	0.0	No
14	Spring Street / 2nd Street	B	14.5	B	14.5	0.0	No
15	Main Street / 2nd Street	C	33.9	C	33.9	0.0	No
16	Los Angeles Street / 2nd Street	C	34.4	C	34.4	0.0	No
17	San Pedro Street / 2nd Street	B	19.1	B	18.7	-0.4	No
18	Central Avenue / 2nd Street	B	10.2	B	16.7	6.5	No
19	Alameda Street / 2nd Street	C	33.1	F	133.2	**100.1**	**Yes**
20	Figueroa Street / 3rd Street	F	140.9	F	140.9	0.0	No
21	Flower Street / 3rd Street	B	15.7	B	15.5	-0.2	No
22	Grand Avenue / 3rd Street	B	13.3	B	13.3	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
23	Hill Street / 3rd Street	D	48.5	D	48.5	0.0	No
24	Broadway / 3rd Street	E	65.7	E	65.7	0.0	No
25	Spring Street / 3rd Street	E	55.9	E	55.9	0.0	No
26	Main Street / 3rd Street	D	39.1	D	39.1	0.0	No
27	Los Angeles Street / 3rd Street	C	23.9	C	23.9	0.0	No
28	San Pedro Street / 3rd Street	B	13.9	B	13.9	0.0	No
29	Central Avenue / 3rd Street	B	15.3	B	15.3	0.0	No
30	Alameda Street / 3rd Street	E	57.1	E	57.1	0.0	No
31	Figueroa Street / 4th Street	B	19.4	B	19.4	0.0	No
32	Flower Street / 4th Street	F	91.5	F	127.6	**36.1**	**Yes**
33	Grand Avenue/ 4th Street	A	4.6	A	4.6	0.0	No
34	Figueroa Street / 5th Street	E	71.6	E	71.6	0.0	No
35	Flower Street / 5th Street	C	20.8	C	27.9	**7.1**	**Yes**
36	Grand Avenue / 5th Street	E	58.5	E	58.5	0.0	No
37	Olive Street / 5th Street	E	61.6	E	61.6	0.0	No
38	Figueroa Street / 6th Street	F	98.4	F	98.4	0.0	No
39	Flower Street / 6th Street	C	31.9	D	38.4	**6.5**	**Yes**
40	Hope Street / 6th Street	B	16.2	B	16.2	0.0	No
41	Grand Avenue / 6th Street	C	22.3	C	22.3	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
42	Olive Street / 6th Street	C	31.8	C	31.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	206.8	0.0	No
44	Flower Street / Wilshire Blvd.	D	44.2	D	44.2	0.0	No
45	Figueroa Street / 7th Street	D	51.4	D	51.4	0.0	No
46	Flower Street / 7th Street	F	131.6	F	131.6	0.0	No
47	Hope Street / 7th Street	B	16.3	B	16.3	0.0	No
48	Grand Avenue / 7th Street	C	29.0	C	29.0	0.0	No
49	Olive Street / 7th Street	C	20.6	C	20.6	0.0	No
50	Figueroa Street / 8th Street	F	94.2	F	94.2	0.0	No
51	Flower Street / 8th Street	F	91.8	F	91.8	0.0	No
52	Hope Street / Temple Street	E	60.2	E	60.2	0.0	No
53	Grand Avenue / Temple Street	F	106.6	F	106.6	0.0	No
54	Hill Street / Temple Street	F	95.1	F	95.1	0.0	No
55	Broadway / Temple Street	E	69.1	E	69.1	0.0	No
56	Spring Street / Temple Street	B	18.6	B	18.6	0.0	No
57	Main Street / Temple Street	C	30.2	C	30.2	0.0	No
58	Los Angeles Street / Temple Street	C	32.7	C	32.7	0.0	No
59	Judge John Aiso Street / Temple Street	B	15.7	E	75.2	**59.5**	**Yes**

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
60	Alameda Street / Temple Street	E	77.1	E	77.6	0.5	No
61	Los Angeles Street / Aliso Street	C	21.7	C	21.7	0.0	No
62	Alameda Street / Aliso Street	D	48.9	F	82.6	**33.7**	**Yes**
63	Los Angeles Street / Arcadia Street	B	16.3	B	16.3	0.0	No
64	Alameda Street / Arcadia Street	F	148.5	F	148.5	0.0	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	26.2	0.0	No
65-2	Alameda Street / Los Angeles Street S.	B	15.4	B	15.4	0.0	No
66	Dewap Rd. / 1st Street	F	75.4	F	56.1	-19.3	No
67	Olive Street / 1st Street	C	25.1	C	25.1	0.0	No
68	Hope Street / 1st Street	E	57.8	D	51.8	-6.0	No
69	S. Hope Street / 2nd Street	C	32.0	C	27.4	-4.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	C	24.3	C	20.9	-3.4	No
71	Broadway / Arcadia Street	D	45.2	D	45.2	0.0	No
72	Spring Street / Arcadia Street	B	10.4	B	10.4	0.0	No
73	Main Street / Arcadia Street	B	15.6	B	15.6	0.0	No
74	Broadway / Aliso Street	C	21.9	C	21.9	0.0	No
75	Spring Street / Aliso Street	B	11.1	B	11.1	0.0	No

Table 5-4. Year 2035 Underground Emphasis LRT Alternative: Intersection LOS and Impacts

No.	Intersection	No Build		Underground Emphasis		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
76	Main Street / Aliso Street	B	16.5	B	16.5	0.0	No
77	Hill Street / 4th Street	D	45.4	D	45.4	0.0	No
78	Olive Street / 4th Street	E	61.5	E	61.5	0.0	No
79	Broadway / 4th Street	C	22.1	C	22.1	0.0	No
80	Spring Street / 4th Street	C	21.4	C	21.4	0.0	No
81	Main Street / 4th Street	C	34.7	C	34.7	0.0	No
82	Los Angeles Street / 4th Street	C	33.1	C	33.1	0.0	No
83	San Pedro Street / 4th Street	B	19.9	B	19.9	0.0	No
84	Central Avenue / 4th Street	B	19.6	B	19.6	0.0	No
85	Alameda Street / 4th Street	F	131.1	F	131.1	0.0	No

5.1.4.3 Parking

Portions of the Underground Emphasis LRT Alternative alignment would use existing roadway space for underground station pedestrian portals and a roadway underpass on Alameda Street. At these locations, there would be a reduction in traffic lanes and/or parking spaces. The number of parking and loading spaces that would be removed was estimated based on the characteristics of each street segment and the proposed street cross-sections. The expected impacts along each of the street segments that the alignment would traverse are discussed below.

Flower Street –Between 5th and 3rd Streets, seven of the 13 on-street parking spaces on the east side of the street between 5th and 4th Streets would be removed. Due to the relatively wide sidewalk, loading spaces on both the east and west sides of the streets would be maintained by creating a loading bay area.

Alameda Street – The proposed Alameda Street underpass at 1st Street would impact the segment of the street between Temple and 2nd Streets. In this segment, the three bus tour loading spaces on the west side of the street adjacent to the Japanese American National Museum would be eliminated. However, access to the JANM loading dock would be maintained. The 10 on-street parking spaces on the east side of the street would also be removed.

The parking impacts identified under this alternative would not be considered adverse or significant.

5.1.4.4 Other Modes

For the Underground Emphasis LRT Alternative, the only street and intersection location where the LRT has an at-grade profile would be in the vicinity of Alameda Street at 1st Street. The alignment would utilize existing roadway space for tracks, underground station pedestrian portals, and a roadway underpass on Alameda Street. Urban design concepts may be incorporated at these locations to improve pedestrian and bicycle safety and flow.

The sidewalk along Flower Street between 6th and 3rd Streets and along 2nd Street at the underground station portals would be maintained or widened. No pedestrian impacts would be expected for these segments of the alignment. At station areas, portals would be located near major signalized intersections, where pedestrian crosswalks are currently in place. Where the tracks cross Alameda Street, a pedestrian bridge is proposed to reduce potential conflicts between pedestrians, trains, and automobiles.

The tunnel portal would be located in the lot bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. Signing and surveillance would be utilized at this tunnel portal to reduce the possibility of unauthorized tunnel entry. Potentially significant pedestrian safety issues associated with unauthorized pedestrian crossings of the tracks at 1st and Alameda Streets would be addressed during design and use Metro standards to minimize possible conflicts. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill.

The underground alignment would not directly impact designated bicycle routes. However, the proposed underpass on Alameda Street at 1st Street and potential changes in traffic circulation patterns may result in the diversion of local traffic to adjacent roadway segments such as Central Avenue. Central Avenue is designated as a Class III bicycle route. Consequently, the flow of bicycle traffic may be impacted by increased traffic volumes on Central Avenue resulting from a potential localized shift in traffic. The impacts identified under this alternative would be less than significant.

Proposed stations would include bike lockers and racks, increasing the bicycle facilities in the area and creating a positive impact. In addition, pedestrian level lighting at stations would

improve the attractiveness and perception of safety, specifically in the evening hours, creating a positive effect for patrons and the community.

5.1.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

5.1.5.1 Transit

The Fully Underground LRT Alternative - Little Tokyo Version 1 would include a complete underground light rail alignment linking the 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets. All of the provisions of the No Build Alternative would be included. This alternative is similar to the Underground Emphasis LRT Alternative except that an additional underground station would be located in the property to be acquired between 1st, 2nd, Central, and Alameda Streets; the rail lines would cross under the 1st and Alameda Streets intersection; and two portals would be constructed. The alignment would surface from one portal to the east of Alameda Street north of Temple Street, to connect to the Metro Gold Line bridge over the US 101 freeway to Union Station. The alignment also would surface from another portal to connect to the Metro Gold Line tracks to East Los Angeles on 1st Street east of Alameda Street.

This alternative would provide a direct east-west route between Santa Monica and the I-605 vicinity and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to make a transfer in the downtown area. The new underground station within the property bounded by 1st, 2nd, Central, and Alameda Streets would serve all operations.

For the Fully Underground LRT Alternative – Little Tokyo Variation 1, the total daily system wide linked transit trips for the entire bus and rail system are projected to be about 1,734,500, which would be a 17,400-trip increase over the No Build Alternative and a 12,100-trip increase over the TSM Alternative. The daily urban rail boarding count for this alternative is projected to be 282,700 at the Metro Blue Line, Metro Gold Line, Metro Expo Line, and the proposed Regional Connector stations combined. The projections show an increase of about 24,200 in urban rail boardings, which would be a positive impact of this alternative. The theoretical carrying capacity of the downtown LRT system would be approximately 13,000 passengers per hour in each direction.

Proposed traffic lane reductions along Flower Street, due to the underground station pedestrian portals, would impact bus operating speeds because of a potential increase in traffic congestion. Bus schedules would be adjusted to reflect modified traffic conditions and travel times. However, from an urban rail perspective, this alternative represents a significant positive impact when compared to both the No Build and TSM Alternatives. In summary, the potential transit impacts identified under this alternative would be less than significant.

5.1.5.2 Traffic Circulation

The Fully Underground Alternative - Little Tokyo Variation 1 would be completely below ground. To accommodate underground station pedestrian portals, one traffic lane would be removed on Flower Street between 6th and 4th Streets. After construction of the train portals east of Alameda Street and on 1st Street, existing traffic lanes would be maintained; however, the signalized intersection at 1st and Hewitt Streets would be removed, eliminating the ability to cross 1st Street at that location. No at-grade train operations would pass through the two intersections of 1st and Alameda Streets and 1st and Temple Streets and traffic signals would operate under that assumption.

The results of the traffic analysis for this alternative and resulting predicted AM and PM peak hour levels of service are presented in Table 5-5. In addition, the table highlights in bold the intersections that would exceed the significance threshold and would be expected to be significantly impacted by this alternative.

The results indicate that under the Fully Underground LRT Alternative – Little Tokyo Variation 1, 70 intersections would continue to operate at LOS D or better in the AM peak hour and 68 would continue to operate at LOS D or better in the PM peak hour. In the AM peak hour, seven intersections would operate at LOS E and eight would operate at LOS F. In the PM peak hour these numbers increase to 13 intersections operating at LOS E and 14 operating at LOS F. Many of these intersections would operate at the same level of service as projected for the No Build Alternative.

Intersections that would be impacted include those that are projected to have a significant negative change in LOS when compared to the No Build Alternative conditions. As defined in Section 3.1, the significance of an impact is related to the magnitude in the change in delay. Only one intersection during the AM peak hour and only three intersections during the PM peak hour would experience a significant adverse impact from the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Table 5-5 also shows that a number of intersections would improve over the No Build Alternative by virtue of a reduction in delays. During the AM peak hour, four intersections would have delay improvements and seven intersections would experience improvements in delay during the PM peak hour. This alternative would increase the person-carrying capacity through the downtown transportation environment without adversely impacting traffic operations.

In summary, the traffic circulation impacts identified under this alternative would be significant.

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts							
No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	65.3	0.0	No
2	Hill Street / 1st Street	C	24.1	C	24.1	0.0	No
3	Broadway / 1st Street	C	24.0	C	24.0	0.0	No
4	Spring Street / 1st Street	B	17.3	B	17.3	0.0	No
5	Main Street / 1st Street	B	16.5	B	16.5	0.0	No
6	Los Angeles Street / 1st Street	B	16.6	B	16.6	0.0	No
7	Judge John Aiso Street / 1st Street	B	13.9	B	13.9	0.0	No
8	Central Avenue / 1st Street	A	5.8	A	5.8	0.0	No
9	Alameda Street / 1st Street	D	44.4	C	24.6	-19.8	No
10	Figueroa Street / 2nd Street	C	25.8	C	25.8	0.0	No
11	Grand Avenue / 2nd Street	B	13.6	B	13.6	0.0	No
12	Hill Street / 2nd Street	B	19.7	B	19.7	0.0	No
13	Broadway / 2nd Street	B	18.4	B	18.4	0.0	No
14	Spring Street / 2nd Street	C	25.3	C	25.3	0.0	No
15	Main Street / 2nd Street	B	12.9	B	12.9	0.0	No
16	Los Angeles Street / 2nd Street	B	14.8	B	14.8	0.0	No
17	San Pedro Street / 2nd Street	B	14.5	B	14.5	0.0	No
18	Central Avenue / 2nd Street	A	9.9	A	9.9	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
19	Alameda Street / 2nd Street	B	15.9	B	15.9	0.0	No
20	Figueroa Street / 3rd Street	F	98.5	F	98.5	0.0	No
21	Flower Street / 3rd Street	C	28.4	C	28.4	0.0	No
22	Grand Avenue / 3rd Street	A	9.6	A	9.6	0.0	No
23	Hill Street / 3rd Street	E	58.7	E	58.7	0.0	No
24	Broadway / 3rd Street	F	86.9	F	86.9	0.0	No
25	Spring Street / 3rd Street	F	87.8	F	87.8	0.0	No
26	Main Street / 3rd Street	C	22.7	C	22.7	0.0	No
27	Los Angeles Street / 3rd Street	E	67.1	E	67.1	0.0	No
28	San Pedro Street / 3rd Street	C	23.7	C	23.7	0.0	No
29	Central Avenue / 3rd Street	C	25.2	C	25.2	0.0	No
30	Alameda Street / 3rd Street	F	82.9	F	82.9	0.0	No
31	Figueroa Street / 4th Street	B	18.0	B	18.0	0.0	No
32	Flower Street / 4th Street	D	39.6	F	102.9	**63.3**	**Yes**
33	Grand Avenue / 4th Street	A	3.0	A	3.0	0.0	No
34	Figueroa Street / 5th Street	B	16.5	B	16.5	0.0	No
35	Flower Street / 5th Street	C	22.3	C	27.1	4.8	No
36	Grand Avenue / 5th Street	C	21.8	C	21.8	0.0	No
37	Olive Street / 5th Street	C	20.8	C	20.8	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
38	Figueroa Street / 6th Street	F	104.0	F	104.0	0.0	No
39	Flower Street / 6th Street	C	32.6	D	36.1	3.5	No
40	Hope Street / 6th Street	A	7.3	A	7.3	0.0	No
41	Grand Avenue / 6th Street	B	16.4	B	16.4	0.0	No
42	Olive Street / 6th Street	B	18.8	B	18.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	E	61.6	0.0	No
44	Flower Street / Wilshire Blvd.	D	41.0	D	41.0	0.0	No
45	Figueroa Street / 7th Street	C	24.8	C	24.8	0.0	No
46	Flower Street / 7th Street	B	13.8	B	13.8	0.0	No
47	Hope Street / 7th Street	B	10.7	B	10.7	0.0	No
48	Grand Avenue / 7th Street	B	16.2	B	16.2	0.0	No
49	Olive Street / 7th Street	B	16.2	B	16.2	0.0	No
50	Figueroa Street / 8th Street	B	16.6	B	16.6	0.0	No
51	Flower Street / 8th Street	B	13.9	B	13.9	0.0	No
52	Hope Street / Temple Street	D	36.5	D	36.5	0.0	No
53	Grand Avenue / Temple Street	F	94.4	F	94.4	0.0	No
54	Hill Street / Temple Street	D	35.2	D	35.2	0.0	No
55	Broadway / Temple Street	E	70.1	E	70.1	0.0	No
56	Spring Street / Temple Street	C	27.5	C	27.5	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts							
No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
57	Main Street / Temple Street	B	11.4	B	11.4	0.0	No
58	Los Angeles Street / Temple Street	B	19.7	B	19.7	0.0	No
59	Judge John Aiso Street / Temple Street	A	5.6	A	5.6	0.0	No
60	Alameda Street / Temple Street	C	29.9	C	20.7	-9.2	No
61	Los Angeles Street / Aliso Street	B	12.9	B	12.9	0.0	No
62	Alameda Street / Aliso Street	F	88.5	F	88.5	0.0	No
63	Los Angeles Street / Arcadia Street	B	14.4	B	14.4	0.0	No
64	Alameda Street / Arcadia Street	E	64.7	E	64.7	0.0	No
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	40.4	0.0	No
65-2	Alameda Street / Los Angeles Street S.	A	6.5	A	6.5	0.0	No
66	Dewap Rd. / 1st Street	A	5.7	A	5.7	0.0	No
67	Olive Street / 1st Street	B	16.1	B	16.1	0.0	No
68	Hope Street / 1st Street	F	99.7	E	69.0	-30.7	No
69	S. Hope Street / 2nd Street	A	7.5	B	11.1	3.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	A	7.2	-11.0	No
71	Broadway / Arcadia Street	B	12.8	B	12.8	0.0	No
72	Spring Street / Arcadia Street	B	16.3	B	16.3	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts							
No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
73	Main Street / Arcadia Street	A	9.4	A	9.4	0.0	No
74	Broadway / Aliso Street	B	19.6	B	19.6	0.0	No
75	Spring Street / Aliso Street	B	11.4	B	11.4	0.0	No
76	Main Street / Aliso Street	A	6.8	A	6.8	0.0	No
77	Hill Street / 4th Street	B	18.3	B	18.3	0.0	No
78	Olive Street / 4th Street	B	17.0	B	17.0	0.0	No
79	Broadway / 4th Street	B	14.8	B	14.8	0.0	No
80	Spring Street / 4th Street	B	13.9	B	13.9	0.0	No
81	Main Street / 4th Street	B	11.8	B	11.8	0.0	No
82	Los Angeles Street / 4th Street	B	10.6	B	10.6	0.0	No
83	San Pedro Street / 4th Street	A	8.1	A	8.1	0.0	No
84	Central Avenue / 4th Street	A	8.2	A	8.2	0.0	No
85	Alameda Street / 4th Street	B	12.0	B	12.0	0.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	56.2	0.0	No
2	Hill Street / 1st Street	E	67.2	E	67.2	0.0	No
3	Broadway / 1st Street	C	30.5	C	30.5	0.0	No
4	Spring Street / 1st Street	B	15.7	B	15.7	0.0	No
5	Main Street / 1st Street	D	53.0	D	53.0	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
6	Los Angeles Street / 1st Street	F	102.9	F	102.9	0.0	No
7	Judge John Aiso Street / 1st Street	C	21.1	C	21.1	0.0	No
8	Central Avenue / 1st Street	B	14.1	B	14.1	0.0	No
9	Alameda Street / 1st Street	F	97.6	E	74.4	-23.2	No
10	Figueroa Street / 2nd Street	F	120.7	F	120.7	0.0	No
11	Grand Avenue / 2nd Street	B	16.7	B	16.7	0.0	No
12	Hill Street / 2nd Street	B	19.9	B	19.9	0.0	No
13	Broadway / 2nd Street	C	20.6	C	20.6	0.0	No
14	Spring Street / 2nd Street	B	14.5	B	14.5	0.0	No
15	Main Street / 2nd Street	C	33.9	C	33.9	0.0	No
16	Los Angeles Street / 2nd Street	C	34.4	C	34.4	0.0	No
17	San Pedro Street / 2nd Street	B	19.1	B	19.1	0.0	No
18	Central Avenue / 2nd Street	B	10.2	B	10.2	0.0	No
19	Alameda Street / 2nd Street	C	33.1	C	33.1	0.0	No
20	Figueroa Street / 3rd Street	F	140.9	F	140.9	0.0	No
21	Flower Street / 3rd Street	B	15.7	B	15.5	-0.2	No
22	Grand Avenue / 3rd Street	B	13.3	B	13.3	0.0	No
23	Hill Street / 3rd Street	D	48.5	D	48.5	0.0	No
24	Broadway / 3rd Street	E	65.7	E	65.7	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
25	Spring Street / 3rd Street	E	55.9	E	55.9	0.0	No
26	Main Street / 3rd Street	D	39.1	D	39.1	0.0	No
27	Los Angeles Street / 3rd Street	C	23.9	C	23.9	0.0	No
28	San Pedro Street / 3rd Street	B	13.9	B	13.9	0.0	No
29	Central Avenue / 3rd Street	B	15.3	B	15.3	0.0	No
30	Alameda Street / 3rd Street	E	57.1	E	57.1	0.0	No
31	Figueroa Street / 4th Street	B	19.4	B	19.4	0.0	No
32	Flower Street / 4th Street	F	91.5	F	127.6	**36.1**	**Yes**
33	Grand Avenue / 4th Street	A	4.6	A	4.6	0.0	No
34	Figueroa Street / 5th Street	E	71.6	E	71.6	0.0	No
35	Flower Street / 5th Street	C	20.8	C	27.9	**7.1**	**Yes**
36	Grand Avenue / 5th Street	E	58.5	E	58.5	0.0	No
37	Olive Street / 5th Street	E	61.6	E	61.6	0.0	No
38	Figueroa Street / 6th Street	F	98.4	F	98.4	0.0	No
39	Flower Street / 6th Street	C	31.9	D	38.4	**6.5**	**Yes**
40	Hope Street / 6th Street	B	16.2	B	16.2	0.0	No
41	Grand Avenue / 6th Street	C	22.3	C	22.3	0.0	No
42	Olive Street / 6th Street	C	31.8	C	31.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	206.8	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
44	Flower Street / Wilshire Blvd.	D	44.2	D	44.2	0.0	No
45	Figueroa Street / 7th Street	D	51.4	D	51.4	0.0	No
46	Flower Street / 7th Street	F	131.6	F	131.6	0.0	No
47	Hope Street / 7th Street	B	16.3	B	16.3	0.0	No
48	Grand Avenue / 7th Street	C	29.0	C	29.0	0.0	No
49	Olive Street / 7th Street	C	20.6	C	20.6	0.0	No
50	Figueroa Street / 8th Street	F	94.2	F	94.2	0.0	No
51	Flower Street / 8th Street	F	91.8	F	91.8	0.0	No
52	Hope Street / Temple Street	E	60.2	E	60.2	0.0	No
53	Grand Avenue / Temple Street	F	106.6	F	106.6	0.0	No
54	Hill Street / Temple Street	F	95.1	F	95.1	0.0	No
55	Broadway / Temple Street	E	69.1	E	69.1	0.0	No
56	Spring Street / Temple Street	B	18.6	B	18.6	0.0	No
57	Main Street / Temple Street	C	30.2	C	30.2	0.0	No
58	Los Angeles Street / Temple Street	C	32.7	C	32.7	0.0	No
59	Judge John Aiso Street / Temple Street	B	15.7	B	15.7	0.0	No
60	Alameda Street / Temple Street	E	77.1	E	63.3	-13.8	No
61	Los Angeles Street / Aliso Street	C	21.7	C	21.7	0.0	No
62	Alameda Street / Aliso Street	D	48.9	D	48.9	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts							
No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
63	Los Angeles Street / Arcadia Street	B	16.3	B	16.3	0.0	No
64	Alameda Street / Arcadia Street	F	148.5	F	148.5	0.0	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	26.2	0.0	No
65-2	Alameda Street / Los Angeles Street S.	B	15.4	B	15.4	0.0	No
66	Dewap Rd. / 1st Street	F	75.4	F	56.1	-19.3	No
67	Olive Street / 1st Street	C	25.1	C	25.1	0.0	No
68	Hope Street / 1st Street	E	57.8	D	51.8	-6.0	No
69	S. Hope Street / 2nd Street	C	32.0	C	27.4	-4.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	C	24.3	C	20.9	-3.4	No
71	Broadway / Arcadia Street	D	45.2	D	45.2	0.0	No
72	Spring Street / Arcadia Street	B	10.4	B	10.4	0.0	No
73	Main Street / Arcadia Street	B	15.6	B	15.6	0.0	No
74	Broadway / Aliso Street	C	21.9	C	21.9	0.0	No
75	Spring Street / Aliso Street	B	11.1	B	11.1	0.0	No
76	Main Street / Aliso Street	B	16.5	B	16.5	0.0	No
77	Hill Street / 4th Street	D	45.4	D	45.4	0.0	No
78	Olive Street / 4th Street	E	61.5	E	61.5	0.0	No

Table 5-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1: Intersection LOS and Impacts							
No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
79	Broadway / 4th Street	C	22.1	C	22.1	0.0	No
80	Spring Street / 4th Street	C	21.4	C	21.4	0.0	No
81	Main Street / 4th Street	C	34.7	C	34.7	0.0	No
82	Los Angeles Street / 4th Street	C	33.1	C	33.1	0.0	No
83	San Pedro Street / 4th Street	B	19.9	B	19.9	0.0	No
84	Central Avenue / 4th Street	B	19.6	B	19.6	0.0	No
85	Alameda Street / 4th Street	F	131.1	F	131.1	0.0	No

5.1.5.3 Parking

The Fully Underground LRT Alternative - Little Tokyo Version 1 would be entirely underground; however, portions of the alignment would utilize existing roadway space for underground station pedestrian portals. At these locations, there would be a reduction in traffic lanes and/or parking spaces along the street segments. The number of parking and loading spaces that would be removed was estimated based on the characteristics of each street segment and the proposed street cross-sections. The potential impacts along each of the street segments that the alignment would traverse are discussed below.

Flower Street - Between 5th and 3rd Streets, seven of the 13 on-street parking spaces on the east side of the street between 5th and 4th Streets would be removed. Due to the relatively wide sidewalk, the loading spaces on both the east and west sides of the street would be maintained by creating a loading bay area.

The parking impacts identified under this alternative would not be considered adverse or significant. No NEPA, CEQA, or local thresholds for the significance of displaced parking are available. Only seven parking spaces would be displaced, in an area with multiple off-street garages. Also, the parking spaces would be replaced by a new underground light rail station, and the improved transit access would offset the effects of the lost parking. Therefore, the parking impacts would not be significant.

5.1.5.4 Other Modes

Although this alternative would be entirely underground, portions of the alignment would use existing roadway space for underground station pedestrian portals. At these locations, urban design concepts may be incorporated to improve pedestrian and bicycle safety and flow. This alternative would have no impacts on bicycle facilities located within the project area.

The sidewalk along Flower Street between 6th and 3rd Streets and along 2nd Street at the underground station portals would be maintained or widened. No pedestrian impacts would be expected for these segments of the alignment. At station areas, portals would be located near major signalized intersections where pedestrian crosswalks are currently in place. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill. Potential pedestrian impacts identified under this alternative would be less than significant.

Proposed stations would be equipped with bike lockers and racks, increasing the bicycle facilities in the area and creating a positive impact. In addition, pedestrian level lighting at stations would improve the attractiveness and perception of safety, specifically in the evening hours, potentially creating a positive effect for patrons and the community.

5.1.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

5.1.6.1 Transit

From an operational point of view, the Fully Underground LRT Alternative – Little Tokyo Variation 2 is similar to the Fully Underground LRT Alternative - Little Tokyo Variation 1 and would include a complete underground light rail alignment linking the 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets. All of the provisions of the No Build Alternative would be included. This alternative would also include four underground stations located near Flower/4th/5th Streets, 2nd/Hope Streets, 2nd Street/Broadway, and one in the property to be acquired between 1st, 2nd, Central, and Alameda Streets. The rail lines would cross under the intersection of 1st and Alameda Streets in a new two-level junction configuration.

Three new portals would be constructed under this alternative. The alignment would surface from one portal east of Alameda Street and north of Temple Street to connect to the Metro Gold Line bridge over the US 101 freeway to Union Station. The alignment would also surface in 1st Street to connect to the Metro Gold Line tract to East Los Angeles. The alignment would surfaces from two portals instead of one, each containing one track, within the widened median of 1st Street. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

This alternative would provide a direct east-west route between Santa Monica and the vicinity of I-605 and a direct north-south route between the Cities of Azusa and Long Beach. Consequently, transit patrons could travel from east-west or north-south without having to transfer in the downtown area. The new two-level underground station within the property bounded by 1st, 2nd, Central and Alameda Streets would serve all operations.

For the Fully Underground LRT Alternative – Little Tokyo Variation 2, the total daily system wide linked transit trips for the entire bus and rail system is projected to be about 1,734,500, which would be a 17,400-trip increase over the No Build Alternative and a 12,100-trip increase over the TSM Alternative. The daily urban rail boarding count for this alternative is projected to be 282,700 at the Metro Blue Line, Metro Gold Line, Metro Expo Line, and the proposed new Regional Connector stations combined. The projections show an increase of about 24,200 in urban rail boardings, which would be a positive impact of this alternative. The theoretical carrying capacity of the downtown LRT system would be approximately 13,000 passengers per hour in each direction.

Proposed traffic lane reductions along Flower Street would impact bus operating speeds because of the potential increase in traffic congestion. Bus schedules would be adjusted to reflect modified traffic conditions and travel times. However, from an urban rail perspective, this alternative would represent a significant positive impact when compared to both the No Build and TSM Alternatives. In summary, the transit impacts identified under this alternative would be less than significant.

5.1.6.2 Traffic Circulation

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would be completely below ground. One traffic lane would be removed on Flower Street between 6th and 4th Streets to accommodate the underground station pedestrian portals. After construction of the train portals on Alameda and 1st Streets, the existing traffic lanes would be maintained. However, the signalized intersection at 1st and Hewitt Streets would be removed, eliminating the ability to cross 1st Street at that location. Traffic signals at the intersections of 1st and Alameda Streets and 1st and Temple Streets would operate under the assumption that no at-grade train operations would pass through these two intersections.

From an operational perspective, the traffic analysis for this alternative results in the same effects as the Fully Underground LRT Alternative - Little Tokyo Variation 1. The predicted AM and PM peak hour levels of service are presented in Table 5-6. In addition, the table highlights in bold the intersections that would exceed the significance threshold and that would be significantly impacted due to the Fully Underground LRT Alternative – Little Tokyo Variation 2.

The results indicate that under the Fully Underground LRT Alternative – Little Tokyo Variation 2, 70 intersections would continue to operate at LOS D or better in the AM peak hour and 68

would continue to operate at LOS D or better during the PM peak hour. In the AM peak hour, seven intersections would operate at LOS E and eight would operate at LOS F. In the PM peak hour, these numbers increase to 13 intersections operating at LOS E and 14 operating at LOS F. Many of these intersections would operate at the same level of service as projected for the No Build Alternative.

Intersections that would be impacted include those that are projected to have a significant negative change in LOS when compared to the No Build Alternative conditions. As defined in Section 3.1, the significance of an impact is related to the magnitude in the change in delay. Only one intersection during the AM peak hour and only three intersections during the PM peak hour would experience a significant adverse impact under the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 5-6 also shows that a number of intersections would improve over the No Build Alternative by virtue of a reduction in delays. Four intersections show delay improvements during the AM peak hour and seven show improvements in delays during the PM peak hour. This alternative would increase the person-carrying capacity through the downtown transportation environment without adversely impacting traffic operations.

In summary, the traffic circulation impacts identified under this alternative would be significant.

5.1.6.3 Parking

The Fully Underground LRT Alternative - Little Tokyo Version 2 would be entirely underground; however, portions of the alignment would use existing roadway space for underground station pedestrian portals. At these locations, traffic lanes and/or parking spaces may be reduced along the street segments. The number of parking and loading spaces that would be removed was estimated based on the characteristics of each street segment and the proposed street cross-sections. The expected impacts along each of the street segments that the alignment would traverse are discussed below.

Flower Street –Between 5th and 3rd Streets, seven of the 13 on-street parking spaces on the east side of the street between 5th and 4th Streets would be removed. Due to the relatively wide sidewalk, loading spaces on both the east and west sides of the streets would be maintained by creating a loading bay area.

The parking impacts identified under this alternative would not be considered adverse or significant. No NEPA, CEQA, or local thresholds for the significance of displaced parking or available. Only seven parking spaces would be displaced, in an area with multiple off-street garages. Also, the parking spaces would be replaced by a new underground light rail station, and the improved transit access would offset the effects of the lost parking. Therefore, the parking impacts would not be significant.

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	65.3	0.0	No
2	Hill Street / 1st Street	C	24.1	C	24.1	0.0	No
3	Broadway / 1st Street	C	24.0	C	24.0	0.0	No
4	Spring Street / 1st Street	B	17.3	B	17.3	0.0	No
5	Main Street / 1st Street	B	16.5	B	16.5	0.0	No
6	Los Angeles Street / 1st Street	B	16.6	B	16.6	0.0	No
7	Judge John Aiso Street / 1st Street	B	13.9	B	13.9	0.0	No
8	Central Avenue / 1st Street	A	5.8	A	5.8	0.0	No
9	Alameda Street / 1st Street	D	44.4	C	24.6	-19.8	No
10	Figueroa Street / 2nd Street	C	25.8	C	25.8	0.0	No
11	Grand Avenue / 2nd Street	B	13.6	B	13.6	0.0	No
12	Hill Street / 2nd Street	B	19.7	B	19.7	0.0	No
13	Broadway / 2nd Street	B	18.4	B	18.4	0.0	No
14	Spring Street / 2nd Street	C	25.3	C	25.3	0.0	No
15	Main Street / 2nd Street	B	12.9	B	12.9	0.0	No
16	Los Angeles Street / 2nd Street	B	14.8	B	14.8	0.0	No
17	San Pedro Street / 2nd Street	B	14.5	B	14.5	0.0	No
18	Central Avenue / 2nd Street	A	9.9	A	9.9	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
19	Alameda Street / 2nd Street	B	15.9	B	15.9	0.0	No
20	Figueroa Street / 3rd Street	F	98.5	F	98.5	0.0	No
21	Flower Street / 3rd Street	C	28.4	C	28.4	0.0	No
22	Grand Avenue / 3rd Street	A	9.6	A	9.6	0.0	No
23	Hill Street / 3rd Street	E	58.7	E	58.7	0.0	No
24	Broadway / 3rd Street	F	86.9	F	86.9	0.0	No
25	Spring Street / 3rd Street	F	87.8	F	87.8	0.0	No
26	Main Street / 3rd Street	C	22.7	C	22.7	0.0	No
27	Los Angeles Street / 3rd Street	E	67.1	E	67.1	0.0	No
28	San Pedro Street / 3rd Street	C	23.7	C	23.7	0.0	No
29	Central Avenue / 3rd Street	C	25.2	C	25.2	0.0	No
30	Alameda Street / 3rd Street	F	82.9	F	82.9	0.0	No
31	Figueroa Street / 4th Street	B	18.0	B	18.0	0.0	No
32	Flower Street / 4th Street	D	39.6	F	102.9	**63.3**	**Yes**
33	Grand Avenue / 4th Street	A	3.0	A	3.0	0.0	No
34	Figueroa Street / 5th Street	B	16.5	B	16.5	0.0	No
35	Flower Street / 5th Street	C	22.3	C	27.1	4.8	No
36	Grand Avenue / 5th Street	C	21.8	C	21.8	0.0	No
37	Olive Street / 5th Street	C	20.8	C	20.8	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
38	Figueroa Street / 6th Street	F	104.0	F	104.0	0.0	No
39	Flower Street / 6th Street	C	32.6	D	36.1	3.5	No
40	Hope Street / 6th Street	A	7.3	A	7.3	0.0	No
41	Grand Avenue / 6th Street	B	16.4	B	16.4	0.0	No
42	Olive Street / 6th Street	B	18.8	B	18.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	E	61.6	0.0	No
44	Flower Street / Wilshire Blvd.	D	41.0	D	41.0	0.0	No
45	Figueroa Street / 7th Street	C	24.8	C	24.8	0.0	No
46	Flower Street / 7th Street	B	13.8	B	13.8	0.0	No
47	Hope Street / 7th Street	B	10.7	B	10.7	0.0	No
48	Grand Avenue / 7th Street	B	16.2	B	16.2	0.0	No
49	Olive Street / 7th Street	B	16.2	B	16.2	0.0	No
50	Figueroa Street / 8th Street	B	16.6	B	16.6	0.0	No
51	Flower Street / 8th Street	B	13.9	B	13.9	0.0	No
52	Hope Street / Temple Street	D	36.5	D	36.5	0.0	No
53	Grand Avenue / Temple Street	F	94.4	F	94.4	0.0	No
54	Hill Street / Temple Street	D	35.2	D	35.2	0.0	No
55	Broadway / Temple Street	E	70.1	E	70.1	0.0	No
56	Spring Street / Temple Street	C	27.5	C	27.5	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
57	Main Street / Temple Street	B	11.4	B	11.4	0.0	No
58	Los Angeles Street / Temple Street	B	19.7	B	19.7	0.0	No
59	Judge John Aiso Street / Temple Street	A	5.6	A	5.6	0.0	No
60	Alameda Street / Temple Street	C	29.9	C	20.7	-9.2	No
61	Los Angeles Street / Aliso Street	B	12.9	B	12.9	0.0	No
62	Alameda Street / Aliso Street	F	88.5	F	88.5	0.0	No
63	Los Angeles Street / Arcadia Street	B	14.4	B	14.4	0.0	No
64	Alameda Street / Arcadia Street	E	64.7	E	64.7	0.0	No
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	40.4	0.0	No
65-2	Alameda Street / Los Angeles Street S.	A	6.5	A	6.5	0.0	No
66	Dewap Rd. / 1st Street	A	5.7	A	5.7	0.0	No
67	Olive Street / 1st Street	B	16.1	B	16.1	0.0	No
68	Hope Street / 1st Street	F	99.7	E	69.0	-30.7	No
69	S. Hope Street / 2nd Street	A	7.5	B	11.1	3.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	B	18.2	A	7.2	-11.0	No
71	Broadway / Arcadia Street	B	12.8	B	12.8	0.0	No
72	Spring Street / Arcadia Street	B	16.3	B	16.3	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
73	Main Street / Arcadia Street	A	9.4	A	9.4	0.0	No
74	Broadway / Aliso Street	B	19.6	B	19.6	0.0	No
75	Spring Street / Aliso Street	B	11.4	B	11.4	0.0	No
76	Main Street / Aliso Street	A	6.8	A	6.8	0.0	No
77	Hill Street / 4th Street	B	18.3	B	18.3	0.0	No
78	Olive Street / 4th Street	B	17.0	B	17.0	0.0	No
79	Broadway / 4th Street	B	14.8	B	14.8	0.0	No
80	Spring Street / 4th Street	B	13.9	B	13.9	0.0	No
81	Main Street / 4th Street	B	11.8	B	11.8	0.0	No
82	Los Angeles Street / 4th Street	B	10.6	B	10.6	0.0	No
83	San Pedro Street / 4th Street	A	8.1	A	8.1	0.0	No
84	Central Avenue / 4th Street	A	8.2	A	8.2	0.0	No
85	Alameda Street / 4th Street	B	12.0	B	12.0	0.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	56.2	0.0	No
2	Hill Street / 1st Street	E	67.2	E	67.2	0.0	No
3	Broadway / 1st Street	C	30.5	C	30.5	0.0	No
4	Spring Street / 1st Street	B	15.7	B	15.7	0.0	No
5	Main Street / 1st Street	D	53.0	D	53.0	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
6	Los Angeles Street / 1st Street	F	102.9	F	102.9	0.0	No
7	Judge John Aiso Street / 1st Street	C	21.1	C	21.1	0.0	No
8	Central Avenue / 1st Street	B	14.1	B	14.1	0.0	No
9	Alameda Street / 1st Street	F	97.6	E	74.4	-23.2	No
10	Figueroa Street / 2nd Street	F	120.7	F	120.7	0.0	No
11	Grand Avenue / 2nd Street	B	16.7	B	16.7	0.0	No
12	Hill Street / 2nd Street	B	19.9	B	19.9	0.0	No
13	Broadway / 2nd Street	C	20.6	C	20.6	0.0	No
14	Spring Street / 2nd Street	B	14.5	B	14.5	0.0	No
15	Main Street / 2nd Street	C	33.9	C	33.9	0.0	No
16	Los Angeles Street / 2nd Street	C	34.4	C	34.4	0.0	No
17	San Pedro Street / 2nd Street	B	19.1	B	19.1	0.0	No
18	Central Avenue / 2nd Street	B	10.2	B	10.2	0.0	No
19	Alameda Street / 2nd Street	C	33.1	C	33.1	0.0	No
20	Figueroa Street / 3rd Street	F	140.9	F	140.9	0.0	No
21	Flower Street / 3rd Street	B	15.7	B	15.5	-0.2	No
22	Grand Avenue / 3rd Street	B	13.3	B	13.3	0.0	No
23	Hill Street / 3rd Street	D	48.5	D	48.5	0.0	No
24	Broadway / 3rd Street	E	65.7	E	65.7	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
25	Spring Street / 3rd Street	E	55.9	E	55.9	0.0	No
26	Main Street / 3rd Street	D	39.1	D	39.1	0.0	No
27	Los Angeles Street / 3rd Street	C	23.9	C	23.9	0.0	No
28	San Pedro Street / 3rd Street	B	13.9	B	13.9	0.0	No
29	Central Avenue / 3rd Street	B	15.3	B	15.3	0.0	No
30	Alameda Street / 3rd Street	E	57.1	E	57.1	0.0	No
31	Figueroa Street / 4th Street	B	19.4	B	19.4	0.0	No
32	Flower Street / 4th Street	F	91.5	F	127.6	**36.1**	**Yes**
33	Grand Avenue / 4th Street	A	4.6	A	4.6	0.0	No
34	Figueroa Street / 5th Street	E	71.6	E	71.6	0.0	No
35	Flower Street / 5th Street	C	20.8	C	27.9	**7.1**	**Yes**
36	Grand Avenue / 5th Street	E	58.5	E	58.5	0.0	No
37	Olive Street / 5th Street	E	61.6	E	61.6	0.0	No
38	Figueroa Street / 6th Street	F	98.4	F	98.4	0.0	No
39	Flower Street / 6th Street	C	31.9	D	38.4	**6.5**	**Yes**
40	Hope Street / 6th Street	B	16.2	B	16.2	0.0	No
41	Grand Avenue / 6th Street	C	22.3	C	22.3	0.0	No
42	Olive Street / 6th Street	C	31.8	C	31.8	0.0	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	206.8	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
44	Flower Street / Wilshire Blvd.	D	44.2	D	44.2	0.0	No
45	Figueroa Street / 7th Street	D	51.4	D	51.4	0.0	No
46	Flower Street / 7th Street	F	131.6	F	131.6	0.0	No
47	Hope Street / 7th Street	B	16.3	B	16.3	0.0	No
48	Grand Avenue / 7th Street	C	29.0	C	29.0	0.0	No
49	Olive Street / 7th Street	C	20.6	C	20.6	0.0	No
50	Figueroa Street / 8th Street	F	94.2	F	94.2	0.0	No
51	Flower Street / 8th Street	F	91.8	F	91.8	0.0	No
52	Hope Street / Temple Street	E	60.2	E	60.2	0.0	No
53	Grand Avenue / Temple Street	F	106.6	F	106.6	0.0	No
54	Hill Street / Temple Street	F	95.1	F	95.1	0.0	No
55	Broadway / Temple Street	E	69.1	E	69.1	0.0	No
56	Spring Street / Temple Street	B	18.6	B	18.6	0.0	No
57	Main Street / Temple Street	C	30.2	C	30.2	0.0	No
58	Los Angeles Street / Temple Street	C	32.7	C	32.7	0.0	No
59	Judge John Aiso Street / Temple Street	B	15.7	B	15.7	0.0	No
60	Alameda Street / Temple Street	E	77.1	E	63.3	-13.8	No
61	Los Angeles Street / Aliso Street	C	21.7	C	21.7	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
62	Alameda Street / Aliso Street	D	48.9	D	48.9	0.0	No
63	Los Angeles Street / Arcadia Street	B	16.3	B	16.3	0.0	No
64	Alameda Street / Arcadia Street	F	148.5	F	148.5	0.0	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	26.2	0.0	No
65-2	Alameda Street / Los Angeles Street S.	B	15.4	B	15.4	0.0	No
66	Dewap Rd. / 1st Street	F	75.4	F	56.1	-19.3	No
67	Olive Street / 1st Street	C	25.1	C	25.1	0.0	No
68	Hope Street / 1st Street	E	57.8	D	51.8	-6.0	No
69	S. Hope Street / 2nd Street	C	32.0	C	27.4	-4.6	No
70	S. Hope Street / Gen. Thaddeus Kosciuszko Way	C	24.3	C	20.9	-3.4	No
71	Broadway / Arcadia Street	D	45.2	D	45.2	0.0	No
72	Spring Street / Arcadia Street	B	10.4	B	10.4	0.0	No
73	Main Street / Arcadia Street	B	15.6	B	15.6	0.0	No
74	Broadway / Aliso Street	C	21.9	C	21.9	0.0	No
75	Spring Street / Aliso Street	B	11.1	B	11.1	0.0	No
76	Main Street / Aliso Street	B	16.5	B	16.5	0.0	No
77	Hill Street / 4th Street	D	45.4	D	45.4	0.0	No

Table 5-6. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2: Intersection LOS and Impacts

No.	Intersection	No Build		Fully Underground		Change in Delay	Significant Impact
		LOS	Delay	LOS	Delay		
78	Olive Street / 4th Street	E	61.5	E	61.5	0.0	No
79	Broadway / 4th Street	C	22.1	C	22.1	0.0	No
80	Spring Street / 4th Street	C	21.4	C	21.4	0.0	No
81	Main Street / 4th Street	C	34.7	C	34.7	0.0	No
82	Los Angeles Street / 4th Street	C	33.1	C	33.1	0.0	No
83	San Pedro Street / 4th Street	B	19.9	B	19.9	0.0	No
84	Central Avenue / 4th Street	B	19.6	B	19.6	0.0	No
85	Alameda Street / 4th Street	F	131.1	F	131.1	0.0	No

5.1.6.4 Other Modes

The Fully Underground LRT Alternative - Little Tokyo Version 2 would be entirely underground; however, portions of the alignment would utilize existing roadway space for underground station pedestrian portals. At these locations, urban design concepts may be incorporated to improve pedestrian and bicycle safety and flow. This alternative would have no impacts on bicycle facilities located within the project area.

The sidewalk along Flower Street between 6th and 3rd Streets and along 2nd Street at the underground station portals would be maintained or widened. No pedestrian impacts are expected for these segments of the alignment. At station areas, the portals would be located near major signalized intersections where pedestrian crosswalks are currently in place. A pedestrian bridge could also be constructed between the 2nd/Hope Street station and Upper Grand Avenue to enhance the connection to Bunker Hill. Potential pedestrian impacts from this alternative would be less than significant.

Proposed stations would be equipped with bike lockers and racks, increasing the bicycle facilities in the area and creating a positive impact. In addition, pedestrian level lighting at

stations would improve the attractiveness and perception of safety, specifically in the evening hours, creating a positive effect for patrons and the community.

5.2 Construction Impacts

Analysis of potential transportation-related construction impacts was based on proposed construction staging scenarios. Potential adverse impacts that may occur during construction of each alternative were evaluated. Implementation of the No Build or TSM Alternatives would not result in potential disruption to the roadway network and therefore are not evaluated as part of the construction impacts analysis.

Areas of a roadway where user conditions would be changed due to construction activities are called traffic control zones. Most of the potential traffic control zones would be divided into four areas: advance warning area, transition area, construction activity area, and termination area. A traffic control zone also includes the streets that would serve as detour routes on approved traffic control plans.

Maintenance of traffic lanes during construction would follow local agency requirements and standards with respect to minimum lane widths, number of lanes, and duration of temporary lane closures. During non-working construction time periods, existing traffic lanes (including turn lanes and two-way left turn lanes) generally would be restored to their pre-construction/original condition unless otherwise authorized by the local jurisdiction.

Street closures would generally be limited to nighttime, weekend, and/or off peak closures and must be authorized by the local jurisdiction. No closures are expected during morning and afternoon peak travel periods except for specific areas discussed in the following sections. Potential street closure locations would be identified in close coordination with the local agencies. Potential construction impacts to transit, traffic circulation, parking, and other modes of transportation for each build alternative are evaluated in the following sections.

5.2.1 At-Grade Emphasis LRT Alternative

5.2.1.1 Transit

Construction of the At-Grade Emphasis LRT Alternative may require temporary closure of traffic lanes over and above the lanes permanently removed to place the trackway planned for the street during the night, weekends, and/or off-peak hours. Closures of several blocks on certain streets may also be required. When traffic lanes are closed during the day, transit bus service would be maintained where feasible. Travel times may increase due to the potential for increased traffic congestion as a result of construction activities and proposed lane closures.

Relocation of utilities and construction of the trackway, stations, and the proposed Alameda Street underpass at Temple Street would require temporary closure of lanes on Flower Street,

Hope Street in the vicinity of General Thaddeus Kosciuszko Way, Main Street, Los Angeles Street, Temple Street, 2nd Street, and Alameda Street over and above the number of lanes permanently removed due to the planned trackway. This would reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas. Travel times for both Metro and non-Metro bus services along these roadways would be impacted.

Track construction and permanent street re-configuration along 2nd Street would eliminate eastbound vehicular travel on the segment of roadway between Hill Street and Main Street and require permanent closure of one eastbound travel lane between Main Street and Los Angeles Street. A permanent lane closure would occur between Hill Street and Los Angeles Street on the westbound direction of 2nd Street.

During construction, it may be necessary to temporarily close 2nd Street for extended periods between Los Angeles Street and Figueroa Street. Travel times for buses traveling along the westbound direction of 2nd Street are expected to increase and eastbound buses would be re-routed on to 4th Street and/or 1st Street. New bus stop locations would be designated for each specific route that is impacted by this permanent change in traffic flow patterns.

Construction of the proposed Alameda Street underpass at Temple Street would also reduce roadway capacity for extended time periods. To maintain two through travel lanes in each direction, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches would be eliminated. The north and south intersection lane configurations would consist of a shared through and right lane and a shared through and left lane for the segment of Alameda Street between Aliso Street and 1st Street.

Existing signal phasing may be changed to split phasing to minimize conflicts between left turns and opposing through movements, and to minimize the formation of queues as a result of a vehicle waiting for a gap in the opposing traffic to conduct a left turn. Consequently, travel times for buses along this segment of Alameda Street would be expected to increase due to potential traffic congestion. Bus stops within the construction area may be temporarily relocated to minimize vehicular queues behind a bus stopped to pick up and/or drop off passengers.

Apart from changes to traffic flow patterns on 2nd Street and reduced roadway capacity due to construction of the Alameda Street underpass, it is expected that temporary peak period closures would be minimal. Temporary off-peak period closures would be intermittent, and most construction along the remaining alignment would occur during nighttime and weekend hours. Transit bus service may be affected by night closures of entire street blocks and buses would be re-routed. Construction may require temporary relocation of some bus stops.

Although most potential construction impacts of the At-Grade Emphasis LRT Alternative would be temporary, they would be considered significant and unavoidable.

5.2.1.2 Traffic Circulation

Construction of the At-Grade Emphasis LRT Alternative would temporarily interfere with the normal flow of traffic, causing some lanes and streets to be temporarily closed to vehicles. It is possible that block-long sections of streets would be closed temporarily for utility relocation, station construction, and installation of rail.

Construction of a typical underground station is estimated to take about 34 months using cut-and-cover construction methods. The primary impact to traffic, however, is usually associated with the time it takes to install decking over a station box. For stations constructed under existing streets, the top 2 to 3 feet of the roadway would be removed and decking would be installed over an approximately 2- to 3-month period. Assuming the construction methods used and conditions are similar to Metro's experience on the Metro Gold Line to East Los Angeles project, the roadway removal and decking could be minimized to several weekends. Construction of the station would continue while traffic travels on the decking. This procedure would require temporary off-peak, nighttime, and/or weekend street closures to install the decking. Traffic would be rerouted to adjacent intersections using clearly signed and marked detours when street closures are required.

For at-grade LRT sections, the street area within and alongside the station areas, supplemented by adjacent sidewalks and off-street areas, would be used for construction staging and equipment and material storage. Haul and delivery truck routes would affect residents and commuters along the alignment. Tunnel spoil hauling, rail and catenary deliveries, and general construction traffic would impact traffic flow patterns as well. In addition to affecting traffic movements, there may be slight physical damage to roads from hauling trucks.

Relocation of utilities and construction of the trackway, stations, and the proposed Alameda Street underpass would require temporary closure of lanes. This would reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas. Vehicular travel times and intersection operations along these roadways would be impacted.

Track construction and permanent street re-configuration along 2nd Street would eliminate eastbound vehicular travel on the segment of roadway between Hill Street and Main Street and require permanent closure of one eastbound travel lane between Main and Los Angeles Streets. For the westbound direction of 2nd Street, a one lane permanent closure would occur between Hill Street and Los Angeles Street. It may be necessary to temporarily close 2nd Street for extended periods of time between Los Angeles Street and Figueroa Street during construction.

Travel times for vehicles traveling along the westbound direction of 2nd Street are expected to increase. Eastbound vehicular through traffic would be re-routed onto 4th Street and/or 1st Street, depending on their origin and destination. The shift in traffic onto both 4th and 1st Streets would increase delays at several intersections between Hill Street and Los Angeles Street.

Construction of the proposed Alameda Street underpass at Temple Street would reduce roadway capacity for extended periods of time. Maintaining two through travel lanes in each direction during construction would require elimination of the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches. The north and south intersection lane configurations would consist of a shared through and right lane and a shared through and left lane for the segment of Alameda Street between Aliso Street and 1st Street.

The existing signal phasing may be changed to split phasing to minimize conflicts between left turns and opposing through movements. This change would also minimize the formation of queues resulting from vehicles waiting for a gap in the opposing traffic to make a left turn. Consequently, travel times along this segment of Alameda Street would be expected to increase due to increased traffic congestion during peak periods and, to a lesser extent, during off-peak periods. Operating conditions for Alameda Street intersections between Aliso Street and 1st Street would also be expected to deteriorate.

Apart from traffic flow patterns, changes on 2nd Street, and reduced roadway capacity from construction of the Alameda Street underpass, temporary peak period closures would be minimal and temporary off-peak period closures would be intermittent. Most construction along the rest of the alignment would take place during the nighttime and weekend hours. Traffic would be re-routed and detours clearly signed and marked during night closures of entire street blocks.

Although the majority of the impacts identified under the At-Grade Emphasis LRT Alternative may be temporary, they would be significant and unavoidable.

5.2.1.3 Parking

It may be necessary to prohibit on-street curb parking when traffic lanes are closed or eliminated due to construction activities. Existing parking meters within the traffic control zone of influence that would be affected by construction would be removed or covered as directed by the agency with jurisdiction. To minimize the loss of crucial commercial parking, contractors would be required to have all employees park off-street at Metro-approved locations.

During construction, the At-Grade Emphasis LRT Alternative would require temporary closure of lanes. Consequently, existing on-street parking spaces and loading stalls would be

temporarily removed. This would impact parking spaces and loading areas on the east and west sides of Flower Street, the loading areas on the east side of Main Street and Los Angeles Street, and the parking spaces on the south side of Temple Street. In addition, the realigned intersection of Hope Street in the vicinity of General Thaddeus Kosciuszko Way may temporarily require removal of several parking spaces along both the east and west sides of that roadway segment.

Track construction and permanent street re-configuration along 2nd Street would temporarily remove several parking and loading stalls. In the vicinity of the Alameda Street underpass, the Japanese American National Museum tour bus loading zone on the west side of the street would be permanently removed and relocated.

Parking impacts identified during construction of the At-Grade Emphasis LRT Alternative would not be adverse or significant.

5.2.1.4 Other Modes

When construction encroaches into a sidewalk, walkway, or crosswalk area, special consideration would be given to pedestrian safety. Pedestrian access to adjoining properties and bicycle traffic movements would be maintained during construction; however, portions of sidewalks may be temporarily closed for decking construction at cut-and-cover station areas. Temporary nighttime closures of sidewalks and crosswalks may be necessary. Lane reductions and street closures could inhibit the flow of bicycle traffic during construction.

The At-Grade Emphasis LRT Alternative includes track construction and permanent street configuration changes along 2nd Street and construction of an underpass on Alameda Street. Both would require lane closures for extended periods of time, and may also require temporary sidewalk closures. Construction along 2nd Street would shift some of the through traffic movements onto 1st Street, which is designated as a Class III bicycle route. Consequently, the flow of bicycle traffic could be hampered due to increased traffic volumes on 1st Street.

Construction of the underpass on Alameda Street may result in localized shifts in traffic to adjacent roadway segments such as Central Avenue, which is also designated as a Class III bicycle route. Similarly, the increase in traffic volumes would impact the flow of bicycle traffic. Temporary sidewalk closures during construction of this alternative would also impact pedestrian flow.

Although temporary, the identified potential impacts during construction on pedestrian and bicycle movements would be significant and unavoidable.

5.2.2 Underground Emphasis LRT Alternative

5.2.2.1 Transit

Relocation of utilities and the construction of cut-and-cover stations and the proposed Alameda Street underpass at 1st Street would require temporary closure of lanes on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, and Alameda Street. This would reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas.

Travel times for both Metro and non-Metro bus services along these roadways would be impacted. Temporary peak period closures would be minimal and temporary off-peak period closures would be intermittent, especially if most construction for station areas affecting surface lanes takes place during the nighttime and weekend hours similar to the methods used for the Metro Gold Line to East Los Angeles project. During night closures, transit bus service may be affected and buses would be re-routed. Accordingly, some bus stops may need to be temporarily relocated due to construction.

Construction of the proposed Alameda Street underpass at 1st Street would reduce roadway capacity for extended times during construction. To maintain two through travel lanes in each direction, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches would be eliminated. The north and south intersection lane configurations would consist of a shared through and right lane and a shared through and left lane for the segment of Alameda Street between Temple Street and 2nd Street.

Existing signal phasing may be changed to split phasing to minimize potential conflicts between left turns and opposing through movements and prevent formation of queues as a result of a vehicle waiting for a gap in the opposing traffic to conduct a left turn movement. Therefore, travel times for buses operating along this segment of Alameda Street would be expected to increase due to the potential for increased traffic congestion. Bus stops within the construction area may need to be temporarily relocated to minimize the formation of vehicular queues behind a bus stopped to pick up and/or drop off passengers.

Although most impacts identified under the Underground Emphasis LRT Alternative may be temporary, they would be significant and unavoidable.

5.2.2.2 Traffic Circulation

Construction activities for the Underground Emphasis LRT Alternative would require temporary closure of lanes on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, 2nd Street, and Alameda Street. This would reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas. Vehicular travel times and intersection operations along these roadways would be impacted.

It is anticipated that temporary peak period closures would be minimal and temporary off-peak period closures would be intermittent, with most station area construction activities that affect surface streets taking place during the nighttime and weekend hours similar to the methods used for the Metro Gold Line to East Los Angeles project. During night closures, traffic flow patterns may be affected, but would be re-routed accordingly with clearly signed and marked detours.

Construction of a typical underground station is estimated to take about 34 months using cut-and-cover construction methods. However, the primary impact to traffic would be associated with the time it takes to install decking over the station box. At each potential station location this duration would be approximately several weekends, assuming that the construction methods used would be similar to those used on the Metro Gold Line to East Los Angeles.

For stations built under existing streets, the top 2 to 3 feet of the roadway would be removed and decking would be installed over an approximately 2- to 3-month period. Construction of the station would continue while traffic travels on the decking. This procedure would require temporary off-peak, nighttime, and/or weekend street closures to install the decking. As these street closures are identified, traffic would be rerouted to adjacent intersections with clearly signed and marked detours.

Roadway capacity would be reduced for extended time periods during construction of the proposed Alameda Street underpass at 1st Street. In order to maintain two through travel lanes in each direction, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the intersection approaches would be eliminated. The north and south intersection lane configurations would consist of a shared through and right lane and a shared through and left lane for the segment of Alameda Street between Temple Street and 2nd Street.

Existing signal phasing may be changed to split phasing to minimize conflicts between left turns and opposing through movements and prevent the formation of queues as a result of vehicles waiting for a gap in the opposing traffic to conduct a left turn movement. Therefore, travel times for vehicles traveling along this segment of Alameda Street would be expected to increase. In addition, operating conditions for the Alameda Street intersections between Temple Street and 2nd Street would be expected to deteriorate.

Although most impacts from this alternative may be temporary, they would be significant and unavoidable.

5.2.2.3 Parking

Parking impacts under the Underground Emphasis LRT Alternative include temporary closure of lanes. Consequently, existing on-street parking spaces and loading stalls would be temporarily removed.

This would impact parking spaces and loading areas on the east and west sides of Flower Street. The realigned intersection of Hope Street in the vicinity of General Thaddeus Kosciuszko Way may temporarily require removal of several parking spaces along both the east and west sides of the roadway segment. In the vicinity of the Alameda Street underpass, the Japanese American National Museum tour bus loading zone on the west side of the street would be permanently removed and relocated. In addition, several parking spaces would be temporarily displaced from the east side of the roadway segment between 1st and 2nd Streets.

Parking impacts of the Underground Emphasis LRT Alternative during construction would not be adverse or significant.

5.2.2.4 Other Modes

The Underground Emphasis LRT Alternative includes cut-and-cover station construction along segments of Flower Street and construction of an underpass on Alameda Street. Both may require temporary sidewalk closures, which would impact pedestrian flow. In addition, construction of the underpass on Alameda Street may result in localized shifts in traffic to adjacent roadway segments such as Central Avenue, which is designated as a Class III bicycle route. Therefore, the flow of bicycle traffic could be impacted due to increased traffic volumes on Central Avenue.

Although temporary, the potential impacts on pedestrian and bicycle movements during construction of the Underground Emphasis LRT Alternative would be significant and unavoidable.

5.2.3 Fully Underground LRT Alternative – Little Tokyo Variation 1

5.2.3.1 Transit

Construction for the Fully Underground LRT Alternative - Little Tokyo Variation 1 would include relocation of utilities and construction of cut-and-cover stations and the proposed portals east of Alameda Street. This would require temporary closure of lanes on Flower Street, Hope Street in the vicinity of General Thaddeus Kosciuszko Way, Alameda Street, and 1st Street, reducing roadway capacity and potentially modifying existing traffic patterns as drivers bypass congested areas.

Travel times for both Metro and non-Metro buses along these roadways would be impacted. It is anticipated that temporary peak period closures would be minimal and temporary off-peak period closures would be intermittent because most construction for the station areas would take place during the nighttime and weekend hours. During night closures, transit bus service may be affected, and buses would be re-routed. Accordingly, bus stops may also need to be temporarily relocated due to construction in some areas.

For this alternative, the Alameda Street portal north of Temple Street would reduce roadway capacity for extended time periods during construction. One through travel lane in each direction would be maintained between Aliso Street and 2nd Street. Outside of this area, all three through travel lanes in both directions on Alameda Street would remain open, but would still be subject to shorter-term intermittent closures.

As a result of this configuration, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the southbound intersection approach with Temple Street would be temporarily removed. The southbound intersection lane configuration at Temple Street would consist of a shared through and right lane and a shared through and left lane. In addition, existing signal phasing may be changed to split phasing to minimize potential conflicts between southbound left turns and the opposing northbound through movements, and prevent the formation of queues resulting from vehicles waiting for a gap in the opposing traffic to conduct a left turn movement.

Travel times for buses operating along this segment of Alameda Street would be expected to increase due to the potential for increased traffic congestion. Additionally, one eastbound travel lane and one westbound travel lane on 1st Street between Alameda Street and Vignes Street would need to be closed during construction. This may cause queues, although two lanes of the 1st Street Bridge are currently closed for bridge widening and the roadway still typically operates without queuing.

Although most potential impacts under the Fully Underground LRT Alternative - Little Tokyo Variation 1 may be temporary, they would be significant and unavoidable.

5.2.3.2 Traffic Circulation

Construction west of Central Avenue under the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be the same as described for the Underground Emphasis LRT Alternative. Construction would require temporary closure of lanes on Flower Street, 2nd Street, Alameda Street, 1st Street, and Hope Street in the vicinity of General Thaddeus Kosciuszko Way. This would temporarily reduce roadway capacity and potentially modify existing traffic patterns as drivers bypass congested areas.

Travel times and intersection operating conditions along these roadways would be impacted. It is anticipated that temporary peak period closures would be minimal and temporary off-peak period closures would be intermittent because most station area construction activities that affect surface streets taking place during the nighttime and weekend hours similar to the methods used for the Metro Gold Line to East Los Angeles project. During night closures, traffic flow patterns may be affected, but would be re-routed accordingly with clearly signed and marked detours.

Construction of a typical underground station is estimated to take about 34 months using cut-and-cover construction methods; however, the primary impact to traffic is usually associated with the time it takes to install decking over the station box. At each potential station location this duration would be approximately several weekends, assuming that the construction methods used would be similar to those used on the Metro Gold Line to East Los Angeles.

For stations constructed under existing streets, the top 2 to 3 feet of the roadway would be removed and decking would be installed over approximately a 2- to 3-month period. Construction of a station would continue while traffic travels on the decking. This procedure would require temporary off-peak, nighttime, and/or weekend street closures to install the decking. Where street closures are required, traffic would be rerouted to adjacent intersections with clearly signed and marked detours.

Construction of the proposed Alameda Street portal north of Temple Street would reduce roadway capacity for extended time periods. One through travel lane would be maintained in each direction on Alameda Street during construction between Aliso Street and 2nd Street. All three lanes in each direction on Alameda Street would remain open, although they would be subject to shorter-term intermittent closures as needed.

As a result of this configuration, the two-way left turn median in the mid-block area and the exclusive right and left turn lanes at the southbound intersection approach with Temple Street would be temporarily removed. The southbound intersection lane configuration at Temple Street would consist of a shared through and right lane and a shared through and left lane. Existing signal phasing may be changed to split phasing to minimize conflicts between southbound left turns and the opposing northbound through movements and prevent the formation of queues resulting from vehicles waiting for a gap in the opposing traffic to conduct a left turn movement. Consequently, travel times for vehicles traveling along this segment of Alameda Street would be expected to increase and operating conditions for the Alameda Street intersection at Temple Street are expected to deteriorate with increased delays.

One eastbound travel lane and one westbound travel lane on 1st Street between Alameda Street and Vignes Street would also need to be closed during construction. Although this may cause formation of queues, two lanes of the 1st Street Bridge are currently closed near this location and the roadway still typically operates without queuing.

Although most potential impacts of construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 may be temporary, they would be significant and unavoidable.

5.2.3.3 Parking

Construction activities west of Central Avenue would be the same as described for the Underground Emphasis LRT Alternative. Therefore, parking impacts would be the same due

to temporary closure of lanes on Flower Street and Hope Street in the vicinity of General Thaddeus Kosciuszko Way. Existing on-street parking spaces and loading stalls would be temporarily removed, impacting parking spaces and loading areas on the east and west sides of Flower Street. In addition, the realigned intersection of Hope Street in the vicinity of General Thaddeus Kosciuszko Way may temporarily remove several parking spaces along both the east and west sides of the roadway segment. The proposed Alameda Street portal north of Temple Street may require loading areas to be displaced for extended times during construction.

Potential parking impacts during construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not be adverse or significant.

5.2.3.4 Other Modes

Construction activities and potential impacts to pedestrian and bicycle flow for this alternative would be the same as for the Underground Emphasis LRT Alternative west of Central Avenue. During construction of the proposed Alameda Street portal north of Temple Street, roadway capacity would be reduced for extended time periods and the sidewalk on the east side of Alameda Street would be eliminated, impacting both pedestrian and bicycle flow.

Although temporary, potential impacts on pedestrian and bicycle movements during construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be significant and unavoidable.

5.2.4 Fully Underground LRT Alternative – Little Tokyo Variation 2

5.2.4.1 Transit

Transit impacts from construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be the same as for the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, Variation 2 would also include a proposed two-portal configuration on 1st Street east of Alameda Street. Construction of the eastbound portal would require temporary closure of one eastbound travel lane and one westbound travel lane along 1st Street, between Hewitt Street and Vignes Street, for extended periods. This would reduce the eastbound roadway capacity and may potentially modify existing traffic flow patterns for vehicles trying to bypass congestion during construction activities.

Travel times for Metro bus service along this roadway would be impacted and expected to increase due to the potential for increased traffic congestion. Bus stops within the construction area may need to be temporarily relocated to minimize the formation of vehicular queues behind a bus stopped to pick up and/or drop off passengers.

Although most potential impacts under the Fully Underground LRT Alternative - Little Tokyo Variation 2 may be temporary, they would be significant and unavoidable.

5.2.4.2 Traffic Circulation

Traffic impacts due to construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be the same as those described for the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, this alternative also includes a proposed two-portal configuration on 1st Street east of Alameda Street. Construction of the eastbound portal would require temporary closure of one eastbound travel lane and one westbound travel lane along 1st Street between Alameda Street and Vignes Street for extended periods. This would reduce eastbound roadway capacity and may potentially modify existing traffic flow patterns for vehicles trying to bypass congestion during construction activities. Travel times and intersection operations along this roadway segment would be impacted, and delays would be expected to increase due to the potential for increased traffic congestion during peak periods. However, two lanes of the 1st Street Bridge are currently closed near this location and the roadway typically operates without long queuing or delays.

Construction of a typical station is estimated to take about 34 months using cut-and-cover construction methods. However, the primary impact to traffic is usually associated with the time it takes to install decking over the station box. At each potential station location this duration would be approximately several weekends, assuming that the construction methods used would be similar to those used on the Metro Gold Line to East Los Angeles.

For stations built under existing streets, the top 2 to 3 feet of the roadway would be removed and decking would be installed over an approximately 2- to 3-month period. Construction of the station would continue while traffic travels on the decking. This procedure would require temporary off-peak, nighttime, and/or weekend street closures to install the decking. Traffic would be rerouted to adjacent intersections with clearly signed and marked detours as closures occur.

Although most potential impacts under the Fully Underground LRT Alternative - Little Tokyo Variation 2 may be temporary, they would be significant and unavoidable.

5.2.4.3 Parking

Parking and loading impacts from construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be the same as described for the Fully Underground LRT Alternative – Little Tokyo Variation 1. The proposed two-portal configuration on 1st Street east of Alameda Street would require temporary closure of one eastbound travel lane and one westbound travel lane along 1st Street between Hewitt and Vignes Streets for extended periods to accommodate the eastbound portal. Consequently, any parking spaces on the south side of the affected roadway segment would be temporarily removed.

Potential parking impacts during construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not be adverse or significant.

5.2.4.4 Other Modes

West of Central Avenue, construction of the proposed Alameda Street portal under the Fully Underground LRT Alternative - Little Tokyo Variation 2 would have similar impacts to pedestrian and bicycle flow as described for the Underground Emphasis LRT Alternative. This alternative also includes a proposed two-portal configuration on 1st Street east of Alameda Street.

Construction of the eastbound portal would require temporary closure of one eastbound travel lane along 1st Street between Hewitt Street and Vignes Street for extended periods. 1st Street is designated as a Class III bicycle route, and the flow of bicycle traffic would be impacted due to reduced roadway capacity.

Although temporary, potential impacts on pedestrian and bicycle movements during construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be significant and unavoidable.

6.0 POTENTIAL MITIGATION MEASURES

This section identifies potential mitigation measures for both construction and operation of the proposed alternatives. As with Section 5, discussion is focused on the transportation components being evaluated. These include transit, traffic circulation, parking, and other modes such as pedestrians and bicycles.

6.1 Potential Mitigation Measures Due to Operational Impacts

6.1.1 Transit

No mitigation measures are required for transit because no significant impacts have been identified. Displacement of bus stops or shifts in bus routes to adjacent roadways caused by at-grade configuration of the LRT alignment would require schedules to be adjusted and bus patrons notified of these changes. If an at-grade LRT alignment displaces existing bus stops, a replacement bus stop would be designated within one-eighth of a mile of the original stop. Bus stops would be relocated to the adjacent corner of the same intersection, if possible, to maintain service access for bus passengers.

Local bus service schedules would be reviewed and adjusted, if required, to reflect the modified traffic conditions and travel times with at-grade LRT operations. Stations would include a kiosk for displaying bus and rail system maps. These measures would reduce any potential transit-related impacts to a level that is less than significant.

6.1.2 Traffic Circulation

Impacted intersection locations for the TSM Alternative and each build alternative were evaluated to identify potential mitigation measures that would reduce the impact to a less than significant level. Potential measures may include converting or modifying current lane designations, optimizing the signal phasing splits, or providing limited widening if right-of-way is available.

Potential mitigation measures are identified in the following sections. Additional traffic mitigation measures, including potential street widening would be analyzed prior to the final design phase of the selected alternative.

6.1.2.1 TSM Alternative

Proposed mitigation measures for potentially impacted intersection locations under the TSM Alternative are summarized below.

- Grand Avenue/1st Street –Signal phasing in the westbound direction would accommodate a protected and permitted left turn.

- Alameda Street/1st Street – Restripe the southbound Alameda approach to provide one shared left-turn/through lane, two through lanes, and an exclusive right-turn lane.
- Figueroa Street/2nd Street –Signal phasing in the northbound direction would accommodate a protected and permitted left turn.
- Hill Street/3rd Street – Restripe the northbound Hill approach to provide one shared left-turn/through lane and two through lanes.
- Broadway/3rd Street – Restripe the westbound 3rd approach to provide one shared left-turn/through lane, two through lanes, and an exclusive right-turn lane.
- Spring Street/3rd Street – Restripe the southbound Spring approach to provide three through lanes and an exclusive right-turn lane, and optimize the signal splits.
- Los Angeles Street/3rd Street – Restripe the southbound Los Angeles approach to provide two through lanes and one shared through/right-turn lane.
- Grand Avenue/5th Street – Restripe the southbound approach on Grand Avenue to accommodate two through lanes, one shared through/right-turn lane, and an exclusive right-turn lane.
- Figueroa Street/Wilshire Boulevard – Restripe the northbound approach on Figueroa Street to accommodate one shared left-turn/through lane, four through lanes, and a shared through/right-turn lane.
- Flower Street/Wilshire Boulevard – Restripe the southbound Flower approach to provide one shared left-turn/through lane, three through lanes, and an exclusive right-turn lane.
- Figueroa Street/8th Street – Restripe the northbound Figueroa approach to provide one shared left-turn/through lane and six through lanes, and optimize the signal splits in the PM peak hour.
- Hill Street/Temple Street – Restripe the westbound Temple approach to provide one shared left-turn/through lane, one through lane, and one shared through/right-turn lane.
- Broadway/Temple Street – Restripe the northbound Broadway approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane.
- Alameda Street/Aliso Street – The eastbound phase would accommodate a free right-turn.

- Alameda Street / Los Angeles Street North – Restripe the southbound Alameda approach to provide three through lanes and an exclusive right-turn lane.

Table 6-1 shows LOS results after mitigation and identifies intersection locations where a residual significant impact would occur. For the TSM Alternative, all impacts could be mitigated to a less than significant level.

Table 6-1. Year 2035 TSM Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		TSM w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
1	Grand Avenue / 1st Street	E	65.3	E	66.0	0.7	No
9	Alameda Street / 1st Street	D	44.4	D	40.5	-3.9	No
10	Figueroa Street / 2nd Street	C	25.8	C	24.9	-0.9	No
23	Hill Street / 3rd Street	E	58.7	E	61.1	2.4	No
24	Broadway / 3rd Street	F	86.9	C	26.6	-60.3	No
25	Spring Street / 3rd Street	F	87.8	E	61.9	-25.9	No
27	Los Angeles Street / 3rd Street	E	67.1	E	55.5	-11.6	No
36	Grand Avenue / 5th Street	C	21.8	C	23.5	1.7	No
43	Figueroa Street / Wilshire Blvd.	E	61.6	D	43.3	-18.3	No
44	Flower Street / Wilshire Blvd.	D	41.0	D	39.4	-1.6	No
50	Figueroa Street / 8th Street	B	16.6	B	16.4	-0.2	No
54	Hill Street / Temple Street	D	35.2	D	35.1	-0.1	No
55	Broadway / Temple Street	E	70.1	E	71.2	1.1	No
62	Alameda Street / Aliso Street	F	88.5	E	72.8	-15.7	No

Table 6-1. Year 2035 TSM Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		TSM w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
65-1	Alameda Street / Los Angeles Street N.	D	40.4	D	37.4	-3.0	No
PM Peak Hour							
1	Grand Avenue / 1st Street	E	56.2	E	55.0	-1.2	No
9	Alameda Street / 1st Street	F	97.6	F	94.7	-2.9	No
10	Figueroa Street / 2nd Street	F	120.7	F	119.4	-1.3	No
23	Hill Street / 3rd Street	D	48.5	D	36.0	-12.5	No
24	Broadway / 3rd Street	E	65.7	C	25.7	-40.0	No
25	Spring Street / 3rd Street	E	55.9	D	51.5	-4.4	No
27	Los Angeles Street / 3rd Street	C	23.9	C	26.0	2.1	No
36	Grand Avenue / 5th Street	E	58.5	D	49.6	-8.9	No
43	Figueroa Street / Wilshire Blvd.	F	206.8	F	190.4	-16.4	No
44	Flower Street / Wilshire Blvd.	D	44.2	C	34.9	-9.3	No
50	Figueroa Street / 8th Street	F	94.2	C	29.7	-64.5	No
54	Hill Street / Temple Street	F	95.1	F	82.0	-13.1	No
55	Broadway / Temple Street	E	69.1	E	68.9	-0.2	No
62	Alameda Street / Aliso Street	D	48.9	D	49.5	0.6	No
65-1	Alameda Street / Los Angeles Street N.	C	26.2	C	28.5	2.3	No

6.1.2.2 At-Grade Emphasis LRT Alternative

Proposed mitigation measures for potentially impacted intersection locations under the At-Grade Emphasis LRT Alternative are summarized below.

- Hill Street/1st Street – Restripe the eastbound 1st approach to provide one left-turn lane, one shared left-turn/through lane, one through lane, and one shared through/right-turn lane.
- Broadway/1st Street – No mitigation measures would be feasible at this location.
- Main Street/1st Street – Restripe the eastbound 1st approach to provide one shared left-turn/through lane, and three through lanes.
- Los Angeles Street/1st Street – No mitigation measures would be feasible at this location.
- Alameda Street/1st Street – Restripe the northbound Alameda approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane.
- Hill Street/2nd Street – Convert signal phasing in the eastbound and westbound directions to permit left turns, and the northbound direction to protected left turns. Adjust signal splits to maintain and optimize the same cycle length.
- Broadway/2nd Street – Restripe the northbound Broadway approach to provide one shared left-turn/through lane and three through lanes.
- Los Angeles Street/2nd Street – Restripe the northbound Los Angeles approach to provide one shared left-turn/through lane, one through lane, and one shared through/right-turn lane. Then optimize the signal splits in the AM peak hour.
- Flower Street/3rd Street – There would be no feasible mitigation measures at this location.
- Hill Street/3rd Street – Restripe the westbound 3rd Street approach to provide one shared left-turn/through lane, two through lanes, and one exclusive right-turn lane.
- Broadway/3rd Street – Restripe the westbound 3rd Street approach to provide one shared left-turn/through lane, two through lanes, and one exclusive right-turn lane.
- Spring Street/3rd Street – Restripe the westbound 3rd Street approach to provide one shared left-turn/through lane, two through lanes, and optimize the signal splits.

- Main Street/3rd Street – Restripe the westbound 3rd Street approach to provide three through lanes and one shared through/right-turn lane, and optimize the signal splits.
- Los Angeles Street/3rd Street – Restripe the westbound 3rd Street approach to provide one left-turn lane, three through lanes, one shared through/right-turn lane, and optimize the signal splits.
- Flower Street/4th Street – There would be no feasible mitigation measures at this location.
- Flower Street/5th Street – Convert signal phasing in the westbound direction to a protected left turn; the cycle length would remain unchanged.
- Flower Street/6th Street – Restripe the southbound Flower Street approach to provide two left-turn lanes and three through lanes.
- Main Street/Temple Street – Restripe the eastbound Temple Street approach to provide one shared left-turn/through lane and two through lanes.
- Los Angeles Street/Temple Street – Restripe the eastbound approach on Temple Street to accommodate one shared left-turn/through lane and one shared through/right-turn lane. The northbound approach on Los Angeles Street would accommodate one shared left-turn/through lane, one through lane, and one shared through/right-turn lane.
- Judge John Aiso Street/Temple Street – Restripe the westbound Temple approach to provide one shared left-turn/through lane and one through lane.
- Los Angeles Street/Aliso Street – Restripe the northbound Los Angeles approach to provide one through lane, one shared through/right-turn lane, and one exclusive right-turn lane. Then optimize the signal splits.
- Alameda Street/Aliso Street – Restripe the southbound Alameda approach to provide one shared left-turn/through lane and three through lanes. Then optimize the signal splits.
- Hill Street/4th Street – Restripe the eastbound 4th Street approach to provide one shared left-turn/through lane, three through lanes, and one shared through/right-turn lane. The southbound approach on Hill Street would provide one left-turn lane, one shared left-turn/through lane, and two through lanes.
- Broadway/4th Street – Restripe the southbound Broadway approach to provide one shared left-turn/through lane and two through lanes. Then optimize splits.

- Spring Street/4th Street – Restripe the eastbound 4th Street approach to provide three through lanes and one exclusive right-turn lane.
- Main Street/4th Street – There would be no feasible mitigation measures at this location.

Table 6-2 shows the level of service results after mitigation and identifies intersection locations where residual significant impacts would occur. After mitigation measures are implemented for the At-Grade Emphasis LRT Alternative, 11 of the 18 impacted intersection locations would continue to be impacted to significant levels during the AM peak hour. Similarly, in the PM peak hour, 15 of the 26 impacted intersection locations would continue to be impacted to significant levels.

Table 6-2. Year 2035 At-Grade Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		At-Grade w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
2	Hill Street / 1st Street	C	24.1	C	33.3	**9.2**	**Yes**
3	Broadway / 1st Street	C	24.0	C	23.9	-0.1	No
5	Main Street / 1st Street	B	16.5	B	14.0	-2.5	No
6	Los Angeles Street / 1st Street	B	16.6	C	23.1	**6.5**	**Yes**
9	Alameda Street / 1st Street	D	44.4	E	75.8	**31.4**	**Yes**
12	Hill Street / 2nd Street	B	19.7	F	210.7	**191.0**	**Yes**
13	Broadway / 2nd Street	B	18.4	C	24.7	**6.3**	**Yes**
16	Los Angeles Street / 2nd Street	B	14.8	E	75.3	**60.5**	**Yes**
21	Flower Street / 3rd Street	C	28.4	D	45.8	**17.4**	**Yes**
23	Hill Street / 3rd Street	E	58.7	F	86.8	**28.1**	**Yes**
24	Broadway / 3rd Street	F	86.9	D	35.8	-51.1	No

Table 6-2. Year 2035 At-Grade Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		At-Grade w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
25	Spring Street / 3rd Street	F	87.8	D	46.5	-41.3	No
26	Main Street / 3rd Street	C	22.7	B	18.1	-4.6	No
27	Los Angeles Street / 3rd Street	E	67.1	B	17.3	-49.8	No
32	Flower Street / 4th Street	D	39.6	F	199.3	**159.7**	**Yes**
35	Flower Street / 5th Street	C	22.3	C	21.0	-1.3	No
39	Flower Street / 6th Street	C	32.6	D	36.0	3.4	No
57	Main Street / Temple Street	B	11.4	B	16.7	5.3	No
58	Los Angeles Street / Temple Street	B	19.7	F	140.8	**121.1**	**Yes**
59	Judge John Aiso Street / Temple Street	A	5.6	B	18.7	13.1	No
61	Los Angeles Street / Aliso Street	B	12.9	B	11.8	-1.1	No
62	Alameda Street / Aliso Street	F	88.5	E	71.2	-17.3	No
77	Hill Street / 4th Street	B	18.3	D	43.2	**24.9**	**Yes**
79	Broadway / 4th Street	B	14.8	B	16.9	2.1	No
80	Spring Street / 4th Street	B	13.9	B	16.5	2.6	No
81	Main Street / 4th Street	B	11.8	B	13.4	1.6	No
PM Peak Hour							
2	Hill Street / 1st Street	E	67.2	E	79.6	**12.4**	**Yes**
3	Broadway / 1st Street	C	30.5	D	53.6	**23.1**	**Yes**

Table 6-2. Year 2035 At-Grade Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		At-Grade w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
5	Main Street / 1st Street	D	53.0	F	92.4	**39.4**	**Yes**
6	Los Angeles Street / 1st Street	F	102.9	F	126.2	**23.3**	**Yes**
9	Alameda Street / 1st Street	F	97.6	E	75.7	-21.9	No
12	Hill Street / 2nd Street	B	19.9	F	241.8	**221.9**	**Yes**
13	Broadway / 2nd Street	C	20.6	C	25.1	4.5	No
16	Los Angeles Street / 2nd Street	C	34.4	D	43.3	**8.9**	**Yes**
21	Flower Street / 3rd Street	B	15.7	C	31.7	**16.0**	**Yes**
23	Hill Street / 3rd Street	D	48.5	D	48.5	0.0	No
24	Broadway / 3rd Street	E	65.7	D	36.4	-29.3	No
25	Spring Street / 3rd Street	E	55.9	D	47.1	-8.8	No
26	Main Street / 3rd Street	D	39.1	C	27.9	-11.2	No
27	Los Angeles Street / 3rd Street	C	23.9	C	25.6	1.7	No
32	Flower Street / 4th Street	F	91.5	F	135.1	**43.6**	**Yes**
35	Flower Street / 5th Street	C	20.8	C	26.7	5.9	No
39	Flower Street / 6th Street	C	31.9	C	34.0	2.1	No
57	Main Street / Temple Street	C	30.2	F	105.0	**74.8**	**Yes**
58	Los Angeles Street / Temple Street	C	32.7	F	510.9	**478.2**	**Yes**
59	Judge John Aiso Street / Temple Street	B	15.7	F	96.0	**80.3**	**Yes**

Table 6-2. Year 2035 At-Grade Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		At-Grade w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
61	Los Angeles Street / Aliso Street	C	21.7	C	24.8	3.1	No
62	Alameda Street / Aliso Street	D	48.9	E	63.4	**14.5**	**Yes**
77	Hill Street / 4th Street	D	45.4	F	100.6	**55.2**	**Yes**
79	Broadway / 4th Street	C	22.1	D	52.5	**30.4**	**Yes**
80	Spring Street / 4th Street	C	21.4	C	25.2	3.8	No
81	Main Street / 4th Street	C	34.7	E	68.7	**34.0**	**Yes**

6.1.2.3 Underground Emphasis LRT Alternative

Proposed mitigation measures for potentially impacted intersection locations under the Underground Emphasis LRT Alternative are summarized below.

- Judge John Aiso Street/1st Street – Restripe the eastbound 1st Street approach to provide one left-turn lane, one shared left-turn/through lane, one through lane, and one exclusive right-turn lane. Restripe the westbound 1st Street approach to provide one shared left-turn/through lane, one through lane, and one exclusive right-turn lane. Then optimize the signal splits.

- Alameda Street/2nd Street – Restripe the eastbound 2nd Street approach to provide one shared left-turn/through lane, one shared through/right-turn lane, and one exclusive right-turn lane. Restripe the westbound 2nd Street approach to provide one shared left-turn/through lane and one shared through/right-turn lane. Signal phasing in the westbound direction would be converted to a permitted left turn. Restripe the northbound Alameda approach to provide one left-turn lane, one shared left-turn/through lane, and one shared through/right-turn lane. Then optimize the signal splits.

- Flower Street/4th Street – Restripe the southbound Flower Street approach to provide one shared left-turn/through lane and two through lanes. Then optimize the signal splits.

- Flower Street/5th Street – Restripe the southbound Flower Street approach to provide three through lanes and one exclusive right-turn lane. Then optimize the signal splits.
- Flower Street/6th Street – Restripe the eastbound 6th Street approach to provide three through lanes and two exclusive right-turn lanes. Then optimize the signal splits.
- Judge John Aiso Street/Temple Street – Restripe the northbound Judge John Aiso Street approach to provide one left-turn lane, one shared left-turn/right-turn lane, and one exclusive right-turn lane. Then optimize the signal splits.
- Alameda Street/Aliso Street – Restripe the southbound Alameda Street approach to provide one shared left-turn/through lane and three through lanes. Then optimize the signal splits.

Table 6-3 shows the level of service results after mitigation and identifies intersection locations where residual significant impacts would occur. After mitigation measures are implemented for the Underground Emphasis LRT Alternative, two of the three impacted intersection locations would continue to be impacted to significant levels during the AM peak hour. Similarly, three of the seven impacted intersection locations would continue to be impacted to significant levels during the PM peak hour.

Table 6-3. Year 2035 Underground Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		Underground w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
7	Judge John Aiso Street / 1st Street	B	13.9	B	12.1	-1.8	No
19	Alameda Street /2nd Street	B	15.9	D	39.2	**23.3**	**Yes**
32	Flower Street / 4th Street	D	39.6	E	64.8	**25.2**	**Yes**
35	Flower Street / 5th Street	C	22.3	C	24.9	2.6	No
39	Flower Street / 6th Street	C	32.6	C	28.9	-3.7	No
59	Judge John Aiso Street / Temple	A	5.6	A	8.1	2.5	No

Table 6-3. Year 2035 Underground Emphasis LRT Alternative with Mitigation: Intersection LOS and Residual Impacts							
No.	Intersection	No Build		Underground w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
	Street						
62	Alameda Street / Aliso Street	F	88.5	E	69.3	-19.2	No
PM Peak Hour							
7	Judge John Aiso Street / 1st Street	C	21.1	D	49.3	**28.2**	**Yes**
19	Alameda Street /2nd Street	C	33.1	F	83.6	**50.5**	**Yes**
32	Flower Street / 4th Street	F	91.5	F	92.1	0.6	No
35	Flower Street / 5th Street	C	20.8	C	25.3	4.5	No
39	Flower Street / 6th Street	C	31.9	C	33.1	1.2	No
59	Judge John Aiso Street / Temple Street	B	15.7	C	26.0	**10.3**	**Yes**
62	Alameda Street / Aliso Street	D	48.9	C	26.2	-22.7	No

6.1.2.4 Fully Underground LRT Alternative – Little Tokyo Variation 1

Proposed mitigation measures for potentially impacted intersection locations under the Fully Underground LRT Alternative - Little Tokyo Variation 1 are discussed below.

- Flower Street/4th Street – Restripe the southbound Flower Street approach to provide one shared left-turn/through lane and two through lanes. Then optimize the signal splits.
- Flower Street/5th Street – Restripe the southbound Flower Street approach to provide three through lanes and one exclusive right-turn lane. Then optimize the signal splits.
- Flower Street/6th Street – Restripe the eastbound 6th Street approach to provide three through lanes and two exclusive right-turn lanes. Then optimize the signal splits.

Table 6-4 shows the level of service results after mitigation and identifies one intersection where a residual significant impact would occur. After mitigation measures are implemented for the Fully Underground LRT Alternative – Little Tokyo Variation 1, this intersection continues to be impacted to significant levels during the AM peak hour. In the PM peak hour, none of the three impacted intersections would continue to be impacted to significant levels. These locations can be mitigated to a less than significant level.

Table 6-4. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 1 with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		Fully Underground w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
32	Flower Street / 4th Street	D	39.6	E	64.8	**25.2**	**Yes**
35	Flower Street / 5th Street	C	22.3	C	24.9	2.6	No
39	Flower Street / 6th Street	C	32.6	C	28.9	-3.7	No
PM Peak Hour							
32	Flower Street / 4th Street	F	91.5	F	92.1	0.6	No
35	Flower Street / 5th Street	C	20.8	C	25.3	4.5	No
39	Flower Street / 6th Street	C	31.9	C	33.1	1.2	No

6.1.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 2

Proposed mitigation measures for potentially impacted intersections under the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be the same as discussed for Little Tokyo Variation 1, and are summarized below.

- Flower Street/4th Street – Restripe the southbound Flower Street approach to provide one shared left-turn/through lane and two through lanes. Then optimize the signal splits.
- Flower Street/5th Street – Restripe the southbound Flower Street approach to provide three through lanes and one exclusive right-turn lane. Then optimize the signal splits.

- Flower Street/6th Street – Restripe the eastbound 6th Street approach to provide three through lanes and two exclusive right-turn lanes. Then optimize the signal splits.

Table 6-5 shows the level of service results after mitigation and identifies one intersection where a residual significant impact would occur. After mitigation measures are implemented for the Fully Underground LRT Alternative – Little Tokyo Variation 2, this intersection continues to be impacted to significant levels during the AM peak hour. In the PM peak hour, none of the three impacted intersections would continue to be impacted to significant levels. These locations can be mitigated to a less then significant level.

Table 6-5. Year 2035 Fully Underground LRT Alternative – Little Tokyo Variation 2 with Mitigation: Intersection LOS and Residual Impacts

No.	Intersection	No Build		Fully Underground w/ Mitigation		Change in Delay	Residual Impact
		LOS	Delay	LOS	Delay		
AM Peak Hour							
32	Flower Street / 4th Street	D	39.6	E	64.8	**25.2**	**Yes**
35	Flower Street / 5th Street	C	22.3	C	24.9	2.6	No
39	Flower Street / 6th Street	C	32.6	C	28.9	-3.7	No
PM Peak Hour							
32	Flower Street / 4th Street	F	91.5	F	92.1	0.6	No
35	Flower Street / 5th Street	C	20.8	C	25.3	4.5	No
39	Flower Street / 6th Street	C	31.9	C	33.1	1.2	No

6.1.3 Parking

The number of on-street parking and loading spaces eliminated by the proposed project would be minimal for the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2. The number of parking spaces removed would increase for the At-Grade Emphasis LRT Alternative due to the at-grade configuration on 2nd Street. Spaces would also potentially need to be removed on 2nd Street to create bus zones for the TSM Alternative.

Depending on the current use of the affected spaces, replacement in the form of off-street parking at adjacent locations may be considered. Potential parking replacement locations and/or strategies would be identified to mitigate parking impacts.

For the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative, the three tour bus loading spaces adjacent to JANM would be relocated to either an acceptable location on 1st Street or to the Nikkei Center site, with an understanding that a pedestrian crossing would be installed to provide safe movement from the tour bus loading area to the museum. Metro is committed to implementing a feasible parking replacement plan to reduce parking impacts to a less than significant level.

6.1.4 Other Modes

One major mitigation measure for other modes of transportation would be to implement a Metro-funded Community Linkages Study for the downtown area. The purpose of this study would be to develop pedestrian plans to link major activity centers with stations along the Regional Connector alignment.

Other mitigation measures would include the use of well-defined pedestrian paths, signage, and barriers, where appropriate, to reduce the potential for unsafe LRT track crossings by pedestrians. Distinctive crosswalk treatments such as textured paving and eye-catching designs can capture the attention of pedestrians and encourage the use of crosswalks. Using pedestrian-oriented signal phasing can decrease crossing wait times and reduce the chances of impatient pedestrians crossing against the light.

Train operations would be coordinated with traffic signal phasing to address potential safety issues and minimize delays. In addition, other techniques to increase pedestrian safety, including educational programs for local businesses, marketing and advertisement campaigns, and cohesive signage, may also be used. Similar at-grade LRT lines currently operating within the region could serve as examples of how to address pedestrian safety issues associated with at-grade portions of the proposed project.

To address the issue of bicycle use on 1st Street potentially coming into conflict with shifting traffic patterns under the At-Grade Emphasis LRT Alternative, the designation of 1st Street as a commuter bicycle facility in the downtown area between Hill and Alameda Streets could be removed. In addition, the designation of Central Avenue as Class III bicycle route between 1st and 2nd Streets could also be removed. However, in order to maintain network continuity for the regional bikeway plan at these specific segments of the system, parallel streets would need to be designated as bicycle routes.

Bicycle commuter route alternatives would be studied as part of a future Community Linkages Study that could be funded by Metro. No bicycle route mitigation is required for the

remaining downtown roadway segments potentially affected by the proposed project because the streets are not designated bikeway facilities.

6.2 Potential Mitigation Measures Due to Construction Impacts

6.2.1 Transit

Mitigation plans would be developed by Metro working closely with the City of Los Angeles and potentially affected transit operators. Bus lines that would be affected by lane closures due to construction activities would continue to operate where feasible in the remaining traffic lanes. Bus stops that would be affected by sidewalk construction would be temporarily relocated, and construction activities would be phased to consider the maintenance of bus service and minimize disruption.

During nighttime periods when entire blocks may be closed to traffic, bus lines would be re-routed to adjacent streets in a manner that minimizes inconvenience to bus passengers. If a block is closed that includes a bus stop, the bus stop would be temporarily relocated to the portion of the street segment that is still open to bus service.

After these mitigation measures are implemented, temporary relocation of bus stops would continue to cause potentially significant impacts during construction due to the possibility of increased travel times and longer walking distances by transit users.

6.2.2 Traffic Circulation

During the final design phase of the project, site- and street-specific Worksite Traffic Control Plans would be developed in cooperation with LADOT to accommodate the required traffic movements. To the extent practical, traffic lanes would be maintained in both directions, particularly during the morning and afternoon peak traffic hours. Access to adjacent businesses via existing or temporary driveways would be maintained throughout the construction period. In addition, Metro would implement a Construction Mitigation Program to coordinate preparation of traffic control plans with community reviews and approvals.

In some cases, specific construction techniques may be used to minimize construction duration, including segmental construction, which would help minimize the need for extensive falsework on the ground. Apart from the proposed elimination of eastbound travel between Hill Street and Main Street on 2nd Street in the At-Grade Emphasis LRT Alternative, at least one traffic lane in each direction and pedestrian access would be maintained during construction.

Designated haul routes for trucks would be identified during the final design phase of the project. These routes would be located to minimize noise, vibration, and other possible impacts to adjacent businesses and neighborhoods. If slight physical damage to the haul route roads is found after the project is complete, the roads would be repaired accordingly.

Driveway access for residences would be maintained at all times. Driveway access to business would be maintained for normal business operating hours.

After these mitigation measures are implemented, construction-related traffic impacts would be potentially significant and unavoidable.

6.2.3 Parking

Prior to construction, a parking mitigation and circulation plan would be developed by the contractor in coordination with Metro and the City. The purpose of this plan would be to minimize impacts on curb parking.

It may be possible to sequence construction activities so that multiple blocks of on-street parking are not temporarily removed at one time. This would make various on-street parking spaces available in an area under construction.

Some wider streets may be restriped to allow diagonal parking, which would provide a greater number of parking spaces in the area. Some of the parking mitigation measures previously outlined could be developed early so that they may be utilized during the period of construction. Metro would not allow contractor employees to park on unauthorized street parking locations or in private parking lots. Metro may use construction staging areas, lease parking lots, and/or provide construction employees with transit passes (if necessary) to avoid impacts to local parking.

After implementation of these proposed mitigation measures, construction-period parking impacts would not be adverse or significant.

6.2.4 Other Modes

Pedestrian movements would not conflict with work site vehicles, equipment, and operations. Special facilities such as handrails, fences, and walkways would be provided for the safety of pedestrians in areas where construction activities would impact sidewalk areas.

When pedestrians are diverted into the street or adjacent to an open trench, Type K-rail concrete barriers would be used as a barricade between pedestrian and vehicular traffic. Sidewalk closures would be approved by the affected agency having jurisdiction and only one side of the street would be closed at a time. If crosswalks are temporarily closed, pedestrians would be directed to use one that is in close proximity to closed one. Adjacent crosswalks would not be closed at the same time so pedestrians could cross streets. Bicyclists would be encouraged through signage to ride with caution in the streets, ride with caution on sidewalks, or choose other routes during construction activities.

During the final design phase of the project, site- and street-specific Worksite Traffic Control Plans would be developed in cooperation with LADOT to accommodate the required

pedestrian and bicycle movements. Access to businesses would be maintained for normal business operating hours. Access to residences would be maintained at all times throughout construction.

After implementation of these mitigation measures, pedestrian and bicycle impacts during construction would be potentially significant and unavoidable.

7.0 CONCLUSIONS

This section identifies the conclusions of the traffic study. In summary, there would be two impact categories: those found to be adverse after mitigation and those found to be not adverse after mitigation.

7.1 Transit

No unavoidable adverse impacts to transit operations would occur after mitigation measures have been implemented. Any potential impacts resulting from the displacement of bus stops or shifts in bus routes due to street design changes would no longer be adverse after mitigation. This would be accomplished by adjusting bus schedules and notifying bus patrons so they are aware of any route and time changes.

Proposed developments, either under construction or planned, along the Regional Connector alignment and station areas would benefit from increased transit service. In addition, the transit trips generated by these new development projects would contribute to the operational success of the overall regional LRT system. These beneficial impacts would increase system wide ridership and use of the overall transit system. The No Build and TSM Alternatives, however, would allow continued traffic degradation and provide no reduction in downtown area transfers, decreasing the overall utility of the transit system and resulting in deteriorated service.

Temporary transit route detours during construction could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of detours, impacts may remain adverse after mitigation.

7.2 Traffic Circulation

7.2.1 No Build Alternative

Potential impacts due to overall growth in the project area are reflected in the No Build Alternative traffic forecasts and associated AM and PM peak hour level of service estimates.

7.2.2 TSM Alternative

A total of 15 intersection locations would be impacted under the TSM Alternative. After implementation of the proposed mitigation measures, traffic circulation impacts at all 15 locations would be mitigated to a less than significant level. There would be no residual impacts for this alternative.

7.2.3 At-Grade Emphasis LRT Alternative

Under the At-Grade Emphasis LRT Alternative, 26 intersections would be impacted in one or both peak hours. After implementation of the proposed mitigation measures, 11 of the 26

impacted intersections would continue to be impacted in the AM peak hour and 15 would continue to be impacted in the PM peak hour. During the AM peak hour, traffic circulation impacts at seven intersections would no longer be adverse after mitigation. During the PM peak hour, traffic circulation impacts at 11 intersections would no longer be adverse after mitigation. In summary, there would 11 intersections with residual impacts in the AM peak hour and 15 with residual impacts in the PM peak hour.

During construction, the additional temporary roadway and lane closures could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of closures, impacts may remain adverse after mitigation.

7.2.4 Underground Emphasis LRT Alternative

Seven intersection locations would be potentially impacted in one or both peak hours. After the implementation of the proposed mitigation measures, two of the seven impacted intersections would continue to be impacted in the AM peak hour and three would continue to be impacted in the PM peak hour. During the AM peak hour, traffic circulation impacts at one intersection could be mitigated to a level where they would no longer be adverse. During the PM peak hour, four intersections could be mitigated to a level where they would no longer be adverse. In summary, there would be two intersections with residual impacts in the AM peak hour and three with residual impacts in the PM peak hour.

During construction, additional temporary roadway and lane closures could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of closures, impacts may remain adverse after mitigation.

7.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Under the Fully Underground LRT Alternative - Little Tokyo Variation 1, three intersection locations would be impacted in one or both peak hours. After the implementation of the proposed mitigation measures, traffic circulation impacts at one of the three impacted intersections would continue to be adverse in the AM peak hour and traffic circulation impacts at all three would be mitigated to a level where they would no longer be adverse in the PM peak hour. During the AM peak hour, the one impacted intersection would continue to experience adverse impacts. During the PM peak hour, traffic circulation impacts at all three intersections could be mitigated to a level where they would no longer be adverse. In summary, there would be one intersection with residual impacts in the AM peak hour and no residual impacts in the PM peak hour.

During construction, additional temporary roadway and lane closures could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of closures, impacts may remain adverse after mitigation.

7.2.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The operational results and conclusions of this alternative are the same as for the Fully Underground LRT Alternative - Little Tokyo Variation 1. Three intersections would be impacted in one or both peak hours. After the implementation of the proposed mitigation measures, one of the three impacted intersections would continue to experience adverse traffic circulation impacts in the AM peak hour, and none would experience adverse impacts in the PM peak hour. In summary, there would be one intersection location with residual impacts in the AM peak hour and no residual impacts in the PM peak hour.

During construction, additional temporary roadway and lane closures could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of closures, impacts may remain adverse after mitigation.

Table 7-1 summarizes the conclusions of this traffic evaluation. The table compares the number of impacted intersections for each build alternative to no build conditions both with and without mitigation. It also identifies the number of intersections that would continue to be impacted after implementation of feasible mitigation measures.

Table 7-1. Number of Impacted Intersections With and Without Mitigation

Alternative Under Consideration	Impacted Intersections		Impacted After Mitigation	
	AM Peak	PM Peak	AM Peak	PM Peak
No Build	-----	-----	-----	-----
TSM	8	9	0	0
At-Grade Emphasis	18	26	11	15
Underground Emphasis	3	7	2	3
Fully Underground – Little Tokyo Variation 1	1	3	1	0
Fully Underground – Little Tokyo Variation 2	1	3	1	0

7.3 Parking

No unavoidable significant adverse impacts would occur after mitigation measures have been implemented for any of the alternatives. Replacement parking such as off-street parking at

adjacent existing locations may be required. Potential parking replacement locations and/or strategies would be identified to mitigate parking impacts. Metro is committed to implementing a feasible parking replacement plan to reduce parking impacts to a less than significant level.

During construction, additional temporary curb parking restrictions could potentially result in short-term loss of parking. Efforts would be made to provide nearby replacement parking and minimize the extent and duration of restrictions, and impacts would not be adverse or significant after mitigation.

7.4 Other Modes

No unavoidable significant adverse impacts to other modes of transportation would occur after implementation of proposed mitigation measures. For potential impacts to pedestrians, Metro could fund a Community Linkages Study for the downtown area. The purpose of this study would be development of pedestrian plans to link major activity centers with stations along the Regional Connector alignment. For bicycles, a parallel street would be identified and designated as a bikeway facility to mitigate removal of the Commuter Bikeway classification on 1st Street. An alternative route would be developed during the Community Linkages Study.

During construction, temporary pedestrian and bicycle detours could potentially result in adverse impacts. Although efforts would be made to minimize the extent and duration of detours, impacts may remain adverse after mitigation.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX M

LAND USE IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Land Use Impacts
Technical Memorandum

March 29, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

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ACRONYMS

BID	Business Improvement District
CEQA	California Environmental Quality Act
CRA	Community Redevelopment Agency
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
NEPA	National Environmental Policy Act
TBM	Tunnel boring machine
TSM	Transportation Management System

1.0 SUMMARY

The Regional Connector Transit Corridor project area is one of Los Angeles County's major employment centers and encompasses retail, entertainment, and residential districts. Income levels of residents vary greatly, and residential units vary widely in cost from new luxury condominium developments in the western half of the project area to single-room occupancy hotels and homeless shelters in the eastern portion.

The land use patterns in the project area consist of mostly commercial office buildings in the southwestern portion, public office buildings in the northern portion, and commercial manufacturing buildings in the southeast. There are pockets of residential uses, including adaptive reuse of older non-residential buildings, scattered through the project area.

The No Build and Transportation System Management (TSM) Alternatives would result in no direct or indirect impacts to land use in the project area. Nor would they result in any cumulative impacts to land use in the project area. However, these two alternatives would not provide new opportunities for transit hub and land use connections, transit-oriented development, compact development patterns, progress toward more walkable communities, and compliance with the federal mandate for transportation investments that have important economic development, environmental and social benefits. Both of these alternatives would be inconsistent with local land use plans that promote sustainable travel patterns.

Construction and operation of any one of the four build alternatives would result in no significant direct or indirect impacts to land use in the project area. Construction of any one of the build alternatives could generate pedestrian and vehicle detours that may inhibit, but would not prevent, access to existing land uses along the alignment.

Construction of the Underground Emphasis Light Rail Transit (LRT) Alternative, Fully Underground LRT Alternative – Little Tokyo Variation 1, and Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in the taking of several existing commercial parcels and, in some cases, the permanent conversion of this land use. These takings would require compensation for the displaced land and business owners at fair market value, but would not be considered a significant land use impact given that the new land use would not conflict with existing adjacent land uses or result in any conflicts or inconsistencies with any existing land use plan, policy, or regulation of any agency with jurisdiction over the project area.

Overall, implementation of any of the build alternatives would not result in significant impacts to land use, nor would any require implementation of mitigation measures to reduce any impacts to a less than significant level. However, the beneficial land use effects of this transit investment have the potential to be significant.

2.0 INTRODUCTION

This technical memorandum discusses the Regional Connector Transit Corridor project area setting in relation to land use. The memo describes existing conditions for these resources, current applicable regulatory setting, and potential impacts from construction and operation of the proposed alternatives.

As the second largest metropolitan region in the United States, Los Angeles is home to approximately 15 million people and contains a variety of diverse cultures, world-renowned entertainment venues, and unique industries. At the heart of Los Angeles is the central downtown, considered the industrial, governmental, and financial core of the City.

The downtown Los Angeles financial district is one of the most job-dense areas in the City. Downtown Los Angeles also encompasses several retail, entertainment, and residential districts. Potential changes to existing land uses with construction of new transit stations or introduction of at-grade transit alignments could affect adjacent land uses. This technical memorandum evaluates the potential for impacts from construction and operation of the proposed Regional Connector project on land uses in the project area.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Standards of Significance

The standards of significance presented below were developed to gauge potential project effects relative to the requirements of the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). The standards were formulated using impact assessment guidance prepared by the Federal Transit Administration, the Federal Highway Administration, similar analyses presented in other transit project Environmental Impact Statements (EIS)/Environmental Impact Reports (EIR), and the significance thresholds within the *Los Angeles CEQA Thresholds Guide* (Section H). Based on these guidance documents, a significant adverse impact on land use would occur if an alternative would:

- Conflict or be incompatible with adjacent and surrounding land uses caused by degradation or disturbances that diminish the quality of a particular land use; or
- Result in conflict or inconsistency with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

3.2 Area of Potential Impact

From a land use perspective, the area of potential impact for this project includes current land use designations for parcels directly adjacent to the build alternatives for the full length of the alignments and the parcels within a one-block radius of any new at-grade or underground transit stations proposed. It also includes the areas that would be crossed by the TSM Alternative. The proposed project was analyzed for potential direct and indirect effects on land use type, density, and character resulting from project construction and operation.

3.3 Analysis Methodology

Potential land use impacts associated with each alternative were analyzed within the components outlined below and structured around the standards of significance identified above:

- Analysis of the potential for short- and long-term conflicts with, or disruption of access to, land uses adjacent to the alternative alignments
- Identification of potential conflicts with applicable local land use plans, policies, or regulations
- Identification of potential land use benefits of the proposed alternatives, such as opportunities for transit-oriented developments and land uses

3.3.1 Land Use Incompatibility and Conflicts

The analysis of potential short- and long-term conflicts with and potential disruption of access to land uses adjacent to the alternative alignments began with an inventory of the existing land uses adjacent to each alternative alignment. The inventory helped characterize land uses along the full length of each alignment for the TSM Alternative and aboveground sections of the At-Grade Emphasis LRT Alternative. The analysis describes qualitative, and where possible, quantitative impacts associated with the project.

Cataloguing land uses along the underground sections of the Underground Emphasis LRT Alternative, Fully Underground LRT Alternative – Little Tokyo Variation 1, and Fully Underground LRT Alternative – Little Tokyo Variation 2 focused on the land uses surrounding new underground stations and other aboveground construction locations with the potential to generate land use conflicts. Cataloguing use relied on General Plan land use designations, Zoning Ordinance designations, and observations made during site reconnaissance.

This land use catalogue is discussed in more detail in Section 4. Section 4 also compares existing and expected land uses of the TSM Alternative and each build alternative to identify potential incompatibility or disruption of existing land uses. Potential for incompatibility could include, but is not limited to, noise, security, lighting, traffic, and pedestrian safety. These are discussed further in other technical memoranda.

3.3.2 Policy Consistency

This technical memorandum focuses on the proposed project's consistency with the goals and policies presented in local land use plans, policies, and regulations. The analysis is to determine if different alternatives have different levels of policy consistency. The land use plans, policies, and regulations that were reviewed include: the City of Los Angeles' General Plan (including the transportation element), the City of Los Angeles Planning and Zoning Code, the Central City Community Plan, the Civic Center Shared Facilities and Enhancement Plan, the Downtown Adaptive Reuse Incentive Ordinance, the Greater Downtown Housing Incentive Ordinance, the Central City North Community Plan, and the redevelopment plans established by the Community Redevelopment Agency (CRA) of the City of Los Angeles.

4.0 AFFECTED ENVIRONMENT

4.1 Existing Conditions

The project area is one of Los Angeles County's major employment centers and encompasses several retail, entertainment, and residential districts. Income levels of the residents vary greatly, and the residential units vary widely in cost from new luxury condominium developments in the western half of the project area to single-room occupancy hotels and homeless shelters in the eastern portion.

Land use patterns in the project area consist mostly of commercial office buildings in the southwestern portion, public office buildings in the northern portion, and commercial manufacturing buildings in the southeast. There are pockets of residential uses, including adaptive reuse of older non-residential buildings, scattered through the project area. The project area falls within the Central City Community Area as indicated in Figure 4-1, which shows the General Plan Land Use Designations along the alternative alignments. Figure 4-2, shows the zoning designations.

The highest floor-area ratios, about 6.0, can be found in the westernmost part of the project area, which is roughly bounded by 1st Street, Hill Street, 7th Street, and the SR 110 freeway. These boundaries are approximately similar to those of the Bunker Hill Urban Renewal Project Area. An older office district dating from the early part of the twentieth century is found to the east of the Bunker Hill Urban Renewal Project Area.

Nearly all of the businesses in this district contain ground-floor retail establishments, resulting in a busy streetscape. The buildings in this area are substantially shorter than those on Bunker Hill due to the City's 12-story height limit at the time of their construction.

Land use patterns in the eastern portion of the project area have been shifting from commercial and manufacturing toward residential over the past several years. New multi-family residential developments have recently opened along 2nd and 3rd Streets in Little Tokyo and the Arts District, stretching from approximately Los Angeles Street to Santa Fe Avenue. Most of these developments are comprised of four to six stories of apartments or condominiums. Some parcels in this area have been cleared for construction including residential buildings up to 20 stories in height.

As such, a large influx of new residents is expected in this area. In a dense area like downtown Los Angeles, this new residential population will likely increase pedestrian activity and spur demand for transit service outside of traditional commute hours, especially if development continues.

One of the oldest industrial areas in the region is in the easternmost part of the project area. The buildings are much lower than buildings elsewhere in the project area, usually only one to

three stories, and vacant lots are more prevalent. Many of the empty lots are used as storage yards or surface parking lots.

Though zoned for industrial manufacturing, some of the buildings have recently been reused as loft condominiums and rental housing units, particularly in the area north of 7th Street between Alameda Street and the Los Angeles River. Other new multi-family residential developments have recently been completed in the area, reflecting a changing trend in downtown land uses. These new residential developments may help to create nodes where transit demand would be higher than the past.

The project area is currently served by four rail lines and over 100 bus lines.

4.2 Regulatory Framework

The following are the land use plans, community plans, and redevelopment plans and projects affecting the project area, as well as brief assessments of their compatibility with the Regional Connector Transit Corridor alternatives.

4.2.1 General Plan Framework

The Los Angeles General Plan Framework, adopted in December 1996, is the Citywide portion of the City's General Plan, which is intended to guide the City's long-range growth and development. The General Plan Framework anticipates fast-paced population growth and outlines methods for directing growth toward selected high-density areas where infrastructure is readily available, rather than allow all areas of the City to grow in an uncontrolled fashion. The study identifies downtown as one of the key growth areas, and calls for enhancements to Los Angeles County's rail system, including extensions and feeder bus service.

4.2.2 Central City Community Plan

The Land Use Element of the General Plan splits the City into 35 community plan areas, each with detailed programs targeted at local growth and neighborhood improvements. All of the alternative alignments lie entirely within the Central City Community Plan area and the Central City North Community Plan area (City of Los Angeles 2003).

The Central City Community Plan calls for creating dense residential neighborhoods with a variety of housing types, improving the functionality of the area's commercial districts, encouraging the development of additional rail transit, retaining the scale and appearance of existing areas, and encouraging job-rich land uses. The Central City Community Plan area is bounded by Cesar Chavez Avenue on the north, the Santa Monica Freeway (I-10) on the south, the Harbor Freeway (SR 110) on the west, and Alameda Street on the east. More detailed land use maps are provided in Appendix A.

In response to the recent increase in housing units downtown, the plan seeks to develop neighborhood-supporting businesses and enhance the safety and cleanliness of the area. The plan heavily promotes transit-supportive land uses such as high-density residential developments, regional entertainment and cultural centers, space for small start-up businesses, retail plazas, nighttime entertainment venues, hotels, and dense industrial and wholesale districts. Of particular importance to the project, the plan notes that most of the traffic in the area is generated by pass-through travel between areas outside of downtown.

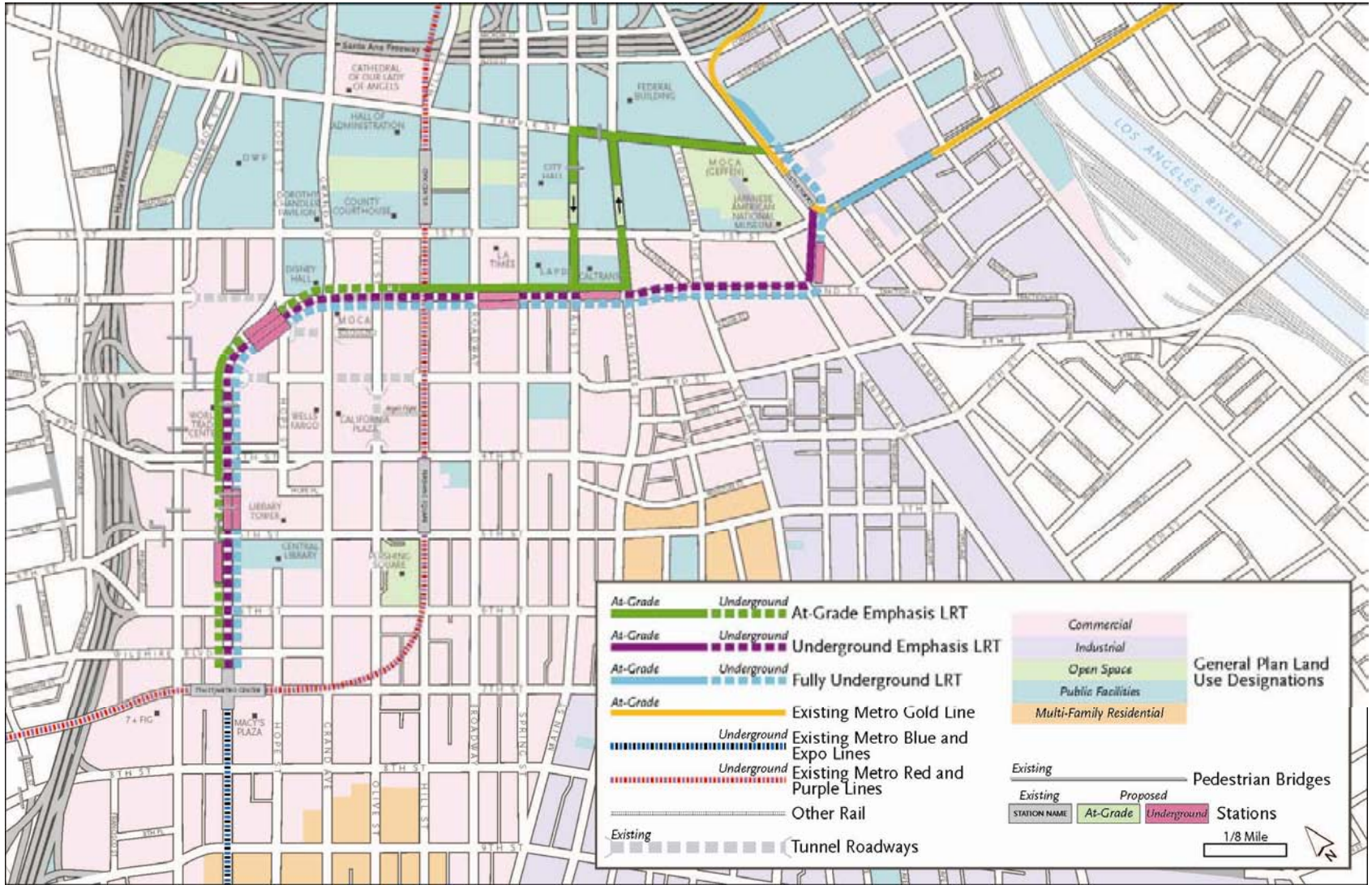

Figure 4-1 General Plan Land Use Designations

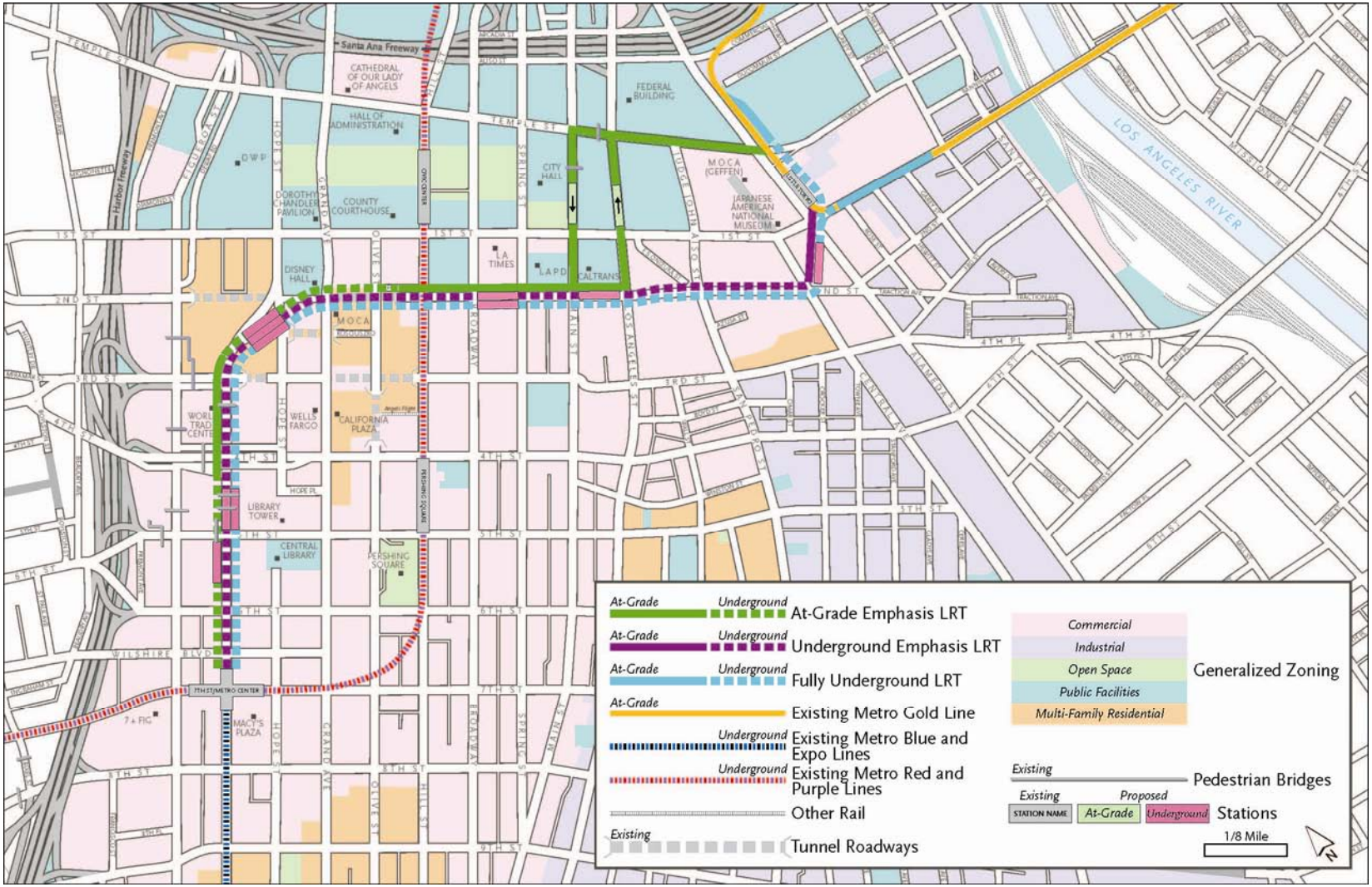

Figure 4-2. Zoning Designations

As such, the plan expressly recommends providing better connections through downtown from the SR 110 corridor, including a light rail extension from 7th Street/Metro Center Station to Union Station via Flower Street, Bunker Hill, and Little Tokyo.

4.2.3 Transportation Element

The Transportation Element of the General Plan lists objectives and programs aimed at improving accessibility and long-term mobility within the City (City of Los Angeles 1999). In the document, the City encourages development of high-capacity transit service along several corridors, including a "Downtown Connector" from either the San Pedro or Washington Stations to Union Station.

4.2.4 Zoning Code Provisions Encouraging Density Around Transit Stations

The City of Los Angeles Planning and Zoning Code includes provisions for development incentives within 1,500 feet of transit station entrances. For example, the City may permit developments in these areas to include more square footage and fewer off-street parking spaces than the zoning would otherwise allow (Los Angeles, California, Planning and Zoning Code art. II, § 12-24 (2000)).

By adding new rail stations to downtown Los Angeles, the Regional Connector would expand the number of parcels eligible for density and parking incentives. This could enhance economic activity in the downtown area, encourage growth in locations served by the rail system, and provide new opportunities for increased transit use.

4.2.5 Downtown Adaptive Reuse Incentive Area

The Regional Connector build alternative alignments are located in the Downtown Adaptive Reuse Incentive Area. Non-residential buildings in this area may be converted to residential dwelling units, contingent upon limited zoning restrictions. The stated goals of the incentive area are to rehabilitate economically distressed and historic buildings, improve the balance between jobs and housing in the downtown area, and encourage mixed use projects.

Developers of adaptive reuse projects within the incentive area may expand converted residential units with additional mezzanine loft space, which does not count toward floor area limits. Developers may also exceed the maximum number of residential units allowed by the existing zoning. In addition, no new off-street parking spaces are required, though existing spaces must be maintained (Los Angeles, California, Planning and Zoning Code, art. II, §12.22 (2001)). Transit improvements like the Regional Connector provide additional transportation capacity and alternatives to automobile use, and are thus compatible with increased densities and reduced off-street parking requirements.

4.2.6 Greater Downtown Housing Incentive Area

Regional Connector build alternatives are entirely located within the Greater Downtown Housing Incentive Area. The enabling zoning ordinance allows density and parking incentives for residential project developers who reserve a portion of their units for low-income residents. Depending on how many units are reserved, incentives can include up to 35 percent more floor area and up to 50 percent fewer required off-street parking spaces than zoning currently specifies (Los Angeles, California, Planning and Zoning Code, art. II, §12.22 (2007)). By improving transit service in the downtown area, the Regional Connector would support the housing incentive program, especially because low-income people are less likely to have automobile access and more likely to rely on transit.

4.2.7 Central City North Community Plan

Almost all of the new trackwork required for the Regional Connector build alternatives would be located within the Central City Community Plan area. However, the eastern boundary of the Central City Community Plan area is Alameda Street, so a small portion of each build alternative's trackwork and construction staging areas near the existing Metro Gold Line's Little Tokyo/Arts District Station would be located in the adjacent Central City North Community Plan area. The two community plans are consistent in their treatment of this location as a commercial area. As such, any land use impacts to the Central City North Community Plan area would be similar to those described for the Central City Community Plan area.

4.2.8 Civic Center Shared Facilities and Enhancement Plan

In 1997, the Civic Center Shared Facilities and Enhancement Plan established goals for creating a cohesive concentration of public office buildings linked by visually enhanced streets (Los Angeles Civic Center Authority 1997). The plan outlines a public services and business district that pedestrians could traverse in ten minutes or less. Central to the plan are linkages to other parts of downtown, including Union Station, the Historic Core, and the Music Center.

4.2.9 Feasibility Study for the Resurrection of the Red Car Trolley Services

The Community Redevelopment Agency of the City of Los Angeles published the Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Downtown Area in July 2006. This study examines the agency's proposal to introduce a historic streetcar line running in a northeast-southwest direction from Chinatown to the Fashion District. The study indicates the usefulness of additional rail transit coverage within downtown, and emphasizes the importance of connectivity with other Metro rail lines.

4.2.10 Business Improvement Districts (BIDs)

The project area contains portions of six BIDs: Fashion BID, Downtown Industrial BID, Toytown BID, Historic Downtown BID, Downtown Center BID, and Little Tokyo BID. These

organizations are funded by property assessments and seek to improve commerce in their areas by providing services such as security patrols, street and sidewalk cleaning, and promotional advertising.

Stimulating business growth increases the number of jobs and shopping opportunities, which translates to higher volumes of trips to the district. As such, BIDs are generally supportive of better transit connections to their areas because high quality transit service makes it easier for potential customers to travel to the area.

4.2.11 Bunker Hill Urban Renewal Project

The Bunker Hill Urban Renewal Project was initiated by the CRA in 1959 and has undergone several amendments since. Key elements of the project include re-subdivision of existing residential parcels into 25 large development sites for high-rise buildings, a new network of tunnels and viaducts to allow smooth traffic flow despite the area's steep terrain, and development incentives for new commercial and residential developments. CRA's plans for the area include open space and pedestrian linkage improvements near Metro Rail stations. All of the build alternative alignments travel through the Bunker Hill Urban Renewal Project area from 5th Street and Hill Street. The project is currently projected to end in 2012.

4.2.12 Central Business District Redevelopment Project

The Central Business District Redevelopment Project was adopted by the CRA in 1975. Project activities include providing decent housing for the Skid Row homeless population in Central City East, spurring development in the Financial District to match the level of development occurring in the Bunker Hill Urban Renewal Project area, revitalizing the Broadway retail district in the Historic Core, and providing crime reduction and rehabilitation of South Park.

Major projects completed in the area include Staples Center, the Los Angeles Convention Center, Cathedral of Our Lady of Angels, new parking structures, and multiple residential buildings. The redevelopment project is set to expire in 2010, though the tax increment revenue cap has already been reached.

The entire At-Grade Emphasis LRT Alternative alignment is located within the Central Business District Redevelopment Project area except the portion from 5th Street to Hill Street. The Underground Emphasis LRT Alternative and Fully Underground LRT Alternatives include Flower Street between 7th Street/Metro Center Station and 5th Street, and 2nd Street between Hill and Los Angeles Streets.

4.2.13 City Center Redevelopment Project

The City Center Redevelopment Project was established in 2002 by the CRA. It includes much of the area covered by the Central Business District Redevelopment Project, though parts of

the Civic Center are excluded. The key goal of the project is to allow the CRA to continue to generate tax increment revenue and address blight in the area despite the revenue limits placed on the Central Business District Redevelopment Project. The City Center Redevelopment Project is set to expire in 2032. All of the Regional Connector build alternative alignments pass along the northern edge of the City Center Redevelopment Project area on 2nd Street between Hill and Los Angeles Streets.

4.2.14 Little Tokyo Redevelopment Project

The Little Tokyo Redevelopment Project was adopted by the CRA in 1970. Key project activities include removing or rehabilitating substandard buildings, reconfiguring obsolete street and railroad patterns to remove irregularly shaped parcels and improve mobility, providing security improvements, encouraging residential development, and alleviating conflicts between adjoining residential and industrial land uses.

Project developments include the Japanese American Cultural and Community Center, the Japan America Theater, the Japanese American National Museum, the Union Center for the Arts, adaptive reuse of a former church, luxury hotels, specialty shopping centers, and several residential buildings. The redevelopment project is presently set to expire in 2013.

The At-Grade Emphasis LRT Alternative traverses the western edge of the Little Tokyo Redevelopment Project area on Los Angeles Street between 2nd and 1st Streets. The alignments of the Underground Emphasis LRT Alternative and Fully Underground LRT Alternative Variations 1 and 2 travel in the redevelopment area from Los Angeles Street to the junction with the Metro Gold Line to East Los Angeles at 1st and Alameda Streets.

5.0 IMPACTS

5.1 No Build Alternative

The No Build Alternative is focused on preserving existing transit services and projects currently in use or planned for completion by 2035. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is presented in the 2009 Metro Long Range Transportation Plan (LRTP). The potential land use impacts associated with projects as outlined in the 2009 LRTP would be reviewed as a part of environmental analyses specific to those projects.

The No Build Alternative would not provide the land use benefits typical of high-capacity transit projects, including encouragement of compact development. Because the LRTP predicts that traffic will continually worsen in the absence of additional capacity, the No Build Alternative would contribute to deteriorating access and mobility within the Los Angeles region.

The No Build Alternative is also inconsistent with the goals of the Central City Community Plan, which call for a light rail connector between 7th Street/Metro Center Station and Union Station. Overall, the No Build Alternative is expected to generate less than significant direct and indirect impacts to land uses in the project area and would generate a less than significant contribution to cumulative direct land use impacts. This alternative would conflict with the FTA guidance (January 13, 2010) that directs consideration of the benefits of transit investments that encourage and support land uses that are environmentally sustainable, and foster livable communities including economic vitality.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking 7th Street/Metro Center Station and Union Station. Two potential bus routes are under consideration in the TSM Alternative – an Upper and a Lower Grand Route.

Peak hour bus-only lanes would be created on the routes where they do not currently exist. Any new peak hour bus-only lanes would be placed in lanes that are currently closed to parking during peak hours. The TSM Alternative would develop enhanced bus stops every two to three blocks along the route to maximize coverage of the area surrounding the routes. On 2nd Street, where bus stops do not currently exist, six new stops (three in each direction) would need to be added, necessitating the removal of up to 24 curb parking spaces. This could cause increased parking demand on surrounding streets.

Like the No Build Alternative, the TSM Alternative would not provide any new transit-related land use benefits, nor would it preserve regional access and mobility in light of continually

worsening traffic congestion. It is also inconsistent with the Central City Community Plan's goal of building a light rail connector between 7th Street/Metro Center Station and Union Station. This alternative would conflict with the FTA guidance (January 13, 2010) that directs consideration of the benefits of transit investments that encourage and support land uses that are environmentally sustainable, and foster livable communities including economic vitality.

The TSM alternative would generate less than significant direct and indirect impacts than the build alternatives. The TSM Alternative would displace fewer existing on-street parking spaces, and development of the alternative's enhanced bus stops on sidewalks adjacent to the bus lanes would not disrupt access to existing land uses along the alignment.

The TSM Alternative is consistent with existing and planned projects within the project area. Potential construction impacts would be less than significant and this alternative would generate a less than significant contribution to cumulative land use impacts. However, this alternative would not contribute to the land use benefits that the build alternatives would, including encouragement of compact development.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative develops a connection between the underground 7th Street/Metro Center Station and the Metro Gold Line at Temple and Alameda Streets with a mix of at-grade and underground sections. This alternative would develop a mix of at-grade and underground transit stations. The alignment and station locations are shown in Figure 4-1.

5.3.1 Potential Land Use Conflicts

As shown in Figure 4-1, the General Plan land use designations of the parcels adjacent to the at-grade sections of the At-Grade Emphasis LRT Alternative's proposed route include public facilities, open space, and commercial. The zoning designations indicated in Figure 4-2 for at-grade sections of the alternative include public facilities, commercial, and residential. The at-grade sections of the alignment run adjacent to public facility and commercial parcels.

5.3.1.1 General Potential Construction Effects

Construction of the tunnels and underground stations for the At-Grade Emphasis LRT Alternative would rely on the cut-and-cover method. Excavation would occur beneath a temporary roadway deck. The bulk of surface impacts would be limited to the beginning and end of the tunneling process, when temporary roadway and decking removal would be necessary.

The at-grade portions of the alignment would be constructed in existing roadways. Lane closures and temporary detours would be required for the entire time the trackway is being

constructed. Shorter-term intersection closures would be needed after the trackway is complete so that overhead wires could be installed. Construction activities would be intensified in the vicinity of at-grade stations.

5.3.1.2 Financial District

The alignment would begin at the northern end of the existing light rail tracks at 7th Street/Metro Center Station. The tracks would extend northward beneath Flower Street to a new underground station between 6th and 5th Streets. The alignment would then continue north under Flower Street and rise to the surface through a new portal between 4th and 3rd Streets. The tracks would then cross 3rd Street at grade and enter a new portal into the hillside just northeast of the intersection of 3rd and Flower Streets.

The existing land uses along the underground portion of the alignment through the Financial District include office towers, public open space, hotels, and other commercial and retail establishments. Notable buildings include the Citigroup Center, Paul Hastings Tower, Maguire Gardens public open space, City National Plaza and Tower, the California Club, the Standard Hotel, the Pegasus apartment building, and Macy's Plaza.

Construction of this underground portion of the At-Grade Emphasis LRT Alternative alignment would use cut-and-cover techniques for the tunnel and new station at Flower and 5th Streets. This construction technique could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment.

A traffic lane and 12 on-street parking spaces would need to be removed permanently to accommodate the portal, at-grade tracks, and underground station entrances. This could potentially shift parking and traffic demand to nearby streets.

The portal and at-grade portion of this section of the alignment would run adjacent to the World Trade Center, Bank of America Plaza, the Westin Bonaventure Hotel, and a parking structure underneath the Ketchum YMCA. Constructing the at-grade tracks in this section of the alignment could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment. As such, the proposed alignment through the Financial District is not expected to generate any instances of land use incompatibility, given its routing in and below a major existing roadway.

5.3.1.3 Bunker Hill

From the new portal into the hillside just northeast of the intersection of 3rd and Flower Streets, the alignment would proceed into a new underground station just southwest of 2nd and Hope Streets. The alignment would then pass through new entrances into the middle section of the existing 2nd Street tunnel and turn east to run inside the tunnel toward its eastern portal near Hill Street.

Existing land uses that this alignment would travel near include education buildings, parking lots, large auditoriums, and large residential developments. Notable sites include the Colburn School of Performing Arts, parcels currently used as parking lots that are proposed for redevelopment as a part of the Grand Avenue Redevelopment Project, the Walt Disney Concert Hall, and high-rise residential developments.

The proposed 2nd/Hope Street station construction would be focused in an existing landscaped traffic control median and on streets closed during construction. Construction and operation of the proposed 2nd/Hope Street station could potentially require some reconfiguration of the surrounding roadways, though this would not limit access to surrounding land uses. If an underground passageway were constructed from the station box to an entrance on the west side of Flower Streets, one or both of the existing private tennis courts may be displaced. However, a midblock crosswalk would be a potential at-grade solution that could create the same pedestrian connection.

Construction and operation of tracks in the existing 2nd Street tunnel and the proposed new rail portals into the tunnel from the 2nd/Hope Street station would not be incompatible with existing land use or affect land uses above the alignment.

5.3.1.4 Historic Core

The proposed At-Grade Emphasis LRT Alternative at-grade alignment would travel through the Historic Core along 2nd Street from the eastern portal of the 2nd Street tunnel near Hill Street to Los Angeles Street. At Main Street, the southbound track would branch off and head north into the Civic Center, while the northbound track would continue eastward on 2nd Street and turn north on Los Angeles Street. As such, the portion of 2nd Street between Main and Los Angeles Streets would have only one track, while the rest of 2nd Street from the 2nd Street tunnel to Main Street would have two tracks. A traction power substation would be constructed on a portion of the parking lot on the south side of 2nd Street between Broadway and Spring Street.

Existing land uses adjacent to this section of 2nd Street include public buildings, offices, parking, and retail. Buildings along the alignment include the Little Tokyo Library, the old Saint Vibiana Cathedral and site of the proposed Vibiana Place Mixed Use Project, the Higgins Building, the Los Angeles Times Building, office buildings with ground floor retail establishments, the Los Angeles Law Center, the City of Los Angeles Parking Violations Bureau, and the Kawada Hotel. Construction of the alignment on 2nd Street could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along the alignment. Some turning movements may be restricted permanently, and sections of 2nd Street along the alignment may be converted to one-way vehicle traffic only, but vehicular access to all properties would be maintained. As indicated by the Noise and Vibration Technical Memorandum, noise impacts at the residential Higgins Building and Kawada Hotel would not be significant.

Development of at-grade tracks along 2nd Street and the need for adequate street widths to provide local access lanes would require that on-street parking and loading zones along 2nd Street be eliminated. Approximately 23 on-street parking spaces, including five loading spaces, would be removed from 2nd Street, which could potentially shift parking demand to other nearby streets. Operation of the alignment after construction would not generate any permanent access disruptions to existing land uses on either side of the right-of-way.

Temporary interruptions to traffic flow as trains pass would be similar to existing interruptions by red lights at intersections. The proposed alignment through the Historic Core would be compatible with existing land use along this segment given its development as an existing roadway.

5.3.1.5 Civic Center

The proposed alignment would enter the Civic Center at grade from the south along Main and Los Angeles Streets. The southbound track would run along the east side of Main Street and the northbound track would run along the east side of Los Angeles Street. Each track would serve a one-way station just north of 1st Street before continuing north to Temple Street. Both tracks would turn east on Temple Street and rejoin just east of the intersection of Temple and Los Angeles Streets.

Most of the buildings along the Civic Center portion of the alignment are occupied by public offices. There are also hotel, restaurant, and other commercial uses along the alignment. Notable buildings include City Hall, City Hall East, Caltrans District 7 Headquarters, and the new LAPD Administration Building scheduled for completion in the fall of 2009. The Kyoto Grand Hotel is also located adjacent to the alignment at 1st and Los Angeles Streets.

The proposed at-grade stations near City Hall along Main and Los Angeles Streets would be constructed along the existing roadway lanes and widened sidewalks. Construction of the at-grade alignment along Temple Street could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along the alignment.

Operation of the alignment after construction is not expected to generate any permanent access disruptions to existing land uses on either side of the alignment. The proposed at-grade stations on Los Angeles and Main Streets would be developed in existing traffic lanes away from the intersections at Temple and 1st Streets. The proposed at-grade stations are not expected to impede access to existing land uses on either side of the alignment given their placement away from the intersections and crosswalks.

The proposed alignment would be compatible with existing land use along this segment given its development as an existing roadway.

5.3.1.6 Little Tokyo

The at-grade alignment would enter Little Tokyo from the Civic Center traveling east along Temple Street from Los Angeles Street. The tracks would reduce the existing automobile lanes on Temple Street from two lanes in each direction to one lane in either direction. At Alameda Street, the alignment would connect to the Metro Gold Line to East Los Angeles in a three-way junction at the intersection of Temple and Alameda Streets.

A new auto underpass and pedestrian overpass would be constructed at the intersection of Alameda and Temple Streets. The existing land uses along this section of Temple Street include a Veterans Affairs outpatient clinic and hospital, a federal building, the Los Angeles Mall public open space, and City Hall East.

Construction along Temple Street could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along the alignment. Operation of the alignment would create permanent access to the Go 4 Broke development site on the south side of Temple Street.

Temporary interruptions as trains pass would be similar to existing interruptions to vehicle traffic on the roadway. The alignment would be compatible with existing land use along this segment given its development as an existing roadway. This section of the proposed alignment could shift traffic and parking demand to other streets near the alignment caused by the reduction of automobile lanes on Temple Street and elimination of 12 parking spaces on the south side of Temple Street west of Alameda Street due to the proposed underpass.

5.3.1.7 Potential Land Use Conflict Conclusions

Land use conflicts caused by construction and operation of the At-Grade Emphasis LRT Alternative would be less than significant. The alternative would not introduce new land uses that are inconsistent with existing land uses.

Construction of the alternative could generate temporary pedestrian and vehicle detours that inhibit, but not prevent, access to existing land uses along the alignment. The Transportation Technical Memorandum traffic section analyzes this potential effect on circulation in the project area and concludes it would be a less than significant effect on land use.

5.3.2 Policy Consistency

The At-Grade Emphasis LRT Alternative is proposed within the Central City Community Plan area and would be subject to numerous plans and development regulations. The At-Grade Emphasis LRT Alternative is consistent with the stated General Plan goal of focusing growth toward existing high density areas, including downtown Los Angeles, by enhancing the County's rail system. It is also consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line.

The Central City Community Plan encourages high-density transit-oriented land uses and recommends improvements to transit connections through downtown from the 7th Street/Metro Center Station to Union Station to address pass-through traffic congestion. The Civic Center Shared Facilities and Enhancement Plan and Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Area identified goals of improving transit connectivity between other existing and planned Metro rail lines, and the value of better linkages between Union Station and downtown.

Redevelopment projects along the proposed At-Grade Emphasis LRT Alternative alignment stress density and pedestrian activity, both of which would be encouraged by the addition of new rail service to the area. The density and parking bonuses created by the City to encourage growth would also support new transit service by expanding the base of potential riders and adding less parking than would normally be required. Because these bonuses are contingent upon proximity to transit stations, the At-Grade Emphasis LRT Alternative would make more parcels eligible by adding new stations to the area. Transit service improvements complement relaxed parking requirements by providing alternate means of access.

The At-Grade Emphasis LRT Alternative is consistent with the goals and policies of local land use plans, policies, and regulations. This alternative would not convert any existing land uses from construction and operation of the alignment and stations, which are primarily in and below existing roadways. In addition, implementation of the alternative could potentially generate land use benefits by supporting high-density, transit-oriented developments identified in the goals and policies of multiple local land use plans, policies, and regulations. These benefits would result from improved transit connections through downtown and increased accessibility for local residents to the Metro service area.

5.3.3 Cumulative Impacts

Implementation of the At-Grade Emphasis LRT Alternative would not contribute to any adverse cumulative land use effects within the project area[1]. The alternative would not convert any existing land uses or create any new land uses that could, in combination with any current and reasonably foreseeable related actions, generate conflicts with land uses adjacent to the alignment, or result in inconsistency or conflict with local land use plans, policies, and regulations. Therefore, the alternative's contribution to cumulative land use impacts would be less than significant.

It is anticipated that the At-Grade Emphasis LRT Alternative and other transit projects currently underway or planned in the future would support increases in transit ridership, which would be a beneficial effect. The improved regional accessibility created by the proposed Regional Connector project and other transit projects currently underway or

[1] Based on the list of anticipated developments provided in the Cumulative Impacts Methodology Memorandum

planned in the future could also support increased residential development within the project area, which would be a beneficial effect.

There are numerous commercial and residential developments planned and underway in the vicinity of the At-Grade Emphasis LRT Alternative alignment, many of which are being built on sites currently occupied by surface parking lots. The new transit service would help offset the impacts of these land use changes by providing alternatives to driving. However, with a substantial portion of the At-Grade Emphasis LRT Alternative alignment running in former traffic lanes on city streets, the transportation benefits to the surrounding developments may be tempered by impaired automobile and pedestrian access.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would provide a connection between the underground 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets with a predominantly underground alignment. The alternative would develop multiple underground transit stations. The alignment and station locations are shown in Figure 4-1.

5.4.1 Potential Land Use Conflicts

As shown in Figure 4-1, the Underground Emphasis LRT Alternative would develop a twin tunnel underground alignment from 7th Street/Metro Center Station to a new tunnel portal southwest of the intersection of 1st and Alameda Streets. The route mirrors the At-Grade Emphasis LRT Alternative with the exception of the segment along 2nd Street between Main Street and the Metro Gold Line at 1st and Alameda Streets.

The General Plan land use designations of the parcels adjacent to the underground sections of this alternative's proposed route include public facilities, open space, and commercial. The zoning designations shown in Figure 4-2 for the underground sections of the alternative include public facilities, commercial, and residential.

5.4.1.1 General Potential Construction Effects

Construction of the tunnels beneath Flower Street would be performed using the cut-and-cover method, where excavation would be carried out beneath a temporary roadway deck. The bulk of surface impacts would be limited to the beginning and end of the tunneling process, when temporary roadway and decking removal would be necessary. All stations would be constructed using this method except possibly the 2nd/Hope Street station, which may be constructed using the Sequential Excavation Method (mining).

The twin tunnels under 2nd Street would be constructed using the Tunnel Boring Machine (TBM) method. They would be bored from east to west from an access point excavated along 2nd Street between Central Avenue and Alameda Street to a mined or cut-and-cover section west of Bunker Hill, where the TBMs would be removed. Alternatively, the twin tunnels could

be bored in the opposite direction with the TBMs inserted near Bunker Hill and removed from 2nd between Central and Alameda.

Tunnel boring operations would not directly affect land uses that overlay the alignment, but could potentially generate ground surface settlement and indirectly affect the overlying land uses. Construction techniques minimizing the potential for ground settlement would be incorporated during operation of the TBMs. Shoring measures would be applied to foundations of structures susceptible to damage from land settlement to prevent impacts on existing land uses.

Construction techniques that could potentially be implemented to limit ground settlement include, but are not limited to, the use of pressure face TBMs. These machines maintain pressure on the new tunnel wall behind the cutting face, prior to injecting grout into the new tunnel wall, which is immediately followed by installation of concrete liners (tunnel rings). These measures limit the time that any portion of the newly cut tunnel is left unsupported and would help to prevent surface settlement. Additional grouting and foundation underpinning techniques could also be used where the alignment travels beneath or adjacent to sensitive structures and the tunnels would be close to the ground surface.

5.4.1.2 Financial District

The Underground Emphasis LRT Alternative alignment begins at the northern end of the existing light rail tracks at 7th Street/Metro Center Station. The alignment would proceed northward beneath Flower Street to a new station between 5th and 4th Streets, adjacent to Citigroup Center and Paul Hastings Tower.

The existing land uses along the underground portion of the alignment through the Financial District include office towers, public open space, hotels, and other commercial and retail establishments. Notable buildings include Citigroup Center, Paul Hastings Tower, World Trade Center, Bank of America Plaza, Maguire Gardens public open space, City National Plaza and Tower, the California Club, the Standard Hotel, the Westin Bonaventure Hotel, the Pegasus apartment building, Macy's Plaza, and the parking structure beneath the Ketchum YMCA.

Construction of this underground portion of the alignment would use cut-and-cover techniques for the tunnel and new station at Flower and 5th Streets. This construction technique could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment.

Station entrances would be located within widened sidewalks, necessitating removal of seven curb parking spaces and a lane of traffic. This could shift parking and traffic demand to nearby streets. There would be no significant land use impacts to the Financial District

because the alignment would be entirely underground within the right-of-way along this portion of the alignment and would not pass directly beneath any existing buildings.

5.4.1.3 Bunker Hill

From the Financial District, the underground alignment would extend into the Bunker Hill area along Flower Street from the Flower/5th/4th Street station to 3rd Street. The tunnels would then curve northeast into the proposed 2nd/Hope Street station. From the station, the tunnels would turn eastward underneath the existing 2nd Street tunnel.

Existing land uses that this alignment would travel near include education buildings, parking lots, large auditoriums, and large residential developments. Notable sites include the Colburn School of Performing Arts, parcels currently used as parking lots that are proposed for redevelopment as a part of the Grand Avenue Redevelopment Project, the Walt Disney Concert Hall, and high-rise residential developments. It would, therefore, generate the same potential effects as construction and operation of the 2nd/Hope Street station described for the At-Grade Emphasis LRT Alternative.

Construction and operation of the proposed 2nd/Hope Street station could potentially require some reconfiguration of the surrounding roadways, though this would not limit access to surrounding land uses. If an underground passageway were to be constructed from the station box to an entrance on the west side of Flower Streets, one or both of the existing private tennis courts may be displaced. However, a midblock crosswalk would be a potential at-grade solution that could create the same pedestrian connection.

The tunnels in this area would be constructed using the cut-and-cover method, thus necessitating temporary pedestrian and vehicle detours. The 2nd/Hope Street station may alternatively be constructed using the sequential excavation method, thereby reducing surface disruption. There would be no significant land use impacts to Bunker Hill because the alignment would be entirely underground along this portion of the alignment and would not pass directly beneath any existing buildings.

5.4.1.4 Historic Core

From the Bunker Hill area, the underground alignment would continue east beneath the 2nd Street tunnel and 2nd Street through the Historic Core community. A new underground station would be constructed beneath 2nd Street, either between Broadway and Spring Street or between Main and Los Angeles Streets.

Existing land uses adjacent to the Historic Core section of 2nd Street include public buildings, offices, parking, and retail. Buildings along the alignment include the Little Tokyo Library, the old Saint Vibiana Cathedral and site of the proposed Vibiana Place Mixed Use Project, the Los Angeles Times Building, the Los Angeles Law Center, the City of Los Angeles Parking Violations Bureau, and the Kawada Hotel.

The 2nd Street station - Broadway Option would be adjacent to the Los Angeles Times Building. The 2nd Street station - Los Angeles Option would be developed adjacent to the "Block 8" residential and retail development currently under construction and the Kyoto Grand Hotel. Construction of a new station on 2nd Street in either location is expected to use cut-and-cover techniques. This construction technique could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment.

The tunnels in the Historic Core area would be constructed using the TBM method, which would result in few noticeable surface impacts aside from those associated with the cut-and-cover station. There would be no significant land use impacts to the Historic Core because the alignment would be entirely underground along this portion and would not pass directly beneath any existing buildings.

5.4.1.5 Little Tokyo

From the Historic Core, the tunnels would continue east under 2nd Street into Little Tokyo. Upon reaching Central Avenue, the tunnels would curve to the northeast into the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The tracks would then rise to the surface through a new portal constructed on this parcel. The alignment would then enter the intersection of 1st and Alameda Streets at grade, where it would connect to the existing Metro Gold Line in a three-way junction.

The parcels where the portal would be located have commercial land use and zoning designations, as shown in Figures 4-1 and 4-2. Existing land uses on these parcels include a large warehouse-style retail establishment (Office Depot) and associated parking lot, multiple other retail establishments and restaurants, and a large parking lot at the corner of 1st Street and Central Avenue. Only the Office Depot, Starbucks, and Senor Fish businesses would need to be removed. All other businesses on the block would remain.

Ten street parking spaces would also need to be removed to accommodate the new three-way junction, which could potentially shift parking demand to nearby streets.

Construction of the portal and at-grade facilities across the parcels bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue would require the taking of multiple retail establishments for both development of the alignment and construction staging. As required by law, affected land and business owners would be compensated for this taking with a fair market value for their land and establishments.

These commercial land uses serve adjacent residential developments and commercial developments in the neighborhood, but other existing commercial businesses in the neighborhood and available commercial space are expected to offset this loss. Permanent conversion of the Office Depot parcel to public use would be needed to accommodate the

portal. Portions of the parcels taken to support construction staging but not utilized as a part of the final alignment for operation could potentially be redeveloped after construction is completed. The tunnel portal would be considered a change in land use type, but would not conflict with adjacent land uses given the urbanized nature of the project area.

Construction of this section of the alignment would require the temporary closure of 2nd Street from Alameda Street to Central Avenue. Here, the street would be excavated in order to insert TBMs. The tunnel portal and Alameda Street underpass would be constructed using methods similar to cut-and-cover techniques.

Construction could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment. The remainder of the tunnel alignment in Little Tokyo would be constructed using the TBM method, which would cause few noticeable surface impacts. Alternatively, TBMs could be inserted at the 2nd/Hope Street station site, thus reducing construction-related impacts on 2nd Street between Alameda Street and Central Avenue.

5.4.2. Potential Land Use Conflict Conclusions

Potential land use conflicts generated by construction and operation of the Underground Emphasis LRT Alternative would be less than significant. As indicated by the noise analysis, there would be no significant noise impact associated with this alternative at the Savoy residential property near 1st and Alameda.

The alternative would not introduce new land uses that are inconsistent with existing land uses. Construction of the tunnel portal on the parcels between the corner of 1st and Alameda Streets and the corner of 2nd Street and Central Avenue would result in a few partial and full takings. Not all of the block would be acquired. With just compensation to affected landowners and business owners, the direct effect of development of the portal on land use would be less than significant. The indirect effect of these land use conversions would be less than significant given the presence of other similar commercial establishments in and around the neighborhood, and the availability of local commercial real estate for these establishments to potentially relocate.

Construction of the alternative could generate temporary pedestrian and vehicle detours that inhibit, but not prevent, access to existing land uses along the alignment. The Transportation Technical Memorandum traffic section analyzes this potential effect on circulation in the project area and concludes it would be a less than significant effect on land use.

5.4.3 Policy Consistency

The Underground Emphasis LRT Alternative is proposed within the Central City Community Plan area and would be subject to numerous plans and development regulations. The

Underground Emphasis LRT Alternative is consistent with the stated General Plan goal of focusing growth toward existing high density areas, including downtown Los Angeles, by enhancing Los Angeles County's rail system. It is also consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line.

The Central City Community Plan encourages high-density, transit-oriented land uses and recommends improvements to transit connections through downtown from the 7th Street/Metro Center Station to Union Station to address pass-through traffic congestion. The Civic Center Shared Facilities and Enhancement Plan and the Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Area identified goals of improving transit connectivity between other existing and planned Metro Rail lines and the value of better linkages between Union Station and downtown. Additionally, the redevelopment projects along the proposed alignment stress density and pedestrian activity, both of which would be encouraged by the addition of new rail service to the area.

The density and parking bonuses created by the City to encourage growth would also be supportive of new transit service by expanding the base of potential riders while adding less parking than would normally be required. Because these bonuses are contingent upon proximity to transit stations, the Underground Emphasis LRT Alternative would make more parcels eligible by adding new stations to the area. Transit service improvements complement relaxed parking requirements by providing alternative means of access.

The Underground Emphasis LRT Alternative is not inconsistent with the goals and policies of local land use plans, policies, and regulations. The alternative would result in the conversion of existing land uses at the new tunnel portal on parcels between the corner of 1st and Alameda Streets and the corner of 2nd Street and Central Avenue.

Some of the parcels will be utilized for construction staging and could potentially, after completion of the alignment, be redeveloped with the same land use types as the establishments being displaced. Land uses permanently converted during the development of the alignment could be offset by the abundance of underutilized similar land uses in the neighborhood adjacent to the tunnel portal and throughout the project area.

Implementation of the Underground Emphasis LRT Alternative has the potential to generate land use benefits by supporting high-density, transit-oriented development as identified in the goals and policies of multiple local land use plans, policies, and regulations. These benefits could occur by improved transit connections through downtown and increased accessibility for local residents to the Metro service area. As a result, land use impacts associated with this alternative would be less than significant.

5.4.4 Cumulative Impacts

Implementation of the Underground Emphasis LRT Alternative would not contribute to any adverse cumulative land use effects within the project area. The alternative would not create any new land uses that could, in combination with any current and reasonably foreseeable related actions, generate conflicts with land uses adjacent to the alignment, or result in inconsistency or conflict with local land use plans, policies, and regulations.

Some land uses would be converted, but not in ways that are inconsistent with current land use plans or incompatible with the surrounding areas. Future developments on these parcels could also integrate with nearby rail stations to encourage transit supportive land uses, community growth, and increased transit ridership. Therefore, the alternative's contribution to cumulative land use impacts would be less than significant.

It is anticipated that the Underground Emphasis LRT Alternative and other transit projects currently underway or planned in the future would support increases in transit ridership, which would be a beneficial effect. The alignment passes near several potential development sites, and plans for these sites include high-density employment and residential facilities. The Underground Emphasis LRT Alternative—combined with other projects—could also support increases in residential development within the project area, which would also be a beneficial effect.

There are numerous commercial and residential developments planned and underway in the vicinity of the Underground Emphasis LRT Alternative alignment, many of which are being built on sites currently occupied by surface parking lots. The new transit service would help to offset the impacts of these land use changes by providing alternatives to driving to access these sites.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Fully Underground LRT Alternative – Little Tokyo Variation 1 would provide a connection between the underground 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets with an all-underground alignment. West of Central Avenue, the alternative would be identical to the Underground Emphasis LRT Alternative – 2nd Street station - Broadway Option (The 2nd Street Station - Los Angeles Street option is not included in Fully Underground LRT Alternative – Little Tokyo Variation 1). The alignment and station locations of Fully Underground LRT Alternative - Little Tokyo Variation 1 are shown in Figure 4-1.

5.5.1 Potential Land Use Conflicts

As shown in Figure 4-1, Fully Underground LRT Alternative – Little Tokyo Variation 1 would develop a twin tunnel underground alignment from 7th Street/Metro Center Station to two new tunnel portals: one northeast of the intersection of Temple and Alameda Streets, and one on 1st Street between Alameda and Garey Streets. The route differs from the Underground

Emphasis LRT Alternative at 1st and Alameda Streets, where a junction would be built underground instead of at grade. An additional underground station on the block bounded by 2nd Street, Central Avenue, 1st Street, and Alameda Street would also be added with Fully Underground LRT Alternative – Little Tokyo Variation 1.

The General Plan land use designations of the parcels adjacent to the underground sections of this alternative's proposed route include public facilities, open space, industrial manufacturing, and commercial. The zoning designations shown in Figure 4-2 for the underground sections of the alternative include public facilities, industrial manufacturing, commercial, and residential.

5.5.1.1 General Potential Construction Effects

The tunnels beneath Flower Street would be constructed using the cut-and-cover method, where excavation would occur beneath a temporary roadway deck. The bulk of surface impacts would be limited to the beginning and end of the tunneling process, when temporary roadway and decking removal would be necessary. All stations would be constructed using this method except possibly the 2nd/Hope Street station, which may be constructed using the Sequential Excavation Method (mining).

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1 would generally be the same as the Underground Emphasis LRT Alternative, with the following exceptions. The 2nd/Central Avenue Station, due to its off-street location, would be constructed using the open-cut method, which is similar to cut-and-cover, but does not include the temporary roadway deck.

The junction beneath the intersection of 1st and Alameda Streets, as well as the tunnels beneath 1st and Temple Streets, would be constructed using the cut-and-cover method. The tunnel on the Nikkei parcel northeast of 1st and Alameda Streets, as well as the portal near Temple and Alameda Streets, would be constructed using the open-cut method. The portal in the median of 1st Street would be constructed using either the open-cut or cut-and-cover method.

5.5.1.2 Financial District

The effects and alignment of Fully Underground LRT Alternative – Little Tokyo Variation 1 in the Financial District would be identical to those for the Underground Emphasis LRT Alternative.

5.5.1.3 Bunker Hill

The effects and alignment of Fully Underground LRT Alternative – Little Tokyo Variation 1 in the Bunker Hill area would be identical to those for the Underground Emphasis LRT Alternative.

5.5.1.4 Historic Core

The effects and alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 1 in the Historic Core area would be identical to those for the Underground Emphasis LRT Alternative with the 2nd Street station - Broadway Station Option. The 2nd Street station - Los Angeles Street Station Option is not part of Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.1.5 Little Tokyo and Arts District

From the Historic Core, the alignment tunnels would continue east under 2nd Street into Little Tokyo. Upon reaching Central Avenue, the alignment tunnels would curve to the northeast, with tracks arriving at a new underground station located beneath the block bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The alignment would then continue into a new underground junction beneath the intersection of 1st and Alameda Streets. The alignment would then split and trains would rise to the surface through one of two portals:

1. A portal northeast of Temple and Alameda Streets connecting to the existing LRT bridge over US 101, which would allow trains to continue along the Metro Gold Line tracks to Azusa via Pasadena

2. A portal in the median of 1st Street between Alameda and Garey Streets, which would connect to the existing Metro Gold Line tracks heading east over the 1st Street Bridge.

A small structure on the southwest corner of 1st and Alameda Streets may need to be constructed to house station ventilation equipment. However, this structure could potentially be incorporated into a future development and would not be large enough to disrupt the surrounding land uses.

The existing land uses where the 2nd/Central Avenue station would be located include a large warehouse-style retail establishment (Office Depot) and associated parking lot, multiple other retail establishments and restaurants, and a large parking lot at the corner of 1st Street and Central Avenue. Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities, and could potentially utilize the site for launching tunnel boring machines and transporting material from the tunnels.

Metro intends to maintain some of the existing business acquired on Central Avenue between 1st and 2nd Streets that are not directly impacted by construction activities. Acquisition of the entire block would represent a worst-case scenario. Potential reductions in acquisition may occur based on further engineering analysis during the preliminary engineering and final design stages. Because these acquisitions are primarily for construction staging purposes, some of the displaced land uses may potentially be returned after construction is finished.

This alternative would not necessarily cause permanent conversion of all of the land uses on this block.

Construction of the portal on 1st Street would require a portion of the vacant Nikkei parcel, located on the northeast corner of the intersection, to be acquired for street widening. Construction of the portal near Temple and Alameda Streets would require part of the Department of Water and Power facility located east of and adjacent to Alameda Street between Temple and Commercial Streets. However, these acquisitions would not affect enough of either parcel to alter or diminish the quality of the current and planned land uses. Sidewalks in the area may be narrowed slightly, but not enough to affect pedestrian access to any of the surrounding parcels.

As required by law and discussed in the Displacement and Relocation Technical Memorandum, affected land and business owners would be compensated for this taking with a fair market value for their land and establishments. These commercial land uses serve adjacent residential developments and commercial developments in the neighborhood, but other existing commercial businesses in the neighborhood and available commercial space are expected to offset this loss.

Permanent conversion of the Office Depot parcel to public transit use would be needed to accommodate the new 2nd/Central Avenue station. Portions of the parcels taken to support construction staging but not utilized as a part of the final alignment for operation could potentially be redeveloped after completion of construction. The tunnel portals and underground stations would be considered a change in land use type, but would not conflict with adjacent land uses given the urbanized nature of the project area.

Construction of this section of the alignment would require temporary closure of 2nd Street from Alameda Street to Central Avenue, where the street would be excavated to insert TBMs. The rail junction beneath Alameda Street would be constructed using the cut-and-cover method. The tunnel crossing beneath Temple Street just east of Alameda Street would also be constructed using the cut-and-cover method.

These construction actions could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment. The tunnel alignment beneath the Nikkei parcel would be constructed using the open-cut method because it is in an off-street location where a temporary deck is not needed to maintain street traffic flow. The remainder of the tunnel alignment in Little Tokyo would be constructed using the TBM method, which would cause few noticeable surface impacts. Alternatively, the TBMs could be inserted at the 2nd/Hope Street station site, thus reducing construction-related impacts on 2nd Street between Alameda Street and Central Avenue.

5.5.2. Potential Land Use Conflict Conclusions

Potential land use conflicts generated by construction and operation of Fully Underground LRT Alternative – Little Tokyo Variation 1 are expected to be less than significant. As indicated by the noise analysis, there would be no noticeable noise impact associated with this alternative at the Savoy residential property near 1st and Alameda. The alternative would not introduce new land uses that are inconsistent with existing land uses.

Attempts will be made to reduce the number of acquisitions. The entire block between the intersections of 1st Street, Alameda Street, 2nd Street, and Central Avenue would be acquired, though Metro intends to maintain some of the existing business acquired on Central Avenue between 1st and 2nd Streets. Portions of the Nikkei and Department of Water and Power sites would need to be acquired to accommodate new portals and tunnels.

With just compensation to affected landowners and business owners, the direct effect of development of the new portals and stations on land use would be less than significant. The indirect effect of these land use conversions would also be less than significant given the presence of other similar commercial establishments in and around the neighborhood and the availability of local commercial real estate for these establishments to potentially relocate.

Land use conversion may not be permanent because portions of the acquired land would be available for development after underground construction is complete, and existing land uses could potentially be restored. Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1could generate temporary pedestrian and vehicle detours that inhibit, but not prevent, access to existing land uses along the alignment. The Transportation Technical Memorandum traffic section analyzes this potential effect on circulation in the project area and concludes it would be a less than significant effect on land use.

The portal in the widened median of 1st Street would be near several parcels with sensitive land uses, including multi-unit residential buildings and the Nishi Hongwanji Buddhist Temple. However, there are already at-grade light rail tracks in the median of 1st Street, and reconfiguration of these tracks into a portal would not introduce any new inconsistency or incompatibility with the surrounding land uses.

5.5.3 Policy Consistency

The Fully Underground LRT Alternative – Little Tokyo Variation 1 is proposed within the Central City Community Plan area and the Central City North Community Plan Area, and would be subject to numerous plans and development regulations. This alternative is consistent with the stated General Plan goal of focusing growth toward existing high density areas, including downtown Los Angeles, by enhancing Los Angeles County's rail system.

Fully Underground LRT Alternative – Little Tokyo Variation 1 is also consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line. The Central City Community Plan encourages high-density, transit-oriented land uses and recommends improvements to transit connections through downtown from the 7th Street/Metro Center Station to Union Station to address pass-through traffic congestion.

The Civic Center Shared Facilities and Enhancement Plan and Feasibility Study for the Resurrection of the Red Car Trolley Services in the Los Angeles Area identified goals of improving transit connectivity between other existing and planned Metro Rail lines and the value of better linkages between Union Station and downtown. Additionally, the redevelopment projects along the proposed alignment stress density and pedestrian activity, both of which would be encouraged by the addition of new rail service to the area.

The density and parking bonuses created by the City to encourage growth would also be supportive of new transit service by expanding the base of potential riders while adding less parking than would normally be required. Because these bonuses are contingent upon proximity to transit stations, Fully Underground LRT Alternative – Little Tokyo Variation 1 would make more parcels eligible by adding new stations to the area. Transit service improvements complement relaxed parking requirements by providing alternate means of access.

Fully Underground LRT Alternative – Little Tokyo Variation 1 is not inconsistent with goals and policies of local land use plans, policies, and regulations. The alternative would convert existing land uses at the new underground station on the parcels between the corner of 1st and Alameda Streets and the corner of 2nd Street and Central Avenue, as well as the new portals and tunnels on and around the Nikkei site and the Department of Water and Power facility. Some of the parcels will be utilized for construction staging and could potentially, after completion of the alignment, be redeveloped with the same land use types as the establishments being displaced.

Land uses permanently converted during construction of the alignment could be offset by the abundance of underutilized similar land uses in the neighborhood adjacent to the tunnel portal and throughout the project area. In addition, implementing this alternative has the potential to generate land use benefits by supporting high-density, transit-oriented development as identified in goals and policies of multiple local land use plans, policies, and regulations. These benefits would occur by improved transit connections through downtown and increased accessibility for local residents to the Metro service area.

The 2nd/Central Avenue station would be located across from the proposed Nikkei development, a multi-story project that will potentially include retail stores, offices, community services, and residential units. The collocation of the station and the Nikkei

development around the intersection of 1st and Alameda Streets creates the potential for a transit-oriented development that would enhance pedestrian activity in the neighborhood and foster transit ridership. This effect is strengthened by the possibility of placing a station entrance on the Nikkei property.

The 2nd/Central Avenue station would also enhance the connection between both sides of Alameda Street, where the wide roadway and heavy traffic currently impedes pedestrian connectivity. This is consistent with the goals of the Little Tokyo Redevelopment Plan, the Central City Community Plan, and the Central City North Community Plan, all of which encourage greater transit and pedestrian use of the neighborhood, as well as economic growth.

The 2nd/Central Avenue station would also support the Community Redevelopment Agency (goal of increasing pedestrian use of Alameda Street, which was expressed during the project scoping period. Given the above, this alternative would not result in a significant effect to land uses.

5.5.4 Cumulative Impacts

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not contribute to any adverse cumulative land use effects within the project area. The alternative would not create any new land uses that could, in combination with any current and reasonably foreseeable related actions, generate conflicts with land uses adjacent to the alignment, or result in inconsistency or conflict with local land use plans, policies, and regulations.

Some land uses would be converted, but not in ways that are inconsistent with current land use plans or incompatible with the surrounding areas. Future developments on these parcels could also integrate with nearby rail stations to encourage transit supportive land uses, transit-oriented development, community growth, and increased transit ridership. Therefore, the alternative's contribution to cumulative land use impacts would be less than significant.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 1 and other transit projects currently underway or planned in the future would support increases in transit ridership, which is considered a beneficial effect. The alignment passes near several potential development sites, and plans for these sites include high-density employment and residential facilities. The Fully Underground LRT Alternative – Little Tokyo Variation 1—combined with other projects—could also support increases in residential development within the project area, which would also be a beneficial effect.

There are numerous commercial and residential developments planned and underway in the vicinity of the Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment, many of which are being built on sites currently occupied by surface parking lots. The new transit

service would help offset the impacts of these land use changes by providing alternatives to driving to access these sites.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would provide a connection between the underground 7th Street/Metro Center Station and the Metro Gold Line at 1st and Alameda Streets with an all-underground alignment. West of Central Avenue, this alternative would be identical to the Underground Emphasis LRT Alternative 2nd Street station – Broadway Station Option (The 2nd Street Station - Los Angeles Option is not included in the Fully Underground LRT Alternative – Little Tokyo Variation 2). The alignment and station locations of the Fully Underground LRT Alternative – Little Tokyo Variation 2 are shown in Figure 4-1.

5.6.1 Potential Land Use Conflicts

As indicated in Figure 4-1, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would develop a twin tunnel underground alignment from 7th Street/Metro Center Station to three new tunnel portals: one double-track portal northeast of the intersection of Temple and Alameda Streets, and two narrower single-track portals on 1st Street between Alameda and Vignes Streets.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment differs from the Underground Emphasis LRT Alternative at 1st and Alameda Streets, where a two-level junction would be built entirely underground instead of a single-level junction at-grade. An additional two-level underground station on the block bounded by 2nd Street, Central Avenue, 1st Street, and Alameda Street would also be added.

The General Plan land use designations of the parcels adjacent to the underground sections of Fully Underground LRT Alternative – Little Tokyo Variation 2 proposed route include public facilities, open space, industrial manufacturing, and commercial. The zoning designations shown in Figure 4-2 for the underground sections of the alternative include public facilities, industrial manufacturing, commercial, and residential.

5.6.1.1 General Potential Construction Effects

The tunnels beneath Flower Street would be constructed using the cut-and-cover method, where excavation would occur beneath a temporary roadway deck. The bulk of surface impacts would be limited to the beginning and end of the tunneling process, when temporary roadway and decking removal would be necessary.

All stations would be constructed using the cut-and-cover method except possibly the 2nd/Hope Street station, which may be constructed using the Sequential Excavation Method (mining). Construction of this alternative would generally be the same as the Underground

Emphasis LRT Alternative, with the following exceptions. The two-level underground 2nd Street/Central Avenue station, due to its off-street location, would be constructed using the open-cut method, which is similar to cut-and-cover but does not include the temporary roadway deck.

The two-level junction beneath the intersection of 1st and Alameda Streets, as well as the tunnels beneath 1st and Temple Streets, would be constructed using the cut-and-cover method. The tunnel on the parcel northeast of 1st and Alameda Streets, as well as the portal near Temple and Alameda Streets, would be constructed using the open-cut method. The two single-track portals in the median of 1st Street would be constructed using either the open-cut or cut-and-cover method.

5.6.1.2 Financial District

Effects and alignment of Fully Underground LRT Alternative – Little Tokyo Variation 2 in the Financial District would be identical to those for the Underground Emphasis LRT Alternative.

5.6.1.3 Bunker Hill

Effects and alignment of Fully Underground LRT Alternative – Little Tokyo Variation 2 in the Bunker Hill area would be identical to those for the Underground Emphasis LRT Alternative.

5.6.1.4 Historic Core

Effects and alignment of Fully Underground LRT Alternative – Little Tokyo Variation 2 in the Historic Core area would be identical to those for the Underground Emphasis LRT Alternative with the Broadway Station Option selected. The Los Angeles Street Station Option is not part of the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.1.5 Little Tokyo and Arts District

From the Historic Core, the alignment tunnels would continue east under 2nd Street into Little Tokyo. Upon reaching Central Avenue, the alignment tunnels would curve, with tracks arriving at a new station to the northeast into the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The tracks would then enter a new two-level 2nd/Central Avenue underground station located beneath this parcel. The alignment would then continue into a new two-level underground junction beneath the intersection of 1st and Alameda Streets. The alignment would then split and trains would rise to the surface through one of three portals:

1. A double-track portal northeast of Temple and Alameda Streets connecting to the existing LRT bridge over US 101 to allow trains to continue along the Metro Gold Line tracks to Azusa via Pasadena

2. Narrower single-track portals in the median of 1st Street between Alameda and Vignes Streets connecting to the existing Metro Gold Line tracks heading east over the 1st Street Bridge toward I-605 via East Los Angeles

A small structure on the southwest corner of 1st and Alameda Streets intersection may need to be constructed for station ventilation equipment. However, this structure could potentially be incorporated into a future development and would not be large enough to disrupt the surrounding land uses.

Figures 4-1 and 4-2 show commercial land use and zoning designations for the parcels where the 2nd/Central Avenue station would be located. Existing land uses on these parcels include a large warehouse-style retail establishment (Office Depot) and associated parking lot, multiple other retail establishments and restaurants, and a large parking lot at the corner of 1st Street and Central Avenue.

Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities, and may potentially utilize the site for launching tunnel boring machines and transporting material from the tunnels. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd that are not directly impacted by construction activities. Acquiring the entire block would represent a worst-case scenario.

Potential reductions in acquisition may occur based on further engineering analysis during preliminary engineering and final design stages. Some of the displaced land uses may potentially be returned after construction is finished because they would be primarily for construction staging purposes. Thus, this alternative would not necessarily cause permanent conversion of all of the land uses on this block.

Construction of the portal on 1st Street would require a portion of the vacant Nikkei parcel located on the northeast corner of the intersection to be acquired for street widening. Construction of the portal near Temple and Alameda Streets would require a partial take of the Department of Water and Power facility located east of Alameda Street between Temple and Commercial Streets. However, these acquisitions would not affect either parcel enough to alter or diminish the quality of the current and planned land uses. Sidewalks in the area may be narrowed slightly, but not enough to affect pedestrian access to any of the surrounding parcels.

As required by law and discussed in the Displacement and Relocation Technical Memorandum, affected land and business owners would be compensated for this taking with a fair market value for their land and establishments. These commercial land uses serve adjacent residential developments and commercial developments in the neighborhood, but

other existing commercial businesses and available local commercial space are expected to offset this loss.

Permanent conversion of the Office Depot parcel to public transit use would be needed to accommodate the new 2nd/Central Avenue station. Portions of the parcels taken to support construction staging, but not utilized as a part of the final alignment for operation, could potentially be redeveloped after construction is completed. The tunnel portals and underground stations would be considered a change in land use type, but would not conflict with adjacent land uses given the urbanized nature of the project area. Therefore, land use impacts with respect to this alternative would be less than significant.

Construction of this section of the alignment would require temporary closure of 2nd Street from Alameda Street to Central Avenue, where the street would be excavated to insert TBMs. The rail junction beneath Alameda Street would be constructed using the cut-and-cover method. The tunnel crossing beneath Temple Street just east of Alameda Street would also be constructed using the cut-and-cover method. This construction could generate temporary pedestrian and vehicle detours that may inhibit, but not prevent, access to existing land uses along this section of the alignment.

Tunnel alignment beneath the Nikkei parcel would be constructed using the open-cut method because it is in an off-street location where a temporary deck is not needed to maintain street traffic flow. The remainder of the tunnel alignment in Little Tokyo would be constructed using the TBM method, which would cause few noticeable surface impacts. Alternately, the TBMs could be inserted at the proposed 2nd/Hope Street station site, thus reducing construction-related impacts on 2nd Street between Alameda Street and Central Avenue.

5.6.2. Potential Land Use Conflict Conclusions

Potential land use conflicts generated by construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less than significant. As indicated by the noise analysis, there would be no noticeable noise impact associated with this alternative at the Savoy residential property near 1st and Alameda.

This alternative would not introduce new land uses that are inconsistent with existing land uses. Attempts would be made to reduce the number of acquisitions during design stages of the project.

The entire block between the intersections of 1st and Alameda and 2nd and Central Avenue could be acquired, though not all businesses would be displaced. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd that are not directly impacted by construction activities. Acquisition of the entire block would represent a worst-case scenario.

Portions of the Nikkei and Department of Water and Power sites would need to be acquired to accommodate new portals and tunnels. With just compensation to affected landowners and business owners, the direct effect of developing new portals and stations on land use would be less than significant.

The indirect effect of these land use conversions would also be less than significant given the presence of other similar commercial establishments in and around the neighborhood and the availability of local commercial real estate for these establishments to potentially relocate. Land use conversion may not be permanent because portions of the acquired land would be available for development after underground construction is complete, and existing land uses could potentially be restored.

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2 could generate temporary pedestrian and vehicle detours that inhibit, but not prevent, access to existing land uses along the alignment. The Transportation Technical Memorandum traffic section analyzes this potential effect on circulation in the project area and concludes it would be a less than significant effect on land use.

The portal in the widened median of 1st Street would be near several parcels with sensitive land uses, including multi-unit residential buildings and the Nishi Hongwanji Buddhist Temple. However, there are already at-grade light rail tracks in the median of 1st Street, and reconfiguration of these tracks into a portal would not introduce any inconsistency or incompatibility with the surrounding land uses.

Portions of two privately owned parcels on the south side of 1st Street between Hewitt and Garey Streets would need to be acquired to accommodate roadway relocation. These parcels are developed, but the area to be acquired is currently used for parking or vacant space. Therefore, no significant land use change or incompatibility would occur.

5.6.3 Policy Consistency

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is proposed within the Central City Community Plan area and Central City North Community Plan Area, and would be subject to numerous plans and development regulations. This alternative is consistent with the stated General Plan goal of focusing growth toward existing high density areas, including downtown Los Angeles, by enhancing Los Angeles County's rail system. It is also consistent with the Transportation Element's support of high-capacity transit service between Union Station and the Metro Blue Line.

The Central City Community Plan encourages high-density, transit-oriented land uses and recommends improvements to transit connections through downtown from the 7th Street/Metro Center Station to Union Station to address pass-through traffic congestion. The Civic Center Shared Facilities and Enhancement Plan and Feasibility Study for the

Resurrection of the Red Car Trolley Services in the Los Angeles Area identified goals of improving transit connectivity between other existing and planned Metro Rail lines and the value of better linkages between Union Station and downtown. Additionally, the redevelopment projects along the proposed alignment stress density and pedestrian activity, both of which would be encouraged by the addition of new rail service to the area.

The density and parking bonuses created by the City to encourage growth would also be supportive of new transit service by expanding the base of potential riders while adding less parking than would normally be required. Because these bonuses are contingent upon proximity to transit stations, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would make more parcels eligible by adding new stations to the area. Transit service improvements complement relaxed parking requirements by providing alternative means of access.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is not inconsistent with the goals and policies of local land use plans, policies, and regulations. This alternative would convert existing land uses at the new underground station on the parcels between the corner of 1st and Alameda Streets and the corner of 2nd Street and Central Avenue, as well as the new portals and tunnels on and around the Nikkei site and the Department of Water and Power facility.

Some of the parcels will be utilized for construction staging and could potentially, after completion of the alignment, be redeveloped with the same land use types as the establishments being displaced. Land uses permanently converted during the development of the alignment could be offset by the abundance of underutilized similar land uses in the neighborhood adjacent to the tunnel portal and throughout the project area.

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 has the potential to generate beneficial land use impacts by supporting the high-density, transit-oriented development identified in the goals and policies of multiple local land use plans, policies, and regulations. These benefits would occur by improved transit connections through downtown and increased accessibility for local residents to the Metro service area.

The 2nd/Central Avenue station would be located across from the proposed Nikkei development, a multi-story project that will potentially include retail stores, offices, community services, and residential units. The collocation of the station and the Nikkei development around the intersection of 1st and Alameda Streets creates the potential for a transit-oriented development that would enhance pedestrian activity in the neighborhood and foster transit ridership. This effect is strengthened by the possibility of placing a station entrance on the Nikkei property. This would enhance the connection between both sides of Alameda Street, where the wide roadway and heavy traffic currently impede pedestrian activity.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is consistent with the goals of the Little Tokyo Redevelopment Plan, the Central City Community Plan, and the Central City North Community Plan, all of which encourage greater transit and pedestrian use of the neighborhood, as well as economic growth. This alternative is also consistent with the CRA goal expressed during scoping to increase pedestrian use of Alameda Street.

5.6.4 Cumulative Impacts

Implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not contribute to any adverse cumulative land use effects within the project area. This alternative would not create any new land uses that could, in combination with any current and reasonably foreseeable related actions, generate conflicts with land uses adjacent to the alignment, or result in inconsistency or conflict with local land use plans, policies, and regulations.

Some land uses would be converted, but not in ways that are inconsistent with current land use plans or incompatible with the surrounding areas. Future developments on these parcels could also integrate with nearby rail stations to encourage transit-supportive land uses, transit-oriented development, community growth, and increased transit ridership. Therefore, the alternative's contribution to cumulative land use impacts would be less than significant.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 2 and other transit projects currently underway or planned in the future would support increases in transit ridership, which is considered a beneficial effect. The alignment passes near several potential development sites, and plans for these sites include high-density employment and residential facilities.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 combined with other projects could also support increases in residential development within the project area, which would also be a beneficial effect.

There are numerous commercial and residential developments planned and underway in the vicinity of the Fully Underground LRT Alternative – Little Tokyo Variation 2, many of which are being built on sites currently occupied by surface parking lots. The new transit service would help offset the impacts of these land use changes by providing alternatives to driving to access these sites.

6.0 POTENTIAL MITIGATION MEASURES

No significant land use impacts in the project vicinity would occur from implementing any of the six Regional Connector Transit Corridor project alternatives. As such, mitigation measures are not required.

The only mitigation available for the adverse land use impacts associated with the No Build and TSM alternatives is construction of one of the build alternatives.

Any property acquired during the course of the Regional Connector Transit Corridor project that is retained after completion of construction would be developed in accordance with Metro's joint development program and consistent with community input.

7.0 CONCLUSIONS

7.1 No Build Alternative

There would be no potential adverse impacts to land use in the project area from the No Build Alternative.

7.2 TSM Alternative

There would be no potential adverse impacts to land use in the project area from the TSM Alternative.

7.3 At-Grade Emphasis LRT Alternative

There would be no potential adverse impacts to land use in the project area from the At-Grade Emphasis LRT Alternative.

7.4 Underground Emphasis LRT Alternative

There would be no potential adverse impacts to land use in the project area from the Underground Emphasis LRT Alternative.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

There would be no potential adverse impacts to land use in the project area from the Fully Underground LRT Alternative – Little Tokyo Variation 1.

7.4 Fully Underground LRT Alternative – Little Tokyo Variation 2

There would be no potential adverse impacts to land use in the project area from the Fully Underground LRT Alternative – Little Tokyo Variation 2.

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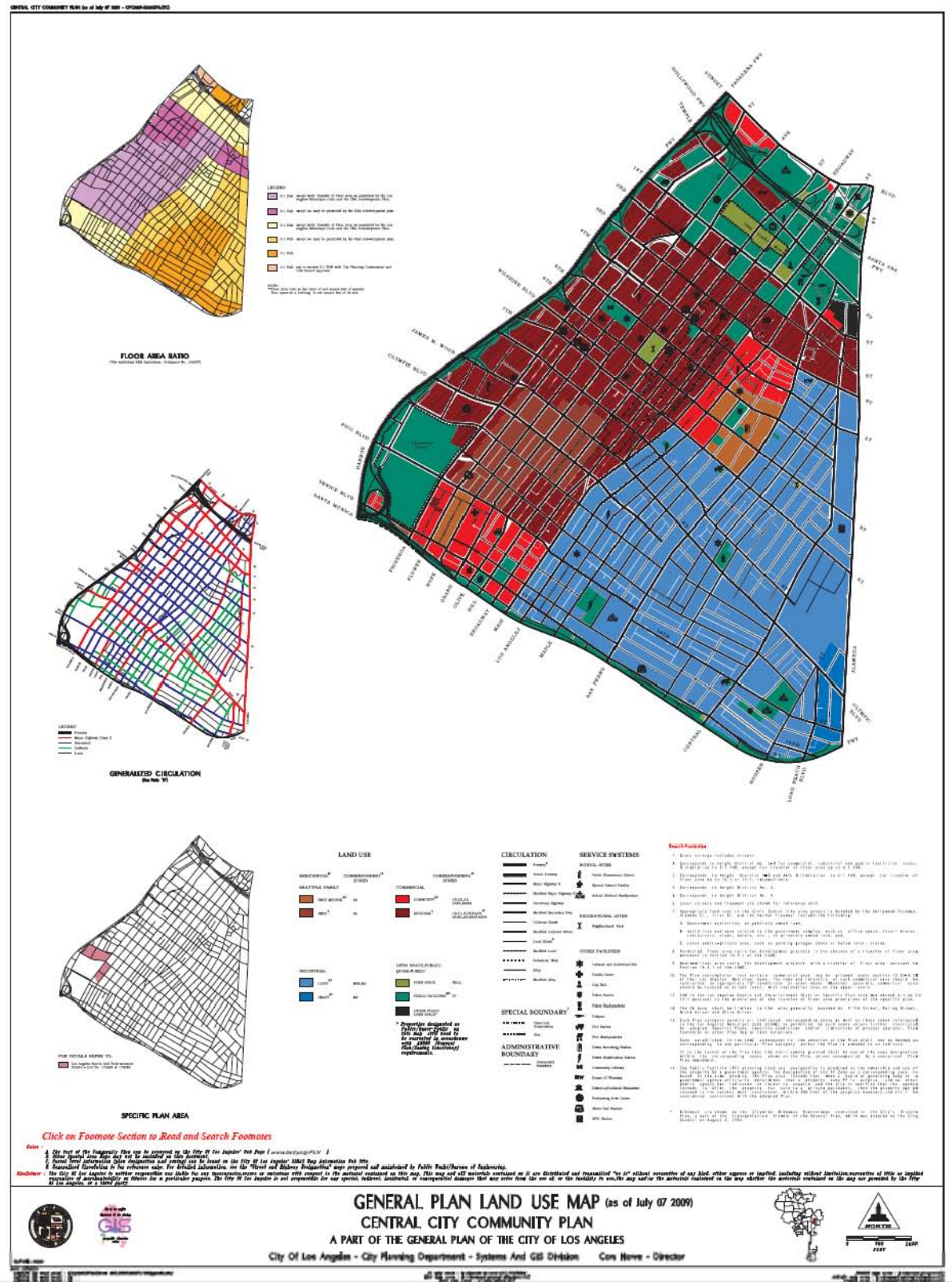
APPENDIX A
GENERAL PLAN LAND USE MAPS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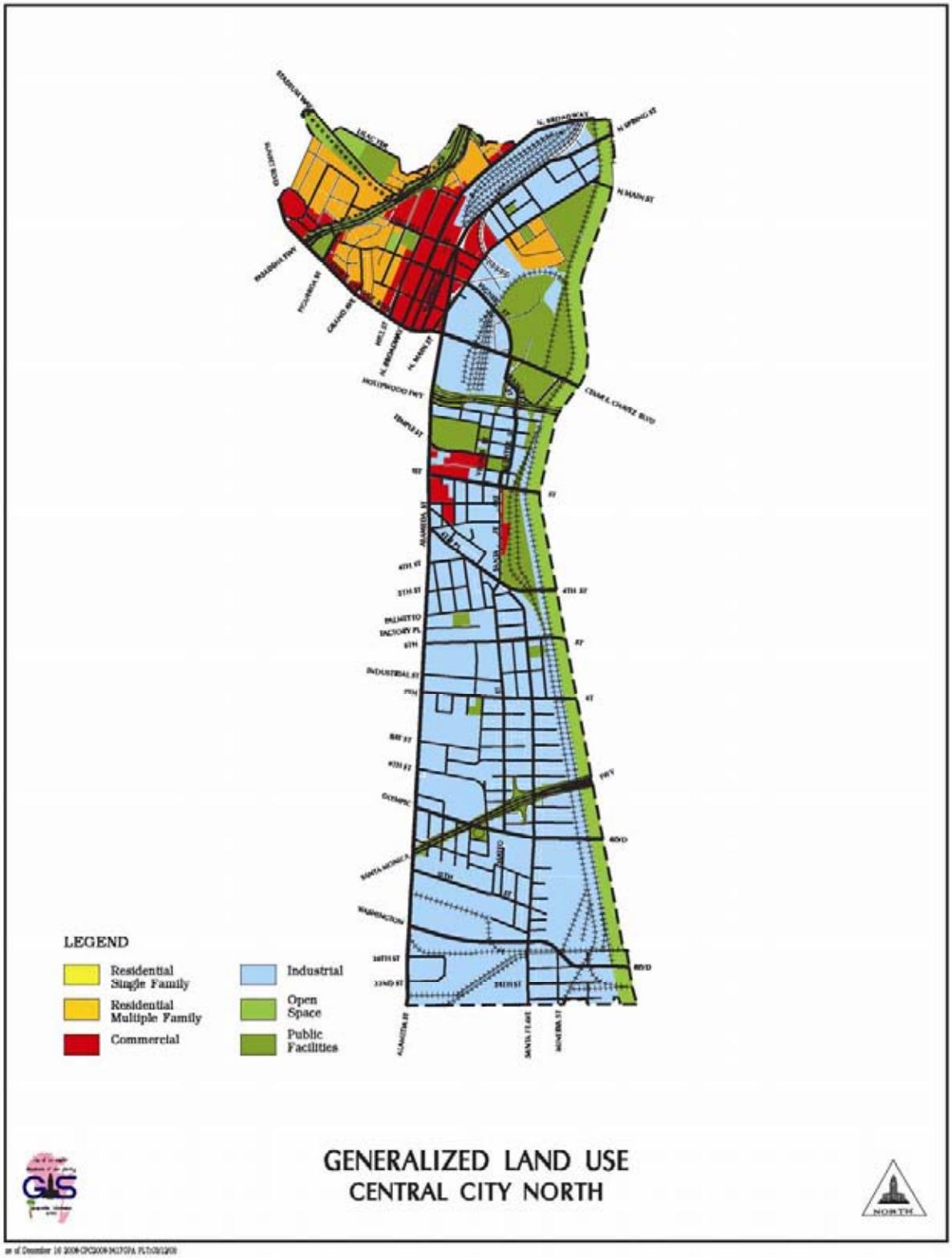
SPECIFIC PLAN AREA
LAND USE
CIRCULATION
SERVICE SYSTEMS
SPECIAL BOUNDARY
ADMINISTRATIVE BOUNDARY
Click on Footnote Section to Read and Search Footnotes
GENERAL PLAN LAND USE MAP (as of July 07 2009)
CENTRAL CITY COMMUNITY PLAN
A PART OF THE GENERAL PLAN OF THE CITY OF LOS ANGELES
City Of Los Angeles - City Planning Department - Systems And GIS Division Con Howe - Director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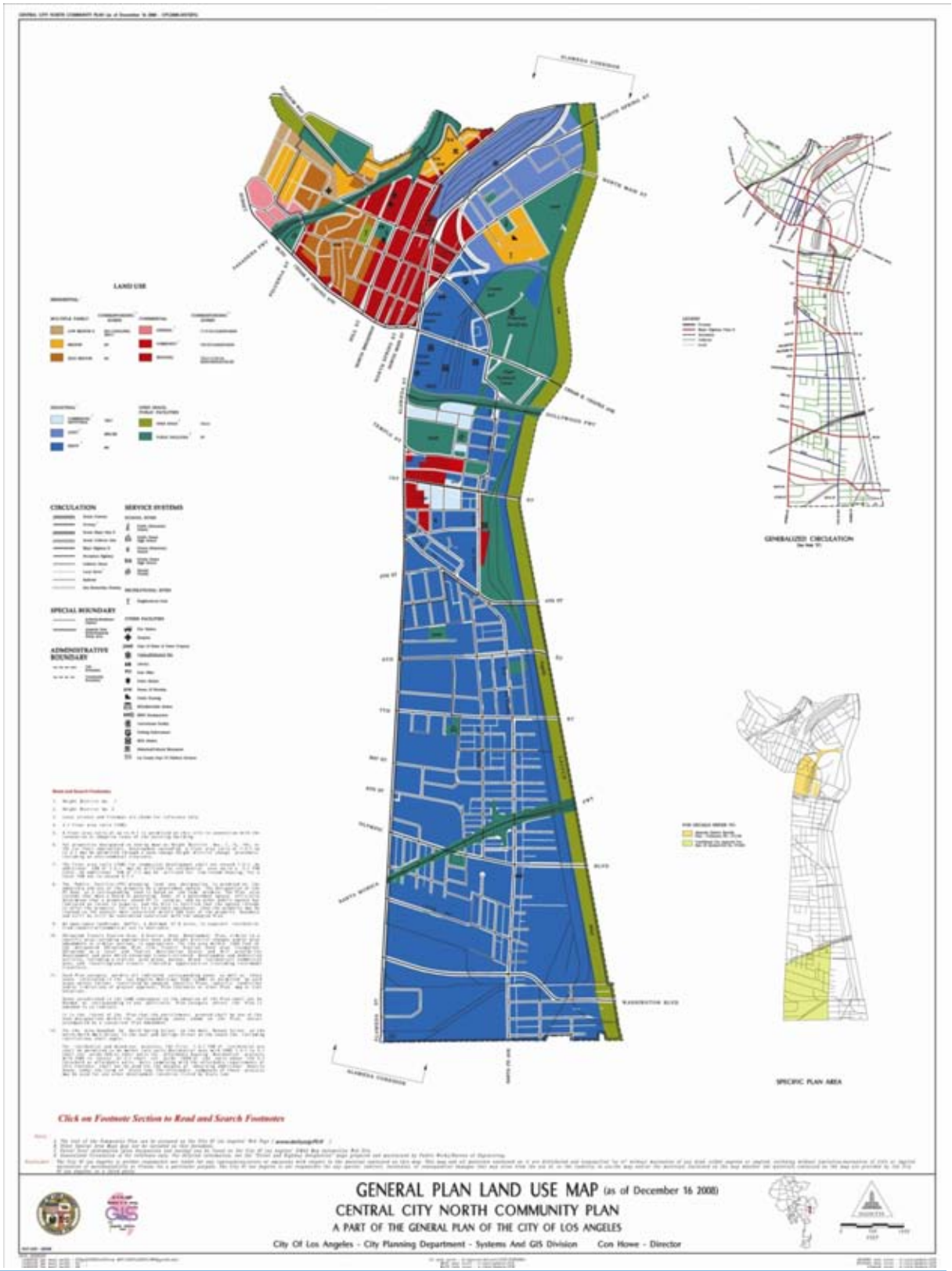
LAND USE
CIRCULATION
SERVICE SYSTEMS
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City Of Los Angeles - City Planning Department - Systems And GIS Division Con Howe - Director

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX N

DISPLACEMENT AND RELOCATION

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Displacement and Relocation
Technical Memorandum

March 19, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

APN	Assessor's Parcel Number
CEQA	California Environmental Quality Act
FTA	Federal Transit Administration
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
NEPA	National Environmental Policy Act
TSM	Transportation Management System
USDOT	Untied States Department of Transportation

1.0 SUMMARY

The project area surrounding the potential Regional Connector alternatives is essentially built-out. Therefore, there is a possibility that displacement as a result of the construction and operation of the proposed project would occur. Displacement could result from temporary or permanent easements, partial takes, and full takes.

Displacement of a business or residence is regulated at the federal level (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970) and state level (California Relocation Act). These regulations guide how fair compensation and relocation assistance is applied to displacements.

The alternatives under consideration for the Regional Connector include the No Build Alternative, the Transportation Systems Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground Alternative – Little Tokyo Variation 1, and the Fully Underground Alternative – Little Tokyo Variation 2.

The No Build Alternative would include the transit investments already planned as described in the Metro 2009 Long-Range Transportation Plan. The No Build Alternative would not result in direct or indirect displacement of housing, people, or employment. Furthermore, the No Build Alternative would not have cumulatively adverse impacts.

The TSM Alternative would include the same transit improvements as the No Build Alternative, but would also include two new shuttles to serve as a connection between Union Station and the existing 7th Street/Metro Center Station. The TSM Alternative would not result in direct or indirect displacement of housing, people, or employment, although approximately 24 curb parking spaces would need to be removed from 2nd Street between Hill Street and Central Avenue to accommodate new bus stops.

Construction and operation of the At-Grade Emphasis LRT Alternative is expected to require the partial take of 11 parcels. Additionally, temporary easements that would affect two parcels would be required.

Construction and operation of the At-Grade Emphasis LRT Alternative is expected to permanently displace approximately 51 on-street parking spaces, 29 on-street loading spaces, 77 off-street parking spaces in a pay-to-park lot, and 33 off-street spaces in a publicly operated lot. Mitigation measures have been identified for potential adverse impacts associated with access to businesses and bus stops.

After mitigation measures are implemented, impacts would not be considered significant adverse effects under the National Environmental Policy Act (NEPA) and would be less than significant under the California Environmental Quality Act (CEQA).

Construction and operation of the Underground Emphasis LRT Alternative is expected to displace 11 parcels that include 9 businesses, and require the partial take of ten parcels. Additionally, it is expected that temporary easements affecting eight parcels and permanent easements affecting four parcels would be required.

Construction and operation of the Underground Emphasis LRT Alternative would permanently displace approximately 148 to 281 off-street parking spaces in privately operated lots, depending which 2nd Street station option is selected (Broadway Option or the Los Angeles Street Option). This range includes 139 off-street parking spaces in privately operated lots in Little Tokyo that would be displaced. The Little Tokyo community has identified these parking spaces as important resources.

The Regional Connector as a transportation project enhances non-auto access to downtown, including Little Tokyo, and will help offset the cumulative loss of parking spaces. In addition, potential mitigation measures have been developed to offset potential impacts related to access to businesses and bus stops and loss of public parking in Little Tokyo. These potential mitigation measures may include replacement parking to address potential environmental justice issues. Once these mitigation measures have been implemented, impacts would not be considered significant adverse effects under NEPA and would be less-than-significant under CEQA.

Construction and operation of the Fully Underground Alternative – Little Tokyo Variation 1 would require up to five more full takes, possibly one less partial take, two more permanent underground easements, and three less temporary construction easements than the Underground Emphasis LRT Alternative.

Impacts of the Fully Underground Alternative – Little Tokyo Variation 1 would be similar to the Underground Emphasis LRT Alternative and the same mitigation measures would apply. Mitigation has been identified for the additional displacements. Impacts would not be considered significant adverse effects under NEPA and would be less than significant under CEQA.

Construction and operation of the Fully Underground Alternative – Little Tokyo Variation 2 would require the same number of full takes, permanent underground easements, and temporary construction easements as the Fully Underground Alternative – Little Tokyo Variation 1. The Fully Underground Alternative – Little Tokyo Variation 2 would have one to two additional partial takes. Impacts would be similar to the Fully Underground Alternative – Little Tokyo Variation 1 and the same mitigation measures would apply. Mitigation has been identified for the additional displacements. Impacts would not be considered significant adverse effects under NEPA and would be less than significant under CEQA.

2.0 INTRODUCTION

The Regional Connector Transit Corridor project maximizes the use of publicly owned rights-of-way. However, given that the project area is densely urbanized, displacement may occur for construction and operation of each of the proposed build alternatives. This technical memorandum addresses potential displacements - including temporary and permanent easements, partial takes, and full takes of real property - that would occur under each alternative. This impact analysis evaluates potential impacts to persons and businesses on private property within the project area.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

3.1.1 Federal

According to the Federal Transit Administration (FTA) NEPA guidelines, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended (Uniform Act) must be implemented if there are any displacements as a direct cause of the project. The Uniform Act mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides for uniform and equitable treatment of persons displaced from their homes and businesses and establishes uniform and equitable land acquisition policies.

Owners of private property have federal constitutional guarantees that their property will not be taken or damaged for public use unless they first receive just compensation. Just compensation is measured by the "fair market value" of the property taken, where "fair market value" is considered to be the:

> "highest price on the date of valuation that would be agreed to by a seller, being willing to sell, but under no particular or urgent necessity for so doing, nor obliged to sell; and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with the full knowledge of all the uses and purposes for which the property is reasonably adaptable and available." (Code of Civil Procedure Section 1263.320a)

Other than compliance with the Uniform Act, there are no specific thresholds under NEPA for displacement impacts.

3.1.2 State

The provisions of the California Relocation Act (California Act) apply in the absence of federal funds and/or involvement if a public entity undertakes a project and consequently must provide relocation assistance and benefits. The California Act, which is consistent with the intent and guidelines of the federal Uniform Act, seeks to (1) ensure consistent and fair treatment of owners of real property, (2) encourage and expedite acquisition by agreement to avoid litigation and relieve congestion in the courts, and (3) promote confidence in the public land acquisitions process. Similar to the federal regulations, owners of private property have state constitutional guarantees regarding property takes, damages, and just compensation.

3.2 Standards of Significance

According to the CEQA Guidelines, a project would have a significant impact if it would:

- Displace substantial numbers of existing housing units, particularly affordable housing units, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating construction of replacement housing elsewhere.

CEQA does not have specific thresholds for displacement impacts on employment. However, given the character of the project area, it is expected that the proposed project could impact businesses. Therefore, a similar threshold for employment displacement is used in this analysis as is used for population and housing.

3.3 Methodology

Conceptual engineering plans for the proposed alignment, station options, staging areas, and rights-of-way were reviewed to assess the types of potential displacement due to any of the project build alternatives. Site reconnaissance of the project area, particularly of the parcels that would potentially be taken fully or partially, was undertaken and existing businesses were documented. Appropriate scale satellite photography was used to determine parking space information and location of parcels. The California Assessor's Office parcel information was utilized in this analysis as well. The impact analyses contained in other technical memoranda including Cultural Resources and Economic and Fiscal Impacts were also reviewed.

4.0 AFFECTED ENVIRONMENT

For purposes of this evaluation of potential land acquisition impacts, the affected environment is limited to the areas within and directly adjacent to the proposed alternative alignments. Property acquisition may be phased over time, depending on project funding and schedule.

4.1 Typical Causes of Displacement

Table 4-1 shows typical causes of land acquisition and displacement that could potentially occur with a project. When an acquisition occurs, it typically results in either a full or partial take of a parcel.

A partial take would occur if only a portion of the entire parcel was required to accommodate the project. This would occur if, for example, a portion of a commercial parking lot fronting the alignment is required, but not the adjacent commercial building located away from the alignment.

Partial property takes may result from widening a street or intersection due to inadequate right-of-way widths, limited cross-sections, and vertical circulation needs adjacent to subway stations. Widening intersections is often required to add left-turn lanes that have been relocated by station platforms installed within a street median, adjacent to transit tracks. Street widening may be necessary when the existing horizontal alignment contains insufficient right-of-way. Vertical circulation is necessary near subway stations to bring passengers to the surface and additional land may be needed.

A full take could occur when the majority of the property is required for the horizontal alignment because of insufficient right-of-way or the need to construct storage or maintenance facilities. A full take could also result from a severe loss of access that reduces the useful operation (e.g., driveway access to a property is eliminated), though there are no instances where this occurs for any of the Regional Connector alternatives.

An easement is the right to use another person's land for a stated purpose. An easement can involve a general or specific portion of the property and can be either at the surface level or beneath the property. Easements can be temporary, during construction for example, or permanent. Temporary construction easements are utilized when there is a need to utilize a portion of a property for construction staging or equipment use. Permanent underground easements are utilized when tunneling for a subway and during its operation.

Using these criteria for the types of acquisitions that may be required for the proposed project (Table 4-1), a list of properties that could be affected was compiled for each alternative (listed in Section 5).

Table 4-1. Causes of Displacement		
Reason	**Type of Acquisition**	**Cause/Process**
Horizontal alignment	Full/Partial	Not enough right-of-way for construction and operation of alignment and stations
Vertical circulation above subway station	Partial	Additional area needed adjacent to subway station to bring passengers to surface
Street widening	Partial	At-grade trackway and stations
Illegal encroachment	Full	Unauthorized use of private property
Access to a businesses (driveway or road)	Full	Damages resulting from reduced or restricted access
Storage Yards	Full	Additional area required to perform maintenance, for ancillary Facilities, and TPSS sites
Widening of intersections	Partial	Additional area to maintain traffic volumes, turn lanes, or platforms
Tunneling easement	Easement	Subway travels off public right-of-way

4.2 Existing Land Uses

The current land uses adjacent to the proposed project alignments are presented in detail in the Land Use Technical Memorandum. Overall, the project area is characterized by a dense downtown urban environment.

Tall skyscrapers with offices and hotels dominate the western end of the project area; these include the City National Towers, Bonaventure Hotel, CitiGroup Tower, US Bank Tower, and the Standard Hotel.

Civic institutions dominate the central portion of the project area. These include City Hall, City Hall East, the California Department of Transportation District 7 Headquarters, Parker Center, and the new Los Angeles Police Department Building under construction.

Little Tokyo, located on the eastern portion of the project area, contains a mix of commercial, residential, civic, and light industrial mid- to low-scale development. Little Tokyo includes the Japanese Village Plaza, the Go For Broke Monument, and the Japanese American National Museum, which are of particular significance to the City of Los Angeles.

5.0 IMPACTS

5.1 No Build Alternative

Under the No Build Alternative, transit infrastructure investment would be limited to improvements planned for and funded in the 2009 Metro Long-Range Transportation Plan (LRTP). By 2035, the Metro Expo Line to Santa Monica, Metro Purple Line to Westwood, Metro Crenshaw Line, Metro Green Line to the South Bay and LAX, and Metro Gold Line to Azusa and the San Gabriel Valley will have opened, and a number of bus services will have been reorganized and expanded to provide connections with these new rail lines. The transit network within the project area will otherwise be largely the same as it is now.

5.1.1 Direct Impacts

Under the No Build Alternative, there would be no construction in the project area associated with transit infrastructure investments. As such, displacement of properties for transit infrastructure would not occur. Therefore, no direct adverse impacts associated with displacements and relocations are expected under the No Build Alternative.

5.1.2 Indirect Impacts

There would be no indirect impacts under the No Build Alternative.

5.1.3 Cumulative Impacts

There would be no cumulative impacts under the No Build Alternative.

5.2 Transportation Systems Management (TSM) Alternative

Under the TSM Alternative, transit infrastructure investment would occur, including but not limited to, two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours in future traffic conditions projected in the Transportation Technical Memorandum. The buses may also have traffic signal priority similar to the Metro Rapid system to help bus mobility in projected future traffic conditions, where the traffic signal control system grants longer green lights to oncoming transit vehicles.

Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. These new shuttles would also have associated structures (bus stops and signage). The same infrastructure investments that would occur under the No Build Alternative would occur under the TSM Alternative.

5.2.1 Direct Impacts

Under the TSM Alternative, the transit infrastructure investment (a new bus route and associated structures) would utilize the existing street and sidewalk networks and would not require the displacement or relocation of properties, residents, or employees. However, up to 24 on-street parking spaces would need to be removed to install new bus stops on 2nd Street between Hill Street and Central Avenue. This assumes that each of the six new bus stops on 2nd Street would be 90 feet in length and displace up to four curb parking spaces.

Transit projects tend to offset the impacts of decreased parking by providing alternatives to driving. In the case of the TSM Alternative, parking impacts would not be considered adverse or significant. However, the TSM Alternative would also be less effective in offsetting these impacts than the build alternatives because it provides poorer connections with the regional rail network.

5.2.2 Indirect Impacts

There would be no indirect impacts under the TSM Alternative.

5.2.3 Cumulative Impacts

Many of the development projects identified in the Cumulative Impacts Technical Memorandum are planned to be built on parcels currently occupied by surface parking lots. The City of Los Angeles typically requires that these displaced parking spaces be replaced at a one-to-one ratio, but they do not necessarily need to be open to the public.

Many of these developments will also qualify for reduced off-street parking quotas due to their proximity to transit facilities and their location in the downtown area. The TSM Alternative's permanent displacement of up to 24 on-street parking spaces (six to 12 in Little Tokyo, where the community has expressed concern over the potential loss of parking) would thus not result in a cumulative impact.

Surface parking lots in downtown Los Angeles are an important community resource because many of the older, historical businesses and civic buildings do not provide the amount of on-site, off-street parking required under current planning code, resulting in an overall parking deficit. The loss of publicly accessible surface parking in Little Tokyo and in other downtown Los Angeles areas due to the proposed project would not represent a cumulative loss.

Typically, transit projects themselves serve as mitigation for the loss of parking because they would remove vehicles on the road, thereby reducing the demand for parking.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would extend from the underground 7th Street/Metro Center Station in a cut-and-cover tunnel north under Flower Street. It resurfaces to at-grade

north of 4th Street, crosses 3rd Street at-grade, enters a cut-and-cover tunnel into the side of Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The alignment continues at-grade along 2nd Street and splits into a couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). The alignment then heads east on Temple Street, realigns into a dual-track configuration just east of Los Angeles Street, and connects to the Metro Gold Line tracks in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street.

Due to the high volume of trains that would traverse the Regional Connector Transit Corridor, an automobile underpass and potential pedestrian overpass would be constructed at Temple and Alameda Streets to eliminate potential pedestrian-train and automobile-train conflicts. To implement this alternative, the number of traffic lanes and on-street parking on portions of 2nd, Temple, Los Angeles, Flower, and Main Streets would be reduced.

5.3.1 Direct Impacts

To construct the At-Grade Emphasis LRT Alternative, 11 parcels would require partial takes. In addition, temporary easements required during construction would affect two parcels. These properties would be utilized for traction power substation (TPSS) site locations, construction staging, below-grade tunneling, and station locations.

Some station plans have multiple entrance options, though not all of them would be constructed. In these cases, all potential takings and easements for station entrances would be evaluated.

Table 5-1 lists the Assessor's Parcel Numbers (APNs), addresses, and the current and intended uses of the properties that could be impacted by displacement to construct the At-Grade Emphasis LRT Alternative. Table 5-1 also references the parcels' locations in Figure 5-1.

For all of the property acquisitions, relocation assistance to residential and business tenants and compensation to property owners would be provided by Metro as required by the Uniform Act and the California Act. The details of these laws regarding relocation assistance and compensation for property acquisitions are described in Sections 3.1.1 and 3.1.2.

Where acquisitions and relocations are unavoidable with the At-Grade Emphasis LRT Alternative, Metro would follow the provisions of the Uniform Act. Procedures that would be used would follow the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by the U.S. Department of Transportation (USDOT), dated February 3, 2005. Metro would apply acquisition and relocation policies to assure compliance with the Uniform Act.

All real property acquired by Metro would be appraised to determine its fair market value. Just compensation, which would not be less than the approved appraisal made to each property owner, would be offered by Metro. Each homeowner, renter, business, or nonprofit organization displaced as a result of the project would be given advanced written notice and informed of their eligibility for relocation assistance and payments.

Table 5-1. Parcels Potentially Affected by Displacement – At-Grade Emphasis LRT Alternative

Figure 5-1 #	APN	Address	Type of Displacement	Current Use	Intended Use
1	5151023400	525 S. Flower Street	Partial Take/Temporary Construction Easement (TCE)	City National Plaza	Construction Staging
2	5151018017	444 S. Flower Street	Temporary Construction Easement (TCE)	Courtyard	Construction Staging
5	5151027256	Parcel Bounded by Figueroa/3rd/Flower/ 2nd Streets	Partial Take	Pool and Tennis Courts	Station Entrance
6	5149008032	201 S. Spring Street	Partial Take	Parking Lot	TPSS Location
3	5151014032	703 W. 3rd Street	Partial Take	Central Plant	Construction Staging
8	5161014901	Parcel Bounded by Main/Temple/ Los Angeles Streets and Parcel 5161014902	Partial Take	Government Building	Alignment Tracks & Station
10	5161013904	Parcel Bounded by Judge John Aiso/ Temple/Los Angeles Streets and Parcel 5161013905	Partial Take	Government Building	Alignment Tracks & Station
11	5161012901	Parcel on SW corner of Temple/Alameda	Partial Take	Parking Lot	Alignment Tracks

Table 5-1. Parcels Potentially Affected by Displacement – At-Grade Emphasis LRT Alternative

Figure 5-1 #	APN	Address	Type of Displacement	Current Use	Intended Use
		Streets			
4	5151014033	Parcel Bounded by 3rd/Hope/Flower Streets & General Kosciuszko Way	Partial Take	Vacant	Construction Staging
7	5161014902	Parcel bounded by Main/1st/Los Angeles Streets and Parcel 5161014901	Partial Take	Government Building	Station
9	5161013905	Parcel bounded by Judge John Aiso/1st/Los Angeles Streets and Parcel 5161013904	Partial Take	Government Building	Station
12	5161012905	152 N. Central Avenue	Partial Take	MOCA and Public Parking	Pedestrian Bridge Footing

Source: TAHA, 2010.

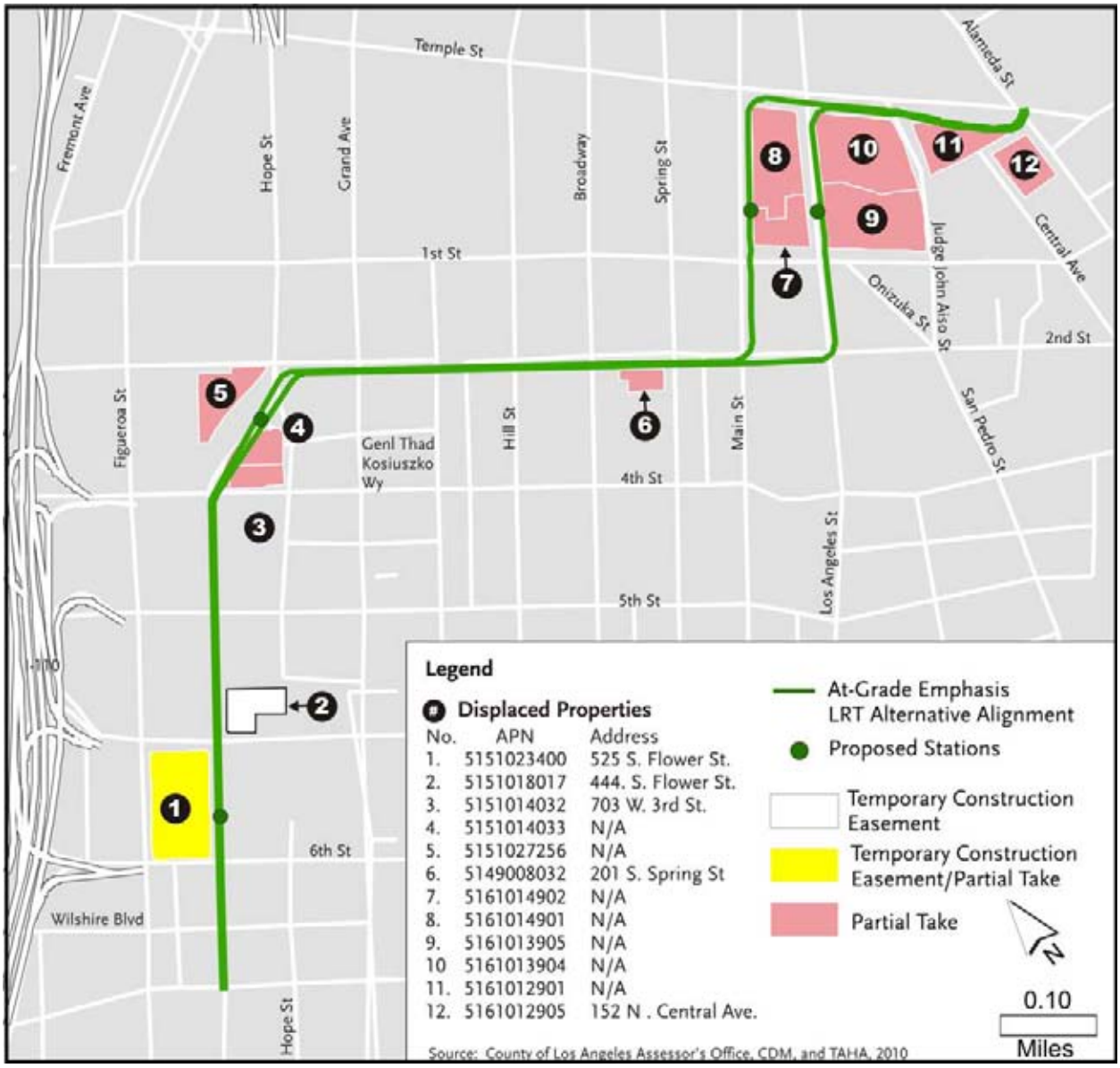

Figure 5-1. At-Grade Emphasis LRT Alternative Potential Displacement

5.3.1.1 Easements

Construction of the At-Grade Emphasis LRT Alternative would require temporary easements that would affect two parcels (Figure 5-1). The easements would include:

- APN 5151023400 (525 S. Flower Street; Figure 5-1 #1) – This parcel contains the City National Plaza and towers. Construction of the At-Grade Emphasis LRT Alternative is expected to utilize a portion of the Plaza for equipment and/or material staging and for construction of a proposed below-grade station. Part of the City National Plaza serves as a bus stop for various bus lines from several transit service providers. During construction, access to this bus stop would be maintained or relocated. In addition, part of the public sidewalk would be utilized as an entrance to the proposed below-grade station, but this would not encroach onto the private property. This easement would be temporary; however, potential adverse impacts could result if access to the bus stop is not maintained. Proposed mitigation measures in Section 6.3 have been developed to reduce this potential impact to a less than significant level.

- APN 5151018017 (444 S. Flower Street; Figure 5-1 #2) – This parcel contains the Citigroup Center, which includes the Citigroup Building and retail shops and restaurants. Construction of the At-Grade Emphasis LRT Alternative is expected to utilize the plaza at the northeast corner of the 5th Street/ Flower Street intersection for construction staging, which is only a portion of the site (. Several mature palm trees are located in the plaza. It is not expected that the palm trees would be removed during construction. Palm trees are not considered heritage trees and are not a protected species in the City of Los Angeles. This easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed. No significant adverse impacts associated with this easement are expected.

5.3.1.2 Partial Takes

There are 11 parcels which would be partially taken for the construction and operation of the At-Grade Emphasis LRT Alternative (Figure 5-1). These parcels would include:

- APN 5151023400 (525 S. Flower Street; Figure 5-1 #1) – This parcel contains the City National Plaza and towers. Construction of the At-Grade Emphasis LRT Alternative is expected to require a partial take for locating an entrance to a proposed below-grade station. Part of the City National Plaza serves as a bus stop for bus lines from several transit service providers. During construction, access to this bus stop would be maintained or relocated. Potential adverse impacts could result if access to the bus stop is not maintained. Proposed mitigation measures in Section 6.3 have been developed to reduce this potential impact to a less than significant level.

- APN 5151014032 (703 W. 3rd Street; Figure 5-1 #3) – This parcel contains the Central Plant, which is a heating and ventilation plant for some buildings in Bunker Hill. This parcel is located within the Bunker Hill Redevelopment Area as designated by the City of Los Angeles Community Redevelopment Agency (CRA) (Parcel H, Central Plant). Construction of the At-Grade Emphasis LRT Alternative is expected to result in a partial take of this site for construction staging and the proposed station. The part of the parcel that would be utilized for construction staging is currently used for parking and is the primary access point to the Central Plant. During construction, this access point would remain available and replacement parking would be required. Potential adverse impacts could result if no replacement parking were provided or if access was restricted or eliminated to the Central Plant. Proposed mitigation measures described in Section 6.3 have been developed to reduce this potential impact to a less than significant level.

- APN 5151014033 (Parcel bounded by 3rd Street, Hope Street, Flower Street, and General Kosciuszko Way; Figure 5-1 #4) – This 1.2-acre parcel is currently vacant but landscaped. This parcel is located within the Bunker Hill Redevelopment Area designated by the CRA (Parcel H, Central Plant). The parcel is expected to be partially acquired for construction staging and to construct the proposed 2nd/Hope Street station. The partial take of this parcel would not displace housing, people, or jobs. No adverse impacts associated with this displacement are expected.

- APN 5151027256 (Parcel bounded by Figueroa Street, 3rd Street, Flower Street, and 2nd Street; Figure 5-1 #5) – This parcel contains a pool, tennis courts, and landscaping associated with the multi-family housing on parcel with APN 5151016013. Construction of the At-Grade Emphasis LRT Alternative is expected to take a portion of the site along Flower Street for a station entrance and underground passageway beneath Flower Street. One or both of the privately owned tennis courts may be removed. An at-grade midblock crosswalk across Flower Street would be an alternative means of creating the same pedestrian connection. No significant adverse impacts associated with this displacement are expected.

- APN 5149008032 (201 S. Spring Street, respectively; Figure 5-1 #6) – This parcel is currently used as a privately operated parking lot with approximately 88 parking spaces (this is estimated because most of the spaces are unmarked). Construction and operation of the At-Grade Emphasis LRT Alternative are expected to take part of the parcel to stage materials and serve as a TPSS substation. An estimated 44 parking spaces are expected to be displaced. Typically, privately operated parking lots are considered transitional land uses that could be developed by the owners for higher and better uses. Additionally, there are several other privately operated parking lots and structures in the vicinity of the area. Although loss of the current parking lot may cause an inconvenience for users, it would not represent a significant adverse impact.

This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. No significant adverse impacts associated with this displacement are expected.

- APN 5161014902 (Parcel bounded by Main Street, 1st Street, Los Angeles Street, and Parcel #5161014901; Figure 5-1 #7) – This parcel contains the City Hall East grounds and associated buildings. Construction of the At-Grade Emphasis LRT Alternative is expected to result in partial take of the western edge along Main Street to accommodate a new station. The partial take would permanently remove a portion of existing landscape and some hardscape features. It is not expected that any plazas or buildings would be impacted by this partial take. No significant adverse impacts associated with this displacement are expected.

- APN 5161014901 (Parcel bounded by Main Street, Temple Street, Los Angeles Street, and Parcel #6161014902; Figure 5-1 #8) – This parcel contains the City Hall East building and grounds. Construction of the At-Grade Emphasis LRT Alternative is expected to result in partial take of the southeast corner of the Main Street/Temple Street intersection to accommodate the turning radius of the rail track. This partial take would permanently remove a portion of existing landscape and some hardscape features, including part of a landscape retaining wall. It is not expected that the plaza would be impacted by this partial take. No significant adverse impacts associated with this displacement are expected.

- APN 5161013905 (Parcel bounded by Judge John Aiso Street, 1st Street, Los Angeles Street, and Parcel #5161013904; Figure 5-1 #9) – This parcel contains the former Los Angeles Police Department Headquarters building (Parker Center) and grounds. However, the building may be demolished as a result of other proposed projects. Construction of the At-Grade Emphasis LRT Alternative is expected to result in a partial take of the western edge along Los Angeles Street to accommodate a station. No adverse impacts associated with this displacement are anticipated because the site has been vacated.

- APN 5161013904 (Parcel bounded by Judge John Aiso Street, Temple Street, Los Angeles Street, and Parcel #5161013905; Figure 5-1 #10) – This parcel contains the new downtown Metropolitan Detention Center building and grounds currently under construction. Construction of the At-Grade Emphasis LRT Alternative is expected to result in a partial take of the southeast corner of the Los Angeles Street/Temple Street intersection to accommodate the turning radius of the rail track. This partial take would permanently remove a portion of existing landscape and the sidewalk, but is not expected to impact the building or its plaza. No significant adverse impacts associated with this displacement are expected.

- APN 5161012901 (Parcel located on southwestern corner of the Temple Street/ Alameda Street intersection; Figure 5-1 #11) – This parcel is currently used as a publicly owned, pay-to-park, surface parking lot. Part of this lot is anticipated to be developed (Bureau of Engineering 2009). Construction of the At-Grade Emphasis LRT Alternative is expected to result in a partial take of several parking spaces (approximately 26 standard spaces and 7 handicapped spaces) for part of its alignment to accommodate the turning radius required to join the existing Gold Line Extension tracks. In addition, since driveway access would be limited, coordination of design would need to occur between Metro and the development, and CPUC, city, and other regulatory safety requirements would need to be met. Although loss of the current parking lot may cause an inconvenience for users, it would not normally represent a significant adverse impact. There are additional privately operated parking lots and structures located in the vicinity.

- APN 5161012905 (Parcel located on southwestern corner of the Temple Street/Alameda Street intersection; Figure 5-1 #12) – This parcel, which is currently used as a publicly owned, pay-to-park, surface parking lot, also contains the Geffen Contemporary at the Museum of Contemporary Art (MOCA). Part of this lot is anticipated to be developed (Bureau of Engineering 2009). Construction of the At-Grade Emphasis LRT Alternative is expected to result in a partial take of five parking spaces to locate the footing of a proposed pedestrian bridge across Alameda Street. Although loss of the current parking lot may cause an inconvenience for users, it would not normally represent a significant adverse impact. There are additional privately operated parking lots and structures located in the vicinity.

5.3.1.43 On-Street Parking

To construct and operate the At-Grade Emphasis LRT Alternative, approximately 51 on-street parking spaces and 29 on-street loading spaces would be permanently eliminated. This includes removing 23 on-street parking spaces and five loading spaces on 2nd Street in and near Little Tokyo. The loss of on-street parking would result from placing tracks along streets. This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. Little Tokyo residents and business owners have indicated that parking spaces are important community resources and that losing this parking could negatively impact the adjacent small businesses and the Japanese American National Museum, located along Alameda Street. The community is concerned that this could, in turn, affect the economic stability and ultimately the character of the community. Therefore, Metro would conduct a parking capacity study of the Little Tokyo area to determine if there is sufficient parking availability without these parking spaces or if replacement parking would be needed and to what extent.

5.3.2 Indirect Impacts

There are no indirect impacts under the At-Grade Emphasis LRT Alternative.

5.3.3 Cumulative Impacts

There are approximately 12 new construction projects anticipated by 2014 and an additional 54 new construction projects between 2014 and 2018 identified within one-quarter mile of the proposed project alignments. Also, there are approximately 12 major renovation projects anticipated by 2014 and eight between 2014 and 2018. More detail about these projects is provided in the Cumulative Impacts Technical Memorandum.

A project may have cumulatively considerable impacts associated with displacement, even when mitigated, if it would contribute cumulatively to displacement of the same land uses or important resources. Construction of the At-Grade Emphasis LRT Alternative is expected to displace a parcel that is currently vacant. No cumulatively considerable impacts are anticipated as a result of this displacement.

The At-Grade Emphasis LRT Alternative would displace parking on three parcels (APNs 5161012901, 5161012905, and 5149008032). According to the Bureau of Engineering, a Children's Museum and Art Park is anticipated to be constructed in the lot with APN 5161012901 by 2018. Therefore, all the parking spaces would be displaced, and the new building would be required to provide its own spaces per the City of Los Angeles Zoning Code.

By the year 2018, planned future developments would displace several existing parking lots. These new developments, mostly residential, would provide the required parking for their residents, but the stock of publicly accessible parking would be greatly reduced. The At-Grade Emphasis LRT Alternative would result in permanent displacement of 170 parking spaces (including 51 on-street parking spaces), 23 of them in Little Tokyo, where the community has expressed concern over the potential loss of parking. Surface parking lots in downtown Los Angeles are an important community resource because many of the older, historical businesses and civic buildings do not provide the amount of on-site, off-street parking required under current planning code, resulting in an overall parking deficit. The loss of publicly accessible surface parking in Little Tokyo due to the proposed project in conjunction with other planned developments would represent a cumulative loss.

Typically, transit projects themselves serve as mitigation for the loss of parking because they would remove vehicles on the road, thereby reducing the demand for parking. The Regional Connector will provide new non-auto access to downtown, including Little Tokyo. Therefore, the proposed At-Grade Emphasis LRT Alternative would partially offset potential adverse impacts due to loss of parking. Some cumulative impacts due to parking loss could remain but they would not be significant.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would extend from the 7th Street/Metro Center Station north in a cut-and-cover tunnel below Flower Street, with a new underground station north of 5th Street. At 3rd Street, the underground tunnel would extend northeast, with a new underground station constructed just south of 2nd and Hope Streets to provide access to Bunker Hill.

This station would be constructed using either the cut-and-cover method or the sequential excavation method. From there, a tunnel excavated by tunnel boring machine would continue east beneath 2nd Street. A second underground station would be located either between Broadway and Spring Street or between Main and Los Angeles Streets. The tunnel would emerge to at-grade connections just southwest of the intersection of 1st and Alameda Streets. At 1st and Alameda Streets, a new underpass would carry car and truck traffic along Alameda Street below the rail junction, and a potential overhead pedestrian bridge structure would eliminate most conflicts between pedestrians and trains. This alternative would have a single at-grade crossing at the intersection of 1st and Alameda Streets.

5.4.1 Direct Impacts

Construction of the Underground Emphasis LRT Alternative would require ten partial takes and acquisition of 11 parcels (full takes). In addition, temporary construction easements affecting eight parcels and permanent underground easements affecting four parcels would be required.

Some station plans have multiple entrance options, though not all of them would be constructed. In these cases, all potential takings and easements for station entrances were evaluated. These properties would be utilized for TPSS site locations, construction staging, below-grade tunneling, and station locations.

Table 5-2 lists the APNs, addresses, and current and intended uses of the properties that could be impacted by displacement to construct the Underground Emphasis LRT Alternative. Table 5-2 also references the parcel's location in Figures 5-2 through 5-4.

Table 5-2. Parcels Potentially Affected by Displacement – Underground Emphasis LRT Alternative

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use

Table 5-2. Parcels Potentially Affected by Displacement – Underground Emphasis LRT Alternative

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
5.2	1	5151023400	525 S. Flower Street	Temporary Construction Easement (TCE)	City National Plaza	Construction Staging
5.2	2	5151018017	444 S. Flower Street	TCE	Citicorp Plaza	Construction Staging
5.2	3	5151014032	703 W. 3rd Street	Partial Take	Central Plant	Construction Staging
5.2	4	5151014033	Parcel Bounded by 3rd/Hope/Flower Streets & Gnl Kosciuszko Way	Partial Take	Vacant	Construction Staging
5.2	5	5151027256	Parcel Bounded by 3rd/Hope/Flower Streets	Partial Take	Tennis Cts and Pool for Residential Bldg	Station Entrance and Bridge
5.2	6	5151004911 thru 5151004913	Parcel Bounded by 2nd Street, Hope Street, Grand Avenue, and Genl. Kosciuszko Way	Permanent Underground Easement (PUE)	Parking Lot	Tunneling
5.3	7	5149001903	Parcel Bounded by 1st/2nd/Hill Streets, Broadway	TCE & Partial Take	Empty Lot	Construction Staging/ Station Entrance
5.3	8	5149008031	200 S. Broadway	Full Take	Parking Lot	Potential Station
5.3	9	5149008030	208 S. Broadway	Full Take	Parking Lot	Potential Station
5.3	10	5149008032	201 S. Spring Street	Full Take	Parking Lot	Potential Station

Table 5-2. Parcels Potentially Affected by Displacement – Underground Emphasis LRT Alternative

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
5.3	11	5149001902	100 W. 1st Street	TCE	New LAPD HQ	Construction Staging
5.3	12	5149007006	206 S. Spring Street	Full Take	Commercial Buildings	Construction Staging
5.3	13	5149007005	212 S. Spring Street	Full Take	Commercial Buildings	Construction Staging
5.3	14	5149006010 -028; 031-054; 056-059; 061-095; 097; 099-108; 110; 112-149, 151	108 W. 2nd Street, Units 102-108; 201-212; 215; 301-315; 401-408; 410-415; 501-515; 601-615; 701-704; 706; 708-715; 801-802; 804; 806-815; 901-915; 1001-10015	PUE	Higgins Bldg; Mixed-Use Commercial and Condos	Tunneling
5.3	15	5161015901	100 S. Main Street	TCE & Partial Take	Caltrans HQ	Station Entrance
5.3	16	5161026023	200 S. Main Street	PUE	St. Vibiana's	Tunneling
5.3	17	5161026024	114 E. 2nd Street	PUE	St. Vibiana's	Tunneling
5.3	18	5161026033	Parcel at SW corner of Los Angeles/2nd Streets	Partial Take	Plaza	Station Plaza
5.3	19	5161026901	203 S. Los Angeles St	Partial Take	Little Tokyo Branch Public Library	Station Entrance
5.3	20	5161024014	Parcel at SE corner of Los Angeles/2nd Streets	TCE & Partial Take	Parking Lot	Construction Staging & Station Plaza

Table 5-2. Parcels Potentially Affected by Displacement – Underground Emphasis LRT Alternative

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
5.3	21	5161024018	Parcel at SE corner of Los Angeles/2nd Streets	TCE	Parking Lot	Construction Staging
5.4	22	5161018007	401 E. 2nd Street	Full Take	Parking Lot	Portal
5.4	23	5161018011	437 E. 2nd Street	Full Take	Parking Lot	Portal
5.4	24	5161018020	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	Partial Take	Commercial	Portal
5.4	25	5161018010	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	Full Take	Parking Lot	Portal
5.4	26	5161018009	Parcel Bounded by 1st/2nd/Alameda Streets. and Central Avenue	Full Take	Parking Lot	Portal
5.4	27	5161018008	105 S. Alameda Street	Full Take	Commercial	Portal
5.4	28	5161018001	416 E. 1st Street	Full Take	Commercial	Portal
5.4	29	5173011900	Parcel at NE corner of 1st/Alameda Streets	TCE & Partial Take	Vacant Lot	Footing for Pedestrian Bridge

Source: TAHA, 2010.

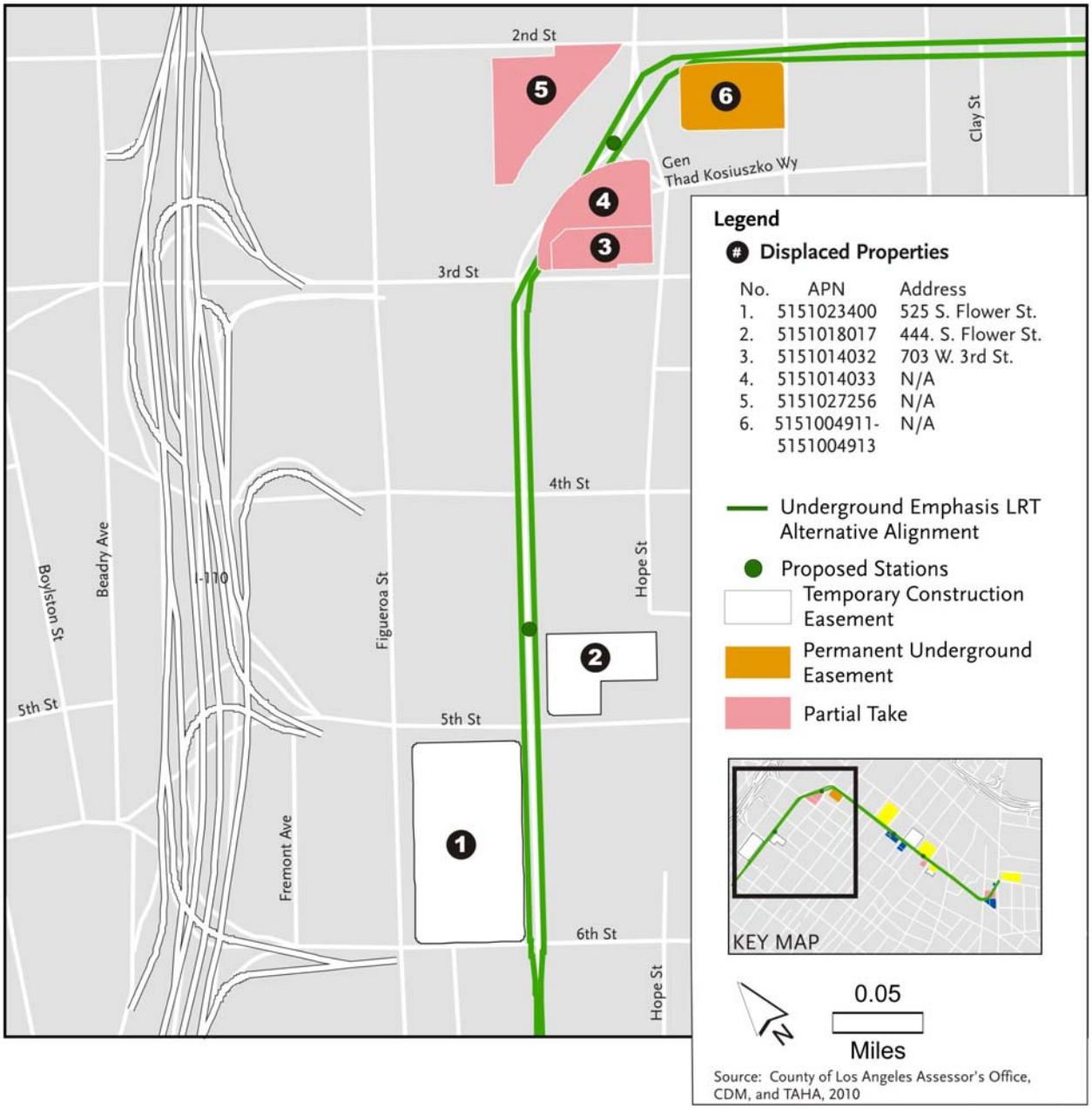

Figure 5-2. Underground Emphasis LRT Alternative Potential Displacement – Flower/5th/4th Street Station to 2nd/Hope Street Station

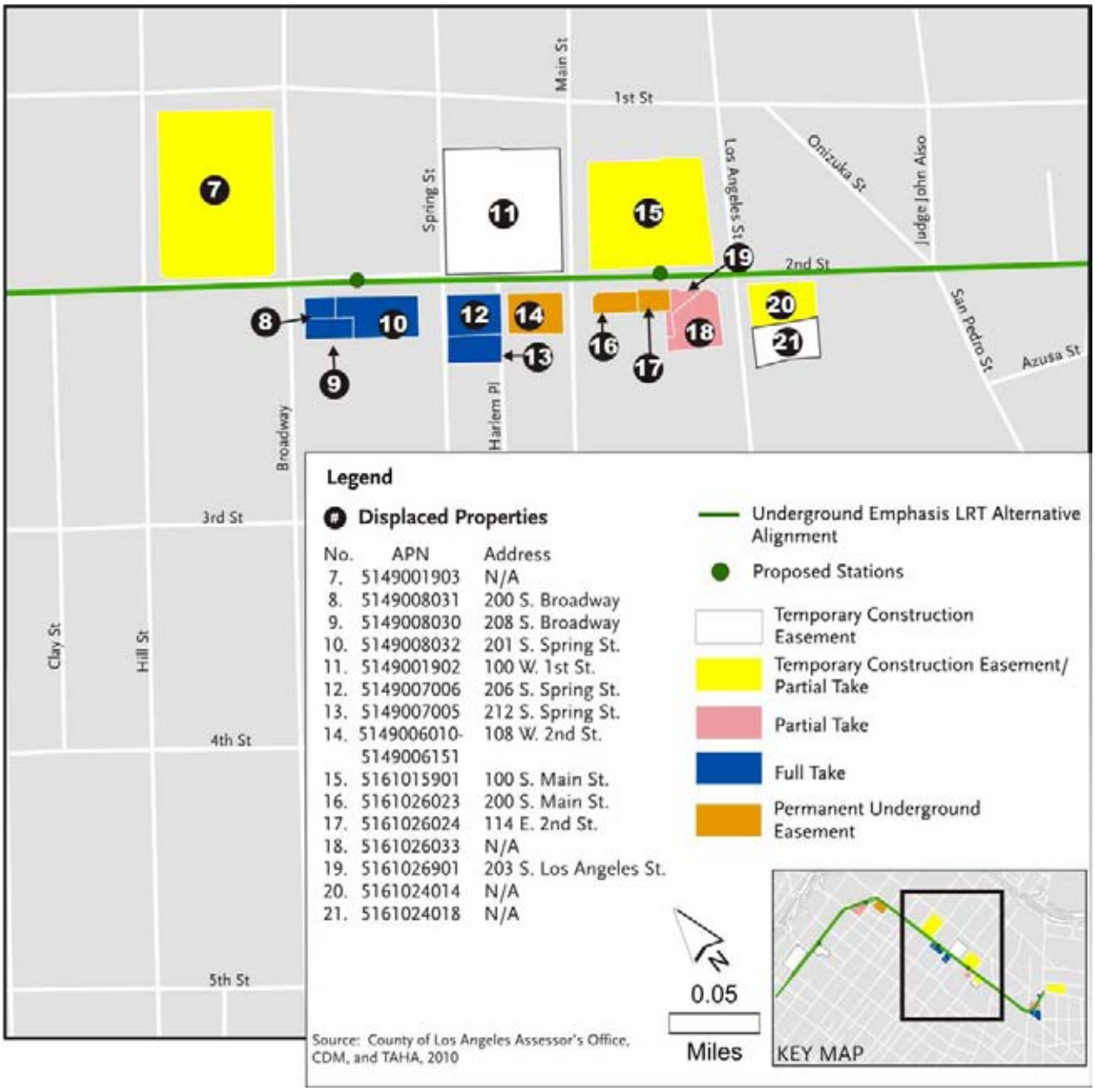

Figure 5-3. Underground Emphasis LRT Alternative Potential Displacement – 2nd Street Station - Broadway or Los Angeles Street Options

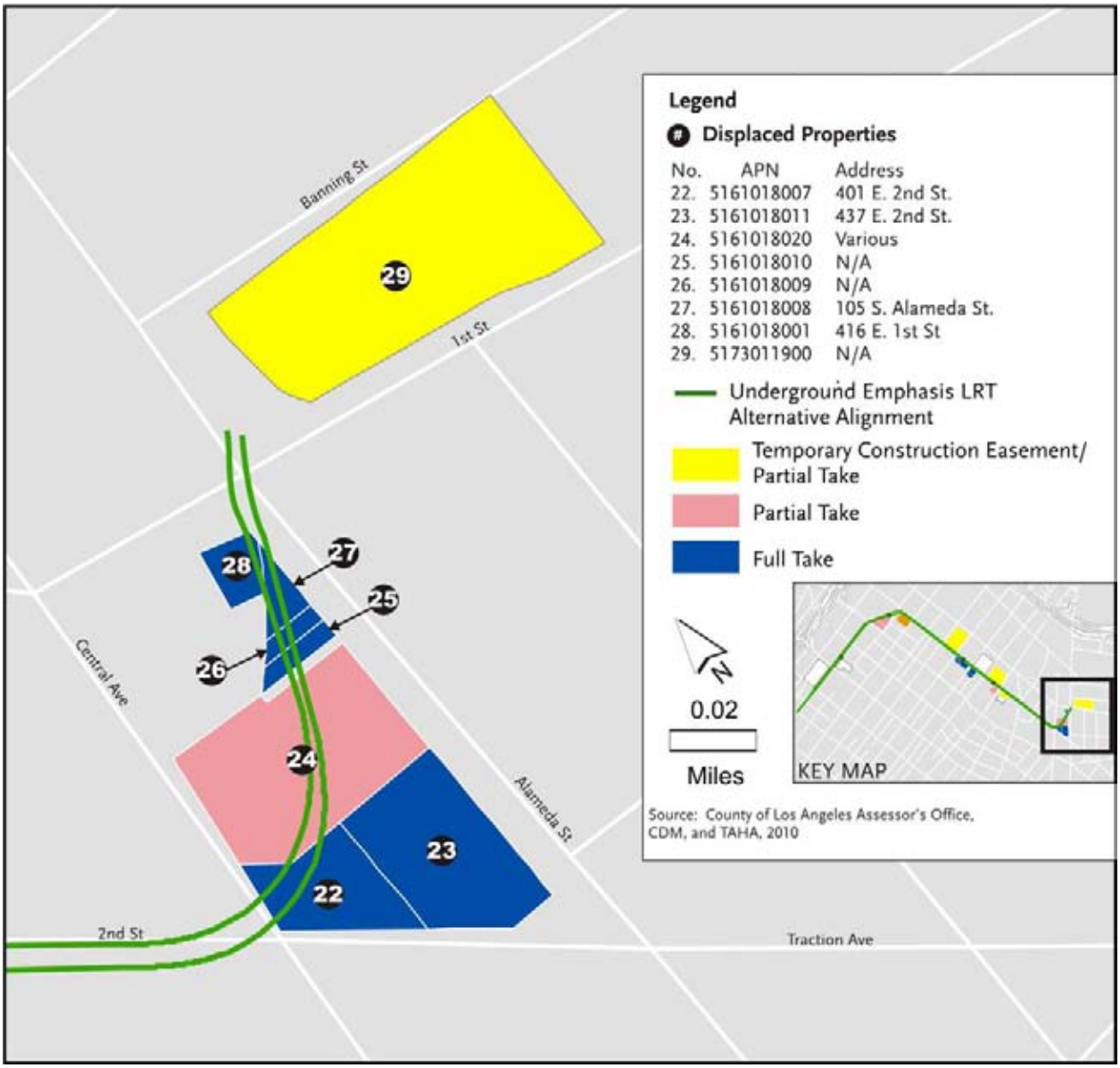

Figure 5-4. Underground Emphasis LRT Alternative Potential Displacement – Portal Area

5.4.1.1 Easements

The proposed Underground Emphasis LRT Alternative would require temporary construction easements affecting eight parcels and four permanent underground easement that would affect five parcels (one parcel, the Higgins Building, contains several APNs, but is considered one parcel for this discussion) (Figures 5-2 through 5-4).

Temporary Construction Easements

- APN 5151023400 (525 S. Flower Street; Figure 5-2 #1) – This parcel contains the City National Plaza and towers. Construction of the Underground Emphasis LRT Alternative is expected to utilize a portion of the plaza for equipment and/or material staging and to construct a proposed below-grade station. Part of the City National Plaza serves as a bus stop for bus lines from several transit service providers. During construction, access to this bus stop would need to be maintained or relocated. In addition, part of the public sidewalk would be utilized as an entrance to the proposed below-grade station, but would not encroach onto private property. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed. Adverse impacts could result if access to the bus stop is not maintained. Proposed mitigation measures described in Section 6.4 have been developed to reduce potential impacts to a less than significant level.

- APN 5151018017 (444 S. Flower Street; Figure 5-2 #2) – This parcel contains the Citigroup Center, which includes the Citigroup Building and retail shops and restaurants. Construction of the Underground Emphasis LRT Alternative is expected to utilize a portion of the plaza at the northeast corner of the 5th Street/ Flower Street intersection for construction staging. Several mature palm trees are located in the plaza. It is not expected that the palm trees would be removed during construction. Palm trees are not considered heritage trees and are not protected species in the City of Los Angeles. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed. No significant adverse impacts associated with this easement are expected.

- APN 5149001903 (Parcel bounded by 1st Street, 2nd Street, Hill Street, and Broadway; Figure 5-3 #7) – This parcel contains an empty lot located at the parcel bounded by 1st Street, 2nd Street, Hill Street, and Broadway. It is a federally owned parcel that is anticipated to house a future federal courthouse. Construction of the Underground Emphasis LRT Alternative is expected to use a portion of the site for construction staging for the proposed 2nd Street station (Broadway Option). The area that would be utilized for construction staging is uneven and would require grading. The easement would be temporary and the site would be returned to pre-construction conditions, with the exception of grading. A portion of the site will be taken for placement of

ancillary structures associated with the Underground Emphasis LRT Alternative. No significant adverse impacts associated with this easement are expected.

- APN 5149001902 (Parcel bounded by 1st Street, 2nd Street, Spring Street, and Main Street; Figure 5-3 #11) – This parcel contains the new Los Angeles Police Department Headquarters building. Construction of the Underground Emphasis LRT Alternative is expected to utilize a portion of the site, a plaza, for construction staging for the proposed 2nd Street station (Los Angeles Street Option). Access for police vehicles would be maintained. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed. No significant adverse impacts associated with this easement are expected.

- APN 5161015901 (100 S. Main Street; Figure 5-3 #15) – This parcel currently contains the California Department of Transportation (Caltrans) District 7 Headquarters building. Construction and operation of the Underground Emphasis LRT Alternative is expected to use part of the parcel for construction staging for the proposed 2nd Street station (Los Angeles Street Option). The portion of the parcel potentially impacted is landscaped and all of the existing trees would be removed. However, as a potential station entrance, additional landscaping may be incorporated into the station design. No part of the Caltrans building would be taken for the Underground Emphasis LRT Alternative. Therefore, no significant adverse impacts associated with this easement are expected.

- APN 5161024014 (Parcel at the southeast corner of the Los Angeles Street/2nd Street intersection; Figure 5-3 #20) – This parcel is currently used as a parking lot. Construction of the Underground Emphasis LRT Alternative is expected to use a portion of the parcel for construction staging for the potential 2nd Street station (Los Angeles Street Option). (A portion of this parcel will also be taken for the entrance to this station.) Therefore, a portion of the current 296 parking spaces on the site would be temporarily displaced. There are several additional surface parking lots and parking garages located within close proximity of this parcel. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed, including restoration of the parking spaces (except for those permanently removed due to the partial take). No significant or adverse impacts associated with this easement are expected.

- APN 5161024018 (Parcel at the southeast corner of the Los Angeles Street/2nd Street intersection; Figure 5-3 #21) – This parcel is currently used as a parking lot. Construction of the Underground Emphasis LRT Alternative is expected to use the entire parcel for construction staging for the potential 2nd Street station (Los Angeles Street Option). As such, the 153 parking spaces currently on the site would be temporarily displaced. There are several additional surface parking lots and parking

garages located within close proximity of this parcel. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed, including restoration of parking spaces. No significant or adverse impacts associated with this easement are expected.

- APN 5173011900 (Parcel at the northeast corner at the 1st Street/Alameda Street intersection; Figure 5-4 #29) – This parcel is currently vacant, but is anticipated to become the Nikkei Center, a mixed-use development (commercial and multi-family housing). Construction of the Underground Emphasis LRT Alternative would use a portion of the site for construction staging for the portal section. (A portion of this parcel would also be taken for construction of the potential pedestrian bridge footing.) None of the multi-family housing proposed on site would be displaced during construction. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed (except for the portion taken for the proposed pedestrian bridge footing). No significant adverse impacts associated with this easement are expected.

Permanent Underground Easements

- APN 5151004911/5151004912/5151004913 (Parcel bounded by 2nd Street, Hope Street, Grand Avenue, and General Kosciuszko Way; Figure 5-2 #6) – This parcel is currently used as a parking lot. The alignment of the Underground Emphasis LRT Alternative would traverse beneath this lot as it transitions from Flower Street to 2nd Street, past the Bunker Hill Station. No surface impacts, and therefore no loss of parking, are expected. Standard shoring practices would be used to avoid subsidence. No adverse impacts associated with this permanent underground easement are expected.

- APNs 5149006010-028, 031-054, 056-059, 061-095, 097, 099-108, 110, 112-149, 151 (108 W. 2nd Street, various units; Figure 5-3 #14) – This parcel is currently occupied by the Higgins Building. The Higgins Building contains residential uses and commercial uses, including restaurants and offices. The basement of the Higgins Building, which is used as a bar, extends into the ROW. The alignment of the Underground Emphasis LRT Alternative would traverse beneath this portion of the basement. No impacts to the basement or the condominiums are anticipated. Standard shoring practices would be used to avoid subsidence. No adverse impacts associated with this permanent underground easement are expected.

- APNs 5161026023 and 5161026024 (200 S. Main Street and 114 E. 2nd Street; Figure 5-3 #s 16 and 17) – This parcel is currently occupied by St. Vibiana's Church and accessory buildings. The 2nd Street/Los Angeles Optional Station of the Underground Emphasis LRT Alternative would have its footprint beneath part of these parcels. No impacts to the church or its associated structures are anticipated. However, as the church is a historic resource, appropriate standard shoring practices would be used to

avoid subsidence and damage to the structure during construction and operation. With mitigation no adverse impacts associated with this permanent underground easement are expected.

5.4.1.2 Partial Takes

There are ten parcels that would be partially taken for construction of the Underground Emphasis LRT Alternative (Figures 5-2 through 5-4). These parcels are:

- APN 5151014032 (703 W. 3rd Street; Figure 5-2 #3) – This parcel contains the Central Plant, a heating and ventilation plant for several buildings in the Bunker Hill area. The parcel is located within the Bunker Hill Redevelopment Area designated by the City of Los Angeles Community Redevelopment Agency (CRA) (Parcel H, Central Plant). Construction of the Underground Emphasis LRT Alternative is expected to result in a partial take of the site for construction staging and for the proposed station. The partial take area is currently used for parking and is the primary access point to the Central Plant. During construction, this access point would remain available and replacement parking would be required. Potential adverse impacts would result if no replacement parking was provided or if access was restricted or eliminated to the Central Plant.

- APN 5151014033 (Parcel bounded by 3rd Street, Hope Street, Flower Street, and General Kosciuszko Way; Figure 5-2 #4) – This 1.2-acre parcel is currently vacant, but is landscaped. The parcel is located within the Bunker Hill Redevelopment Area designated by the CRA (Parcel H, Central Plant). The parcel is expected to be partially acquired for construction staging and to construct the 2nd/Hope Street station of the Underground Emphasis LRT Alternative. The partial take of this parcel would not displace housing, people, or jobs. No significant adverse impacts associated with this displacement are expected.

- APN 5151027256 (Parcel bounded by Figueroa Street, 3rd Street, Flower Street, and 2nd Street; Figure 5-1 #5) – This parcel contains a pool, tennis courts, and landscape associated with multi-family housing on the parcel with APN 5151016013. Construction of the Underground Emphasis LRT Alternative is expected to take a portion of the site along Flower Street for placing a station entrance and underground passageway beneath Flower Street. One or both of the privately owned tennis courts may be removed. An at-grade midblock crosswalk across Flower Street would be an alternative means of creating the same pedestrian connection. No significant adverse impacts associated with this displacement are expected.

- APN 5149001903 (Parcel bounded by 1st Street, 2nd Street, Hill Street, and Broadway; Figure 5-3 #7) – This parcel contains an empty lot bounded by 1st Street, 2nd Street, Hill Street, and Broadway. It is a federally owned parcel that is anticipated to house a

future federal courthouse. Construction and operation of the Underground Emphasis LRT Alternative is expected to take a portion of the site for ancillary structures associated with the proposed 2nd Street station (Broadway Option). No structures would be displaced due to this partial take, and therefore no significant adverse impacts associated with this partial take are expected.

- APN 5161015901 (100 S. Main Street; Figure 5-3 #15) – This parcel currently contains the Caltrans District 7 Headquarters building. Construction and operation of the Underground Emphasis LRT Alternative is expected to take part of the parcel and use it as an entrance to the potential 2nd Street station (Los Angeles Street Option). The portion of the parcel potentially impacted contains some landscaping, and all of the existing trees would be removed. However, as a potential station entrance, additional landscaping may be incorporated into the station design. No part of the Caltrans building would be taken for the Underground Emphasis LRT Alternative. Therefore, no significant adverse impacts associated with displacements or relocations from this partial take are expected.

- APNs 5161026033 and 5161026901 (203 S. Los Angeles Street; Figure 5-3 #s18 and 19) – These parcels are currently occupied by the City of Los Angeles Public Library Little Tokyo Branch. The Underground Emphasis LRT Alternative would use portions of these parcels as a plaza and entrance to the potential underground 2nd Street station (Los Angeles Street Option). These parcels contain a public resource. It is anticipated that during operations, the plaza would be a shared resource, serving as the main entrance to the library and the underground station. During construction, potential adverse impacts may occur if access to the Little Tokyo Library Branch were removed or restricted.

- APN 5161024014 (Parcel at the southeast corner of the Los Angeles Street/2nd Street intersection; Figure 5-3 #20) – This parcel is currently used as a parking lot. Construction and operation of the Underground Emphasis LRT Alternative is expected to take part of the parcel and utilize it as an entrance to the proposed underground 2nd Street station (Los Angeles Street Option). Approximately nine parking spaces would be permanently lost, including three spaces for persons with disabilities. Privately operated parking lots are typically considered transitional land uses that could be developed by the owners for higher and better uses. There are several other privately operated parking lots and structures in the vicinity of the area. This potential impact to parking would also be partially offset by the increased public transit access provided by the proposed project. Therefore, no significant or adverse impacts associated with this partial take are expected.

- APN 5161018020 (437 E. 2nd Street; Figure 5-4 # 24) – This parcel is currently occupied by several commercial buildings containing restaurants and retail uses. The largest

portion of this parcel is occupied by an Office Depot. There are five smaller commercial businesses occupying the site, including three fast food chain outlets and two local restaurants. Construction and operation of the Underground Emphasis LRT Alternative would displace two businesses (85 jobs) on this parcel for the train portal. Each business displaced as a result of the project would be given advance written notice and would be informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs would be potentially displaced but would be retained with the relocation. Therefore, there would be no net loss of jobs overall and no significant adverse impacts related to job loss.

- APN 5173011900 (Parcel at the northeast corner at the 1st Street/Alameda Street intersection; Figure 5-4 #29) – This parcel is anticipated to become the Nikkei Center, a mixed-use development (commercial and multi-family housing). Construction and operation of the Underground Emphasis LRT Alternative is expected to take part of the parcel for a footing of a potential pedestrian bridge spanning the intersection of 1st and Alameda Streets. The part of the parcel that would be taken is not expected to reduce the amount of housing or commercial space that could be developed on site. Therefore, no significant adverse impacts associated with this partial take are expected.

5.4.1.3 Full Takes

There are 11 parcels which would be fully taken to construct the Underground Emphasis LRT Alternative (Figures 5-2 through 5-4). Relocation assistance and compensation would be provided by FTA and Metro as required by the federal Uniform Act and the California Act. These laws for relocation assistance and compensation for property acquisitions are described in Sections 3.1.1 and 3.1.2.

Where acquisition and relocation are unavoidable, FTA and Metro would follow the provisions of both acts. All real property acquired by Metro would be appraised to determine its fair market value. Just compensation, which would not be less than the approved appraisal, would be made to each property owner. Each business displaced as a result of the project would be given advance written notice and informed of their eligibility requirements for relocation assistance and payments.

While the potential loss of parking spaces would be partially offset by the increased public transit access provided by the proposed project, Little Tokyo businesses and residents have expressed concerns about the potential loss of parking.

The parcels potentially affected by displacement are:

- APNs 5149008031, 5149008030, and 5149008032 (200, 208, and 201 South Spring Street, respectively; Figure 5-3 #s 8, 9, and 10, respectively) – These parcel are currently used as a privately operated parking lot with approximately 142 parking spaces (this is an estimate because about half of the spaces are unmarked). Construction and operation of the Underground Emphasis LRT Alternative is expected to take all of the parcels and utilize them to stage materials and to serve as the entrance plaza for the proposed 2nd Street station (Broadway Option). Privately operated parking lots are typically considered transitional land uses that could be developed by the owners for higher and better uses. There are several other privately operated parking lots and structures in the vicinity of the area. Although loss of the current parking lot may cause an inconvenience for users, it would not represent a significant or adverse impact. This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. No significant or adverse impacts associated with this displacement are expected.

- APN 5149007006 (206 S. Spring Street; Figure 5-3 #12) – This parcel is occupied by a commercial building that includes five businesses. The businesses located in this parcel include two restaurants, a cigar shop, a credit union, and the City Employees Club. The entire parcel would be taken and utilized for staging materials and equipment for the Underground Emphasis LRT Alternative (for the entire alignment, not just the adjacent station options). Optional station entrance locations are also located on this site, though not all of the optional station entrances would be constructed. Displacement of these five businesses would displace approximately 40 employees. Each business displaced as a result of the project would be given advance written notice and would be informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs that would be potentially displaced would be retained with the relocation. Therefore, there would be no net loss of jobs overall. This would result in no significant adverse impacts related to job loss.

- APN 5149007005 (212 S. Spring Street; Figure 5-3 #13) – This parcel is currently occupied by a vacant commercial building. The Underground Emphasis LRT Alternative would take the entire parcel and use it for staging materials and equipment for construction of the entire alignment, not just the adjacent station options. Optional station entrance locations are also located on this site, though not all of the optional station entrances would be constructed. No significant adverse impacts related to job loss would occur because the parcel is occupied only by a vacant building. However, should businesses exist when the project starts, each business displaced as a result of the project would be given advance written notice and would be informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs potentially displaced would

be retained with relocation. Therefore, there would be no net loss of jobs overall. This would result in no significant adverse impacts related to job loss.

- APNs 5161018010, 5161018009, and 5161018008 (portion) (402 E. 1st Street; Figure 5-4 #25, 26, and 27, respectively) – These parcels are currently used as a privately operated parking lot. All of these parcels are expected to be taken in order to stage materials during construction and serve as a train egress/ingress portal for the Underground Emphasis LRT Alternative. These parcels have approximately 30 parking spaces (this is an estimate because some of the spaces are unmarked). Typically, privately operated parking lots are considered transitional land uses that could be developed by the owners for higher and better uses. There are several other privately operated parking lots and structures in the vicinity. Although loss of the current parking lot may cause an inconvenience for users, it would not normally represent a significant adverse impact. Potential impacts to parking would be partially offset by the increased public transit access provided by the proposed project. Little Tokyo residents and business owners have indicated that parking spaces are important community resources and that the loss of this parking could negatively impact the adjacent small businesses and the Japanese American National Museum located across the street. The community is concerned that this could, in turn, affect the economic stability and ultimately the character of the community. Therefore, Metro would conduct a parking capacity study of the Little Tokyo area to determine if there is sufficient parking availability without these parcels or identify the amount of replacement parking that would be needed.

- APNs 5161018008 (portion) and 5161018001 (105 S. Alameda Street and 416 E. 1st Street; Figure 5-4 #s 27 and 28) – These parcels are currently occupied by a commercial building and associated patio (part of 5161018008). The current business is a Señor Fish Restaurant. The entire parcel is expected to be taken to serve as the train egress/ingress portal during operation of the Underground Emphasis LRT Alternative. Displacement of this property would result in the loss of approximately six jobs and in the loss of a possible historical structure. The Cultural Resources Technical Memorandum discusses in detail the potential impacts of the loss of this structure. Each business displaced as a result of the project would be given advance written notice and would be informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs would be retained with the relocation. Therefore, there would be no net loss of jobs overall. This would result in no significant adverse impacts related to job loss.

- APNs 5161018007 and 5161018011 (437 E. 2nd Street; Figure 5-4 #s22 and 23) – These parcels are currently used as parking lots. Construction and operation of the Underground Emphasis LRT Alternative would displace 109 parking spaces on these parcels by the train egress/ingress portal. The parking lot is associated with

businesses in the adjacent parcels and normally would not be considered separately from its complementary use. However, this parking lot is also used in the evenings for public, paid parking after the Office Depot has closed for the day. This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. Little Tokyo residents and business owners have indicated that parking spaces are important community resources and that losing this parking could negatively impact the adjacent small businesses and the Japanese American National Museum, located across the street. The community is concerned that this could, in turn, affect the economic stability and ultimately the character of the community. Therefore, Metro would conduct a parking capacity study of the Little Tokyo area to determine if there is sufficient parking availability without these parcels or if replacement parking would be needed and to what extent.

5.4.1.4 On-Street Parking

To construct and operate the Underground Emphasis LRT Alternative, approximately 26 on-street parking spaces and three on-street loading spaces would be permanently eliminated. This includes removing 13 on-street parking spaces and three loading spaces on Alameda Street in Little Tokyo. The loss of on-street parking would result from constructing the underpass at the 1st Street/Alameda Street intersection. This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. Little Tokyo residents and business owners have indicated that parking spaces are important community resources and that losing this parking could negatively impact the adjacent small businesses and the Japanese American National Museum, located along Alameda Street. The community is concerned that this could, in turn, affect the economic stability and ultimately the character of the community. Therefore, Metro would conduct a parking capacity study of the Little Tokyo area to determine if there is sufficient parking availability without these parking spaces or if replacement parking would be needed and to what extent.

5.4.2 Indirect Impacts

There would be no potential indirect impacts from the Underground Emphasis LRT Alternative.

5.4.3 Cumulative Impacts

There are approximately 12 new construction projects anticipated by 2014 and an additional 54 new construction projects between 2014 and 2018. Also, there are 12 major renovation projects anticipated by 2014 and eight between 2014 and 2018. A project may have cumulatively considerable impacts associated with displacement, even when mitigated, if it would contribute cumulatively to displacement of the same land uses or important resources.

The Underground Emphasis LRT Alternative would take several parcels, displacing the existing businesses and parking lots, and resulting in a loss of commercial space and parking in the downtown area. However, not all of the parcels acquired would be needed for operation of the project. After construction of the Regional Connector, additional remaining land near Bunker Hill and in Little Tokyo could be available for commercial use, offsetting any decrease in commercial space.

Most of the related projects anticipated by 2018 would not displace existing commercial businesses. Instead, they would displace existing parking lots or underutilized parcels. Therefore, minimal loss of the commercial building stock in the project area is expected.

It is anticipated that where these related projects remove commercial businesses, the business or job loss would be offset by the continued commercial growth within the downtown area. No cumulative adverse impact associated with displacement of commercial businesses is expected.

By the year 2018, the majority of related projects would displace several current parking lots. These new developments, mostly residential, would provide the required parking for their tenants, but the stock of public-accessible parking would be reduced.

The Underground Emphasis LRT Alternative could permanently displace between 148 and 281 parking spaces—139 of them in Little Tokyo, where the community has expressed concern over the potential loss of parking. The displaced parking spaces may be replaced in an existing lot.

Surface parking lots in downtown Los Angeles are an important community resource because many of the older, historical businesses and civic buildings do not have the amount of on-site, off-street parking required under the current planning code, which results in an overall parking deficit. The loss of publicly accessible surface parking in Little Tokyo and other downtown Los Angeles areas due to the proposed project would represent a cumulative loss. Transit projects themselves typically serve as mitigation for the loss of parking because they reduce dependence on vehicles on the road, thereby reducing the demand for parking. The Regional Connector would provide new non-auto access to downtown, including Little Tokyo. Therefore, the proposed project would partially offset potential adverse impacts due to loss of parking. Remaining cumulative impacts due to parking loss would not be significant.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would follow the same alignment and be constructed in the same manner as the Underground Emphasis LRT Alternative from the 7th Street/Metro Center Station to 2nd Street and Central Avenue. In this portion of the alignment, there would be three proposed underground stations; at Flower/5th/6th Streets, at 2nd/Hope Streets, and at 2nd Street and Broadway. A fourth

underground station within the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets would be constructed. The alignment would emerge to at-grade connections with the existing Gold Line tracks via two portals: north of Temple and Alameda Streets for the north-south line and on 1st Street east of Alameda Street for the east-west line.

Metro has identified the entire block for acquisition under the Fully Underground LRT Alternative - Little Tokyo Variation 1 in order to accommodate the new underground station. This acquisition is needed to stage construction and build a new underground station, station entrances, and ancillary facilities. Metro may also use the site to launch tunnel boring machines and transport material from the tunnels. Alternately, this may also be done near the proposed 2nd/Hope Street station site. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not be directly impacted by construction activities. Metro would, to the extent possible, promote and encourage businesses so that they remain open during construction, but Weilands Brewery, Café Cuba, Señor Fish, and Office Depot would need to be removed. Acquisition of the entire block would represent a worst-case scenario. Potential reductions in the total acquisition may occur based on further engineering analysis during the preliminary engineering and final design stages.

5.5.1 Direct Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would potentially require partial takes of ten parcels and full takes of 16 parcels. In addition, temporary construction easements required would affect five parcels and permanent underground easements would affect six parcels. Some station plans have multiple entrance options, though not all of them would be constructed. In these cases, all potential takings and easements for station entrances would be evaluated. These properties would be utilized for TPSS site locations, construction staging, below-grade tunneling, and station locations. The Fully Underground LRT Alternative – Little Tokyo Variation 1 has a similar alignment as, and shares most of the potential stations with, the Underground Emphasis LRT Alternative.. Only three parcels that would be fully or partially acquired as part of the Underground Emphasis LRT Alternative would not be impacted by any type of displacement as part of the Fully Underground LRT Alternative – Little Tokyo Variation 1. These parcels are:

- Parcel #5149001902 (Figure 5-3 #10)
- Parcel #5161024014 (Figure 5-3 #20)
- Parcel #5161024018 (Figure 5-3 #21)

The Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Underground Emphasis LRT Alternative share similar displacement impacts. The following discussion focuses only on the area east of 2nd Street and Central Avenue where the two alternatives

follow different alignments. Table 5-3 identifies parcels in the eastern end of the project area that could be impacted by displacement under the Fully Underground LRT Alternative – Little Tokyo Variation 1 that would not be impacted by the Underground Emphasis LRT Alternative. Table 5-3 also references the parcel's location as shown in Figure 5-5.

In addition, additional engineering analysis may result in full take of three more parcels in the block bounded by Central Avenue, 1st Street, 2nd Street, and Alameda Street, one of which is already characterized as a partial take.

Table 5-3. Additional Parcels Potentially Affected by Displacement –Fully Underground LRT Alternative – Little Tokyo Variation 1

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
5.5	30	5173011901	Parcel bounded by Alameda Street, 1st Street, Temple Street, and Parcel 5173011900	Full Take	Metro Gold Line Alignment/ Station	Road Widening
5.5	31	5173012900	Parcel bounded by 1st Street, Temple Street, and Parcels 5173011900 and 5173012031	TCE & Partial Take	Empty Lot	Construction Staging, Station Entrance, and Road Widening
5.5	32	5173012901	Parcel bounded by 1st Street and Parcel 5173012900	Full Take	Parking lot	Road Widening
5.5	33	5173008908	432 E. Temple Street	Permanent Underground Easement	Warehouse and grounds	Alignment
5.5	34	5173008901	432 E. Temple Street	Permanent Underground Easement	Warehouse and grounds	Alignment
5.5	35	5173007901	433 E. Temple Street	Partial Take	LA Dept of Water and Power (DWP) Station	Portal

Table 5-3. Additional Parcels Potentially Affected by Displacement –Fully Underground LRT Alternative – Little Tokyo Variation 1						
Fig.	**#**	**APN**	**Address**	**Type of Displacement**	**Current Use**	**Intended Use**
5.5	36	5173006900	433 E. Temple Street	Partial Take	DWP Station	Portal/Aerial Structure
5.5	37	5173001901	Parcel at Southeast corner of Alameda Street/ Commercial Street intersection	Partial Take	Vacant	Portal/Aerial Structure
5.5	38	5163018002	402 E. 1st Street	Potential Full Take	Parking Lot	Station Entrance
5.5	39	5163018021	Parcel at Southwest corner of Alameda Street/ Commercial Street intersection	Potential Full Take	Parking Lot/ Restaurant	Station Entrance

Source: TAHA 2010.

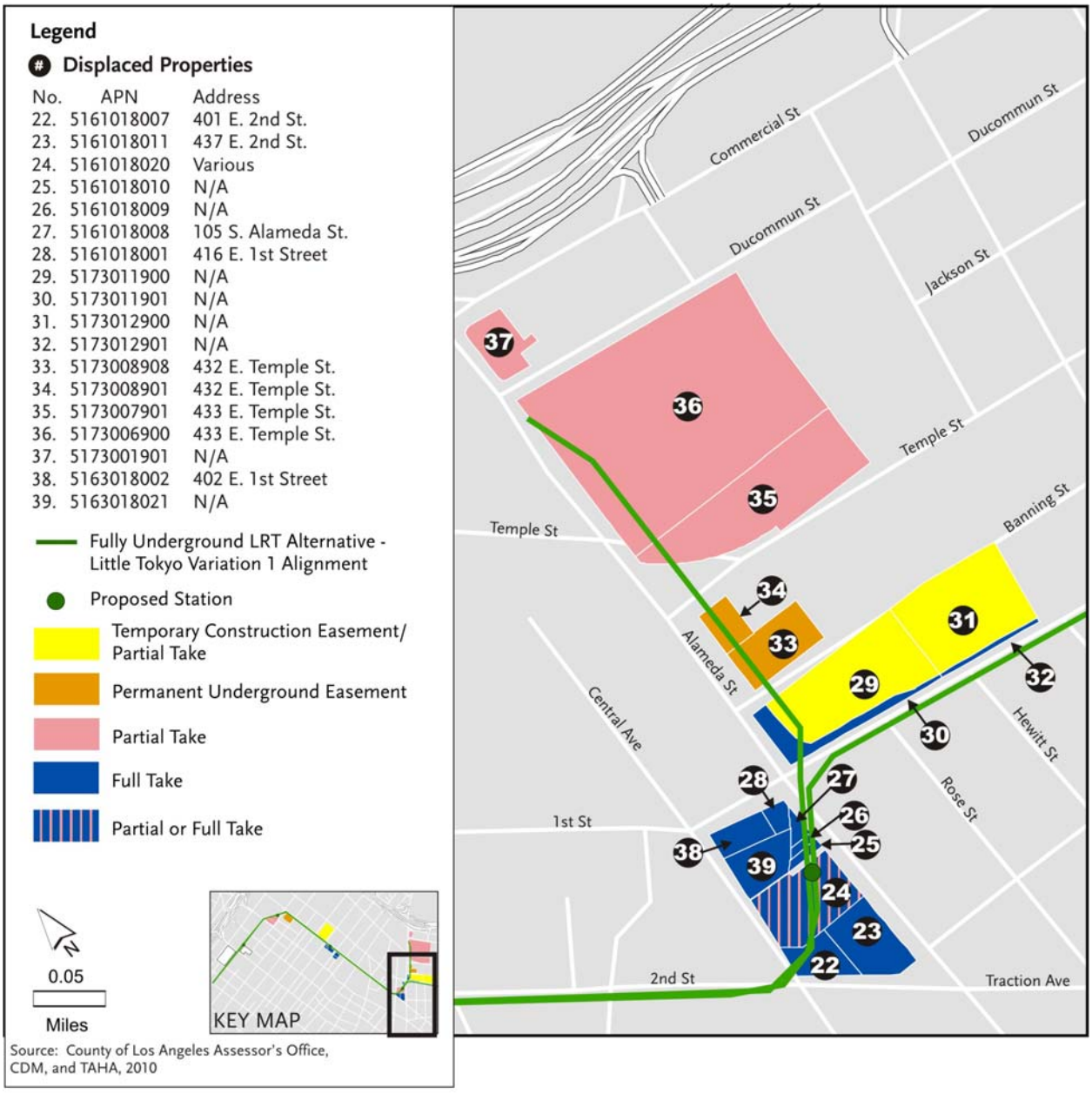

Figure 5-5. Fully Underground LRT Alternative – Little Tokyo Variation 1 - Potential Displacement in Little Tokyo

5.5.1.1 Easements

Temporary Construction Easements

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require temporary construction easements that would affect five parcels, four of which are the same parcels that would be affected by the Underground Emphasis LRT Alternative:

- Parcel # 5151023400 (Figure 5-2 #1)
- Parcel #5151018017 (Figure 5-2 #2)
- Parcel #5149001903 (Figure 5-3 #7)
- Parcel #5173011900 (Figures 5-4/5-5 #29)

For the impact analysis of these four parcels, refer to section 5.4.1.1. The following additional parcel would be impacted by the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- APN 5173012900 (Parcel bounded by 1st Street, Temple Street, and Parcels 5173011900 and 5173012031; Figure 5-5 #31) – This parcel is currently vacant, but is anticipated to become the Nikkei Center, a mixed-use development (commercial and multi-family housing). Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would use a portion of the site for construction staging. No part of the mixed-use development that is proposed would be displaced during construction. The easement would be temporary, and the site would be returned to pre-construction conditions once construction is completed (except for the portion taken for road widening and a potential station entrance). No significant adverse impacts associated with this easement are expected.

Permanent Underground Easements

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require permanent underground easements affecting six parcels, four of which would also be affected by the Underground Emphasis LRT Alternative:

- Parcel # 5151004911/5151004912/5151004913 (Figure 5-2 #6)
- Parcels #5149006010-5149006151/5161026023/5161026024 (Figure 5-3 #s14, 16, 17)

For the impact analysis of these parcels, refer to section 5.4.1.1. The following additional parcel would be impacted by Fully Underground LRT Alternative – Little Tokyo Variation 1:

- APNs 5173008908 and 5173008901 (432 E. Temple Street; Figure 5-5 #s 33 and 34) – These parcels are currently occupied by a warehouse and its associated parking lot.

The alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would traverse beneath these lots as it travels parallel to the existing Metro Gold Line at-grade alignment to join the north/southbound tracks. No surface impacts are expected and, therefore, no loss of parking or the warehouse would occur. Standard shoring practices would be used to avoid subsidence. No adverse impacts associated with this permanent underground easement are expected

5.5.1.2 Partial Takes

There are ten parcels that would be partially taken for construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 (Figures 5-2 through 5-5). Six of these parcels would also be partially taken under the Underground Emphasis LRT Alternative:

- Parcel #5151014032 (Figure 5-2 #3)
- Parcel #5151014033 (Figure 5-2 #4)
- Parcel #5151027256 (Figure 5-2 #5)
- Parcel #5149001903 (Figure 5-3 #7)
- Parcel #5161018020 (Figures 5-4/5-5 #24)
- Parcel #5173011900 (Figures 5-4/5-5 #29)

For the impact analysis of these parcels, refer to section 5.4.1.2. The following additional parcels would be impacted by the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- APN 5173012900 (Parcel bounded by 1st Street, Temple Street, and Parcels 5173011900 and 5173012031; Figure 5-5 #31) – This parcel is currently vacant, but is anticipated to become the Nikkei Center, a mixed-use development (commercial and multi-family housing). Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would take a portion of the site for road widening to accommodate realignment of 1st Street. The partial taking of this parcel could result in a change in design of the proposed development. As the parking would be removed regardless of the project, no significant adverse impacts associated with this partial take are expected.
- APNs 5173007901 and 5173006900 (433 E. Temple Street; Figure 5-5 #35 and 36) – This parcel contains the Central District Headquarters for the City of Los Angeles Department of Water and Power (LADWP). A portion of the parcel would be taken to accommodate a portal that would allow the transition from the underground alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 1 to join

the existing at-grade alignment of the Metro Gold Line. This partial take could remove some parking spaces and building structures on a portion of the lot. The LADWP would be given advance written notice and would be informed of its eligibility for relocation assistance and payments. In addition, the LADWP would be consulted during the design phase to ensure its operational needs are met during construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1. After mitigation, no significant adverse impacts associated with this partial take are expected.

- APN 5173001901 (Parcel on southeast corner of Alameda Street/Commercial Street intersection; Figure 5-5 #37) – This parcel contains a vacant lot. A portion of the parcel would be taken to accommodate a portal and associated structures that would allow the Fully Underground LRT Alternative – Little Tokyo Variation 1 underground alignment to join the existing at-grade Metro Gold Line. No significant adverse impacts associated with this partial take are expected because the lot is vacant.

5.5.1.3 Full Takes

There are 13 parcels that would be fully taken for construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 (Figures 5-2 through 5-5). Ten of these parcels would also be fully taken under the Underground Emphasis LRT Alternative:

- Parcel #5149008031 (Figure 5-3 #8)
- Parcel #5149008030 (Figure 5-3 #9)
- Parcel #5149008032 (Figure 5-3 #10)
- Parcel #5149007006 (Figure 5-3 #12)
- Parcel #5149007005 (Figure 5-3 #13)
- Parcel #5161018007 (Figures 5-4/5-5 #22)
- Parcel #5161018011 (Figures 5-4/5-5 #23)
- Parcel #5161018010 (Figures 5-4/5-5 #25)
- Parcel #5161018009 (Figures 5-4/5-5 #26)
- Parcel #5161018008 (Figures 5-4/5-5 #27)
- Parcel #5161018001 (Figures 5-4/5-5 #28)

For the impact analysis of these parcels, refer to section 5.4.1.3. The following additional parcels would be impacted by the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- APN 5173011901 (Parcel bounded by Alameda Street, 1st Street, Temple Street, and Parcel 5173011900; Figure 5-5 #30) – This parcel contains the existing Metro Gold Line alignment and Little Tokyo/Arts District Station. A portion of the parcel would be taken to widen 1st Street to accommodate the portals on 1st Street and allow the underground Fully Underground LRT Alternative – Little Tokyo Variation 1 to join the existing at-grade Metro Gold Line alignment. No significant adverse impacts associated with this full take are expected because the parcel is already owned by Metro.

- APN 5173012901 (Parcel bounded by 1st Street and Parcel 5173012900; Figure 5-5 #32) – This parcel contains a sidewalk and a portion of the parking lot associated with the proposed Nikkei development. The parcel would be taken in full to widen 1st Street to accommodate the portals on 1st Street and allow the Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment to join the existing at-grade Metro Gold Line alignment. No significant adverse impacts associated with this full take are expected because the parcel for the most part contains a sidewalk, and the Nikkei development would remove all existing parking.

- APN 5161018002 (402 E. 1st Street; Figure 5-5 #38) – This parcel is currently occupied by a privately owned, pay-to-park lot used primarily by customers of the restaurants in the vicinity of the lot and patrons of the Japanese American National Museum (JANM). If engineering analysis indicates that a full take is required on this parcel, construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would displace all parking spaces (approximately 70; however, this is an estimate because not all spaces are marked) for construction of an underground station and construction staging. Privately operated parking lots are typically considered transitional land uses that could be developed by the owners for higher and better uses. There are several other privately operated parking lots and structures in the vicinity. Although loss of the current parking lot may cause an inconvenience for users, it would not normally represent a significant adverse impact. This potential impact to parking would be partially offset by the increased public transit access provided by the proposed project. Little Tokyo residents and business owners have indicated that parking spaces are important community resources and that the loss of this parking could negatively impact the adjacent small businesses and the JANM located across the street. The community is concerned that this could, in turn, affect economic stability and ultimately the character of the community. Therefore, Metro would conduct a parking capacity study of the Little Tokyo area to determine if there is sufficient parking availability without these parcels or identify if replacement parking is

needed and to what extent. Adverse impacts to parking associated with this displacement would not occur.

- APN 5161018020 (437 E. 2nd Street; Figure 5-5 # 24) –If a full take of this parcel is required, Metro shall allow the existing businesses to remain operational, with the exception of the Office Depot and potentially Starbucks Coffee. The Office Depot would be given advance written notice and informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs that would be potentially displaced would be retained with the relocation. Therefore, there would be no net loss of jobs overall and no adverse impacts related to job loss. Additionally, displaced parking would be replaced by restriping Central Avenue with diagonal parking to accommodate more vehicles and by using the Nikkei parcel for parking.

- APN 5161018021 (Figure 5-5 # 39) – This parcel is currently occupied partly by a commercial building containing two restaurants and partly by a privately operated parking lot that is also part of APN 5161018002. If engineering analysis indicates that a full take is required, construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would displace the two restaurants (25 jobs) on this parcel to construct an underground station and for construction staging. Each business displaced as a result of the project would be given advance written notice and informed of its eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs potentially displaced would be retained with the relocation. Therefore, there would be no net loss of jobs overall and no adverse impact related to job loss. Although the commercial building on this parcel is an older structure, it is not considered to be historically significant.

5.5.2 Indirect Impacts

There are no potential indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.3 Cumulative Impacts

Cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those under the Underground Emphasis LRT Alternative. Approximately the same amount of job loss and parking space loss is expected. The same mitigation measures would apply to the Fully Underground LRT Alternative – Little Tokyo Variation 1 as the Underground Emphasis LRT Alternative.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would follow the same alignment and be constructed in the same manner as the Underground Emphasis LRT

Alternative from the 7th Street/Metro Center Station to 2nd Street and Central Avenue. In this portion of the alignment, there would be three proposed underground stations; at Flower/5th/6th Streets, at 2nd/Hope Streets, and at 2nd Street and Broadway. A fourth underground stacked station in the block bounded by Central Avenue and 1st, 2nd, and Alameda Streets would be constructed. The alignment would emerge to at-grade connections with the existing Gold Line tracks via three portals: north of Temple and Alameda Streets for the north-south line and staggered portals on 1st Street east of Alameda Street for the east-west line.

Metro has identified the entire block for acquisition under the Fully Underground LRT Alternative - Little Tokyo Variation 2. This acquisition is needed to stage construction and build a new underground station, station entrances, and ancillary facilities. Metro may also use the site to launch tunnel boring machines and transport material from the tunnels. Alternately, this may also be done near the proposed 2nd/Hope Street station site. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not be directly impacted by construction activities. Metro would, to the extent possible, promote and encourage businesses so that they remain open during construction, but Weilands Brewery, Café Cuba, Señor Fish, and Office Depot would need to be removed. This would represent a worst-case scenario. Potential reductions in the total acquisition may occur based on further engineering analysis during the preliminary engineering and final design stages.

5.6.1 Direct Impacts

A total of 12 parcels would potentially be acquired in part and 16 parcels as full takes to construct the Fully Underground LRT Alternative – Little Tokyo Variation 2. In addition, temporary construction easements that would affect five parcels and permanent underground easements that would affect six parcels would be required for this alternative.

Some station plans have multiple entrance options, though not all of them would be constructed. In these cases, all potential takings and easements for station entrances were evaluated. These properties would be utilized for TPSS site locations, construction staging, below-grade tunneling, and station locations. The Fully Underground LRT Alternative – Little Tokyo Variation 2 has a similar alignment as the Underground Emphasis LRT Alternative and Fully Underground LRT Alternative – Little Tokyo Variation 1, and shares most of the proposed stations with these two alternatives as well. The only parcels that would be fully or partially acquired as part of the Underground Emphasis LRT Alternative that would not be acquired as part of the Fully Underground LRT Alternative – Little Tokyo Variation 2 are:

- Parcel #5149001902 (Figure 5-3 #11)
- Parcel #5161024014 (Figure 5-3 #20)

- Parcel #5161024018 (Figure 5-3 #21)

Therefore, all three of these alternatives share similar displacement impacts. Table 5-4 identifies parcels in the project area that could be impacted by displacement by the Fully Underground LRT Alternative – Little Tokyo Variation 2 that would not be impacted by either the Underground Emphasis LRT Alternative or the Fully Underground LRT Alternative – Little Tokyo Variation 1. Table 5-4 also references the parcel's location as shown in Figure 5-6.

Additional engineering analysis may indicate that acquisition of two more parcels in the block bounded by Central Avenue, 1st Street, 2nd Street, and Alameda Street would be required.

Table 5-4. Additional Parcels Potentially Affected by Displacement –Fully Underground LRT Alternative – Little Tokyo Variation 2

Fig.	#	APN	Address	Type of Displacement	Current Use	Intended Use
5.6	40	5163003002	710 E. 1st Street	Partial Take	Vacant lot (associated with adjacent office bldg)	Road Widening
5.6	41	5163003003	712 E. 1st Street	Partial Take	Offices	Road Widening

Source: TAHA, 2010.

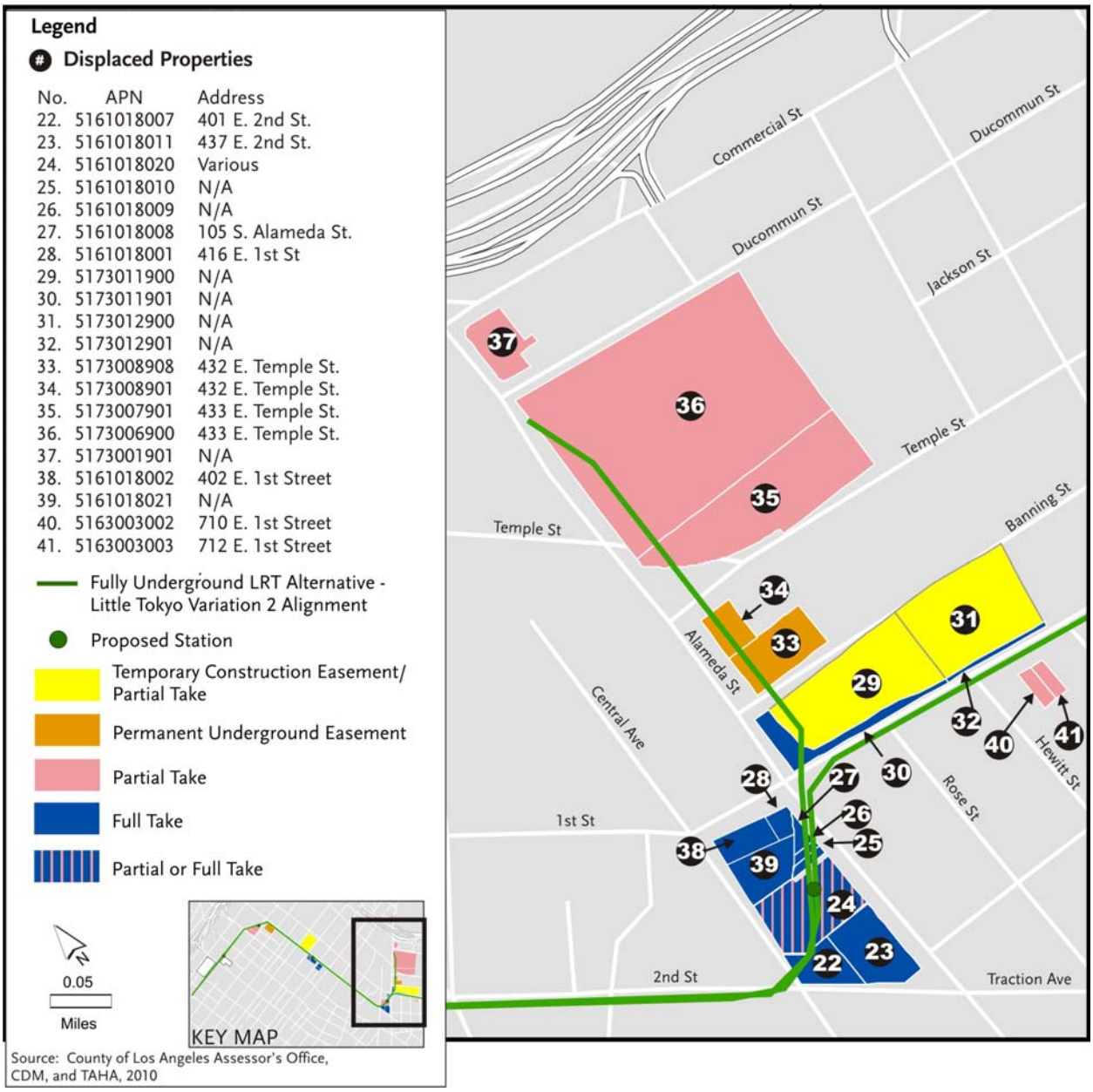

Figure 5-6. Fully Underground LRT Alternative – Little Tokyo Variation 2 - Potential Displacement in Little Tokyo

5.6.1.1 Easements

Temporary Construction Easements

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require temporary construction easements affecting five parcels, all of which would also be affected by either the Underground Emphasis LRT Alternative or the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- Parcel #5151023400 (Figure 5-2 #1)
- Parcel #5151018017 (Figure 5-2 #2)
- Parcel #5149001903 (Figure 5-3 #7)
- Parcel #5173011900 (Figures 5-4/5-5/5-6 #29)
- Parcel #5173012900 (Figures 5-5/5-6 #31)

For the impact analysis of these parcels, refer to sections 5.4.1.1 and 5.5.1.1.

Permanent Underground Easements

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require permanent underground easements affecting six parcels, all of which would also be affected by either the Underground Emphasis LRT Alternative or the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- Parcel # 5151004911/5151004912/5151004913 (Figure 5-2 #6)
- Parcels #5149006010-5149006151/5161026023/5161026024 (Figure 5-3 #s14, 16, 17)
- Parcels #5173008908 and #5173008901 (Figures 5-5/5-6 #s 33 and 34)

For the impact analysis of these parcels, refer to sections 5.4.1.1 and 5.5.1.1.

5.6.1.2 Partial Takes

There are 12 parcels that would be partially taken to construct the Fully Underground LRT Alternative – Little Tokyo Variation 2 (Figures 5-2 through 5-5). Ten of these parcels would also be partially taken under either the Underground Emphasis LRT Alternative or the Fully Underground LRT Alternative – Little Tokyo Variation 1:

- Parcel #5151014032 (Figure 5-2 #3)
- Parcel #5151014033 (Figure 5-2 #4)

- Parcel #5151027256 (Figure 5-2 #5)
- Parcel #5149001903 (Figure 5-3 #7)
- Parcel #5161018020 (Figures 5-4/5-5/5-6 #24)
- Parcel #5173011900 (Figures 5-4/5-5/5-6 #29)
- Parcel #5173012900 (Figures 5-5/5-6 #30)
- Parcels #5173007901 and #5173006900 (Figures 5-5/5-6 #s 35 and 36)
- Parcel #5173001901 (Figures 5-5/5-6 #37)

For the impact analysis of these parcels, refer to sections 5.4.1.2 and 5.5.1.2. The following additional parcels would be impacted by the Fully Underground LRT Alternative – Little Tokyo Variation 2:

- APN 5163003002 (710 E. 1st Street; Figure 5-6 #40) – This parcel is currently vacant. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would take a portion of the site for road widening to accommodate a realignment of 1st Street. This would be required to accommodate the train portals on 1st Street that would allow the Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment to join the existing at-grade portion of the Metro Gold Line alignment. No adverse impacts associated with this partial take are expected because the parcel is vacant.

- APN 5163003003 (712 E. 1st Street; Figure 5-6 #41) – This parcel is currently occupied by an office and associated parking lot. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would take a portion of the site for road widening to accommodate a realignment of 1st Street. This would be required to accommodate portals on 1st Street that would allow the Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment to join the existing at-grade portion of the Metro Gold Line alignment. A portion of the parking lot would be displaced, resulting in a loss of one to two parking spaces. The business to be relocated would be given advance written notice and informed of its eligibility for relocation assistance and payments. Provisions for replacement parking during construction and operation would be made for the business. In addition, further refinement of the alignment design would try to minimize the taking of parking for this business. With mitigation, no significant adverse impacts associated with this partial take are expected.

5.6.1.3 Full Takes

There are 13 parcels which would be fully taken to construct the Fully Underground LRT Alternative – Little Tokyo Variation 2 (Figures 5-2 through 5-5). These parcels would also be

fully taken under either the Underground Emphasis LRT Alternative or the Fully Underground LRT Alternative – Little Tokyo Variation 1, and include:

- Parcel #5149008031 (Figure 5-3 #8)
- Parcel #5149008030 (Figure 5-3 #9)
- Parcel #5149008032 (Figure 5-3 #10)
- Parcel #5149007006 (Figure 5-3 #12)
- Parcel #5149007005 (Figure 5.3 #13)
- Parcel #5161018007 (Figures 5-4/5-5/5-6 #22)
- Parcel #5161018011 (Figures 5-4/5-5/5-6 #23)
- Parcel #5161018010 (Figures 5-4/5-5/5-6 #25)
- Parcel #5161018009 (Figures 5-4/5-5/5-6 #26)
- Parcel #5161018008 (Figures 5-4/5-5/5-6 #27)
- Parcel #5161018001 (Figures 5-4/5-5/5-6 #28)
- Parcel #5173011901 (Figures 5-5/5-6 #30)
- Parcel #5173012901 (Figures 5-5/5-6 #32)
- Parcel #5161018002 (Figures 5-5/5-6 #38)
- Parcel #5161018020 (Figures 5-4/5-5/5-6 #24)
- Parcel #5161018021 (Figures 5-5/5-6 #39)

For the impact analysis of these parcels, refer to sections 5.4.1.3 and 5.5.1.3.

5.6.2 Indirect Impacts

There are no potential indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.3 Cumulative Impacts

Cumulative impacts under the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those under either the Underground Emphasis LRT Alternative or the Fully

Underground LRT Alternative – Little Tokyo Variation 1. Therefore, approximately the same amount of job loss and parking space loss is expected. The same mitigation measures would apply to the Fully Underground LRT Alternative – Little Tokyo Variation 2 as apply to the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative – Little Tokyo Variation 1.

6.0 POTENTIAL MITIGATION MEASURES

6.1 No Build Alternative

6.1.1 Direct Impacts

No direct adverse impacts associated with displacements and relocations are expected under the No Build Alternative. Therefore, no mitigation measures are required.

6.1.2 Indirect Impacts

There are no indirect impacts associated with the No Build Alternative. Therefore, no mitigation measures are required.

6.1.3 Cumulative Impacts

There are no cumulative impacts associated with the No Build Alternative. Therefore, no mitigation measures are required.

6.2 Transportation Systems Management (TSM) Alternative

6.2.1 Direct Impacts

No direct adverse impacts associated with displacements and relocations of property are expected under the TSM Alternative. Therefore, no mitigation measures are required.

Up to 24 on-street parking spaces would need to be removed to install new bus stops on 2nd Street between Hill Street and Central Avenue. This assumes that each of the six new bus stops on 2nd Street would be 90 feet in length and displace up to four curb parking spaces.

Transit projects tend to offset the impacts of decreased parking by providing alternatives to driving. In the case of the TSM Alternative, parking impacts would be considered insignificant. Replacement parking may be required in the form of off-street parking at adjacent existing locations. Potential parking replacement locations and/or strategies would be identified to mitigate parking impacts.

6.2.2 Indirect Impacts

There are no indirect impacts associated with the TSM Alternative. Therefore, no mitigation measures are required.

6.2.3 Cumulative Impacts

There are no cumulative impacts associated with the TSM Alternative; therefore, no mitigation measures are required.

6.3 At-Grade Emphasis LRT Alternative

6.3.1 Direct Impacts

Potential adverse impacts associated with displacement are expected due to construction and operation of the At-Grade Emphasis LRT Alternative. The following mitigation measures would reduce potential impacts to below the thresholds of significance. Implementation of the proposed mitigation measures would result in a conclusion of no significant adverse impacts from the proposed alternative.

- Regarding APN 5151014032, where a potential adverse impact is expected due to the partial take of parking and primary access to the Central Plant, one-for-one replacement parking would be provided at the parcel or a nearby parcel. In addition, access to the Central Plant would be maintained at all times during construction of the At-Grade Emphasis LRT Alternative.

- Regarding APN 5161012901, where a potential adverse impact is expected due to the loss of 33 publicly operated parking spaces, replacement parking would be considered at a nearby parcel to ensure public parking continues to be available.

- Access would be maintained and adequate signage indicating the location and accessibility of a bus stop would be posted where access to bus stops are restricted (such as APN 5151023400).

- Adequate bus stop relocation to a nearby alternative location based on the re-routing of bus service would be implemented where bus stops would be displaced due to street closures (such as APN 5151016013). Adequate signage and notices indicating the relocated bus stop would be placed at strategic locations, as determined by Metro Operations.

- Metro would conduct a parking analysis of the Little Tokyo area to determine current parking capacity and how temporary or permanent displacement of parking would affect this capacity. Metro could possibly replace public (but paid) parking spaces displaced on APNs #s 6161012905 and 5161012901. During construction, access to other public parking lots would be maintained. Refer to the Traffic and Transportation Technical Memorandum for detailed mitigation measures regarding parking.

- Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure or necessary for access would be included in Metro Joint Development Program for possible development. A development would be environmentally cleared separately from this project and would undergo its own community input process. Until a development is approved, the remaining underutilized property may be used to house surface public parking spaces or at the

very least be graded and fenced to a higher standard that reflects the community's identity and character more than typical gravel and chainlink.

- During construction, Metro would work with the City to evaluate potential parking mitigation options to increase the number of public parking spaces in the area of Little Tokyo. This could include, but would not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, increase number of hours of parking for on-street parking.

6.3.2 Indirect Impacts

There are no indirect impacts associated with the At-Grade Emphasis LRT Alternative. Therefore, no mitigation measures are required.

6.3.3 Cumulative Impacts

The proposed At-Grade Emphasis LRT Alternative would provide three new stations and greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset some of the loss of parking in the downtown area. Therefore, the project would be partly self-mitigating and the potential impact would not be significant.

6.4 Underground Emphasis LRT Alternative

6.4.1 Direct Impacts

Potential adverse impacts associated with displacement are expected due to construction and operation of the Underground Emphasis LRT Alternative. The following mitigation measures would result in no significant adverse impacts:

- Access would be maintained and adequate signage indicating the location and accessibility of a bus stop would be posted where access to bus stops are expected to be restricted (such as APN 5151023400).

- For APN 5151014032, the potential adverse impact is due to the partial take of parking and primary access to the Central Plant. Replacement parking would be provided at the parcel or a nearby parcel. In addition, access to the Central Plant would be maintained at all times during construction of the Underground Emphasis LRT Alternative.

- Access to the Little Tokyo Library Branch would be maintained at all times during construction of the Underground Emphasis LRT Alternative (APN 5161026033). Notification of construction activities would be defined in a Construction Mitigation Program developed by Metro upon approval of the project. This program would include identification of communication protocol with the community during final design and construction.

- Regarding all displaced businesses (APNs 5149007006, 5161018001, 5161018020, and 5161018021), Metro would provide relocation assistance and compensation as required by both the Uniform Act and the California Act. The details of these laws are described in Sections 3.1.1 and 3.1.2. Where acquisitions and relocations are unavoidable, FTA and Metro would follow the provisions of both acts and their amendments. All real property acquired by Metro would be appraised to determine its fair market value. Just compensation, which would not be less than the approved appraisal, would be made to each property owner. Each business displaced as a result of the project would be given advance written notice and informed of their eligibility for relocation assistance and payments. It is anticipated that where relocation would be required, most of the jobs potentially displaced would be retained with the relocation. This would result in no significant adverse impacts related to job loss.

- Regarding APN 5161018001, refer to the Historical Resources Technical Memorandum for detailed mitigation measures regarding historical properties. Regarding the privately operated parking lot spaces in Little Tokyo (parcels bounded by Central Avenue, Alameda Street, 1st Street, and 2nd Street), Metro would conduct a parking capacity study in Little Tokyo to evaluate the need for replacing these parking spaces.

- Bus stops would be relocated to a nearby alternative location based on re-routed bus service due to street closures (such as APN 5151016013). Adequate signage and notices indicating the relocated bus stop would be placed at strategic locations, as determined by Metro Operations.

- Metro would conduct a parking analysis of the Little Tokyo area to determine parking capacity and if temporary or permanent displacement of parking would affect this capacity. During construction and operation of this alternative, Metro would consider replacing displaced parking on the block bounded by Central Avenue, 1st Street, 2nd Street, and Central Avenue. During construction, access to other public parking lots would be maintained. Refer to the Traffic and Transportation Technical Memorandum for detailed mitigation measures regarding parking.

- Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure or necessary for access would be included in Metro Joint Development Program for possible development. A development would be environmentally cleared separately from this project and would undergo its own community input process. Until a development is approved, the remaining underutilized property may be used to house surface public parking spaces or at the very least be graded and fenced to a higher standard that reflects the community's identity and character than typical gravel and chainlink.

- During construction, Metro would work with the City to evaluate potential parking mitigation options to increase the number of public parking spaces in the area of Little Tokyo. This could include, but would not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, increase number of hours of parking for on-street parking.

6.4.2 Indirect Impacts

There are no indirect impacts associated with the Underground Emphasis LRT Alternative. Therefore, no mitigation measures are required.

6.4.3 Cumulative Impacts

The proposed Underground Emphasis LRT Alternative would provide three new stations and greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset some of the loss of parking in the downtown area. Therefore, the project would be partly self-mitigating and the potential impact would not be significant.

6.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

6.5.1 Direct Impacts

The impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 are similar to those expected for the Underground Emphasis LRT Alternative. Therefore, the same mitigation measures proposed in Section 6.4.1 would apply to the Fully Underground LRT Alternative – Little Tokyo Variation 1. In addition, the following mitigation would result in no significant adverse impacts associated with this alternative:

- For APNs 5173007901 and 5173006900, the LADWP will be consulted during the design phase to accommodate its operational needs during construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Area reduction of impacts would occur as engineering analysis continues, should properties be removed from the list of properties identify to be fully taken for construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1. Similar mitigation as the Underground Emphasis LRT Alternative for displaced businesses and parking would be utilized to reduce potential impacts to a less than significant level.

Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure or necessary for access would be included in Metro Joint Development Program for possible development. A development would be environmentally cleared separately from this project and would undergo its own community input process. Until a development is approved, the remaining underutilized property may be used to house

surface public parking spaces or at the very least be graded and fenced to a higher standard that reflects the community's identity and character more than typical gravel and chainlink.

During construction, Metro would work with the City to evaluate potential parking mitigation options to increase the number of public parking spaces in the area of Little Tokyo. This could include, but would not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, increasing the number of hours of parking for on-street parking.

6.5.2 Indirect Impacts

There are no indirect impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1. Therefore, no mitigation measures are required.

6.5.3 Cumulative Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would provide four new stations and greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset the parking loss in the downtown area. Therefore, the project would be partly self-mitigating and the potential impact would not be significant.

6.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

6.6.1 Direct Impacts

The impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 are similar to those anticipated for both the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative – Little Tokyo Variation 1. Therefore, the same mitigation measures proposed in sections 6.4.1 and 6.5.1 would apply to the Fully Underground LRT Alternative – Little Tokyo Variation 2. In addition, the following mitigation would result in no significant adverse impacts associated with this alternative:

- For APN 5163003003, further refinement of the alignment design would minimize the taking of parking.

If additional parcels are fully taken to construct and operate the Fully Underground LRT Alternative – Little Tokyo Variation 2, similar mitigation as the Underground Emphasis LRT Alternative for displaced businesses and parking would be utilized to result in no significant or adverse impacts.

Upon completion of construction, property needed for construction but not required to maintain the physical infrastructure or necessary for access would be included in Metro Joint Development Program for possible development. A development would be environmentally cleared separately from this project and will undergo its own community input process. Until a development is approved, the remaining underutilized property may be used to house

surface public parking spaces or at the very least be graded and fenced to a higher standard that reflects the community's identity and character more than typical gravel and chainlink.

During construction, Metro would work with the City to evaluate potential parking mitigation options to increase the number of public parking spaces in the area of Little Tokyo. This could include, but would not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, increase number of hours of parking for on-street parking.

6.6.2 Indirect Impacts

There are no indirect impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2. Therefore, no mitigation measures are required.

6.6.3 Cumulative Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would provide four new stations and greatly enhance non-auto access by rail to downtown and Little Tokyo. This would partly offset some of the loss of parking in the downtown area. Therefore, the project would be partly self-mitigating and would not result in significant or adverse impacts.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

The No Build Alternative would include the transit investments already planned as described in the Metro 2009 LRTP. Accordingly, under the No Build Alternative there would be little to no construction in the project area associated with additional transit infrastructure investment. The No Build Alternative would not result in displacement of housing, people, or employment. Therefore, no significant adverse impacts are expected, and no mitigation measures are required.

7.1.2 CEQA Determinations

Based on the CEQA thresholds of significance (Section 3.2), the No Build Alternative would not have a significant impact associated with displacement or relocation because it would not displace or relocate persons or housing, including affordable housing. Additionally, it would not displace employment. No cumulatively considerable impacts are anticipated. No adverse impacts are anticipated and no mitigation measures are required.

7.2 Transportation Systems Management (TSM) Alternative

7.2.1 NEPA Findings

Under the TSM Alternative, transit infrastructure investment would occur, including (but not limited to) two new express shuttle bus lines linking the 7th Street/Metro Center Station and Union Station. This would be in addition to the same infrastructure investment that would occur under the No Build Alternative.

The TSM Alternative would utilize existing street and sidewalk networks wherever possible; however, approximately 24 curb parking spaces would need to be removed from 2nd Street between Hill Street and Central Avenue to accommodate the new bus stops. No displacement or relocation of properties, residents, or employees would be required. Therefore, no significant adverse impacts associated with displacements and relocations are expected under the TSM Alternative, and no mitigation measures are required. Cumulative adverse impacts would not occur with respect to parking displacement of 24 on-street parking spaces. In addition, potential impacts to parking would be partially offset by the increased public transit access provided by the proposed TSM Alternative and therefore, would not be significant.

7.2.2 CEQA Determinations

Based on the CEQA thresholds of significance (see Section 3.2), the TSM Alternative would not have a significant impact associated with displacement or relocation because it would not

displace or relocate persons or housing, including affordable housing. Additionally, it would not displace employment. No cumulatively considerable impacts are expected. No significant adverse impacts are expected and no mitigation measures are required.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would extend the light rail tracks from the underground 7th Street/Metro Center Station and connect to the Metro Gold Line tracks in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street at Temple Street. To implement this alternative, the number of traffic lanes and on-street parking on 2nd Street would be reduced.

It is expected that 11 parcels would be acquired as partial takes to construct the At-Grade Emphasis LRT Alternative. In addition, temporary easements during construction affecting two parcels would be required. These parcels would be utilized for TPSS site locations, construction staging, below grade tunneling, and proposed station locations.

Construction and operation of the At-Grade Emphasis LRT Alternative would result in potentially adverse impacts associated with displacement of 51 on-street spaces, 29 on-street loading spaces and 77 pay-to-park parking spaces, restriction to the Central Plant access and associated parking, and restriction or relocation of bus stops. Mitigation measures have been identified that would reduce potential impacts to a less than significant level. Cumulative adverse impacts would not occur with parking displacement of 33 parking spaces. In addition, potential impacts to parking would be partially offset by the increased public transit access provided by the proposed project and potential effects would be less than significant.

7.3.2 CEQA Determinations

Based on the CEQA thresholds of significance (see Section 3.2), the At-Grade Emphasis LRT Alternative would not have a significant impact associated with displacement or relocation because it would not displace or relocate persons or housing, including affordable housing. Also, no employment would be lost due to displacement under the At-Grade Emphasis LRT Alternative. No mitigation measures are required.

Adverse cumulative impacts would not occur due to loss of parking. In addition, impacts to parking would be partially offset by the increased public transit access provided by the proposed project and potential effects would be less than significant.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

The Underground Emphasis LRT Alternative would extend from the 7th Street/Metro Center Station north along Flower Street, east under 2nd Street, and emerge at an at-grade connection just southwest of the 1st/Alameda Streets intersection.

To construct the Underground Emphasis LRT Alternative, it is expected that ten parcels would be acquired as partial takes and 11 parcels as in full takes. In addition, temporary easements during construction affecting eight parcels and permanent easements affecting four parcels would be required for this alternative. These parcels would be used for TPSS site locations, construction staging, below-grade tunneling, and station locations.

Construction and operation of the Underground Emphasis LRT Alternative would result in potential adverse impacts associated with:

- Displacement of approximately nine businesses, including approximately 90 jobs;
- Permanent displacement of between 148 and 281 parking spaces on privately operated lots, with approximately 139 of those spaces located in Little Tokyo;
- Permanent displacement of 17 on-street parking spaces and three on-street loading spaces;
- Potential restriction of access to the Central Plant (and associated parking) and the Little Tokyo Library Branch during construction; and
- Potential restriction of access or relocation of bus stops.

Mitigation measures have been identified that would reduce potential impacts to a less than significant level. Cumulative adverse impacts would not occur with respect to parking displacement. In addition, parking loss would be offset by increased transit access and replacement parking.

7.4.2 CEQA Determinations

Based on the CEQA thresholds of significance (see Section 3.2), the Underground Emphasis LRT Alternative would not have a significant impact associated with displacement or relocation because it would not displace or relocate persons or housing, including affordable housing.

Although no thresholds of significance exist under CEQA for employment displacement, the net loss of employment would be considered an adverse impact. However, mitigation measures have been identified that would mitigate this impact to a less-than-significant level.

Adverse cumulative impacts would not occur due to the loss of parking. In addition, parking losses would be partially offset by increased access provided by rail transit and replacement parking. Therefore, potential impacts would be less than significant.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would extend from the 7th Street/Metro Center Station north along Flower Street, east under 2nd Street, and emerge at an at-grade connection north of Temple Street parallel to Alameda Street and along 1st Street, east of Alameda Street.

To construct the Fully Underground LRT Alternative – Little Tokyo Variation 1, it is expected that nine to ten parcels would be acquired as partial takes and 13 to 16 parcels as full takes. In addition, temporary easements during construction affecting five parcels and permanent easements affecting six parcels would be required for this alternative. These parcels would be utilized for TPSS site locations, construction staging, below grade tunneling, and station locations. Additionally, if further engineering analysis indicates, three additional parcels may be fully taken on the block bounded by Central Avenue, 1st Street, 2nd Street, and Alameda Street.

Construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in similar potential adverse impacts as the Underground Emphasis LRT Alternative and, as a result, would require the same mitigation measures to reduce potential impacts to a less than significant level. In addition, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would have an additional impact by potentially displacing parking and structures in the LADWP site located at the northeast corner of the Alameda Street/Temple Street intersection. Mitigation measures have been identified that would result in no adverse impacts. Cumulative adverse impacts would not occur with respect to parking displacement. In addition, parking loss would be partially offset by increased transit access and replacement parking. Therefore, potential impacts would be less than significant.

7.5.2 CEQA Determinations

Based on the CEQA thresholds of significance (see Section 3.2), the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not have a significant impact associated with displacement or relocation because it would not displace or relocate persons or housing, including affordable housing.

Although no thresholds of significance exist under CEQA for employment displacement, the net loss of employment is considered an adverse impact. However, mitigation measures have been identified that would mitigate this impact to a less-than-significant level.

Adverse cumulative impacts would not occur due to the loss of parking. In addition, parking losses would be partially offset by the increase in access provided by rail transit and replacement parking. Therefore, potential impacts would be less than significant.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would extend from the 7th Street/Metro Center Station north along Flower Street, east under 2nd Street, and emerge at an at-grade connection north of Temple Street parallel to Alameda Street and along 1st Street, east of Alameda Street.

To construct Fully Underground LRT Alternative – Little Tokyo Variation 2, it is expected that 11 to 12 parcels would be acquired as partial takes and 13 to 16 parcels as full takes. In addition, temporary easements during construction affecting five parcels and permanent easements affecting six parcels would be required for this alternative. These parcels would be utilized for TPSS site locations, construction staging, below grade tunneling, and station locations. Additionally, if further engineering analysis indicates, three additional parcels may be taken in full on the block bounded by Central Avenue, 1st Street, 2nd Street, and Alameda Street.

Construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in similar potential adverse impacts as both the Underground Emphasis LRT Alternative and the Fully Underground LRT Alternative – Little Tokyo Variation 1. Consequently, the same mitigation measures identified for these impacts would be required to reduce potential impacts to a less than significant level. In addition, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would have an additional impact of potentially displacing parking and a setback for businesses on the south side of 1st Street between Hewitt Street and Garey Street. Mitigation measures have been identified that would result in less than significant impacts. Cumulative adverse impacts would not occur with respect to parking displacement. In addition, lost parking would be offset by increased transit access and replacement parking. Therefore, potential impacts would be less than significant.

7.6.2 CEQA Determinations

Based on the CEQA thresholds of significance (see Section 3.2), the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not have a significant impact associated with displacement or relocation because it would not displace or relocate persons or housing, including affordable housing.

Although no thresholds of significance exist under CEQA for employment displacement, the net loss of employment is considered an adverse impact. However, mitigation measures have been identified that would mitigate this impact to a less-than-significant level.

Adverse cumulative impacts would not occur due to the loss of parking. In addition, parking losses would be partially offset by increased access provided by rail transit and replacement parking. Therefore, potential impacts would be less than significant.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX O

COMMUNITY AND NEIGHBORHOOD IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Community and Neighborhood Impacts
Technical Memorandum

March 12, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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State Clearinghouse Number: 2009031043

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ACRONYMS

CCA & DCBID	Central City Association and Downtown Center Business Improvement District
CEQA	California Environmental Quality Act
JANM	Japanese American National Museum
LADOT	Los Angeles Department of Transportation
LOS	Level of Service
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
MOCA	Museum of Contemporary Art
NEPA	National Environmental Policy Act
SCAG	Southern California Association of Governments
TBM	Tunnel Boring Machine
TSM	Transportation Management System

1.0 SUMMARY

This technical memorandum analyzes potential impacts of the Regional Connector Transit Corridor project on communities and neighborhoods in the central downtown area of Los Angeles. For purposes of this analysis, the central downtown area is defined as the area bounded on the north by Sunset Boulevard/Cesar Chavez Avenue, on the south by the Santa Monica Freeway (I-10), on the west by the Harbor Freeway (SR 110), and on the east by Alameda Street.

The project area encompasses seven communities (or neighborhoods) including the Financial District, Bunker Hill, Civic Center, Historic Core, Little Tokyo, and the Arts District. The alternatives analyzed include the No Build Alternative, the Transportation System Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2.

The No Build Alternative would not involve any construction and is presented to show potential impacts of not building the proposed project. The TSM Alternative involves creating two new shuttle bus routes to connect the Metro Gold and Blue Lines. This alternative would involve minimal construction and would create a new bus public transportation route through the central downtown area; however, the TSM Alternative would not substantially decrease commute times or reduce the number of transfers required. Therefore, it is not expected to encourage new growth in population, housing, or employment.

The At-Grade Emphasis LRT Alternative would potentially have construction and operational impacts in the project area. The major potential community and neighborhood impacts associated with this alternative would be reduced mobility and access to businesses during construction and elimination of mid-block left turn lanes along 2nd Street in the Civic Center and Bunker Hill neighborhoods during operation. Some partial property acquisitions, including both temporary and permanent easements, would also be necessary. (Temporary easements are used during construction, and permanent easements are obtained to provide for operations.)

Overall, the improved transit infrastructure, coupled with the city's transit-oriented growth policies, could encourage new residential and commercial development, thus improving the supply of housing and job opportunities in the downtown area.

The Underground Emphasis LRT Alternative would have similar potential construction impacts as the At-Grade Emphasis LRT Alternative. It would require displacing several existing businesses in Little Tokyo and the Historic Core area.

Operation of the Underground Emphasis LRT Alternative would not adversely affect existing businesses because the alignment would not run along existing streets. The project would bring additional pedestrians to the downtown area, providing opportunities for businesses to attract new customers.

The new transit infrastructure of the Underground Emphasis LRT Alternative could attract development to the immediate area of the stations and alignment. The number of housing units and jobs could increase if coupled with the City's transit-oriented land use policies. Access to and from the project area communities and within the entire Los Angeles region would be greatly enhanced.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 would also have potential construction and operational impacts. West of Central Avenue, the impact would be identical to that of the Underground Emphasis LRT Alternative when built with the 2nd Street station - Broadway option. East of Central Avenue, additional property would need to be acquired, and additional buildings would need to be displaced. These displacements would include removing existing businesses.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 include a new underground station in Little Tokyo. This station would connect train service from more branches of the rail system than other alternatives. Therefore, these alternatives provide the most access to the community from other parts of the county.

Fully Underground LRT Alternative – Little Tokyo Variation 1 and Fully Underground LRT Alternative – Little Tokyo Variation 2 would bring more pedestrians to the downtown area, benefitting businesses and housing developments, and providing opportunities for businesses to attract new customers. Communities near stations along the project corridor will have direct light rail access to four different corridors throughout the County.

2.0 INTRODUCTION

As the second largest metropolitan region in the United States, Los Angeles is home to approximately 15 million people and contains diverse cultures, world-renowned entertainment venues, and unique industries. At the heart of Los Angeles is the central downtown, considered the industrial, governmental, and financial core of the City.

Los Angeles was originally established in 1781 beginning in the area now known as central downtown (City of Los Angeles 2003a). The area saw a large increase in growth in the 1800s as the transcontinental railway was constructed. By the 1900s, the population continued to grow with development of manufacturing, industrial, and commercial industries.

While the Great Depression and World War II resulted in slower population growth, the economic and suburban expansion after the war helped the City to rebound. Recently, the central downtown area has been the center of the City's revitalization plans and continues to undergo redevelopment to improve the economic vitality and quality of life for those living and working in the area (City of Los Angeles Planning Department 2003a).

The central downtown community area, defined in the Central City Community Plan (City of Los Angeles 2003a), encompasses approximately three square miles south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of Harbor Freeway (SR 110), and west of Alameda Street. It is bounded by the Central Downtown North, Silver Lake-Echo Park, Westlake, Southeast, and South Central Los Angeles communities (City of Los Angeles Planning Department 2003a). In addition to housing many of the City's government and financial institutions, central downtown has important architecture, unique ethnic communities, historic landmarks, and growing residential areas.

The Regional Connector Transit Corridor project would provide a public transit option through central downtown, linking the Metro Gold Line to the City of Azusa via Pasadena and I-605 via the Eastside Extension with the Metro Blue Line to Long Beach, and the proposed Metro Expo Line to Santa Monica. Currently, public transit users must transfer to the Metro Red Line to connect from the Metro Gold Line to or from the Metro Blue Line. Thus, this project would help commuters by providing them a means to travel directly through the central downtown, reducing the number of necessary transfers.

The project would provide residents and businesses in the communities of downtown with greatly expanded access to and from the entire Los Angeles region. Up to four new landmark rail stations would enhance the visibility and identity of downtown communities. While the overall project is expected to provide many beneficial impacts, it also has the potential to adversely affect the quality of life for the diverse neighborhoods and communities that make up central downtown.

This document discusses the potential adverse and beneficial, direct and indirect construction and operation impacts of the Regional Connector Transit Corridor project on the various affected communities and neighborhoods. The document also discusses possible mitigation measures that could be implemented to offset potential impacts.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section discusses the community and neighborhood-related regulatory requirements potentially relevant to the project.

3.1 Federal Regulatory Requirements

3.1.1 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and implementing regulations (49CFR24) outline minimum standards for federally funded projects that acquire real property or displace persons from their homes or businesses. The purpose of the Act is to provide fair and equitable treatment and relocation assistance to those whose property is acquired or who have been displaced. The Regional Connector Transit Corridor project will comply with this Act in the event that properties must be acquired or any persons are displaced.

3.1.2 Americans with Disabilities Act of 1990

The Americans with Disabilities Act of 1990 ensures equal rights to all those with disabilities. The regulations implementing this Act (49CFR38) outline specific requirements for buses and light rail vehicles, including access ramps, handrails, priority seats for persons with disabilities, auditory and visual warnings for door closings, and minimum door widths to ensure persons with disabilities can safely use public transit facilities. The Regional Connector Transit Corridor project will comply with the Americans with Disabilities Act and will ensure adequate access to persons with disabilities.

3.2 State Regulatory Framework

The California State Environmental Quality Act (CEQA) requires an analysis of potential project impacts on communities and neighborhoods. CEQA guidelines include standards of significance that provide a framework for evaluating potential impacts. These standards are discussed in further detail in Section 3.4.

3.3 Local Regulatory Framework

3.3.1 Central City Community Plan

The Central City Community Plan is part of the City of Los Angeles General Plan Land Use Element and guides future development within the central downtown area. All proposed build alternatives would be consistent with the transportation objectives and policies stated in the Central City Community Plan, specifically:

Objective: 11-2.10 Extend light rail transit northerly from the existing 7th Street/Metro Center terminal to serve Bunker Hill and Little Tokyo connecting to Union Station.

Policies:

- Provide additional bus routes to link businesses and housing districts with existing and planned cultural/entertainment districts. Coordinate additional routes with extended hours of operation.
- Provide for the efficient circulation into and within downtown.

Small portions of the build alternatives' alignments near the Little Tokyo/Arts District Station are located east of Alameda Street, in the Central City North Community Plan area. Both the Central City Community Plan and the Central City North Community Plan are consistent in their treatment of this location.

3.3.2 Zoning Code Provisions Encouraging Density Around Transit Stations

The City of Los Angeles Planning and Zoning Code includes incentives for development within 1,500 feet of transit station entrances. For example, the City may permit developments in these areas to include more square footage and fewer off-street parking spaces than zoning would otherwise allow (Los Angeles, California, Planning and Zoning Code art. II, § 12-24 [2000]).

By adding new rail stations to downtown Los Angeles, the Regional Connector would expand the number of parcels eligible for density and parking incentives. This could enhance economic activity in the downtown area, encourage growth in locations served by the rail system, and provide new opportunities for increased transit use.

3.4 Significance Criteria

Under CEQA, a project would create a significant adverse impact to communities and neighborhoods if it would physically divide an established community or neighborhood.

According to the U.S. Department of Transportation NEPA guidance for assessing transportation project impacts on communities, a significant adverse impact to communities and neighborhoods could result if it would:

- Adversely alter the social and physical character of the community or neighborhood; or
- Degrade the quality of life by:
    - Adversely affecting public health or safety
    - Increasing the potential for crime

- Adversely affecting important community resources and events (such as festivals, parades, landmarks, parks, or community centers)
- Adversely affecting senior citizens or disabled persons
- Adversely affecting viability of local businesses (through loss of parking, re-routing of vehicles, decreasing pedestrian access, relocation)
- Reducing mobility (pedestrian, bicycle, or vehicle) in and between communities or neighborhoods
- Adversely affecting existing community public services (emergency services)
- Substantially changing the population or employment of the area

3.5 Methodology

The analysis of impacts on existing communities and neighborhoods was conducted according to the "*Community Impact Assessment: A Quick Reference For Transportation"* (U.S. Department of Transportation, Federal Highway Administration 1996).

The analysis includes a description of community profiles to identify population, housing, and employment characteristics; unique community features and events; community linkages and mobility; crime; and important public services. These community profiles have been established using the Central City Community Plan of the Los Angeles General Plan, the Central City Association of Los Angeles resources, site visits, U.S. Census Bureau statistics, Southern California Association of Governments (SCAG) data, information from local neighborhood councils, and public comments and input received on the project from ongoing meetings and outreach activities.

Communities have a set of identifiable elements (both perceptual and physical) within a specific geographic area. Once a profile has been described for each of the potentially affected communities, the analysis describes short-term (temporary) and long-term (permanent) effects from both construction and operation of the project alternatives on each community. The analysis includes several aspects: creation of physical, social, or psychological barriers within an established community or neighborhood; disruption of access to community assets; and displacement effects on the community assets. The analysis describes qualitative, and where possible, quantitative impacts associated with potential changes to the local communities.

Each impact is examined based on the profile of the community or neighborhood in which it would occur. The significance of each impact is determined based on the significance criteria listed above, the nature of the impact (temporary or permanent), both direct and indirect

impacts on each local community or neighborhood, and the potential mitigation measures that could be implemented to reduce or avoid the impact.

3.6 Project Area

The project area for the community and neighborhood analysis includes all communities and neighborhoods that would be potentially directly and/or indirectly impacted by the construction and operation of the proposed project. The communities that could be potentially beneficially or adversely impacted by the proposed project include:

- Financial District
- Bunker Hill
- Toy District
- Arts District
- Civic Center
- Historic Core
- Little Tokyo

A map of these communities is provided in Figure 3-1. Other areas that would be indirectly affected by the project include communities along the Metro Gold Line and the Metro Blue Line because they would be linked by the Regional Connector Project. Indirect effects to these communities are discussed at a qualitative level.

The area analyzed is slightly larger than the actual footprint of the proposed alternatives because communities near the area also have the potential to be affected by project construction and operation . This analysis includes all of the central downtown area, defined as south of Sunset Boulevard/Cesar Chavez Avenue, north of the Santa Monica Freeway (I-10), east of Harbor Freeway (I-110), and west of Alameda Street. For purposes of this community and neighborhood impact analysis, the area examined includes the following census tracts within central downtown: 2074, 2062, 2063, 2073, 2075, 2077.10, 2060.30, and 2060.40. Figure 3-2 presents a map of the census tracts included in this analysis.

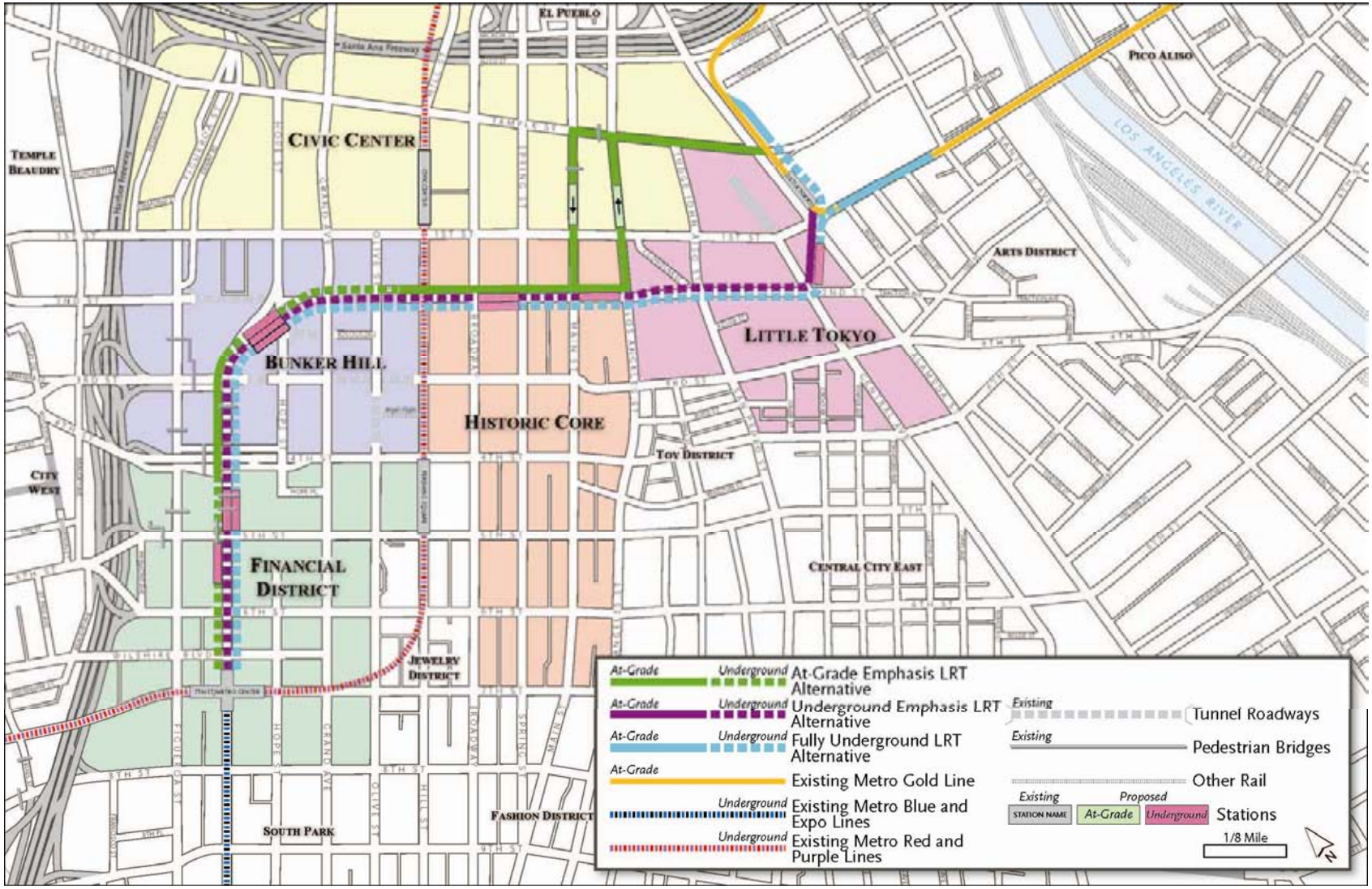


Figure 3-1. Central Downtown Communities

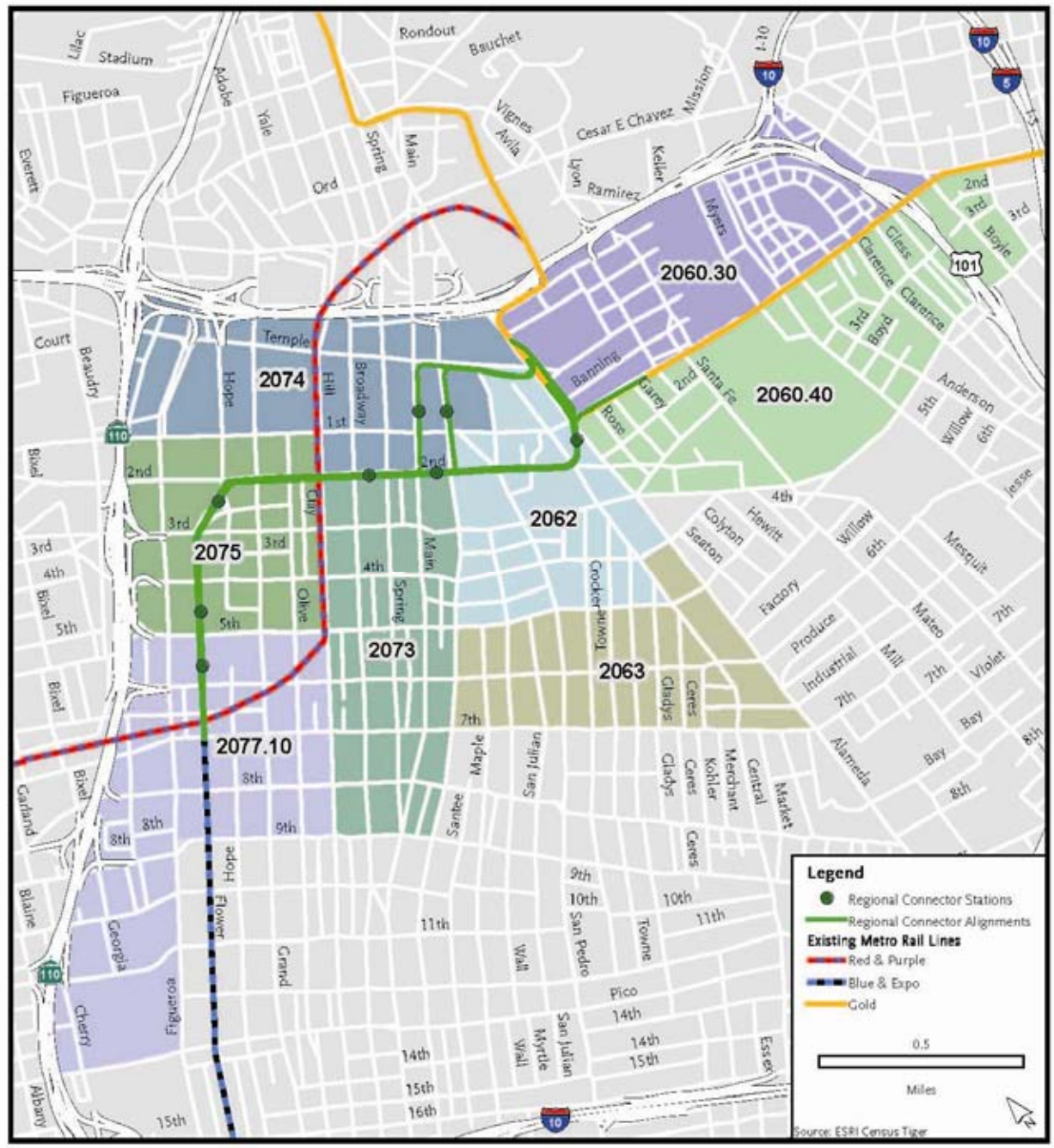


Figure 3-2. Census Tracts Analyzed

4.0 AFFECTED ENVIRONMENT

This section describes the current conditions of the central downtown area, including general demographics and community profiles.

4.1 Population and Ethnicity

In 2000, the central downtown area's[1] population was approximately 23,175, representing less than 0.6 percent of the entire City of Los Angeles' population (Census Bureau 2000). In 2005 SCAG estimated that the central downtown area's population was approximately 24,794, about 0.6 percent of the City's population (City of Los Angeles Planning Department /Demographic Research Unit 2009). Table 4-1 shows the 2000 and 2005 population by census tract for central downtown.

Table 4-1. Population for the Central Downtown Area

Census Tract	Approximate Neighborhoods	2000[1] Population	2005[2] Estimated Population
2060.30	Little Tokyo, Arts District, Boyle Heights*	955	1,029
2060.40	Little Toyko, Arts District, Boyle Heights*	3,445	3,753
2062	Little Tokyo, Central City East*	3,477	3,638
2063	Central City East*, Central Industrial District*	4,995	5,320
2073	Historic Core	3,739	4,068
2074	Civic Center	1,237	1,344

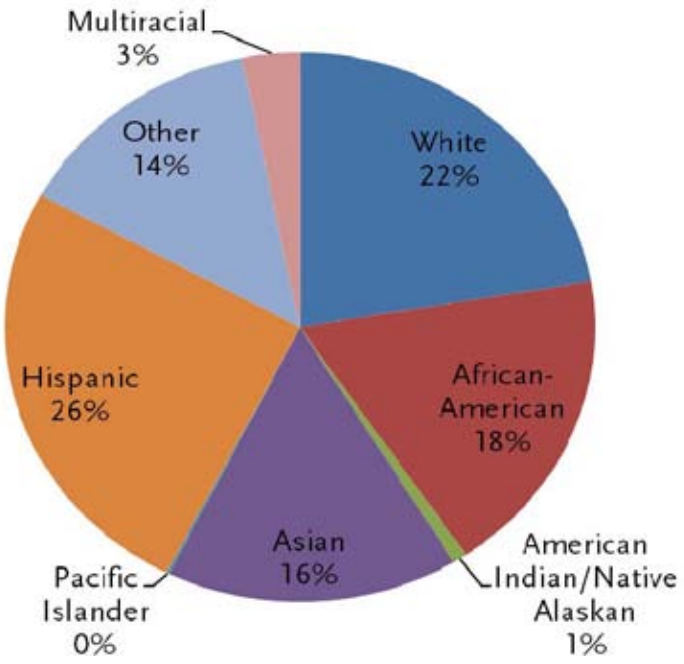
[1] Note: The total population of the analysis area for community and neighborhood impacts is shown. The area and population defined in the Central City Community Plan and the Central City North Community Plan will vary. Also, some of the census tracts included in the demographic data extend beyond the boundaries of the communities to be analyzed.

Table 4-1. Population for the Central Downtown Area			
Census Tract	**Approximate Neighborhoods**	**2000[1] Population**	**2005[2] Estimated Population**
2075	Bunker Hill	4,098	4,326
2077.10	Financial District, South Park	1,229	1,316
Total		**23,175**	**24,794**

Source: [1]Census Bureau, Summary File 1, 2000; [2]SCAG 2009.

** Neighborhood included in census tract data, but is too far from proposed alternatives to be impacted. More specific data is not available.*

Central downtown has a diverse ethnic population. As shown in Figure 4-1, 26 percent of the population in 2000 was Hispanic, 18 percent was African-American, 16 percent was Asian, 22 percent was White, 1 percent was American Indian/Native American, 3 percent was designated as multiple race, and less than 1 percent was designated as Pacific Islander and Other Race (Census Bureau 2000).



Source: Census Bureau 2000.

Figure 4-1. Ethnicity for Central Downtown

The age of the population in the central downtown area varies considerably throughout the different communities. In 2000 there were three main areas with relatively higher populations of seniors (over the age of 65): the Bunker Hill area, the Little Tokyo area, and the northern portion of central downtown.

Table 4-2 shows the median age of the downtown population by census tract for the year 2000. An area around the Historic Core and Jewelry District had a median age of 49, while the northern portion of the Arts District had a median age of just 28. The Little Tokyo area had a median age of 45 (Census Bureau 2000).

4.2 Languages Spoken At Home

The most common language spoken at home throughout the central downtown area in 2000 was English, followed by Asian/Pacific Isle languages, Spanish, Indo-European languages, and other languages (Census Bureau 2000). Each community within the downtown area varies considerably regarding the language spoken at home.

Table 4-2. Median Age of Central Downtown Population

Census Tract	Both Sexes	Male	Female
2060.30	28.2	28.7	27.1
2060.40	32.3	31.5	33.1
2062	45.1	43.6	50.4
2063	42.1	43.3	38.4
2073	49.2	49.2	49.4
2074	35	34.5	38
2075	48.5	43.1	53.4
2077.10	45.4	43.6	48

Source: Census Bureau, Summary File 1, 2000.

Figure 4-2 shows the percentage breakdown of the languages spoken at home by census tract for the year 2000. Census tracts in the northwest and in the Little Tokyo area spoke predominantly Asian languages, and census tracts in the southern portion spoke mainly Spanish.

4.3 Housing

There were an estimated 10,500 housing units in the central downtown area in 2008. Of the 10,500 housing units, 10,200 were multi-family units and only 200 were single-family units. The vacancy rate for all housing units was about 11 percent (City of Los Angeles Planning Department /Demographic Research Unit 2009).

Land designated for residential use is found in the east and south portions of central downtown and makes up only about five percent of the total land use (City of Los Angeles Planning Department 2003a). The residentially-zoned properties in the central downtown area are found in Bunker Hill and Little Tokyo. Some residential uses are permitted within commercial buildings in the central downtown area as they are redeveloped into residential units to meet an increased demand for housing (City of Los Angeles Planning Department 2003a).

4.4 Employment

The central downtown area employs a substantial number of people; over 170,000 in 2005. As shown in Table 4-3, most of the people working in the downtown area do not live there and must commute to it each day. The areas within the central downtown that provide the largest number of jobs include the Financial District, the Civic Center, the Historic Core/Jewelry District, and the Fashion District.

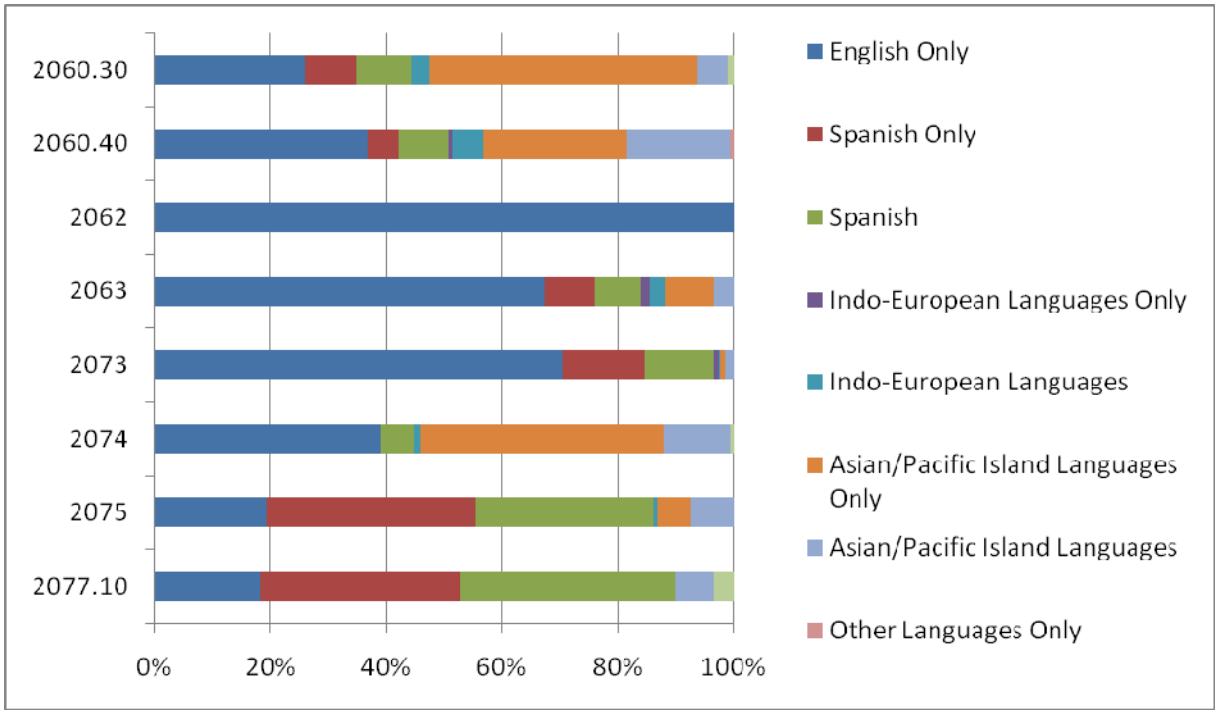


Figure 4-2. Languages Spoken at Home by Census Tract in Central Downtown

Source: Census Bureau, Summary File 3, 2000.

4.5 Community Mobility

The central downtown area experiences heavy pedestrian traffic on weekdays and during the lunch hours (City of Los Angeles Planning Department 2003a). Much of the pedestrian traffic occurs in areas with daytime employment such as Bunker Hill, the Financial District, and the Historic Core. Some pedestrian movement occurs between the Civic Center and Little Tokyo along Temple, 1st, and 2nd Streets (City of Los Angeles Planning Department 2003a).

The Fashion District attracts many pedestrians during both weekdays and weekends, as does Broadway between 2nd and 7th Streets. 7th Street often experiences large volumes of pedestrians due to the Wilshire Grand and Sheraton Hotels. There is much less pedestrian activity in the central downtown area at night because much of the daytime population leaves after business hours. The exceptions are Little Tokyo and the Arts District that have experienced a resurgence of evening activity due to increases in new housing in the area and a solid commercial base of restaurants.

The main pedestrian infrastructure in central downtown consists of sidewalks and crosswalks. There is an elevated pedestrian walkway on Bunker Hill that connects many of the large hotels and office buildings.

Table 4-3. Population, Households, and Employment for the Central Downtown Area

Census Tract	2005 Population	2005 Households	2005 Employment
2060.30	1,029	267	2,444
2060.40	3,753	1,125	2,855
2062	3,638	1,179	6,631
2063	5,320	1,591	4,670
2073	4,068	3,101	35,488
2074	1,344	8	38,760
2075	4,326	3,024	27,319
2077.10	1,316	635	53,760
Total	**24,794**	**10,930**	**171,927**

Source: SCAG, 2009.

The downtown area offers several Angels Walk tours, which were developed to promote pedestrian and public transit use in the City. Each Angels Walk encourages pedestrians to explore important cultural and historic areas of the City. Brochures and maps are provided for self-guided tours. Stanchions located throughout the Angels Walk routes mark important features and provide information in text and photographs.

The central downtown area is served by over 100 bus lines, operated by ten different transit agencies, and a network of commuter rail, light rail, and heavy rail lines. Metrolink operates commuter rail trains from Union Station to multiple points in Los Angeles, Ventura, Orange, San Bernardino, San Diego, and Riverside Counties. Metro operates the Metro Red Line heavy rail subway to North Hollywood, the Metro Purple Line heavy rail subway to Wilshire/Western Station, the Metro Blue Line light rail service to Long Beach, and the Metro Gold Line light rail service to Pasadena and East Los Angeles. The Metro Expo Line light rail service to Culver City is expected to open in 2011.

Transit mobility within downtown, to and from the communities of downtown, and within the region as a whole is impaired by the lack of a train connection between the Metro Gold and Blue Lines. Passengers travelling between these two LRT lines must currently transfer via the Metro Red and Metro Purple Lines. This lack of direct connection adversely affects travel times and the ability of transit to attract automobile commuters.

The Regional Connector project would eliminate transfers by enabling through service between the Metro Gold, Blue, and Expo Lines. The Regional Connector would add additional reliable transit service that, unlike buses, will not be subject to future deteriorating traffic conditions if surface street congestion increases.

For information on existing traffic patterns within the study area, see the Transportation Technical Memorandum.

4.6 Emergency Services

The Central Area Community Police Station is located on East 6th Street and serves an area in central downtown of 4.5 square miles, including the communities of Little Tokyo, South Park, Historic Core, Financial District, Jewelry District, Arts District, and Fashion District. There are approximately 400 sworn and civilian members of the Los Angeles Police Department stationed at this location (Los Angeles Police Department 2008).

Parker Center, the current Los Angeles Police Department headquarters, is located on Los Angeles Street between 1st and Temple Streets. A new headquarters building, scheduled to open in 2010, will replace Parker Center. The new building is currently under construction on the block bounded by 1st, Spring, 2nd, and Main Streets.

Los Angeles Fire Department Station 9 provides fire protection services for the central downtown area. Station 9 is located at 430 East 7th Street at the corner of 7th Street and San Julian. The station employs approximately 50 staff members (Fire Station 9 Skid Row 2006; City of Los Angeles Undated).

An additional fire station (Station 4) and emergency center are located on Temple Street east of Alameda Street. Fire Station 4 serves the Little Tokyo, El Pueblo, and Chinatown areas (Los Angeles Fire Department 2009). Fire Station 3 at 1st Street and Fremont Avenue serves the western portion of the downtown area.

4.7 Crime

Although many community groups have been working together to improve public safety, crime is an issue in the Central Downtown area. The downtown area is served by the Central Area Community Police.

There were 6,138 arrests made in 2007 and 5,497 in 2008. By the end of May 2009, 5,190 arrests had been made. The majority of the arrests from January 2007 through May 2009 were made for larceny and aggravated assault. The number of violent crimes was 397 in 2007 and 385 in 2008. By the end of May 2009, there were 437 violent crimes reported, a 14 percent increase since 2008 (Los Angeles Police Department 2009).

4.8 Community Events

There are many important community events that occur in the central downtown area each year, including music and cultural festivals, parades, arts/theatre performances, and exhibitions. These events often attract hundreds of people to downtown. Table 4-4 lists community events in the project area that were scheduled for 2009.

Table 4-4. Community Events in Central Downtown

Event	Description
World City	Free performances and art workshops for children at the Disney Concert Hall
1st Thursday San Pedro Art Walk	San Pedro Street between 4th and 8th Streets celebrates the arts by opening up galleries and studios, offering live entertainment with cafes and live street vendors in the evening of the first Thursday of each month.
Downtown Art Walk	A monthly self-guided tour of art exhibition venues in the Downtown.

Table 4-4. Community Events in Central Downtown	
Event	**Description**
St. Patrick's Day and Parade	Annual celebration of St. Patrick's Day with a parade that starts on 5th and Olive Streets.
Cherry Blossom Festival of Southern California	This event celebrates spring, cherry blossoms, and the Japanese American culture in Little Tokyo.
Azusa Street Festival	A music festival in Little Tokyo.
AT&T Fiesta Broadway	Cinco De Mayo Celebration on Broadway Street between 1st and 11th Streets
Annual Children's Day	Arts and crafts and activities for children of all ages at the Japanese American Cultural and Community Center in Little Tokyo.
Mixed Roots Film and Literary Festival	Celebration of the mixed racial and cultural through readings, live performances, and films at the Japanese American National Museum in Little Tokyo.
Shakespeare Festival/L.A. Romeo and Juliet	Live theatre and free outdoor shows influenced by Shakespeare at Cathedral of Our Lady of the Angels on Temple Street.
Grand Performances	Free afternoon and evening performing arts events at the California Plaza.
Nisei Week Japanese Festival	Cultural festival that celebrates community cultural diversity in Little Tokyo.
L.A. County Holiday Celebration	Choirs, instrumental groups, and dance are used to celebrate the season at the Music Center on Grand Avenue.

Source: City of Los Angeles Department of Cultural Affairs 2009

4.9 Community Profiles

This section presents brief profiles for each of the communities and districts within the central downtown area that have the potential to be directly affected by construction or operation of the Regional Connector Transit Corridor project. A map of the approximate locations of these communities is provided in Figure 3-1. While distinctions have been made

between the different districts, many districts continue to develop and expand their area of influence, often resulting in overlap with other districts or communities. The boundaries of the districts discussed below are for descriptive purposes and are not meant to delineate distinct borders.

4.9.1 Financial District

The Financial District generally extends between 3rd Street to the north, 6th Street to the south, Hill Street to the east, and SR 110 to the west. The Financial District contains most of the city's banks, large hotels, and skyscraper office buildings. It is also home to the Central Library, Maguire Gardens, retail stores, and clubs. This area experiences a high volume of traffic during daytime hours because of its location next to the SR 110 freeway.

While not as pedestrian friendly as some of the other districts, the Financial District lies within walking distance to the 7th Street retail area, Grand Avenue corridor, and Pershing Square. This neighborhood is within walking distance to the Metro Red Line, Metro Purple Line and the Metro Blue Line (CCA & DCBID 2003).

The Central Library, located at Hope Street, is one of the key features of the Financial District. North of the library is downtown's tallest building, Library Tower (City of Los Angeles Planning Department 2003a). At 73 stories high, the tower is visible for miles. The Bunker Hill Steps surround the building and connect the Financial District to Bunker Hill (City of Los Angeles Planning Department 2003a).

The proposed 2.7 million square foot Metropolis mixed-use development is located in the southwestern end of the Financial District. Phase I of this project will provide 360 residential units. Park Fifth is a major, planned, 76-story high-rise development across from Pershing Square and will provide over 700 condominiums and a 200 room hotel.

4.9.2 Bunker Hill

Located generally between 1st Street on the north, Hill Street on the east, 3rd Street on the south, and Figueroa Street on the west, Bunker Hill is a developed hill centered roughly around 3rd Street and Grand Avenue. Bunker Hill has a large portion of central downtown's population because of numerous apartments and condominiums. This district is within close walking and public transit distance to the Financial District, the Historic District, and the Civic Center.

Major downtown destinations located within Bunker Hill include the Walt Disney Concert Hall, Museum of Contemporary Art (MOCA), high-rise office towers, senior and market rate housing, hotels, and commercial/retail centers. Bunker Hill has over 3,200 residential units, mainly in mid- and high-rise buildings. Large development projects planned for this area include Civic Park and the Grand Avenue Development Project that will develop this area into

a regional arts, entertainment, and residential destination. The proposed Grand Avenue Development includes 3.6 million square feet, including 449,000 square feet of retail space. Plans call for 2,600 new housing units, almost doubling the existing number of units in the area.

4.9.3 Toy District

The Toy District is south of Little Tokyo and includes 12 blocks between 3rd, San Pedro, and 5th Streets, and Werdin Place. The Toy District is a wholesale and retail area with over 500 businesses offering silk flowers, incense/oils, craft supplies, luggage, electronics, and traditional toys like dolls, die-cast cars, action figures, and video games (Central City East Association 2009). This area experiences high volumes of pedestrians. The Medallion project proposed for this district is expected to provide 192 residential lofts and over 200,000 square feet of retail space.

4.9.4 Civic Center

The Civic Center contains federal, state, and local government offices and has the second largest concentration of civic buildings in the country (City of Los Angeles Planning Department 2003a). The Civic Center extends from US 101 in the north to 4th Street in the south, and from SR 110 in the west to Alameda Street in the east. Important community resources in this area include the Cathedral of Our Lady of the Angels on Temple Street, Los Angeles City Hall, the County Hall of Administration, the California State Department of Transportation (CalTrans) Headquarters, and a U.S. Federal District Courthouse planned for the block bounded by 2nd, Hill, and 1st Streets, and Broadway. The area includes the Civic Center Historic District centered around the City Hall building.

Most of the government facilities in this area are within a 10-minute walk of each other designated as the "10 minute diamond". There are also several cultural, arts, and music facilities found in the Civic Center such as the Ahmanson Theater, Mark Taper Forum, and the Dorothy Chandler Pavilion (City of Los Angeles Planning Department 2003a).

4.9.5 Historic Core/Center City

The Historic Core/Center City links many of the districts and communities of central downtown. It encompasses an area from 1st to 11th Streets between Los Angeles and Hill Streets. The Historic Core approximates the area where Los Angeles originated in the early 1800s, and a variety of historic and architecturally significant buildings are found here. There are two historic districts in this area registered in the National Register of Historic Places: the Spring Street Financial District between 4th and 7th Streets, and the Broadway Theater District between 3rd and 9th Streets (City of Los Angeles Planning Department 2003a).

The major corridor in the Historic Core/Center City is Broadway, with clothes outlets, restaurants, Grand Central Market, and other shops frequented by the Hispanic population

(City of Los Angeles Planning Department 2003a). To the east, a variety of offices, hotels, shops and government buildings exist along Los Angeles, Spring, and Main Streets. Many buildings here have been renovated and converted to residential uses with ground floor retail, restaurants, and art galleries. Most of the historic financial buildings of the 1920s are found on Spring Street. Several historic theatres are located in this area; however, some are being used for retail purposes or are currently vacant.

The southern end of the Historic Core/City Center is adjacent to the Fashion District and contains historic buildings now used to manufacture clothing. The Metro Red Line travels beneath this district with a station on Hill Street between 4th and 5th Streets (City of Los Angeles Planning Department 2003a). The Skid Row community is located adjacent to the Historic Core/Center City area and contains a large homeless population and many single occupancy hotel residential properties.

4.9.6 Little Tokyo

Little Tokyo is a unique cultural community in downtown Los Angeles with the largest Japanese-American community in the continental United States (City of Los Angeles Planning Department 2003). Los Angeles' Little Tokyo is one of only three remaining Japantowns in the US (in addition to San Francisco and San Jose). Located between 1st, 3rd, San Pedro, and Alameda Streets, Little Tokyo has a range of mixed uses including retail, hotel, office, and commercial spaces.

The area also contains a substantial portion of the central downtown's residential units and has several new residential developments. The rehabilitation of existing spaces into residential uses is also occurring in Little Tokyo. Important developments in the early planning stages include a 4.5-acre site adjacent to the Little Tokyo/Arts District Station on the Metro Gold Line. This development could potentially contain a high-density combination of offices and housing, utilizing its proximity to transit.

Little Tokyo contains a variety of important cultural venues and resources including the Japanese American National Museum (JANM), the Jodo Shu Betsuin Temple, the former Nishi Hongwanji Temple, and the Japanese American Cultural and Community Center. The Geffen Contemporary at the Museum of Contemporary Art (MOCA) is located behind JANM. North of The Geffen Contemporary at MOCA, at Temple and Alameda Streets, is the Go For Broke Monument, a monument dedicated to the Japanese American veterans of World War II who fought for the United States even as their families were classified as "enemy aliens" and were forced into internment camps (Experience L.A. 2009). Little Tokyo also houses the Little Tokyo Service Center that provides affordable housing and community services to the area.

The Little Tokyo Historic District was listed on the National Register of Historic Places in 1986. The district spans the north side of 1st Street from Judge John Aiso Street to Central Avenue, and the east side of Judge John Aiso Street from 1st Street to midblock between 1st

and Temple Streets. Buildings in the Historic District include commercial buildings on the north side of 1st Street, the Union Church on San Pedro Street, and the former Nishi Hongwanji Temple at 1st and Central streets, the first Buddhist Temple built in Los Angeles.

4.9.7 Arts District

The Arts District is technically outside central downtown and considered a part of the Central City North Community Plan area; however it is discussed in this section because it is adjacent to Little Tokyo and could be affected by the project. The Arts District is generally considered to be between 1st, 6th and Alameda Streets, and the Los Angeles River. The Arts District consists mostly of old warehouses that have been converted to artists' lofts and studios (City of Los Angeles Planning Department 2003b). The largest concentration of artists is within the area between 1st, Palmetto, and Alameda Streets, and the Los Angeles River. This area is referred to as the Artist-in-Residence District (City of Los Angeles Planning Department 2003b).

5.0 IMPACTS

5.1 No Build Alternative

The No Build Alternative would not involve any new construction. This alternative would not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP). The transit network within the project area would be largely the same as it is now.

5.1.1 Community Mobility

Community mobility in the study area would be expected to worsen along with region-wide traffic congestion. Future increases in the area's population and employment would attract more people to the area each day, causing more vehicle and pedestrian traffic. This may reduce mobility in certain communities, especially during the commute hours.

Pedestrian mobility would not be expected to substantially change by 2035. As suggested in the Central City Community Plan, some improvements may occur to encourage pedestrian movement through the various communities and districts, but overall no substantial changes in pedestrian movement are expected. Transit mobility would deteriorate as the No Build Alternative would not provide enhanced access from downtown communities to other parts of the Los Angeles region or from the region to downtown communities.

5.1.2 Viability of Existing Businesses

The viability of existing businesses would be expected to remain similar to current conditions. No substantial transportation improvements are planned that would result in long-term construction that could affect the viability of businesses in the project area. Businesses would not benefit from enhanced access potentially afforded by build alternatives.

5.1.3 Emergency Services

As the population of the central downtown area grows, it is expected that emergency service providers would increase staff to meet the needs of the changing population. Access and response times could potentially be hampered by future traffic congestion.

5.1.4 Public Health and Safety and Crime

Crime may slightly increase in the central downtown area as a result of population growth, but public safety services would be expected to increase staff in response to new demands. Access and response times could potentially be hampered by future traffic congestion

5.1.5 Community Resources and Events

Community resources and events are not expected to change in the future. Enhanced access to events from around the region, potentially provided by build alternatives, would not occur.

5.1.6 Population, Housing, and Employment

Table 5-1 shows population estimates through 2035 for the central downtown area. The population is expected to reach about 30,000 by 2035, an increase of about 20 percent over the 2005 population. Areas projected to experience the largest percent increase in population growth (over 26 percent) from 2005 to 2035 include the Financial District, the Toy District, and Little Tokyo.

Table 5-1. Central Downtown Population Projections through 2035

Census Tract	Population 2010	Population 2015	Population 2020	Population 2025	Population 2030	Population 2035
2060.30	1,059	1,081	1,105	1,128	1,150	1,171
2060.40	3,866	3,947	4,033	4,116	4,195	4,272
2062	3,835	4,009	4,174	4,330	4,476	4,611
2063	5,598	5,846	6,084	6,308	6,516	6,709
2073	4,221	4,331	4,464	4,593	4,716	4,833
2074	1,370	1,387	1,407	1,427	1,449	1,470
2075	4,484	4,596	4,728	4,855	4,977	5,094
2077.10	1,394	1,454	1,513	1,568	1,621	1,672
Total	**25,827**	**26,651**	**27,508**	**28,325**	**29,100**	**29,832**

Source: SCAG 2009.

Table 5-2 presents the household projections through 2035. The number of households in central downtown is expected to increase to 14,200 by 2035, an increase of about 4,000 households from 2005. The Historic Core/Jewelry District area is expected to experience the largest increase in households; approximately 900 households would be added to the area by 2035. The Bunker Hill area is expected to add over 800 new households by 2035. The majority of these new households are expected to be multi-family housing.

Employment is expected to rise steadily through 2035 in the central downtown area, as shown in Table 5-3. By 2035, the largest increase in employment is expected to occur in the Financial District with the addition of over 4,600 new jobs. Over 3,600 new jobs are expected in the Civic Center area.

The No Build Alternative would not be expected to substantially change existing communities and neighborhoods in the project area. Future growth projections for population, housing, and employment would remain unchanged.

Table 5-2. Households in Central Downtown through 2035

Census Tract	Households 2010	Households 2015	Households 2020	Households 2025	Households 2030	Households 2035
2060.30	282	297	313	325	337	347
2060.40	1,186	1,243	1,304	1,352	1,398	1,435
2062	1,250	1,317	1,390	1,447	1,502	1,548
2063	1,671	1,748	1,833	1,899	1,963	2,016
2073	3,275	3,441	3,622	3,763	3,900	4,012
2074	13	17	21	25	28	30
2075	3,187	3,343	3,514	3,648	3,777	3,883
2077.10	698	758	819	867	913	951
Total	**11,562**	**12,164**	**12,816**	**13,326**	**13,818**	**14,222**

Source: SCAG 2009.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative would create two new express shuttle bus lines linking 7th Street/Metro Center Station with Union Station in addition to the infrastructure improvements described for the No Build Alternative. These buses would run frequently, especially during peak hours. The buses may have traffic signal priority similar to the Metro Rapid system, where the traffic signal control system grants longer green lights to oncoming transit vehicles. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes.

Table 5-3. Central Downtown Employment through 2035						
Census Tract	Employment 2010	Employment 2015	Employment 2020	Employment 2025	Employment 2030	Employment 2035
2060.30	2,480	2,508	2,527	2,548	2,570	2,592
2060.40	2,955	3,034	3,086	3,146	3,211	3,273
2062	6,730	6,809	6,861	6,921	6,985	7,047
2063	4,718	4,756	4,781	4,810	4,841	4,871
2073	36,168	36,711	37,062	37,474	37,915	38,336
2074	39,632	40,330	40,786	41,321	41,893	42,440
2075	27,935	28,427	28,745	29,119	29,519	29,901
2077.10	54,868	55,750	56,316	56,982	57,692	58,373
Total	**175,846**	**178,325**	**180,164**	**182,321**	**184,626**	**186,833**

Source: SCAG 2009.

5.2.1 Construction

There would be no significant impact on communities and neighborhoods from construction of this alternative. The only construction that would occur would be for the enhanced bus stops located every about two blocks along the shuttle routes. Construction of such bus stops would require a minimal amount of construction equipment. This would not be expected to reduce mobility or affect emergency services, viability of existing businesses, public health and safety and crime, population, housing, or employment. There would be no significant impact from construction of the TSM alternative.

5.2.2 Operation

Operation of the TSM Alternative would have a minimal impact on existing communities and neighborhoods. This alternative would introduce two new shuttle bus routes that would run every five minutes during commute hours. This would increase bus traffic through the following districts/communities:

- Upper Grand Route Shuttle Bus: Little Tokyo, Civic Center, Bunker Hill, Financial District.

- Lower Grand Route Shuttle Bus: Little Tokyo, Historic Core, Bunker Hill, Financial District.

5.2.2.1 Community Mobility

Since the shuttle buses would use existing streets, they would not be expected to impair pedestrian mobility between neighborhoods. New infrastructure would not have the potential to physically divide existing communities.

The shuttle buses under the TSM Alternative would help to link the Metro Gold Line to the Metro Blue Line and would provide additional public transportation within the central downtown area. However, the requirement to transfer from a train to a bus operating in street traffic would limit the potential of this alternative. Transfers increase overall trip times and make the transit system less attractive to prospective riders.

New bus stops along the shuttle bus lines would increase transit mobility within the central downtown area. However, the shuttle buses would be subject to deteriorating traffic conditions as traffic congestion worsens in the future. Thus, the mobility benefits may not be permanent. The buses themselves may also add to traffic congestion, which would decrease mobility in the area, particularly during peak hours.

The overall impact of adding new transit service would be beneficial. Still, any benefits would be contingent on the ability of buses operating in street traffic to attract patrons. Noise and air quality impacts of buses proposed under the TSM Alternative are detailed in the Noise and Vibration Technical Memorandum and the Air Quality Technical Memorandum. Additional details about the potential congestion effects of adding new shuttle bus service to the project area, including level of service (LOS) data, are provided in the Transportation Technical Memorandum.

All shuttle buses and bus stops would be designed to comply with existing disability laws and would be wheel-chair and stroller accessible. There would be no adverse impacts to senior citizens or disabled persons.

5.2.2.2 Viability of Existing Businesses

Operation of the shuttle buses may slightly improve business viability in and around the new bus stops because it could increase the number of visitors to the area. This would be a beneficial impact. Bus stops could also be slightly detrimental to businesses if they impede visibility or access to the business.

5.2.2.3 Emergency Services

The shuttle buses under this alternative would use existing roads, and the addition of frequent new bus service could potentially add to traffic congestion and lengthen emergency vehicle response times.

5.2.2.4 Public Health and Safety and Crime

It is unlikely that there will be any impacts to public health and safety, as the shuttle buses would use existing roads, although emergency vehicle response times could lengthen.

The creation of new bus stops may slightly increase the potential for crimes such as vandalism, depending on the structures placed at each new bus stop. There would not likely be any increase in any other types of crimes. While there is a perception that transit stops may increase crime levels in general, mitigation measures, such as additional security services, would help prevent an increase in crime. Overall, impacts related to crime are expected to be less than significant.

5.2.2.5 Community Resources and Events

No community resources or events would be adversely affected by operation of this alternative. This alternative may be beneficial for some community events and resources because it would provide a new public transit method from the central downtown area to the Metro Gold and Blue Lines. However, because the shuttle buses would run on public streets, the beneficial impact of the buses might be reduced if service needs to be rerouted or suspended during street closures for major events. Rerouting of buses would not affect the community events.

5.2.2.6 Population, Housing, and Employment

While this alternative would provide two new bus routes and several new bus stops, it is not expected to attract a large number of new residents to the area because it would not substantially reduce commute times. The shuttle buses would provide a link between the Metro Gold and Blue Lines that would help people commuting to and from the area. However, the connection would still require commuters to make a bus transfer between the rail lines, reducing travel time savings. Since the two new bus routes would not substantially reduce commute times, they would not be expected to attract many new commuters. There would be no impact to population, housing, or employment.

5.2.3 Cumulative Impacts

This section presents the cumulative effects of the TSM Alternative.

5.2.3.1 Community Mobility

The TSM Alternative would potentially increase mobility because it would provide two new shuttle routes. Other future planned transportation projects would also contribute to beneficial impacts associated with community mobility because they would create more linkages and additional transportation routes. Overall, cumulative effects on community mobility could be beneficial. The benefit is contingent upon whether shuttle buses operating in mixed traffic would attract commuters who would otherwise drive.

However, benefits to mobility under this alternative may not be permanent if developments already planned for the downtown area (listed in the Cumulative Impacts Methodology Memorandum) increase local traffic congestion to the point where the speed of the shuttle buses is reduced. Any reduction in congestion created by the new shuttle bus service could be offset, at least partially, by the addition of these frequent buses to existing streets. There is no way to be certain if the benefits of the TSM Alternative will be permanent until the outcomes of other planned projects are known.

5.2.3.2 Viability of Existing Businesses

The TSM Alternative would result in beneficial impacts to the viability of existing businesses by providing new bus stops in central downtown. No other transportation projects are expected along the proposed shuttle routes, and there would be no cumulative impacts associated with the viability of existing businesses. A future increase in traffic and congestion may lessen the benefits to downtown businesses under the TSM Alternative. Additional buses running on downtown streets may also increase congestion to the point where it lengthens travel times under this proposal, offsetting some of the potential benefits.

5.2.3.3 Emergency Services

There would be no cumulative impacts on emergency services.

5.2.3.4 Public Health and Safety and Crime

Future population growth has the potential to increase crime. The TSM Alternative would have very little impact associated with crime but may increase the potential for vandalism by adding new facilities that are susceptible to graffiti. Overall, the TSM Alternative's contribution to cumulative crime impacts would be less than significant.

5.2.3.5 Community Resources and Events

The TSM Alternative, in tandem with future transportation projects outside the central downtown area, could result in beneficial impacts because all projects would create new linkages and provide more options for commuters in the region. This would be a beneficial cumulative impact.

5.2.3.6 Population, Housing, and Employment

There would be no cumulative impact to population, housing or employment.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would extend from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces north of 4th Street, crosses 3rd Street at-grade, enters Bunker Hill, and turns northeast through a new entrance to the existing

2nd Street tunnel. The new underground portions of the alignment would be constructed using the cut and cover method that is described in detail in the Description of Construction.

After entering the 2nd Street tunnel, the alignment continues along 2nd Street and splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). It then heads east on Temple Street, realigns into a dual track configuration just east of Los Angeles Street, and connects to the Metro Gold Line in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street.

An automobile underpass and a potential pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets because of the high volume of auto and truck traffic on Alameda Street. These grade separations would reduce potential pedestrian-train and automobile-train conflicts.

The communities directly affected by construction and operation of the At-Grade Emphasis LRT Alternative would include:

- Civic Center
- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

Other surrounding communities and neighborhoods may be indirectly affected by this alternative. Potential direct and indirect effects are described in more detail in the following sections.

5.3.1 Construction

Construction of the At-Grade Emphasis LRT Alternative would have the potential to temporarily affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in this analysis.

Additional information about the construction staging areas is provided in the Description of Construction. Most impacts would be temporary and intermittent and would be reduced or eliminated after construction is complete (four to five years).

5.3.1.1 Community Mobility

This At-Grade Emphasis LRT Alternative would require the construction of three new stations; one in the Civic Center area composed of two one-way stations located on adjacent streets, one at Bunker Hill, and one in the Financial District along Flower Street. Construction of these stations would require temporary sidewalk and street closures. Street closure locations have not yet been defined and some may last only overnight or for a few days. Mobility would be temporarily reduced in these areas during construction.

Installation of the at-grade tracks and other necessary light rail infrastructure would occur on Temple, Main, Los Angeles, and 2nd Streets in the Civic Center and Historic Core areas and would require street closures during construction. This would temporarily reduce pedestrian and vehicle mobility between the Civic Center, the Historic Core, and Little Tokyo for the duration of construction.

Under this alternative, the alignment would run underground from Flower Street and the Financial District through the Bunker Hill area onto 2nd Street. Cut and cover excavation activities for the underground portion of the alignment would result in road closures in these areas and would likely shift traffic to the surrounding streets. This could temporarily add congestion and reduce mobility to surrounding communities.

The addition of an automobile underpass at the intersection of Temple and Alameda Streets would facilitate movement of traffic on Alameda Street by allowing it to travel below the intersection without stopping. Frontage roads would allow some turning movements between Alameda and Temple Streets to be maintained, though some turns would no longer be permitted. The underpass would enhance community mobility by removing most of the automobile traffic from the intersection of Temple and Alameda Streets, thus improving traffic flow along a major regional arterial. Additional details regarding congestion improvements are provided in the Transportation Technical Memorandum.

Overall, pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area would be reduced during construction because of road and sidewalk closures and traffic detours. However, these impacts would only last for the duration of construction. This impact could be potentially significant but would be reduced to a less than significant level with mitigation measure 1 in Section 6.0. Ultimately, after construction, mobility would be improved (see Section 5.3.2).

5.3.1.2 Viability of Existing Businesses

No businesses would be directly affected by construction of this alternative because no properties on which businesses are located would need to be acquired. Still, indirect effects to businesses may occur. Businesses around each of the new stations, and along the proposed alignment, could be affected by construction activities, construction-related traffic,

and road and sidewalk closures. Construction activities would likely result in a decrease in accessibility to many businesses and could reduce on-street and off-street parking.

Construction could negatively affect business activity levels because the number of customers may temporarily decline. The decline in customers could have a potentially significant impact to businesses. Even with implementation of mitigation measures in Section 6.0, this impact may remain significant. While all attempts would be made to provide adequate detours and minimize road closures, some indirect effects to businesses would still likely occur because consumers might avoid the area altogether.

Thus, the potential impact to businesses could be significant during the construction phase but would be reduced by mitigation measures. Short term adverse construction impacts would be offset by long term benefits of new transit access to businesses and the enhancement of downtown as a business destination.

5.3.1.3 Emergency Services

Construction of the At-Grade Emphasis LRT Alternative would likely require road closures, and this could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services would be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

No increases in staff would be required for emergency service providers because construction security would be the responsibility of the construction contractor.

5.3.1.4 Public Health and Safety and Crime

Construction of the At-Grade Emphasis LRT Alternative is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately fenced to prevent entry. Signs would be posted to alert the public to any areas where large construction vehicles or equipment are operating or where roads or sidewalks have been closed. The construction contractor would be responsible for providing security for the construction site throughout the duration of construction. The potential impact to crime and public health and safety would be less than significant, and mitigation measures are identified in Section 6.0.

5.3.1.5 Community Resources and Events

Construction of the At-Grade Emphasis LRT Alternative may require road and sidewalk closures and would add construction vehicles and equipment to central downtown streets. Construction of this alternative has the potential to adversely (if periodically) affect annual festivals and events in the downtown area. Construction could also disrupt traffic patterns and make public access to certain community resources (such as the MOCA Geffen

Contemporary building and the Go For Broke Monument) more difficult. This potential impact could be significant. Mitigation measures described in Section 6.0 would reduce this potential impact to a less than significant level.

5.3.1.6 Population, Housing, and Employment

Construction of the At-Grade Emphasis LRT Alternative would affect properties along the alignment and in areas around the proposed new stations Metro would have to acquire parts of three properties just north of Little Tokyo on Temple Street between Main Street and Central Avenue for the track alignments. Two of the properties are currently government buildings and one is a parking lot.

In the Bunker Hill area, easements for construction and staging would need to be obtained for two properties that contain multi-family housing, a pool, and tennis courts. A partial take would be required for construction and staging along 3rd Street on property that currently contains the Central Plant. Only one property would need to be acquired it its entirety: a vacant lot between Hope Street and Flower Street. Easements would be required for construction and staging on five additional properties along Flower Street in the Financial District area.

In the Historic Core area, residents of the Higgins Building are concerned about construction and operation noise near their building under this alternative. These concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. Since the building is located across the street from the proposed underpass site, there would be additional noise and construction detours around the building. These concerns, along with mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

All properties requiring full or partial takes would be compensated according to the requirements of the Uniform Relocation Act. Easements and properties acquired under this alternative would not result in the displacement of houses or businesses; therefore, no changes to population, housing, or employment would occur during construction of the At-Grade Emphasis LRT Alternative.

This alternative would provide new construction jobs during the four to five years of construction. Creation of these new jobs in central downtown would be beneficial but temporary because the jobs would no longer be needed after construction is complete. Most construction workers would be expected to commute from surrounding areas and not permanently relocate to the work site. Thus, the workers would not substantially change the population in central downtown. Impacts on housing would be less than significant.

5.3.2 Operation

Operation of the At-Grade Emphasis LRT Alternative could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.3.2.1 Community Mobility

The At-Grade Emphasis LRT Alternative would create a new LRT alignment through central downtown that would provide a new connection between the Civic Center, Historic Core, Bunker Hill, and Financial District. This new connection would also provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both within downtown communities and to the central downtown from outside communities, would be a beneficial impact.

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot wide surface right-of-way bordered by mountable curbs. This width would increase to approximately 39 feet at station locations. Similar to current conditions, pedestrian crossings would be limited to traffic signal-controlled intersections, though signal phasing may be modified to provide adequate green time for the LRT vehicles to safely cross.

The At-Grade Emphasis LRT Alternative would have the potential to reduce pedestrian mobility between the Civic Center, Little Tokyo, and the Historic Core because at-grade trains would be running frequently along 2nd, Main, and Los Angeles Streets. Since adequate pedestrian street crossings would be provided at all traffic signal-controlled intersections, pedestrians would still be able to cross the streets. This potential impact would be less than significant.

Vehicular crossings would also be limited to traffic signal-controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. No uncontrolled mid-block vehicular crossing of the tracks would be permitted. Access to existing parking structures, parking lots, loading docks and commercial frontage would be affected by some at-grade LRT facilities.

Impacts could be offset by providing alternate street access. Access and egress to parking lots, by making a left turn from the street, presently exists at many locations downtown. However, at-grade LRT facilities would eliminate uncontrolled mid-block left turns, modifying existing approach and departure traffic patterns around parking sites. The Transportation Technical Memorandum contains additional details regarding modification of automobile access to lots adjacent to the proposed alignment.

These potential changes in traffic flow could decrease mobility between communities and neighborhoods and could affect access to local businesses in the area. This potential reduction in vehicle mobility on existing streets is unavoidable. This potential adverse impact to adjacent properties from decreased vehicular mobility could be partially offset by increases in access via the new trains that would be available to businesses and their patrons.

The at-grade alignment along Temple Street in the Civic Center area, just north of Little Tokyo, could result in increased conflicting traffic movements. This area would have a high volume of trains using the Regional Connector corridor and a large volume of traffic using Alameda Street and pedestrians crossing Alameda Street to access the existing Little Tokyo/Arts District Station. In order to improve operation of the Temple and Alameda Streets intersection, a vehicle underpass and a potential pedestrian overpass would be constructed. With the construction of the proposed underpass/overpass, the potential for increased conflicting traffic movements would be a less than significant impact.

The new LRT stations and trains would comply with the Americans with Disabilities Act and would be designed to ensure accessibility to all persons. The stations would be wheelchair and stroller accessible with ramps and/or elevators. The LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each of the trains would be designated for persons with disabilities and senior citizens. There would be no adverse impacts on disabled persons or senior citizens.

5.3.2.2 Viability of Existing Businesses

Most businesses in the central downtown area along the proposed alignment would likely benefit from the At-Grade Emphasis LRT Alternative. This alternative would provide a new means of public transportation through the Civic Center, Historic Core, Bunker Hill, and Financial District and would likely increase the number of pedestrians around each of the new stations. This new access could potentially increase customers for local businesses. This would be a beneficial effect.

Some adverse indirect effects may occur to existing businesses along the at-grade portions of the alignment through the Civic Center and Historic Core. As noted in the mobility section, at-grade LRT facilities would eliminate uncontrolled mid-block left turns, modifying existing approach and departure traffic patterns. Some businesses may be adversely affected since access may become more difficult. This could reduce customers to and decrease the viability of some existing businesses.

On 2nd Street, the at-grade LRT tracks would run along the southern side of the street, so impacts would likely be greater for businesses on the south side of the street than those on the north side. These impacts could potentially be significant. The elimination of mid-bock left turns cannot be avoided or reduced. The significance of the resulting impact could be

partially offset by increases in access via the new trains that would be available to businesses and their patrons.

5.3.2.3 Emergency Services

Operation of the At-Grade Emphasis LRT Alternative would not be expected to increase emergency response times. Emergency services would be notified of any changes to existing roads needed for the operation of Regional Connector trains.

In fact, the proposed vehicular underpass at Temple and Alameda Streets may improve emergency response times by increasing roadway capacity. Still, some rerouting of emergency vehicles may be needed due to new restrictions on turning movements. No new emergency services staff would be required. The potential impact to emergency services would be less than significant.

5.3.2.4 Public Health and Safety and Crime

Operation of the At-Grade Emphasis LRT Alternative is not expected to substantially increase crime in the central downtown area. Mitigation measures, such as adding security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime.

Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic that are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity. Metro would continue to contract with the Sheriff's Department to provide specialized security at all rail stations.

Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the facilities are not expected to substantially change crime levels in the central downtown area. The potential impact to crime would be less than significant, and potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the project build alternatives.

Operation of the LRT in Bunker Hill and the Financial District would not be expected to cause any public health and safety issues since trains would be travelling underground. Operation of the trains through the Civic Center and Historic Core would be at-grade and introduces an opportunity for collisions between trains and pedestrians. Thus, like other Metro trains currently in use, the new trains would be equipped with auditory signals that would alert pedestrians when trains are approaching.

As required by law, all track crossings at intersections would have appropriate signal lights, auditory signals, and traffic barriers. Speed limits would be established for areas with heavy pedestrian use. Overall, the potential impact to public safety would be less than significant.

5.3.2.5 Community Resources and Events

Operation of the At-Grade Emphasis LRT Alternative could benefit community resources and events because it would provide an efficient public transportation method for people travelling to the area. This effect would be beneficial. The only permanent impacts to communities would be easements, and partial and full takes of properties necessary for the track alignment.

Major events, particularly in the City Hall area, would require coordination between Metro and city law enforcement officials. Since the At-Grade Emphasis LRT Alternative would run at grade in the Civic Center area, temporary service interruptions may be necessary to accommodate crowds and ensure safety. These interruptions would not impact events but could cause light rail system delays throughout the County.

5.3.2.6 Population, Housing, and Employment

Over the long-term, the presence of the Regional Connector may attract new residents to the central downtown area because it would provide three new stations that would link to the regional LRT system. As the City of Los Angeles continues to encourage public transportation and transit-oriented growth, new developments, including additional housing units, may occur around transit stations. This would be consistent with the Central City Community Plan and would be a beneficial impact.

The At-Grade Emphasis LRT Alternative may indirectly increase employment. Operation of the Regional Connector would decrease commute times and would result in three new transit stations in the central downtown area. A more efficient public transportation option could encourage people in the surrounding communities to seek employment downtown. This potential impact would be beneficial.

5.3.3 Cumulative Impacts

This section describes cumulative effects of the At-Grade Emphasis LRT Alternative.

5.3.3.1 Community Mobility

The At-Grade Emphasis LRT Alternative, when considered cumulatively with other future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. Taken cumulatively, the projects would result in a beneficial impact.

5.3.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the At-Grade Emphasis LRT Alternative. However, many new construction and renovation projects are planned in the area. If these construction projects also affect accessibility to local businesses, then there may be a cumulative impact during construction of the Regional Connector.

However, these impacts are all expected to be temporary and would be eliminated after construction is complete. No future projects are expected to alter existing streets or on-street parking in the construction area. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant. Viability of existing businesses would improve after the At-Grade Emphasis LRT Alternative is completed because it would bring more potential customers to the area.

5.3.3.3 Emergency Services

Many new construction and renovation projects are planned in central downtown for the same time as construction of the At-Grade Emphasis LRT Alternative. If these projects require road closures or detours in the same time frame as the construction of this alternative, a cumulative effect could result in increased response times for emergency services. However, each construction project, including the At-Grade Emphasis LRT Alternative, would be responsible for alerting emergency services to any road closures or detours to help avoid increased response times. The potential cumulative impact would be less than significant.

5.3.3.4 Public Health and Safety and Crime

The At-Grade Emphasis LRT Alternative, and other projects planned for the central downtown area, would potentially result in safety risks or increased crime during both construction and operation. However, each project would be responsible for reducing or avoiding potential adverse impacts. The At-Grade Emphasis LRT Alternative includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of the mitigation measures in Section 6.0, the At-Grade Emphasis LRT Alternative would not contribute adversely to cumulative public health and safety or crime impacts.

5.3.3.5 Community Resources and Events

Many new construction and renovation projects are planned in and around the central downtown area during construction of the At-Grade Emphasis LRT Alternative. If these projects require road closures or detours in the same timeframe as this alternative, cumulative effects to community resources or events may occur through traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each project, including the At-Grade Emphasis LRT Alternative, would be responsible for coordinating with local

community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, the potential cumulative impact would be less than significant.

5.3.3.6 Population, Housing, and Employment

The At-Grade Emphasis LRT Alternative has the potential to indirectly increase population, housing, and employment over the long-term because it would better link the project area to the LRT system. This could encourage more people to live and work in central downtown. Future development in the project area would also increase population, housing, and employment.

The cumulative population, housing, and employment growth under this alternative and other planned future projects would be expected to be consistent with the Central City Community Plan objectives and would result in a beneficial cumulative impact. Los Angeles' transit-oriented growth policies could encourage new, dense, development around the proposed stations under this alternative. This development would add to the housing supply and create new jobs in the downtown area, which is a beneficial impact.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would connect directly to the Metro Blue/Expo Line tracks at 7th Street/Metro Center Station, continue north underneath Flower Street to 3rd Street, then travel further northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north into a new portal on the private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue. The tracks would then enter the intersection of 1st and Alameda Streets in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative. The option exists under this alterative for a potential pedestrian overpass and vehicular underpass for through traffic on Alameda Street.

The communities potentially directly affected by construction and operation of the Underground Emphasis LRT Alternative would include:

- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

5.4.1 Construction

Construction impacts from the Underground Emphasis LRT Alternative would have the potential to affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about the construction staging areas is provided in the Description of Construction.

Most impacts would be temporary and intermittent, and they would be reduced or eliminated after construction is complete in four to five years. Cut and cover tunnel construction would be required on Flower Street and all of the station sites, except possibly at the 2nd/Hope Street station, which may be constructed using the sequential excavation method. The remainder of the alignment on 2nd Street would be constructed using a tunnel boring machine. Further information about these construction methods is available in the Description of Construction.

5.4.1.1 Community Mobility

This alternative would require the construction of three new underground stations: one near the Financial District, one at Bunker Hill, and one in the Historic Core/Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction. Installation of underground tracks would require tunneling along 2nd and Flower Streets. The segment on Flower Street would require temporary cut and cover excavations and concrete decking along the entire length of the roadway from 7th Street/Metro Center Station to the new portal just south of 3rd Street. Along 2nd Street, a tunnel boring machine (TBM) would be used for the majority of the alignment. As such, construction impacts to surface traffic and mobility would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

However, most of the construction would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of the temporary excavations would be greater on Flower Street than on 2nd Street. Streets and sidewalks in the vicinity of the temporary excavation areas would likely be closed periodically during construction.

Temporary street closures and construction activities, similar to cut and cover construction, would be needed in the vicinity of the proposed underpass at 1st and Alameda Streets. This could result in temporary mobility impacts during construction. Further information about construction activities and mobility impacts is available in the Description of Construction and the Transportation Technical Memorandum.

In summation, road and sidewalk closures and traffic detours could reduce mobility for pedestrian and vehicle traffic in the central downtown area. This potential impact could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to a less than significant level.

5.4.1.2 Viability of Existing Businesses

Businesses around each of the new stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would likely result in a temporary decrease in accessibility to many businesses and could reduce on-street and off-street parking. Construction operations could negatively affect business activity levels as the number of customers may temporarily decline. This potential impact could be significant.

While Metro would provide adequate detours and minimize road closures, some indirect effects to businesses may occur as people may avoid the project area altogether. This potential impact could be significant and unavoidable during the construction phase. Mitigation measures could help reduce the significance of these impacts. The Underground Emphasis LRT Alternative could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could also create local construction-related and other permanent jobs.

Some existing commercial properties would need to be acquired under this alternative in Little Tokyo and the Historic Core. Properties would be acquired according to the Uniform Relocation Act, and owners would be compensated. However, loss of these businesses could indirectly affect the viability of surrounding businesses because less people could be drawn to the general area. This potential impact could be significant and unavoidable if not necessarily permanent. Mitigation measures would help reduce the significance of these impacts.

After construction, access to local businesses would be enhanced by the improved transit service provided by the Underground Emphasis LRT Alternative. Viability of businesses along the alignment would be increased by added pedestrian activity (more potential customers) on streets near the alignment, especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the

project. Measures to ensure these concerns are addressed will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Underground Emphasis LRT Alternative would require acquisition of a portion of the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new portal, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses could include Office Depot, Señor Fish, and Starbucks Coffee. All other businesses on Central Avenue would remain. Additionally, some off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Any further displacement of businesses could cause additional temporary job losses. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.4.1.3 Emergency Services

The Underground Emphasis LRT Alternative would likely require temporary road closures during construction. This could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.4.1.4 Public Health and Safety and Crime

Construction of the Underground Emphasis LRT Alternative is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately fenced or blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. The potential impact from this alternative on crime and public health and safety would be less than significant, and potential mitigation measures are identified in Section 6.0.

5.4.1.5 Community Resources and Events

Construction of the Underground Emphasis LRT Alternative would require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. Construction under this alternative has the potential to create temporary adverse affects on festivals and events in the downtown area. It could also disrupt traffic patterns and make it more difficult for the public to access certain community resources like the Japanese American National Museum and the MOCA Geffen Building. The potential resulting impact could be significant; however, mitigation measures described in Section 6.0 would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.4.1.6 Population, Housing, and Employment

Construction of the Underground Emphasis LRT Alternative would affect properties along the alignment, near proposed underground stations, and where the alignment connects to the Metro Gold Line.

In order to construct a portal and launch site for the TBM, some properties on the block bounded by 1st, Alameda, and 2nd Streets, and Central Avenue in Little Tokyo would be acquired. These properties include commercial buildings and parking lots. Acquisition of properties housing businesses could temporarily reduce employment in the Little Tokyo area. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This direct decrease in employment at this location in Little Tokyo would be unavoidable. However, construction activities would introduce new employees into the area on a regular basis, which could offset the decrease in economic activity. After the project is complete, the added mobility and access it would provide to the area would likely increase business viability and overall employment. In addition, new employment at new businesses developed in the station vicinities would likely occur.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential tunnel boring machine launch area) and adjacent to the proposed underpass site. There would be noise and construction detours around the building under this project alternative. These concerns, along with potential mitigation

measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to 19 easements, six partial takes, and four full takes could be required, depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. However, not all proposed station entrances would be built, so the actual number of easements needed would likely be smaller. The four properties that would be acquired in full include three parking lots and commercial buildings. A direct decrease in employment at this location in the Historic Core and would be an unavoidable. After the project is complete, the added mobility and access it would provide to the area would likely increase business viability and overall employment. In addition, new employment at new businesses developed in the station vicinities would likely occur.

Residents of the Higgins Building are concerned about construction noise that would result from implementation of the Underground Emphasis LRT Alternative. The building is located less than one block from the proposed 2nd Street station (under either the Broadway option or the Los Angeles Street option). These concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. The Central Plant property would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, so there would be no impact to population, housing, or employment.

The Underground Emphasis LRT Alternative would provide a number of new construction jobs in the four to five years construction would last. Creation of new employment in central downtown would be beneficial but temporary since the jobs would end with completion of the project.

Most construction workers are expected to come from surrounding areas and not permanently relocate around the work site. They would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.4.2 Operation

Operation of the Underground Emphasis LRT Alternative could result in direct and indirect impacts on mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.4.2.1 Community Mobility

The Underground Emphasis LRT Alternative would create a new LRT alignment through central downtown and provide a new connection between Little Tokyo, the Historic Core, Bunker Hill, and the Financial District. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both within downtown and to the central downtown from outside communities, would be a beneficial impact.

Unlike the At-Grade Emphasis LRT Alternative, operation of the Underground Emphasis LRT Alternative would run almost entirely underground. Operation would not affect existing pedestrian or vehicle traffic except around the at-grade portion of the alignment near Alameda Street. Alameda Street experiences heavy vehicle traffic and large volumes of pedestrians cross Alameda Street to get to and from the Little Tokyo/Arts District Station.

Many of the traffic movements that could conflict with LRT trains would be eliminated by construction of a new underpass that would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction. Additionally, a potential new overhead pedestrian bridge structure would allow pedestrians to safely cross the street. Potential mobility impacts from this alternative would be less than significant and smaller than those for the At-Grade Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and would be designed to ensure accessibility to all persons. The stations would be wheelchair and stroller accessible with ramps and/or elevators. The LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts on senior citizens or disabled persons.

5.4.2.2 Viability of Existing Businesses

Most businesses in the central downtown area along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through Little Tokyo, the Historic Core, Bunker Hill, and the Financial District and would likely increase the number of pedestrians around each of the new stations. An increase in pedestrian traffic would have a beneficial impact to businesses by increasing the number of potential customers.

5.4.2.3 Emergency Services

Operation of the Underground Emphasis LRT Alternative would not be expected to increase emergency response times because it would be underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response

times by increasing roadway capacity. Some alteration of emergency routes may be needed due to potential new turning restrictions. No new emergency service staff would be required as a result of operation of this alternative. There would be no adverse impact to emergency services.

5.4.2.4 Public Health and Safety and Crime

Operation of the Underground Emphasis LRT Alternative is not expected to substantially increase crime in the central downtown area. While there is a perception that transit stops increase crime levels in general, mitigation measures, such as additional security services, would help prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials that are resistant to vandalism, such as brick, concrete, steel, aluminum, and heavy plastic. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the facilities are not expected to substantially change crime levels in the central downtown area. The potential impact of this alternative related to crime would be less than significant, and potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the project build alternatives.

5.4.2.5 Community Resources and Events

Operation of the Underground Emphasis LRT Alternative would benefit community resources and events since it would provide a new transit option for travelers to the area. Since the alignment would run almost entirely underground, train service would continue uninterrupted during large events. Potential event attendees would gain new access to the area. This impact would be beneficial.

5.4.2.6 Population, Housing, and Employment

Over the long-term, the presence of the Regional Connector may attract new residents to the central downtown area since it increases access to the area. The City of Los Angeles continues to encourage public transportation and transit-oriented growth. Development, including additional housing units, may occur around proposed stations. This potential increase in population and housing would be consistent with the Central City Community Plan and would be a beneficial impact.

The Underground Emphasis LRT Alternative may indirectly increase employment. Operation of the Regional Connector would decrease commute times and increase access to and within

the central downtown area. Increased access could make employment in the central downtown area more attractive to residents of surrounding communities. This potential impact would be beneficial.

5.4.3 Cumulative Impacts

This section describes cumulative effects of the Underground Emphasis LRT Alternative.

5.4.3.1 Community Mobility

The Underground Emphasis LRT Alternative, when considered cumulatively with future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.4.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Underground Emphasis LRT Alternative. However, many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact. Still, these impacts are expected to be temporary and would be eliminated after construction is complete. The potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.4.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area for the same time as construction of the Underground Emphasis LRT Alternative. If these related projects require road closures or detours in the same timeframe as construction of the Underground Emphasis LRT Alternative, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This would lessen increased emergency response times due to construction. The potential cumulative impact to emergency services would be less than significant.

5.4.3.4 Public Health and Safety and Crime

The Underground Emphasis LRT Alternative, and the future projects planned for the central downtown area, could have the potential to increase safety risks and crime during both construction and operation. However, each project would be responsible for reducing or avoiding potential adverse impacts.

The Underground Emphasis LRT Alternative has included measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Underground Emphasis LRT Alternative would not contribute to significant cumulative public health and safety or crime impacts.

5.4.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area for the same time as the potential construction of the Underground Emphasis LRT Alternative. If these related projects require road closures or detours in the same timeframe as construction of the Underground Emphasis LRT Alternative, a cumulative effect could occur resulting in adverse impacts to community resources and events.

Potential adverse impacts could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads.

However, each specific project, including the Underground Emphasis LRT Alternative, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, this potential cumulative impact would be less than significant.

5.4.3.6 Population, Housing, and Employment

The Underground Emphasis LRT Alternative has the potential to indirectly increase population, housing, and employment in central downtown over the long-term. This alternative would better link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the city's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development projects in the project area could also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Underground Emphasis LRT Alternative, and other planned future projects, would be expected to be consistent with the Central City Community Plan objectives and would result in a beneficial cumulative impact.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would connect directly to the Metro Blue/Expo Line tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets, and Central

Avenue. Next, the tracks would enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two directions. One set of tracks bound for the City of Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for I-605 via the Eastside Extension, would proceed east from the junction and rise through a new portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line to East Los Angeles tracks.

The communities directly affected by construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would include:

- Arts District
- Little Tokyo
- Historic Core
- Bunker Hill
- Financial District

5.5.1 Construction

Construction impacts from the Fully Underground LRT Alternative - Little Tokyo Variation 1 would potentially affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, and population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about the construction staging areas is provided in the Description of Construction.

Most impacts under this alternative would be temporary and intermittent and would be reduced or eliminated after construction is completed in four to five years. Cut and cover tunnel construction would be required on Flower Street between 7th Street/Metro Center Station and 3rd Street. The potential 2nd /Hope Street station could be constructed using either the cut and cover method or the sequential excavation method. The proposed 2nd Street/Central Avenue station, the portal on the Department of Water and Power site, and tunnels beneath the Nikkei parcel would be constructed using the open cut method.

Other stations would be constructed using the cut and cover method. Cut and cover construction would also be needed for the junction beneath the intersection of 1st and

Alameda Streets and tunnel approaches to nearby portals. The remainder of the alignment on 2nd Street would be constructed using a tunnel boring machine. Further information about these construction methods is available in the Description of Construction.

5.5.1.1 Community Mobility

This alternative would require the construction of four new underground stations: one near the Financial District, one at Bunker Hill, one in the Historic Core, and one in Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction.

Installation of underground tracks would require tunneling along 2nd and Flower Streets. A segment on Flower Street would require temporary cut and cover excavations. Concrete decking would be installed along the entire length of Flower Street from 7th Street/Metro Center Station to the new portal just south of 3rd Street. Along 2nd Street, a TBM would be used for the majority of the alignment. Since the TBM operates underground, construction impacts to surface traffic and mobility would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

Tunneling activities would affect Flower Street at 7th Street , Bunker Hill, Little Tokyo, and the Arts District. Temporary excavations in these areas could periodically reduce mobility during construction. Most of the construction, however, would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of the temporary excavations would be greater on Flower Street than on 2nd Street. Construction could necessitate the periodic closing of streets and sidewalks near excavations.

Temporary street closures, and construction activities similar to cut and cover construction, would be needed in the vicinity of the two portals near the intersection of 1st and Alameda Streets. This could result in temporary mobility impacts while construction is underway. Further information about construction activities and mobility impacts are available in the Description of Construction and the Transportation Technical Memorandum.

Overall, pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area could be reduced during construction because of road and sidewalk

closures and traffic detours. This potential impact could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to mobility to a less than significant level.

5.5.1.2 Viability of Existing Businesses

Businesses around each of the new stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would result in a temporary decrease in accessibility to some businesses and could reduce on-street and off-street parking. Less accessibility could negatively affect business activity levels if the number of customers temporarily declines. This potential impact could be significant.

While Metro would provide adequate detours and minimize road closures, some indirect effects to businesses may occur if consumers avoid the project area altogether. This potential impact could be significant and would be unavoidable during the construction phase. Mitigation measures would help reduce the significance of these impacts. The Fully Underground LRT Alternative - Little Tokyo Variation 1 could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could create local construction-related and permanent jobs.

Partial takes would be needed along only the north side of 1st Street between Alameda and Garey Streets. A partial take on the north side of 1st Street would come from the proposed Nikkei parcel. Though less space would remain, the development potential of the Nikkei parcel would be enhanced by the proposed 2nd Street/Central Avenue station that would improve access to the site.

Under this alternative, some existing commercial properties would need to be acquired in Little Tokyo and the Historic Core. These properties would be acquired according to the Uniform Relocation Act and owners would be compensated. However, losing these businesses could indirectly affect the viability of other local businesses because fewer people might be drawn to the area. This impact would be unavoidable during construction and could be considered significant. Mitigation measures would help reduce the significance of these impacts.

After construction, access to the area would be enhanced by the improved transit service provided by the Fully Underground LRT Alternative – Little Tokyo Variation 1. After construction, this alternative would increase viability of area businesses by increasing pedestrian activity (adding more potential customers) on streets near the alignment and especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the

project. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 1 could require acquisition of the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new station, entrances, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses would include Office Depot, Señor Fish, Starbucks Coffee, Weiland's Brewery, and Café Cuba. All other businesses on Central Avenue would remain. Additionally, all off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.5.1.3 Emergency Services

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would require temporary road closures during construction. Road closures could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.5.1.4 Public Health and Safety and Crime

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. This potential impact would be less than significant, and mitigation measures are identified in Section 6.0.

5.5.1.5 Community Resources and Events

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 may require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. This has the potential for temporary adverse affects on annual festivals and events held in the downtown area. Construction could disrupt traffic patterns and make it more difficult for the public to access community resources such as the Nishi Hongwanji Temple, the Japanese American National Museum, and the MOCA Geffen building. This potential impact could be significant; however, mitigation measures, described in Section 6.0, would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.5.1.6 Population, Housing, and Employment

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would affect properties along the alignment, near the proposed underground stations, and near the portals where the alignment would connect to the Metro Gold Line.

All of the properties on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue in Little Tokyo would be acquired under this alternative to allow for construction of a portal and launch site for the TBM. Though they would be acquired under this project alternative, the strip of businesses facing Central Avenue would remain in place, except possibly Starbucks Coffee. These properties consist of commercial buildings and parking lots. Acquisition of these properties could temporarily reduce employment in the Little Tokyo area since these properties contain existing businesses. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This alternative would result in a decrease in employment at this location in Little Tokyo and would be unavoidable. However, construction activities would introduce new people into the area on a regular basis. This influx could offset the decrease in employment and economic activity. After construction there would likely be additional new employment since the increased access to the area afforded by the project would enhance local business viability.

Should it be necessary to acquire all properties on the aforementioned block, a temporary reduction in employment would be more pronounced but would not extend to other areas of the community. New space for businesses could potentially be constructed on the same site once the Regional Connector is finished, possibly as part of a transit-oriented development that would boost business activity throughout the community.

Residents of the Savoy condominium development have expressed concerns over construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential TBM launch area) and is adjacent to the proposed portal site. There would be additional noise and construction detours would be implemented around the building during construction. Potential noise and access effects, along with mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to eighteen easements, six partial takes, and four full takes could be required depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. Not all proposed station entrances would be built however, so the number of easements needed would likely be smaller. Three commercial properties and a parking lot would be acquired in full.

This acquisition is unavoidable and would result in a direct decrease in employment at this location. After construction this impact could be offset by new employment at new businesses developed in the vicinity of new stations. When the area becomes more accessible by rail, employment could increase since local businesses would become more viable.

Residents of the Higgins Building are concerned about construction noise that would result from the Fully Underground LRT Alternative - Little Tokyo Variation 1. The Higgins Building is located less than one block from the proposed 2nd Street/Broadway station. Construction noise concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. Property housing the Central Plant would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, and no population, housing, or employment impacts would occur.

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide a number of new construction jobs over the four to five year construction period. Creation of new employment in central downtown would be beneficial but temporary since the jobs would no longer be needed after construction is complete. Most construction workers are expected to commute from surrounding areas and are not expected to permanently relocate to the work site. Construction workers would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.5.2 Operation

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.5.2.1 Community Mobility

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would create a new LRT alignment through central downtown and provide a new connection between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both between downtown communities and to central downtown from outside communities, would be a beneficial impact. Mobility for Little Tokyo and the Arts District would be enhanced under this alternative because the proposed 2nd Street/Central Avenue station would be served by both North-South and East-West Regional Connector routes.

Unlike the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative, operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would run entirely underground and would not affect existing pedestrian or vehicle traffic. One exception exists where the alignment would surface on 1st Street. Pedestrians and vehicles would no longer be able to cross 1st Street at Hewitt Street, but they would still be able to cross at Alameda Street and Vignes Street. Alameda Street currently experiences heavy vehicle and pedestrian traffic. Additionally, large volumes of pedestrians cross Alameda Street to get to and from the existing Little Tokyo/Arts District Station.

However, by placing the 2nd Street/Central Avenue Station close to major activity centers in Little Tokyo, this alternative would eliminate the need for many pedestrians to cross Alameda Street. Operation of this alternative would not conflict with existing traffic movements, but some intersections would be modified by new turning restrictions. Potential mobility impacts from this alternative would be less than significant. Additionally, mobility impacts would be less than those of the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and be designed to ensure accessibility to all persons. Stations would be wheelchair and stroller accessible with ramps and/or elevators. LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of the trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts to senior citizens or disabled persons.

5.5.2.2 Viability of Existing Businesses

Most businesses along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. The number of pedestrians in the areas around new stations would likely increase.

An increase in pedestrians would benefit local businesses by increasing the volume of potential customers. An entrance to the 2nd Street/Central Avenue station could be incorporated into the planned Nikkei Center on the northeast corner of 1st and Alameda Streets. Such transit-oriented development could increase transit ridership and local business activity. This potential effect would be beneficial.

5.5.2.3 Emergency Services

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not be expected to increase emergency response times because it would run underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response times by increasing roadway capacity. Some alteration of emergency routes may be needed due to added turning restrictions. New emergency service staff would not be required as a result of operation of this alternative. There would be no adverse impact to emergency services.

5.5.2.4 Public Health and Safety and Crime

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not result in an increase in crime in the central downtown area. Mitigation measures, such as additional security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic which are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the operation of this alternative is not expected to change crime levels in the central downtown area. The potential impact of the project on crime would be less than significant. Mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the proposed build alternatives.

5.5.2.5 Community Resources and Events

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would benefit community resources and events because it would provide a new transit option for travelers to the area. Since the alignment would operate entirely underground, train service would continue uninterrupted during large events, facilitating access for event attendees. This increased access would be beneficial.

5.5.2.6 Population, Housing, and Employment

Over the long-term, this alternative could attract new residents to the central downtown area. This alternative would link the project area to the regional LRT system through four new stations. As Los Angeles continues to encourage public transportation and transit-oriented growth, new development, including additional housing units, could occur around new stations. This increase in population and housing would be consistent with the Central City Community Plan and the Central City North Community Plan and would be a beneficial impact.

The Fully Underground LRT Alternative - Little Tokyo Variation 1 could indirectly increase employment. This alternative creates four new stations and would decrease commute times for workers. In general, increased public transportation would make central downtown a more desirable location to work and live in, increasing jobs and population. This potential impact would be beneficial.

5.5.3 Cumulative Impacts

This section describes cumulative effects of the Fully Underground LRT Alternative - Little Tokyo Variation 1.

5.5.3.1 Community Mobility

Upon completion, the Fully Underground LRT Alternative - Little Tokyo Variation 1, when considered cumulatively with future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.5.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Fully Underground LRT Alternative - Little Tokyo Variation 1. Many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact.

However, impacts are expected to be temporary and would be eliminated after construction is complete. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.5.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area during the time the Regional Connector would be constructed. If these projects require road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 1's construction, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each specific project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This measure would help avoid increased response times due to construction. The potential cumulative impact to emergency response time would be less than significant.

5.5.3.4 Public Health and Safety and Crime

The Fully Underground LRT Alternative - Little Tokyo Variation 1, and future projects planned for the central downtown area could potentially result in safety risks or increased crime during both construction and operations. However, each project would be responsible for reducing or avoiding potential impacts.

The Fully Underground LRT Alternative - Little Tokyo Variation 1 includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not contribute to significant cumulative public health and safety or crime impacts.

5.5.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area during the time the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be constructed. If these projects require temporary road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 1's construction, cumulative effects to community resources or events may occur.

Adverse effects could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each specific project, including the Fully Underground LRT Alternative - Little Tokyo Variation 1, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the mitigation measures listed in Section 6.0, potential cumulative impacts to community resources and events would be less than significant.

5.5.3.6 Population, Housing, and Employment

Over the long-term, the Fully Underground LRT Alternative - Little Tokyo Variation 1 has the potential to indirectly increase population, housing, and employment in the downtown area. This alternative would link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the city's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development in the project area would also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Fully Underground LRT Alternative - Little Tokyo Variation 1, and other planned future projects, would be consistent with the Central City Community Plan objectives. Such growth would be a beneficial cumulative impact.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would connect directly to the Metro Blue and Expo Line tracks at 7th Street/Metro Center Station and continue north underneath Flower Street to 3rd Street and then northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tracks would then veer north beneath the private property bounded by 1st, Alameda, and 2nd Streets and Central Avenue. The tracks would then enter a junction beneath the intersection of 1st and Alameda Streets.

From the junction, the track would diverge into two sets. One set of tracks bound for the City of Azusa would proceed north and rise through a portal just northeast of the intersection of Temple and Alameda Streets. Here, the track would connect to the Metro Gold Line LRT bridge over US 101. Another set of tracks, bound for I-605 via the Eastside Extension, would proceed east from the junction and rise through a new portal in the middle of 1st Street between Alameda and Hewitt Streets. These tracks would connect to the existing Metro Gold Line.

Communities potentially directly affected by construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would include:

- Arts District
- Little Tokyo
- Historic Core
- Bunker Hill

- Financial District

5.6.1 Construction

Construction impacts from the Fully Underground LRT Alternative - Little Tokyo Variation 2 could affect community mobility, viability of local businesses, emergency services, public health and safety, crime, community resources and events, and population, housing, and employment. Construction staging areas have been identified along the proposed alignment and are included in the analysis for this report. Additional information about construction staging areas is provided in the Description of Construction.

Most potential impacts would be temporary and intermittent and would be reduced or eliminated after construction is complete in four to five years. Cut and cover tunnel construction would be required on Flower Street between 7th Street/Metro Center Station and 3rd Street. The 2nd/Hope Street station could be constructed using either the cut and cover method or the sequential excavation method. The 2nd Street/Central Avenue station would be constructed using the open cut method.

Other stations would be constructed using the cut and cover method. Cut and cover construction would be needed for the junction beneath the intersection of 1st and Alameda Streets and tunnel approaches to nearby portals. A TBM would create the remainder of the alignment on 2nd Street. Further information about construction methods is available in the Description of Construction.

5.6.1.1 Community Mobility

This alternative would construct four new underground stations: one near the Financial District, one at Bunker Hill, one in the Historic Core, and one in Little Tokyo. Construction of these stations would require temporary sidewalk and street closures. Mobility would be reduced in these areas during construction.

Installation of underground tracks would require tunneling along 2nd and Flower Streets. Temporary cut and cover excavation would be required on a segment of Flower Street. Concrete decking would be installed along the entire length of Flower Street from 7th Street/Metro Center Station to the new portal just south of 3rd Street. A TBM would be used to build the majority of the alignment along 2nd Street. As such, construction impacts to mobility of surface traffic would be less pronounced on 2nd Street than on Flower Street.

The TBM would be placed in the ground near 2nd and Hope Streets in the Bunker Hill area and would tunnel east toward Little Tokyo. In order to bore a second tunnel, the TBM could be removed at 2nd and Alameda Streets and placed back in the ground at 2nd and Hope Streets, or two TBMs could be used simultaneously. It would also be possible for the TBMs to be inserted at 2nd and Alameda Streets and tunnel east toward Little Tokyo. The tunneling

activities would affect the Little Tokyo area, Bunker Hill, and Flower Street at 7th Street. Temporary excavations could periodically reduce mobility in these areas.

Tunneling activities would affect Flower Street at 7th Street, Bunker Hill, Little Tokyo, and the Arts District. Temporary excavations could periodically reduce mobility in these areas during construction. However, most construction would occur beneath temporary concrete decking while traffic operates normally on the surface. The extent of temporary excavations would be greater on Flower Street than on 2nd Street. Some streets and sidewalks in the vicinity of temporary excavation areas would periodically be closed during construction.

Temporary street closures, and construction activities similar to cut and cover construction, would be needed in the vicinity of the two portals near the intersection of 1st and Alameda Streets. This could result in temporary mobility impacts while construction is underway. Further information about construction activities and mobility impacts are available in the Description of Construction and the Transportation Technical Memorandum.

Overall, construction could lead to road and sidewalk closures and traffic detours and reduce pedestrian and vehicle mobility between communities and neighborhoods in the central downtown area. This potential impact to mobility could be significant. Mitigation measures in Section 6.0 would reduce this potential impact to a less than significant level.

5.6.1.2 Viability of Existing Businesses

Businesses around the proposed stations and along the proposed alignment could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Construction activities would likely result in a temporary decrease in accessibility to many businesses and could reduce on-street and off-street parking.

Construction could negatively impact business activity levels because the number of customers may temporarily decline. This potential impact could be significant. While Metro would provide adequate detours and minimize road closures, some adverse effects to businesses may occur as people may avoid the project area altogether.

This potential adverse impact would be unavoidable during construction and could be significant. Mitigation measures would help reduce the significance of these impacts. The Fully Underground LRT Alternative - Little Tokyo Variation 2 could offset business losses because it would require construction employees to be in the area on a regular basis. These employees could potentially provide business for neighborhood restaurants and retail establishments. The project could also create local construction-related and permanent jobs.

Some commercial properties in Little Tokyo and the Historic core would be acquired under this alternative. These properties would be acquired according to the Uniform Relocation Act and owners would be compensated. However, loss of these businesses could adversely affect

the surrounding communities and indirectly affect the viability of other businesses because fewer people could be drawn to the area. This impact would be unavoidable and could be considered significant if not permanent. Mitigation measures would help reduce this potential impact to a less than significant level.

Under this alternative, partial property acquisitions would occur along both sides of 1st Street east of Alameda Street. Easements on the south side of the street would be located on a private parking lot and vacant space, causing little disruption to the community. The partial take on the north side of 1st Street would be from the proposed Nikkei parcel. Though less space would remain, the development potential of the Nikkei parcel would be enhanced by the proposed 2nd Street/Central Avenue station that would improve access to the site.

After construction, access to the area would be enhanced by the improved transit service provided by the Fully Underground LRT Alternative – Little Tokyo Variation 2. After construction, this alternative could increase viability of area businesses by increasing pedestrian activity (adding more potential customers) on streets near the alignment and especially near stations.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and businesses in the area, particularly during the construction phase of the project. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

It is anticipated that the Fully Underground LRT Alternative – Little Tokyo Variation 2 could require acquisitions of the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue in order to safely construct and operate a new station, entrances, ancillary facilities, and a potential TBM launch site. TBMs could also be launched from the vicinity of 2nd/Hope Street station, though acquisitions in Little Tokyo would still be necessary.

Displaced businesses would include Office Depot, Señor Fish, Starbucks Coffee, Weiland's Brewery, and Café Cuba. All other businesses on Central Avenue would remain. Additionally, all off-street parking on this block would be removed during construction. Retail, restaurant, and parking areas could potentially be restored on the site after construction is complete, so job losses would only be temporary. Because the project would bring new jobs to the project area, the net result would be a local increase in jobs. Further engineering may be able to minimize the acquisition area.

The businesses that would be removed do not contribute to the community identity as a Japanese American cultural center. Aside from Starbucks Coffee, they do not provide sidewalk seating or otherwise contribute to street activity. Temporary parking for remaining businesses on Central Avenue, some of which do provide sidewalk seating and are Japanese American-oriented, could potentially be provided by restriping Central Avenue for diagonal

parking or by placing a temporary lot on the Nikkei parcel. This, and other mitigation measures outlined in Section 6.0, would reduce potential adverse impacts to a less than significant level.

5.6.1.3 Emergency Services

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would require temporary road closures during the construction period; this could result in increased response times for emergency services such as police and fire. Any increase in response times for emergency services could be considered a significant impact. Mitigation measures in Section 6.0 would reduce this impact to a less than significant level.

5.6.1.4 Public Health and Safety and Crime

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 is not expected to increase crime or pose a threat to public health and safety. Any construction and staging areas that would be dangerous to the public would be adequately blocked off to prevent entry. The construction contractor would be responsible for providing security for the construction site at all times. This potential impact would be less than significant, and potential mitigation measures are identified in Section 6.0.

5.6.1.5 Community Resources and Events

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 may require road and sidewalk closures and would introduce construction vehicles and equipment into central downtown. This has the potential for temporary adverse affects on annual festivals and events held in the downtown area. Construction could disrupt traffic patterns and make it more difficult for the public to access community resources such as the Nishi Hongwanji Temple, the Japanese American National Museum, and the MOCA Geffen building. This potential impact could be significant; however, mitigation measures, described in Section 6.0, would reduce this potential impact to a less than significant level.

Little Tokyo stakeholders have expressed concern about retaining the character of the existing community and cultural events in the area. Measures to address these concerns will be considered for implementation once the ongoing coordination process with the Little Tokyo community is completed.

5.6.1.6 Population, Housing, and Employment

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would affect properties along the alignment, near the proposed underground stations, and near the portals where the alignment would connect to the Metro Gold Line.

All of the properties on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue in Little Tokyo would be acquired under this alternative to allow for construction of a

portal and launch site for the TBM. Though they would be acquired under this project alternative, the strip of businesses facing Central Avenue would remain in place, except possibly Starbucks Coffee. These properties consist of commercial buildings and parking lots. Acquisition of these properties could temporarily reduce employment in the Little Tokyo area since these properties contain existing businesses. Further engineering may be able to minimize the acquisition area. The 2nd/Hope Street station area is also under consideration as an alternative TBM launch site, but the acquisitions in Little Tokyo would still be necessary.

This alternative would result in a decrease in employment at this location in Little Tokyo and would be unavoidable. However, construction activities would introduce new people into the area on a regular basis. This influx could offset the decrease in employment and economic activity. After construction there would likely be additional new employment since the increased access to the area afforded by the project would enhance local business viability.

Should it be necessary to acquire all properties on the aforementioned block, a temporary reduction in employment would be more pronounced but would not extend to other areas of the community. New space for businesses could be constructed on the same site once the Regional Connector is finished, possibly as part of a transit-oriented development that would boost business activity throughout the community.

Residents of the Savoy condominium development have expressed concerns over potential construction and operation noise. The Savoy is located across the street from a construction staging area (and a potential TBM launch area) and adjacent to the proposed portal site. Potential noise impacts and construction detours could occur around the building. Noise and traffic concerns, along with potential mitigation measures, are addressed in the Noise and Vibration Technical Memorandum and the Transportation Technical Memorandum.

Along 2nd Street in the Historic Core, up to eighteen easements, six partial takes, and four full takes could be required depending on the location for the proposed new station. These totals encompass all of the acquisitions needed for all of the potential station entrances being considered. Not all potential station entrances would be built however, so the number of easements needed would likely be smaller. Three commercial properties and a parking lot would be acquired in full.

This acquisition would be unavoidable and could result in a direct decrease in employment at this location. After construction this impact could be offset by new employment at new businesses developed in the vicinity of the proposed stations. When the area becomes more accessible by rail, employment could increase since local businesses would become more viable.

Residents of the Higgins Building are concerned about potential construction noise that would result from Fully Underground LRT Alternative - Little Tokyo Variation 2. The Higgins

Building is located less than one block from the proposed 2nd Street/Broadway station. Construction noise concerns are addressed, along with mitigation measures, in the Noise and Vibration Technical Memorandum.

In the Bunker Hill area, seven easements, one partial take, and one full take would be necessary. Property housing the Central Plant would be partially acquired, and a vacant lot would be fully acquired. No commercial or residential properties would be displaced, and no population, housing, or employment impacts would occur.

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide a number of new construction jobs over the four to five year construction period. Creation of new employment in central downtown would be beneficial but temporary since the jobs would no longer be needed after construction is complete. Most construction workers are expected to commute from surrounding areas and are not expected to permanently relocate to the work site. Construction workers would not substantially change the population or create a new demand for housing in central downtown. This potential impact would be less than significant.

5.6.2 Operation

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 could result in direct and indirect impacts associated with mobility, viability of existing businesses, population and housing, emergency services, public health and safety, community events, and senior and disabled persons.

5.6.2.1 Community Mobility

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would create a new LRT alignment through central downtown and provide a new connection between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. This new connection would provide a link to the central downtown area from outside communities via the Metro Gold and Blue Lines. This increase in mobility, both between downtown communities and to central downtown from outside communities, would be a beneficial impact. Mobility for Little Tokyo and the Arts District is particularly enhanced under this alternative because the proposed 2nd Street/Central Avenue station would be served by both North-South and East-West Regional Connector routes.

Unlike the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative, operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would run entirely underground and would not affect existing pedestrian or vehicle traffic. One exception exists where the alignment would surface on 1st Street. Pedestrians and vehicles would no longer be able to cross 1st Street at Hewitt Street, but they would still be able to cross at Alameda Street and Vignes Street. Alameda Street currently experiences

heavy vehicle traffic. Additionally, large volumes of pedestrians cross Alameda Street to get to and from the existing Little Tokyo/Arts District Station.

However, by placing the 2nd Street/Central Avenue Station close to major activity centers in Little Tokyo, this alternative could eliminate the need for many pedestrians to cross Alameda Street. Operation of this alternative would not conflict with existing traffic movements, but some intersections would be modified by new turning restrictions. Potential mobility impacts from this alternative would not be significant. Additionally, mobility impacts would be less than those of the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative.

New LRT stations and trains would comply with the Americans with Disabilities Act and be designed to ensure accessibility to all persons. Stations would be wheelchair and stroller accessible with ramps and/or elevators. LRT train platforms would be constructed with ramps to allow passengers with strollers or disabilities to easily move in and out of trains. As required by law, several seats on each train would be designated for persons with disabilities and senior citizens. There would be no adverse impacts to senior citizens or disabled persons.

5.6.2.2 Viability of Existing Businesses

Most businesses along the proposed alignment would likely benefit from operation of this alternative. This alternative would provide a new means of public transportation through the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. The number of pedestrians in the areas around proposed new stations would likely increase.

An increase in pedestrians would benefit local businesses by increasing the volume of potential customers. An entrance to the 2nd Street/Central Avenue station could be incorporated into the planned Nikkei Center on the northeast corner of 1st and Alameda Streets. Such transit-oriented development could increase transit ridership and local business activity. This potential effect would be beneficial.

5.6.2.3 Emergency Services

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not be expected to increase emergency response times because it would run underground. Modifications to the intersection at 1st and Alameda Streets would likely improve emergency vehicle response times by increasing roadway capacity. Some alteration of emergency routes may be needed due to added turning restrictions. New emergency service staff would not be required as a result of operation of this alternative. There would be no adverse impact to emergency services

5.6.2.4 Public Health and Safety and Crime

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 is not expected to increase crime in the central downtown area. Mitigation measures, such as additional security services, would prevent an increase in crime. Stations and trains would be designed to maximize public safety and minimize the potential for crime. Stations would be constructed from materials such as brick, concrete, steel, aluminum, and heavy plastic which are generally resistant to vandalism. Adequate lighting and security cameras would be provided to deter criminal activity.

Metro contracts with the Sheriff's Department to provide specialized security at all stations. Maintenance access to underground facilities would be designed to prevent unauthorized entry. Overall, the operation of this alternative is not expected to substantially change crime levels in the central downtown area. The potential effects related to crime would be less than significant. Potential mitigation measures are identified in Section 6.0.

Additionally, this project would contribute to a pedestrian friendly community and encourage compact development. This would lead to increased walking, which would be a beneficial health impact of all the build alternatives.

5.6.2.5 Community Resources and Events

Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would benefit community resources and events because it would provide a new transit option for travelers to the area. Since the alignment would operate entirely underground, train service would continue uninterrupted during large events, facilitating access for event attendees. This increased access would be beneficial.

5.6.2.6 Population, Housing, and Employment

Over the long-term, this project alternative could attract new residents to the central downtown area. This alternative would link the project area to the regional LRT system through four new stations. As Los Angeles continues to encourage public transportation and transit-oriented growth, new development, including additional housing units, could occur around new stations. This increase in population and housing would be consistent with the Central City Community Plan and the Central City North Community Plan and would be a beneficial impact.

The Fully Underground LRT Alternative - Little Tokyo Variation 2 could indirectly increase employment. This alternative creates four new stations and would decrease commute times for workers. In general, increased public transportation would make central downtown a more desirable location to work and live in, potentially increasing jobs and population. This potential impact would be beneficial.

5.6.3 Cumulative Impacts

This section describes cumulative effects of the Fully Underground LRT Alternative - Little Tokyo Variation 2.

5.6.3.1 Community Mobility

Upon completion, the Fully Underground LRT Alternative - Little Tokyo Variation 2, when considered cumulatively with other future projects, may result in benefits to the central downtown area. The Regional Connector Transit Corridor project and other Metro projects would increase community mobility, provide additional regional transit linkages, and increase ridership systemwide. This would be a cumulatively beneficial impact.

5.6.3.2 Viability of Existing Businesses

There are no other planned transportation projects that would affect the viability of businesses along the alignment for the Fully Underground LRT Alternative - Little Tokyo Variation 2. Many new construction and renovation projects are planned in the area. If these construction projects affect accessibility to local businesses, there may be a cumulative adverse impact.

However, impacts are expected to be temporary and would be eliminated after construction is complete. Overall, the potential cumulative impacts associated with the viability of existing businesses would be less than significant.

5.6.3.3 Emergency Services

Many new construction and renovation projects are planned in the central downtown area during the time the Regional Connector would be constructed. If these projects require road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 2's construction, a cumulative effect could occur resulting in increased response times for emergency vehicles.

However, each specific project, including the Regional Connector, would be responsible for alerting emergency services to any road closures or detours. This measure would help avoid increased response times due to construction. The potential cumulative impact to emergency response time would be less than significant.

5.6.3.4 Public Health and Safety and Crime

The Fully Underground LRT Alternative - Little Tokyo Variation 2, and future projects planned for the central downtown area, could potentially result in safety risks or increased crime during both construction and operations. However, each project would be responsible for reducing or avoiding potential impacts.

The Fully Underground LRT Alternative - Little Tokyo Variation 2 includes measures to protect public health and safety and reduce or avoid crime. All Metro Rail facilities are continuously monitored by security personnel to minimize risks to the public. With implementation of such measures, the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not contribute to significant cumulative public health and safety or crime impacts.

5.6.3.5 Community Resources and Events

Many new construction and renovation projects are planned in the central downtown area during the time the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be constructed. If these projects require temporary road closures or detours in the same timeframe as the Fully Underground LRT Alternative - Little Tokyo Variation 2's construction, cumulative effects to community resources or events may occur.

Adverse effects could include temporary traffic congestion, decreased mobility, and closures of sidewalks and roads. However, each specific project, including the Fully Underground LRT Alternative - Little Tokyo Variation 2, would be responsible for coordinating with local community groups prior to construction to minimize impacts. With implementation of the potential mitigation measures listed in Section 6.0, potential cumulative impacts to community resources and events would be less than significant.

5.6.3.6 Population, Housing, and Employment

Over the long-term, the Fully Underground LRT Alternative - Little Tokyo Variation 2 has the potential to increase population, housing, and employment in the downtown area. This alternative would link the project area to the LRT system, encouraging people to live and work in central downtown. Combined with the City's transit-oriented growth policies, the new transit stations could encourage denser development and make alternatives to the single occupancy vehicle more viable.

Future development in the project area would also increase population, housing, and employment. The cumulative population, housing, and employment growth from the Fully Underground LRT Alternative - Little Tokyo Variation 2, and other planned future projects, would be consistent with the Central City Community Plan objectives. Such growth would be a beneficial cumulative impact.

6.0 POTENTIAL MITIGATION MEASURES

Mitigation measures could be implemented to avoid, minimize, or mitigate potentially significant impacts identified in Section 5.0. Additional measures may be considered once the ongoing coordination process with the communities in the project area is completed. The following is a list of potential mitigation measures:

- Whenever possible, develop detours for any road or sidewalks to be closed during construction. Post signs (in appropriate languages) alerting pedestrians and vehicles of road and sidewalk closures and detours. Ensure pedestrian detours are accessible to seniors and disabled persons. Develop Worksite Traffic Control Plans in conjunction with the City of Los Angeles Department of Transportation (LADOT) to accommodate automobile and pedestrian traffic.

- Maintain access to community facilities affected by construction activities.

- Provide early notification to emergency service providers of any road closures or detours.

- Develop a community outreach plan to notify local communities of construction schedules, road and sidewalk closures, and detours. Coordinate with local communities during preparation of traffic management plans to minimize potential construction impacts to community resources and special events. Consider limiting construction activities during special events.

- Develop a construction mitigation plan with community input to address construction impacts unique to the Little Tokyo community. Determine truck hauling routes and schedules that would minimize impacts on sensitive uses in all parts of the project area.

- During construction, provide temporary replacement parking to offset the loss of parking due to acquisitions on the block bounded by 1st, 2nd Street, and Alameda Streets, and Central Avenue. Temporary parking could be added by constructing surface lots on nearby vacant parcel or restriping nearby streets to allow diagonal curb parking.

- Provide crossing guards in the vicinity of construction sites, haul routes and other relevant sites as proposed in the *California DOT Traffic Manual, Chapter 10-07.3, Warrants for Adult Crossing Guards*,

- Erect barriers and provide security personnel during construction to minimize trespassing and vandalism. Barriers could be enhanced with artwork and attractive design features where possible.

- Forewarn the public of any anticipated road closures or detours due to construction activity.
- Work with businesses along the alignment to increase their visibility during construction.

7.0 CONCLUSIONS

7.1 No Build Alternative

The No Build Alternative would result in some population, housing, and employment growth. However, this alternative would not be expected to create any substantial changes in the quality of life for communities and neighborhoods in the project area. While this alternative would not have significant adverse impacts it also would not have beneficial mobility, business or community effects.

7.2 TSM Alternative

The TSM Alternative would require minimal construction and would not affect existing communities or neighborhoods. Operation of the TSM Alternative could be beneficial. This alternative could increase mobility through the central downtown area and increase viability for local businesses along new bus routes. However, adding additional buses to the street network in downtown Los Angeles could contribute to additional congestion.

Potential benefits from the TSM alternative depend upon whether it would attract current automobile commuters. The TSM Alternative would not substantially decrease commute times for commuters to central downtown. This alternative would not affect population, housing or employment growth in the central downtown area.

7.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would have potentially significant adverse impacts to community mobility, emergency service response times, and community resources and events. These impacts would be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Furthermore, this alternative could have a significant adverse impact on the viability of some local businesses. Road and sidewalk closures could decrease accessibility to businesses near the proposed alignment and staging areas. Some customers might avoid the area altogether during construction activities. This impact would be unavoidable during construction. Mitigation measures would be developed with affected parties to reduce this impact to a less than significant level. The efficacy of the measures would be evaluated after implementation.

Operation of the At-Grade Emphasis LRT Alternative would have beneficial effects on population, housing, and employment. This alternative would decrease commute times to central downtown and could encourage more people to live and work in the area. Operation of this alternative would be beneficial for community resources and events because it would provide a new public transportation option through central downtown. This alternative would

increase mobility between the Financial District, Bunker Hill, the Civic Center, and the Historic Core.

The At-Grade Emphasis LRT Alternative would, however, limit mid-block left turns through the Civic Center and Historic Core areas where the track runs along the surface. This change in traffic flow could adversely affect accessibility to existing businesses and would be unavoidable. This impact would be partially offset by increased access from the new trains that would be available to patrons of local businesses.

7.4 Underground Emphasis LRT Alternative

Construction of the Underground Emphasis LRT Alternative would have largely the same impacts as the At-Grade Emphasis LRT Alternative. Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would have potentially greater impacts on local business viability during construction. This alternative could reduce accessibility to existing businesses during construction but would also require the displacement of existing businesses in Little Tokyo and near Bunker Hill.

Property acquisition would be carried out according to the Uniform Relocation Act requirements. Still, displaced businesses would be unavoidably affected and surrounding businesses would be potentially indirectly affected by a smaller overall customer base. Mitigation measures identified in the Displacement and Relocation Technical Memorandum would reduce the impacts of these business losses below the level of significance. Additionally, new development of businesses around new stations would help offset adverse impacts to business.

Operation of the Underground Emphasis LRT Alternative would result in benefits similar to the At-Grade Emphasis LRT Alternative. The Underground Emphasis LRT Alternative would benefit population growth, housing, and employment during operation because it would decrease commute times to central downtown and would encourage more people to live and work in the area. This alternative would also be beneficial for community resources and events since it would increase mobility in and accessibility of the central downtown area.

This alternative would increase mobility between the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. It would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central Avenue to a potential location for a mixed-use joint development. The main difference between this alternative and the At-Grade Emphasis LRT Alternative would be that this alternative would operate mainly below ground and not on

surface streets. Thus, this alternative would not adversely affect existing businesses through the elimination of mid-block left turns in the Civic Center and Bunker Hill areas.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Construction impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would generally mirror those from construction of the Underground Emphasis LRT Alternative. However, construction activities would extend further east along 1st Street to Garey Street. Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 could potentially have greater unavoidable impacts associated with the viability of existing businesses. Under this alternative, additional businesses might need to be acquired on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. Property acquisition would be carried out according to the Uniform Relocation Act. Still, acquisitions would unavoidably impact project area communities through direct loss of businesses and related, indirect effects on surrounding business.

Mitigation measures identified in Section 6.0 and the Displacement and Relocation Technical Memorandum would reduce the potential impacts of these business losses below the level of significance. Additionally, new development of businesses around stations would help offset adverse impacts to business viability.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in more benefits to the Little Tokyo community than the At-Grade Emphasis LRT Alternative or the Underground Emphasis LRT Alternative because it includes a new station with greater connectivity than the existing Little Tokyo/Arts District Station. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be beneficial to population, housing, and employment during operation because it would decrease commute times to central downtown and encourage more people to live and work in the area.

This alternative would also be beneficial to community resources and events since it would provide a new public transportation option through central downtown. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would increase mobility between the Financial District, Bunker Hill, the Historic Core, Little Tokyo, and the Arts District. This alternative would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central Avenue into a potential location for a mixed-use joint development. This potential new development would combine the site with the proposed 2nd Street/Central Avenue station and the proposed Nikkei Center across the street.

Unlike the At-Grade Emphasis LRT Alternative, this alternative would not operate on the surface of existing streets and would not adversely affect existing businesses by eliminating mid-block left turns in the Civic Center and Bunker Hill areas.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would generally have the same impacts as construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, construction activities would extend further east along 1st Street to Vignes Street because two single track portals would be constructed instead of one double track portal.

Construction could have potentially significant, if temporary, impacts to community mobility, emergency service response times, and community resources and events. These impacts could be reduced to a less-than-significant level with mitigation measures described in Section 6.0.

Compared with the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 2 could potentially have greater unavoidable impacts associated with the viability of existing businesses. Under this alternative, additional businesses might need to be acquired on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. Property acquisition would be carried out according to the Uniform Relocation Act. Still, acquisitions would unavoidably impact project area communities through direct loss of businesses and related, indirect effects on surrounding business.

Mitigation measures identified in Section 6.0 and the Displacement and Relocation Technical Memorandum would reduce the impacts of these business losses to a less than significant level. Additionally, new development of businesses around stations would help offset adverse impacts to business viability.

Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in more benefits to the Little Tokyo community than the At-Grade Emphasis LRT Alternative or the Underground Emphasis LRT Alternative because it includes a new station with greater connectivity than the existing Little Tokyo/Arts District Station. Fully Underground LRT Alternative – Little Tokyo Variation 2 would be beneficial to population, housing, and employment during operation because it would decrease commute times to central downtown and encourage more people to live and work in the area.

This alternative would also be beneficial to community resources and events since it would provide a new public transportation option through central downtown. Fully Underground LRT Alternative – Little Tokyo Variation 2 would increase mobility between the Financial District, Bunker Hill, the Historic Core, Little Tokyo, and the Arts District. This alternative would transform a portion of the site bounded by 1st, 2nd, and Alameda Streets, and Central

Avenue into a potential location for a mixed-use joint development. This potential new development would combine the site with the proposed 2nd Street/Central Avenue station and the proposed Nikkei Center across the street.

Unlike the At-Grade Emphasis LRT Alternative, this alternative would not operate on the surface of existing streets and would not adversely affect existing businesses by eliminating mid-block left turns in the Civic Center and Bunker Hill areas.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX P

VISUAL AND AESTHETIC IMPACTS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Visual and Aesthetic Impacts
Technical Memorandum

March 19, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

APE	Area of Potential Effects
CEQA	California Environmental Quality Act
LRT	Light Rail Transit
LTS	Less than Significant Impact
Metro	Los Angeles County Metropolitan Transportation Authority
MOCA	Museum of Contemporary Art
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
TBM	Tunnel boring machine
TSM	Transportation System Management
VMC	Visual Modification Class

1.0 SUMMARY

The findings of this visual and aesthetic impact assessment are based upon the California Environmental Quality Act (CEQA) Thresholds of Significance Criteria included in Appendix G. These thresholds are used to identify significant visual and aesthetic impacts associated with "substantial degradation of existing visual character or quality of a site and its surroundings." Significance is also determined by "the degree of contrast between proposed features and existing features that represent the valued aesthetic image of an area."

This technical memorandum evaluates proposed alternatives of the Regional Connector Transit Corridor Project. These alternatives include the No Build Alternative, Transportation System Management (TSM) Alternative, At-Grade Emphasis Light Rail Transit (LRT) Alternative, Underground Emphasis LRT Alternative, and Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2.

Primary visual resources in the project area include historic buildings located along or near the proposed alignments. The alignments are located in or near (depending on the alternative) the Civic Center and the Little Tokyo Historic Districts. Table 7-1 summarizes visual and aesthetic impacts associated with each of the six alternatives.

The No Build Alternative would result in no visual impacts to these resources. The TSM Alternative would result in minor visual modifications to the existing environment due to construction of enhanced bus stops; potential impacts would be less than significant.

There would be permanent potential visual impact associated with the At-Grade Emphasis LRT Alternative because new tracks, an overhead contact system, catenary poles, train portals, and two at-grade platforms would be added to streets adjacent to historic buildings. However, this potential impact would be less than significant. Visual impacts associated with construction of the At-Grade Emphasis LRT Alternative would be temporary and less than significant.

Potential permanent visual impacts of the Underground Emphasis LRT Alternative would be less than significant because the only visible street-level features would be a single tunnel portal and pedestrian entrances to underground stations. Visual impact associated with construction of the Underground Emphasis LRT Alternative would be temporary and less than significant.

Potential permanent visual impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same as for the Underground Emphasis LRT Alternative. Both alternatives follow the same alignment and configuration for most of the corridor. Portions of the corridor in the vicinity of Little Tokyo, along Alameda and east of Alameda, would have prominent, visible street-level features, including pedestrian entrances to an underground

station and a single tunnel portal in 1st Street. Visual impacts in this vicinity, including the area along the proposed train portal, would be less than significant. Visual impact associated with construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be temporary and less than significant.

Potential permanent and temporary visual impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1. For most of the alignment, the two alternatives follow the same route and configuration. An exception is the portal location and arrangement in 1st Street.

Visual impacts in the vicinity of 1st Street would potentially occur because the portals are staggered and potential visual effects would extend farther along 1st Street than Fully Underground Alternative – Little Tokyo Variation 1. Impacts in this vicinity would be low to moderate and less than significant for about three blocks. In consultation with the Los Angeles Hompa Hongwanji Temple, the Reverend, indicated to the Los Angeles County Metropolitan Transportation Authority (Metro) that the portal's proximity to the temple would be visually intrusive.

Under all build alternatives, the visual character of the corridor would be altered; however, views would not be degraded to the extent that significant impacts would result from project implementation. There are no scenic highways or protected views near the proposed alignments, so these types of resources would be unaffected.

All build alternatives would provide new pedestrian-friendly street improvements, including landscaping as appropriate, in the vicinity of the alignments and stations, thereby enhancing the aesthetics of the project area. Addition of an enhanced pedestrian environment would offset the potential low to moderate levels of visual impacts described above. The build alternatives would create improved and safer settings from which pedestrians could view visual and aesthetic resources and create a streetscape that complements those visual and aesthetic resources.

2.0 INTRODUCTION

Downtown Los Angeles is known for its designated historic districts, buildings, and sites. The region's colorful history is captured in the downtown area's many historic buildings, several of which are located adjacent to the Regional Connector build alternative alignments.

Construction activities and potential changes to the streetscape could affect views of these historic resources. This technical memorandum evaluates the potential for visual and aesthetic impacts resulting from construction and operation of the proposed Regional Connector alternatives.

The portions of downtown Los Angeles near the proposed alignments lack broad views of mountains, water bodies, and other natural features. Therefore, there would be no impacts to such views. The significant visual resources currently along the proposed Regional Connector transit corridor are historic buildings, many of which are eligible for listing in the National Register of Historic Places and/or the California Register of Historic Resources.

Potential impacts to historic resources are evaluated in the Cultural Resources - Built Environment Technical Memorandum. The project would not impede views from any nationally recognized scenic highways, designated scenic routes, corridors, or parkways, nor would it affect any public viewing locations that are otherwise recognized or valued.

3.0 METHODOLOGY FOR IMPACT EVALUATION

Criteria used to evaluate the proposed alternatives are described below. Potential impacts have been evaluated according to CEQA guidelines. While there are other evaluation criteria for visual assessments, CEQA guidelines are most relevant to the Regional Connector Transit Corridor Project. Guidance and methodologies have been adapted to address the project's urban setting as appropriate.

Multiple federal agencies have developed analytical frameworks for visual resource management, including the U.S. Department of Agriculture, Forest Service (USFS 1974, 1995); U.S. Department of Interior, Bureau of Land Management (BLM 1978); and U.S. Department of Transportation, Federal Highway Administration (FHWA 1981). The methodology and assumptions presented here build on the guidance developed by these federal agencies and the extensive work of Lawrence Headley of LH&A for the Port of Los Angeles and other Los Angeles projects (Headley 2008, 2006, and 2005).

3.1 Regulatory Framework

3.1.1 Federal

The National Environmental Policy Act (NEPA) is an umbrella law that requires an evaluation and disclosure of potential impacts that might result from construction and operation of a project. As such, NEPA often does not have-topic specific requirements or guidance. There are no specific thresholds or evaluation criteria for potential visual and aesthetic impacts.

Compliance with other federal, state and local regulations is often used as a means of demonstrating that a proposed project would not have significant impacts under NEPA. Guidance for the Regional Connector Transit Project was found in the National Historic Preservation Act (NHPA) and CEQA, and is used to evaluate potential impacts under NEPA.

Section 106 of the National Historic Preservation Act (NHPA) as amended in 1966 [36 CFR § 800.5(a)(2)] regulates activities that could impact historic properties by "diminishing the visual integrity of the property's significant historic features." There are approximately 50 properties, including three historic districts, within the project area in downtown Los Angeles that are listed in, determined, or found eligible for the National Register of Historic Properties. Potential visual impacts on historic resources are evaluated in the Cultural Resources Built Environment Technical Memorandum.

3.1.2 State

The principal evaluation criteria used in this visual resource analysis come from Appendix G of the CEQA Guidelines; the methodology to evaluate visual resources also follows guidance from the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006), referred to in this document as the *Thresholds Guide*. This guide recommends that impacts and their

significance be evaluated on a case-by-case basis. Except for shadow impacts, the *Thresholds Guide* includes no absolute principles, rules, standards, criteria, or thresholds for assessing the degree or significance of visual and aesthetic impacts.

Aesthetic impact assessment generally deals with the issue of contrast, or the degree to which elements of the environment differ visually. Aesthetic features occur in a diverse array of environments, ranging in character from urban centers to rural regions and wildlands. Adverse visual effects can include a loss of natural features or areas, removal of urban features with aesthetic value, or introduction of contrasting urban features into natural areas or urban settings. The key applicable visual consideration for downtown Los Angeles would be "introduction of contrasting urban features into ... urban settings." Significant alteration of the visual character through the introduction of a proposed project can result in a visual impact.

This aesthetic impact assessment concentrates on urban features because the proposed project is located within an urban setting. Urban features that may contribute to a valued aesthetic character or image include structures of architectural or historic significance or visual prominence; public plazas, art, or gardens; heritage oaks or other trees or plants protected by the City; consistent design elements (such as setbacks, massing, height, and signage) along a street or district; pedestrian amenities; and landscaped medians or park areas (*L.A. CEQA Thresholds Guide* 2006). Additionally, CEQA guidelines require impacts to historic buildings within a state scenic highway be evaluated.

Visual and aesthetic findings can be highly subjective, making them difficult to analyze using rigid technical standards. The Regional Connector project is set in an urban context, where visual change is expected. Whether visual change in the downtown environment is adverse or beneficial remains a subjective matter. Different viewers may consider the same change in the visual environment as either beneficial or adverse. This analysis discusses potential impacts for public and agency consideration with as much objectivity as practical given the subjective nature of aesthetic perceptions.

3.2 Standards of Significance

This analysis examines whether the proposed Regional Connector alternatives have potential to cause significant visual impacts. Though NEPA offers no definition for "significance," CEQA Guidelines § 15382 define a significant impact as "... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including ... objects of ... aesthetic significance." The methodology applied to this assessment expands upon the CEQA definition and draws from methodology recommendations included in the *L.A. CEQA Thresholds Guide*.

As outlined in Appendix G of the CEQA guidelines, determination of a significant impact to visual and aesthetic resources is based on the following thresholds:

- Would the project have a substantial, adverse effect on a scenic vista?
- Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within [view from] a state scenic highway?
- Would the project substantially degrade the existing visual character or quality of a site and its surroundings?
- Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

In addition to the thresholds identified in Appendix G of the CEQA guidelines, the *City of Los Angeles CEQA Thresholds Guide* includes the following criteria for identifying and evaluating potentially significant visual resources impacts from proposed actions occurring within the City:

- Would project-related structures result in the shading of shadow-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Standard Time (between early April and late October)?

3.2.1 Definitions

According to the *L.A. CEQA Thresholds Guide*, urban features that may contribute to a valued aesthetic character may include, but are not limited to, structures of architectural or historic significance or visual prominence; public plazas, art, or gardens; heritage oaks or other protected trees; consistent design elements along a street or district; pedestrian amenities; and landscaped medians or park areas. Significant alteration of the visual character resulting from a proposed project can result in a visual impact.

According to Headley (2007), a visual impact on a visual or aesthetic resource occurs when:

- Features are altered, introduced, made less visible, or removed, and the resultant effect on the views is perceptibly inconsistent with the inherent, established character of the landscape; and/or
- Access to public views is diminished such that the affected view is limited to some degree and/or physical access to public viewing positions is impeded.

Headley (2007) further defines a significant visual impact as one that:

- Causes a substantial adverse change in the visual resources of the affected environment, and/or
- Would cause views from scenic highways, designated scenic routes, corridors, and parkways, or public views that are otherwise recognized or valued, to become substantially blocked or screened from view, and/or
- Would cause historically available public access to such views to become substantially diminished.

A substantial adverse change in visual resources occurs when visual quality has been noticeably reduced. The perception that visual quality has been noticeably reduced is influenced by public sensitivity to adverse visual impacts, including intensity and duration of the impacts, as qualified by the temporal viewing context. A highly sensitive public is more apt to notice adverse changes in visual resources of lesser intensity than a less sensitive public. A highly sensitive public is therefore more likely to regard the effects of adverse changes as "substantial" and significant.

For example, a highly sensitive public would likely react adversely to a large, contemporary sculpture placed on the sidewalk directly in front of a national historic landmark building. The two could be at cross purposes visually. On the other hand, the public may be less sensitive to changes in the urban landscape of downtown Los Angeles along the proposed Regional Connector build alignments due to the large number of urban structures, circulation systems, and activities already present.

3.2.2 Impact Intensity

Both NEPA and CEQA use the concept of "intensity" to help determine the significance of an impact. For potential visual impacts, the intensity is the degree to which visual conditions change adversely relative to existing (baseline) conditions.

Changes in visual conditions can be classified by Visual Modification Classes (VMC) as defined by Headley (2008). VMCs provide a useful framework for describing and evaluating visual conditions. Table 3-1 provides definitions for each VMC.

A change from one VMC to another provides a method to evaluate the intensity or magnitude (and thus potential significance) of a change in visual condition. For example, a reduction from existing (baseline) conditions of VMC 1 to VMC 2 is a level 1 impact intensity; a reduction from VMC 1 to VMC 3, or VMC 2 to VMC 4, is a level 2 impact intensity; and a reduction from VMC 1 to VMC 4 is a level 3 impact intensity. The intensity of a visual impact

is a function of how apparent the proposed project's features, or those of its alternatives, may be within their context (e.g., barely noticeable versus visually dominant) (Table 3-1).

Table 3-1. Visual Modification Class Definitions

VM Class 1	Not noticeable: changes in the landscape are within the field of view but generally would be overlooked by all but the most concerned and interested viewers; they generally would not be noticed unless pointed out (inconspicuous because of such factors as distance, screening, low contrast with context, or other features in view, including the adverse impacts of past activities).
VM Class 2	Noticeable, visually subordinate: changes in the landscape would not be overlooked (noticeable to most without being pointed out), they may attract some attention but do not compete for it with other features in the field of view, including adverse impacts of past activities. Such changes often are perceived as being in the background.
VM Class 3	Distracting, visually co-dominant: changes in the landscape compete for attention with other features in view, including adverse impacts of past activities (attention is drawn to the change about as frequently as to other features in the landscape).
VM Class 4	Visually dominant, demands attention: changes in the landscape are the focus of attention and tend to become the subject of the view; such changes often cause a lasting impression of the affected landscape.

Source: Headley 2008

3.3 Evaluation Methodology

This visual and aesthetic impact analysis used a multi-step process to evaluate potential aesthetic impacts associated with the proposed alternatives. The progressive steps of this analysis are described in the following paragraphs.

- An inventory that included field observations and photography was undertaken of the visual and aesthetic resources along each alternative alignment. The inventory focused primarily on relevant historic buildings. Photos of the project area are included in this technical memorandum.
- The City of Los Angeles Circulation Element was reviewed to determine the presence of any scenic highways or recognized and valued views.

- Significant views along the corridor that warranted further aesthetic impact evaluation were identified. Close attention was paid to views that were potentially significant based on the key evaluation criteria, which include: substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within [a view from] a state scenic highway (*Appendix G of the CEQA Guidelines*); and potential for substantial degradation of existing visual character or quality of a site and its surroundings.
- A site visit was conducted of the views identified in step 3 (selected photographs are included in Section 4 of this technical memorandum).
- Views of historic buildings were then highlighted and evaluated from the public right-of-way to assess potential impact of the proposed Regional Connector alternatives.
- Potential visual impacts of the build alternatives on historic features of the downtown streetscape were analyzed. Mitigation recommendations were made as appropriate.

4.0 AFFECTED ENVIRONMENT

4.1 Area of Potential Visual and Aesthetic Effects

The four build alternatives (At-Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, and Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2) were subjected to a cultural resource identification process to define the area of potential impact for the visual and aesthetic analysis. The process resulted in development of a Area of Potential Effect (APE) The APE used to evaluate indirect impacts to cultural resources includes the entire Los Angeles Civic Center Historic District (determined eligible for listing in the California Register) and the Little Tokyo Historic District, a National Historic Landmark. The visual impact analysis used a modified APE including only the portions of the historic districts within one city block of the build alternatives. The areas within one city block of the proposed alignments are the only portions visible from the proposed alternatives.

4.2 Existing Visual and Aesthetic Environment

The existing visual and aesthetic APE was surveyed on May 7 and 8, 2009. Multiple photographs were taken and reviewed. Research was completed to locate previously identified visual and aesthetic resources. These resources include, but are not limited to, structures of architectural or historic significance or visual prominence; public plazas, art, and gardens; heritage oaks or other trees or plants protected by the City of Los Angeles; consistent design elements (such as setbacks, massing, height, and signage) along a street or district; pedestrian amenities; and landscaped medians or park areas. The objective was to capture relationships between existing buildings and the streetscape/corridor alignment environment.

The build alternatives' existing visual and aesthetic environment is characterized by an established urban landscape. Based on site reviews, the predominant visual resources within the modified APE are recognized historic buildings. Figures 4-1 through 4-4 show the visual resources identified within the modified APE.

This analysis includes historic structures and visual resources in the following communities within the modified APE:

- Financial District
- Bunker Hill
- Historic Core
- Civic Center
- Little Tokyo

Each of these areas has unique visual and aesthetic qualities, as shown in Figures 4-5 through 4-27. The potential for visual intrusion, blockage of views, and visual incompatibility by the project alternatives is assessed in Section 5.

4.2.1 Scenic Vistas

The City of Los Angeles General Plan and the Scenic Highways Plan within the General Plan's Circulation Element were reviewed to determine whether the project would affect scenic vistas.

Based on this review, it was determined that no scenic highways are located in downtown Los Angeles. Though Objective 11 of the Circulation Element is to "preserve and enhance access to scenic resources and regional open space," there are no such features adjacent to the TSM or build alternatives.

4.2.2 Scenic Resources

The following buildings and open spaces have been identified as scenic resources along the proposed alignment corridors for the TSM and build alternatives.

4.2.2.1 Financial District:

- Fine Arts Building
- 818 Building
- Roosevelt Lofts
- Pegasus
- 811 Wilshire Boulevard
- Engine Company No. 28
- The Standard Hotel
- California Club
- Los Angeles Central Library and Maguire Gardens
- Arco Plaza
- Citigroup Center Plaza

4.2.2.2 Bunker Hill:

- Walt Disney Concert Hall
- 2nd Street Tunnel
- Grassy Open Space at General Thaddeus Kosciuszko Way

4.2.2.3 Historic Core:

- Los Angeles Law Center
- Times Annex
- Times Building
- Higgins Building
- St. Vibiana's Cathedral
- Redwing Shoes

4.2.2.4 Civic Center:

- City Hall South
- Los Angeles City Hall
- U.S. Courthouse
- Fletcher Bowron Square
- Parker Center
- Tinker Toy Parking Structure

4.2.2.5 Little Tokyo:

- Little Tokyo Historic District
- Los Angeles Hompa Hongwanji Temple

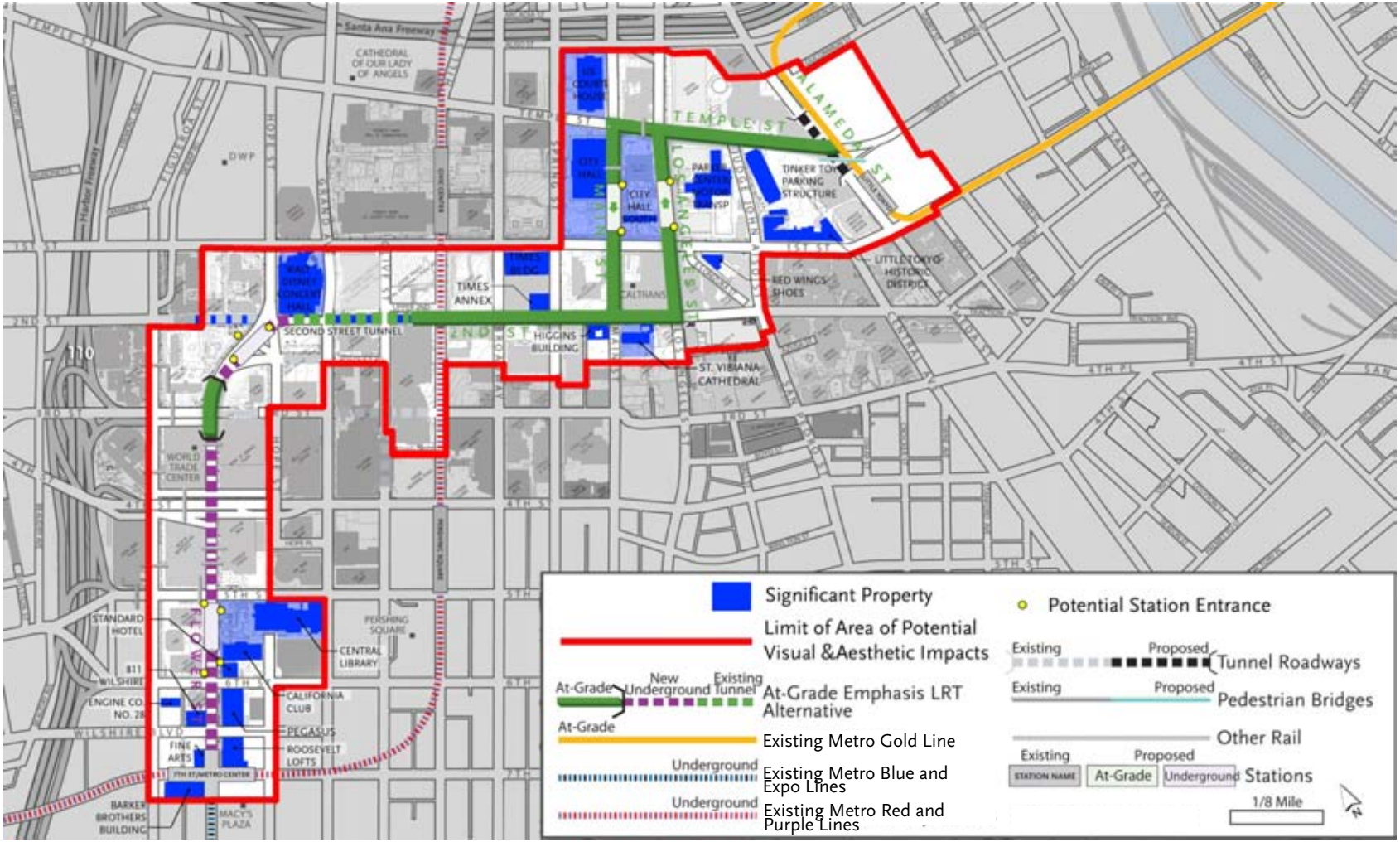

Figure 4-1. Visual Resources Associated with the At-Grade Emphasis LRT Alternative

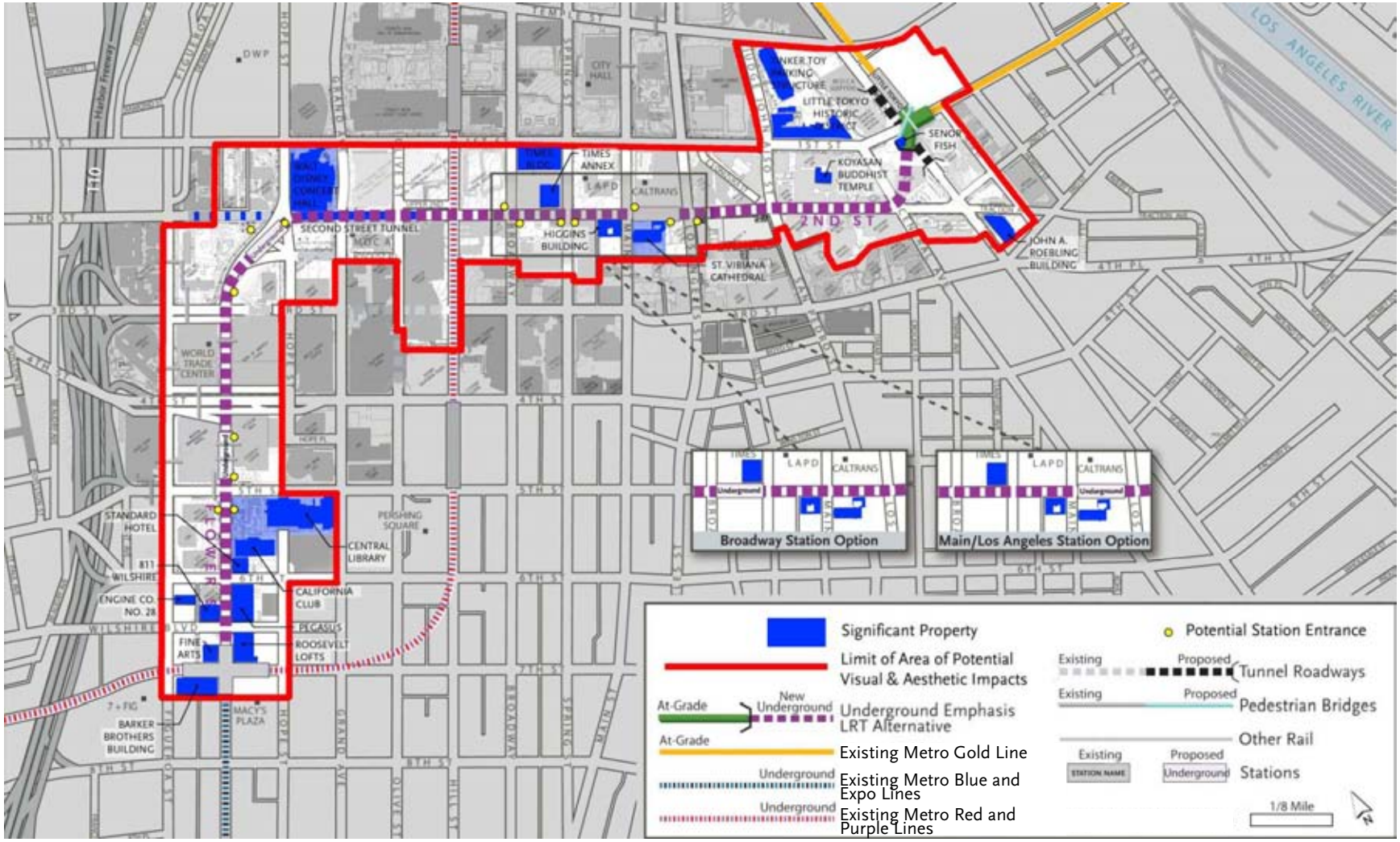

Figure 4-2. Visual Resources Associated with the Underground Emphasis LRT Alternative

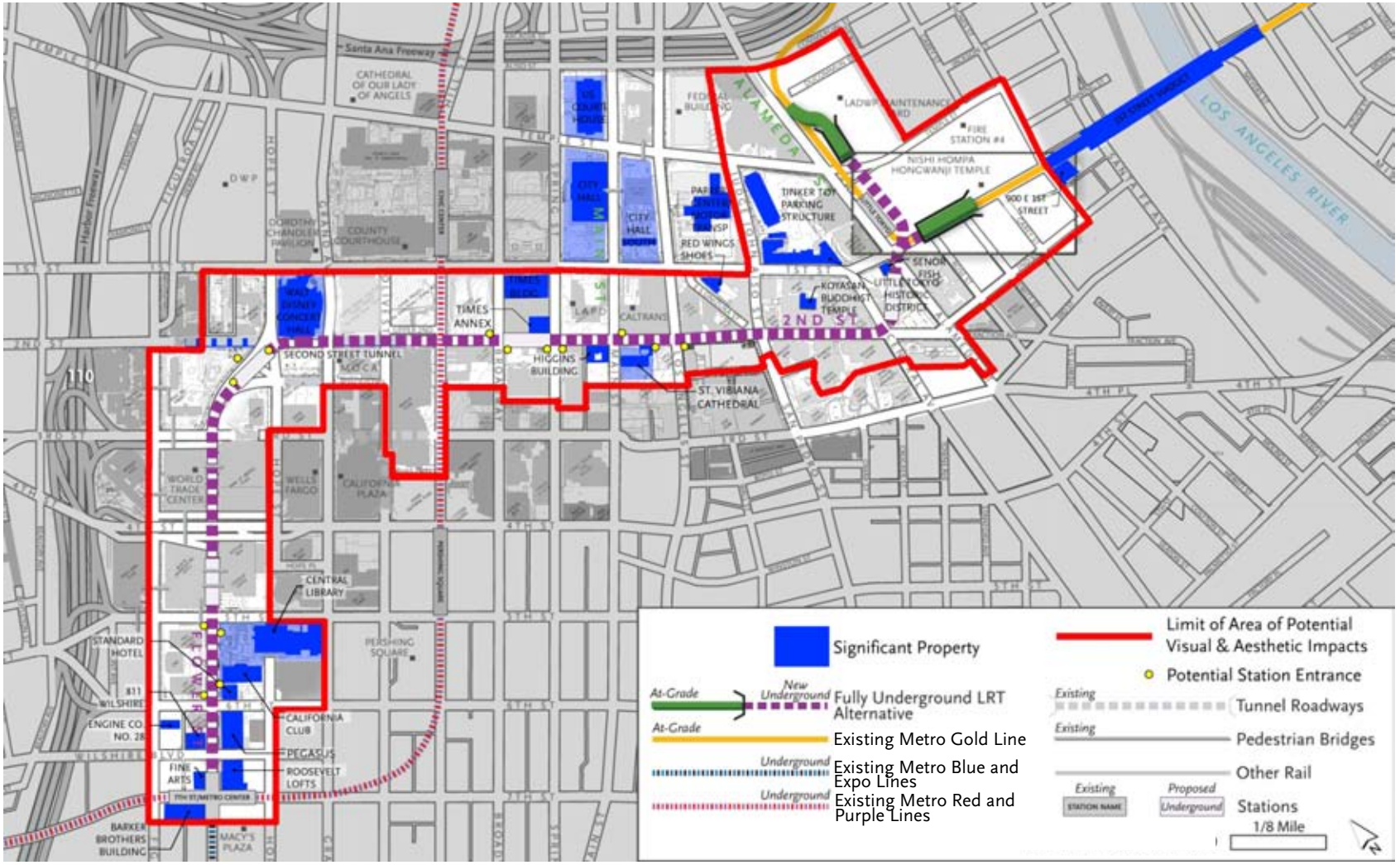

Figure 4-3. Visual Resources Associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1

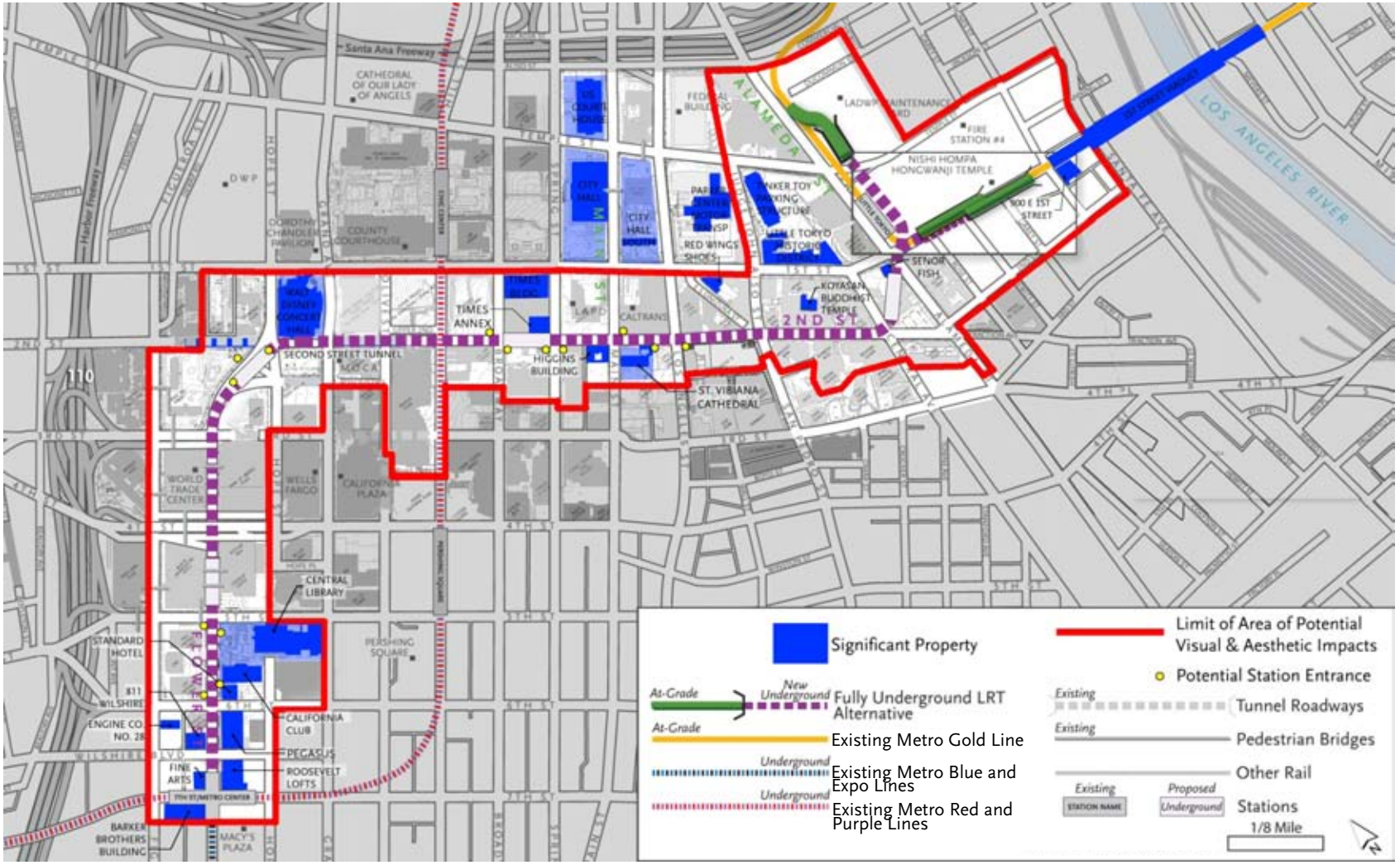

Figure 4-4. Visual Resources Associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2

4.2.3 Visual Character

The visual context for the build alternatives consists of five distinct communities. Each is rich with a variety of buildings and public and private spaces that create an individual character. These communities include the Financial District, Bunker Hill, Historic Core, Civic Center, and Little Tokyo and are described in the following paragraphs.

4.2.3.1 Financial District

Located around Flower Street, the Financial District is characterized by predominantly high-rise institutional, hotel, and financial buildings, as shown in Figure 4-5. The area contains several open space areas of varying character. The Central Library's Maguire Gardens is located immediately west of the Central Library and south of 5th Street between the library building and Flower Street, as shown in Figures 4-6, 4-7, and 4-8.

Across the street and to the west of the Central Library is the City National Plaza, a paved private open space that serves as a forecourt to the Paul Hastings Tower, CNB, and City National Tower complex (shown in Figure 4-9). A paved plaza is located at the Citigroup Center on the northeast corner of the intersection of Flower and 5th Streets, as shown in Figure 4-10.

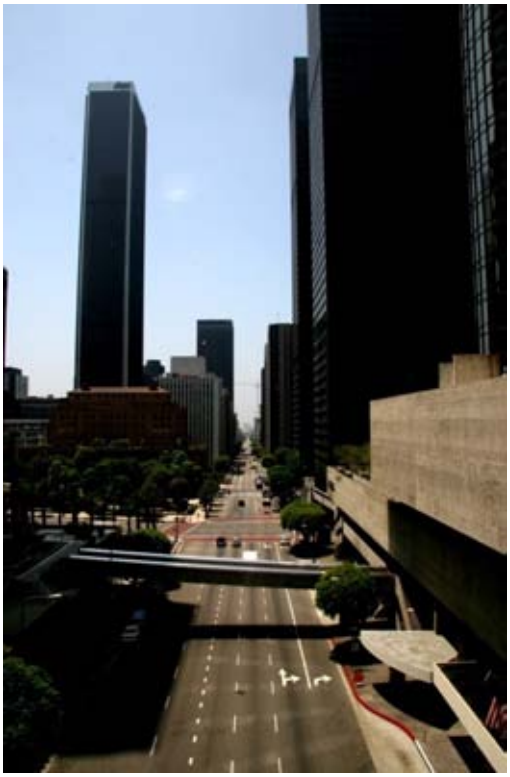

Figure 4-5. Financial District/Flower Street Corridor

Figure 4-6. Los Angeles Central Library

Figure 4-7. Central Library's Maguire Gardens - 1

Figure 4-8. Central Library's Maguire Gardens - 2

Figure 4-9. City National Plaza

Figure 4-10. Citigroup Center Plaza

4.2.3.2 Bunker Hill

Located approximately near the intersection of Flower and 2nd Streets, Bunker Hill includes several high-rise institutional and cultural buildings that interface with the Civic Center to the east and a residential complex to the west. The iconic Walt Disney Concert Hall (Figure 4-16), flanked by the Dorothy Chandler Pavilion to the north, is located in this neighborhood, as are the Colburn School for the Performing Arts and the Museum of Contemporary Art (MOCA).

Topographically, Bunker Hill is the highest point in downtown Los Angeles, with several viewpoints toward the northeast, southwest, and east. A grassy open space area on Bunker Hill (Figure 4-11) is located on the north end of Flower Street. Office towers located on the southern part of Bunker Hill are visible from various points in the downtown area. Crossing beneath Bunker Hill are the 2nd and 3rd Street tunnels, linking areas east and west of Bunker Hill. These tunnels are shown in Figures 4-12, 4-13, 4-14, and 4-15.

Figure 4-11. Open Space at West End of 2nd and 3rd Street Tunnels

Figure 4-12. West End of 2nd Street Tunnel

Figure 4-13. East End of 2nd Street Tunnel

Figure 4-14. West End of 3rd Street Tunnel

Figure 4-15. 3rd Street Corridor and East End of 3rd Street Tunnel

Figure 4-16. Walt Disney Concert Hall

4.2.3.3 Historic Core

The 2nd Street portion of the Historic Core is centered around Broadway and characterized by large civic buildings to the north and a mixture of retail, religious, and office buildings to the south (Figures 4-17, 4-18, and 4-19). Broadway runs roughly north-south through this area, and numerous vestiges of downtown Los Angeles' historic past are found here. Broadway is lined with many mid-rise commercial and residential buildings, typically with no space between them.

Many buildings were constructed between 1880 and the late 1920s and range in height from four to 12 stories; heights were restricted by the City's 150-foot height limit at that time. Most of the ground floor retail shops along Broadway have been modernized, but the exterior facades of the upper floors are largely intact and unchanged since the buildings' original construction. Most of Broadway's historic buildings are located south of 3rd Street, at least one block from the proposed LRT alignments.

Figure 4-17. 2nd Street Corridor and the Los Angeles Times Building

Figure 4-18. 2nd Street and the Higgins Building

Figure 4-19. 2nd Street and St. Vibiana's Cathedral

4.2.3.4 Civic Center

The Civic Center District includes both city and federal buildings, including the Los Angeles City Hall, the Los Angeles Law Center, the United States Federal Courthouse, Parker Center, and other civic buildings (Figures 4-20 through 4-23). Many of these buildings, including the

Los Angeles City Hall Building, collectively contribute to the determined-eligible-for-listing Los Angeles Civic Center Historic District, shown in Figure 4-23. Buildings within the Civic Center district of Central Los Angeles are primarily mid-rise structures with large open space and/or plaza setbacks separating the buildings from the streets.

Figure 4-20. Los Angeles Law Center

Figure 4-21. Los Angeles City Hall

Figure 4-22. Fletcher Bowron Square/Los Angeles Mall

Figure 4-23. Temple Street Corridor through the Civic Center

4.2.3.5 Little Tokyo

This community includes the Little Tokyo Historic District, which is a National Historic District as defined by the National Park Service. It is also listed in the National Register of Historic Places. The Little Tokyo Historic District is described in more detail in the Cultural Resources – Built Environment Technical Memorandum.

The neighborhood surrounding the National Historic District has become known as "Little Tokyo" and is approximately four city blocks in size. First called Little Tokyo in 1903, this neighborhood contains an assemblage of buildings and spaces that are inviting to pedestrians and tourists. There is a diversity of buildings in Little Tokyo, including cultural, religious, retail, office, hotel, institutional, and residential uses (Figures 4-24 through 4-27). The area is pedestrian and transit friendly, with numerous bus stops, pedestrian alleyways, plazas, and storefront retail.

Figure 4-24. 2nd Street & Central in Little Tokyo

Figure 4-25. 2nd Street Corridor Adjacent to Japanese Village Plaza

Figure 4-26. Onizuka Street with "Friendship Knot" at San Pedro & 2nd Street

Figure 4-27. 1st Street Corridor in the Heart of Little Tokyo

4.2.4 Nighttime Illumination

The build alternative alignments are within the greater downtown Los Angeles area, which is a heavily urbanized environment. Extensive nighttime lighting is provided throughout the region via street lighting, building entrance lighting, and general illumination from lights shining through the windows of high- and mid-rise buildings lining the corridor.

4.2.5 Shade and Shadows

Within this heavily urbanized environment, extensive shadows are cast by the existing mid- and high-rise buildings lining the corridor. Therefore, the project area experiences extensive shade during certain parts of the day as the sun moves from east to west in the sky.

4.3 Conclusions

There are no scenic byways, scenic vistas, or protected public view corridors. All of the proposed alignments are located in downtown Los Angeles, which is heavily urbanized. All of the proposed alignments include several downtown communities, each with its own unique character and visual context. Most of these downtown communities include historic buildings. Two communities in particular, Civic Center and Little Tokyo, include designated historic districts. The visual and aesthetic context of the project area is primarily shaped by these historic resources.

The key difference between the visual contexts for the alternatives is that the alignments follow slightly different routes through downtown Los Angeles. The TSM Alternative's proposed bus routes extend farther north and east to Union Station than the other alternatives.

The At-Grade Emphasis LRT Alternative incorporates both Los Angeles and Main Streets and the buildings fronting them, including City Hall. It also includes the Temple Street environment, which consists primarily of large-scale office buildings, institutional buildings, and parking lots. The At-Grade Emphasis LRT Alternative would traverse through the eligible-for-listing Civic Center Historic District.

The Underground Emphasis LRT Alternative remains predominantly underground and would pass through only four of the five districts comprising the project area: the Financial District, Bunker Hill, the Historic Core, and Little Tokyo. The Underground Emphasis LRT Alternative would be located within one block of the Little Tokyo Historic District and pass through Little Tokyo at grade east of Central Avenue between 1st and 2nd Streets.

Both Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 are identical to the Underground Emphasis LRT Alternative except for segments that continue east for several blocks in 1st Street, and north for two blocks just east of Alameda Street.

5.0 IMPACTS

5.1 Build Alternative Features

Visual and aesthetic impacts associated with the No Build, TSM, and build alternatives are described in the following subsections. Impacts discussed within this section are summarized in Tables 5-1 through 5-5. These tables list the identified visual resources in the project area potentially affected by each of the build alternatives, and show how aspects of construction and operation for each alternative have the potential to affect the identified visual resources.

5.2 No Build Alternative

The No Build Alternative would not involve construction of a new light rail transit project in downtown. It would also not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan. The transit network within the project area would be largely the same as it is now (Figure 5-1).

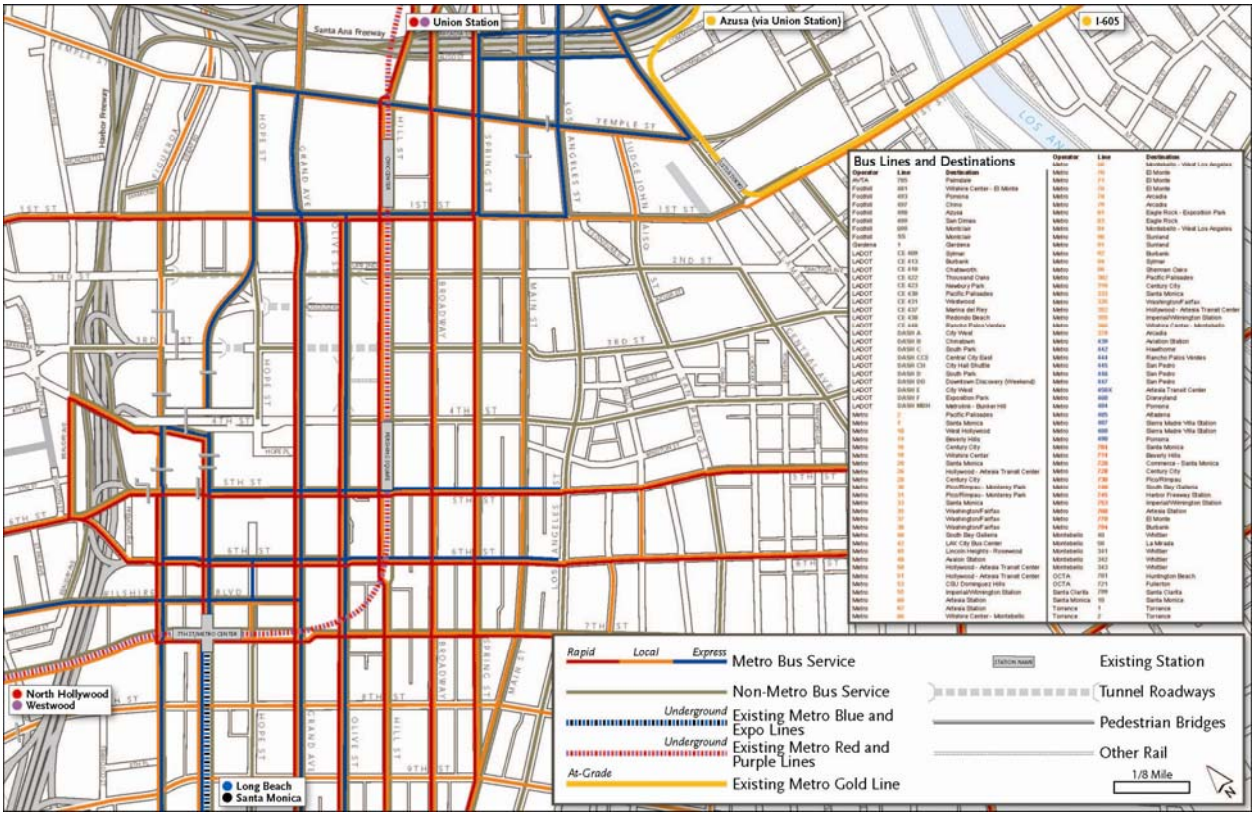

Figure 5-1. No Build Alternative

5.1.1 Direct Impacts

There will be no new transit projects constructed or operated in the project area under this alternative. No new streetscape improvements will be made. Therefore, there will be no direct visual impacts to scenic vistas, scenic resources, nighttime lighting, and shade and shadow impacts. Additionally, because the streetscape will remain unchanged, the existing visual character of the project area will not be degraded.

5.1.2 Indirect Impacts

No indirect construction or operation impacts to scenic vistas, scenic resources, nighttime lighting, and shading and shadowing would occur with the No Build Alternative because there would be no construction or new rail operations. Additionally, because the streetscape will remain unchanged, the existing visual character of the project area will not be indirectly degraded or enhanced.

5.1.3 Cumulative Impacts

No cumulative impacts would result from the No Build Alternative because there would be no direct or indirect impacts under this alternative.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative would include new express shuttle bus lines linking 7th Street/Metro Center Station and Union Station. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. The TSM Alternative shuttle bus routes are shown in Figure 5-2.

5.2.1 Direct Impacts

The enhanced bus stops constructed under the TSM Alternative would consist of select streetscape improvements, including bus stops, seating opportunities for those waiting for buses, and shelters. These improvements are shown in Figures 5-3a and 5-3b. Streetscape improvements would be consistent with existing enhanced bus stops and shelters already located throughout the project area and Greater Los Angeles. Views to scenic resources along the TSM Alternative alignment would not be obstructed due to the small scale and size of these bus stops and shelters and their location within an existing heavily urbanized environment.

Adding bus stops and shelters within the Civic Center Historic District and near the Little Tokyo Historic District would not alter the visual character of these districts. Context sensitive design of bus shelters would be applied to avoid any potential visual effects. Therefore, no significant visual impacts to scenic vistas, scenic resources, nighttime lighting, and shade and shadow impacts would occur.

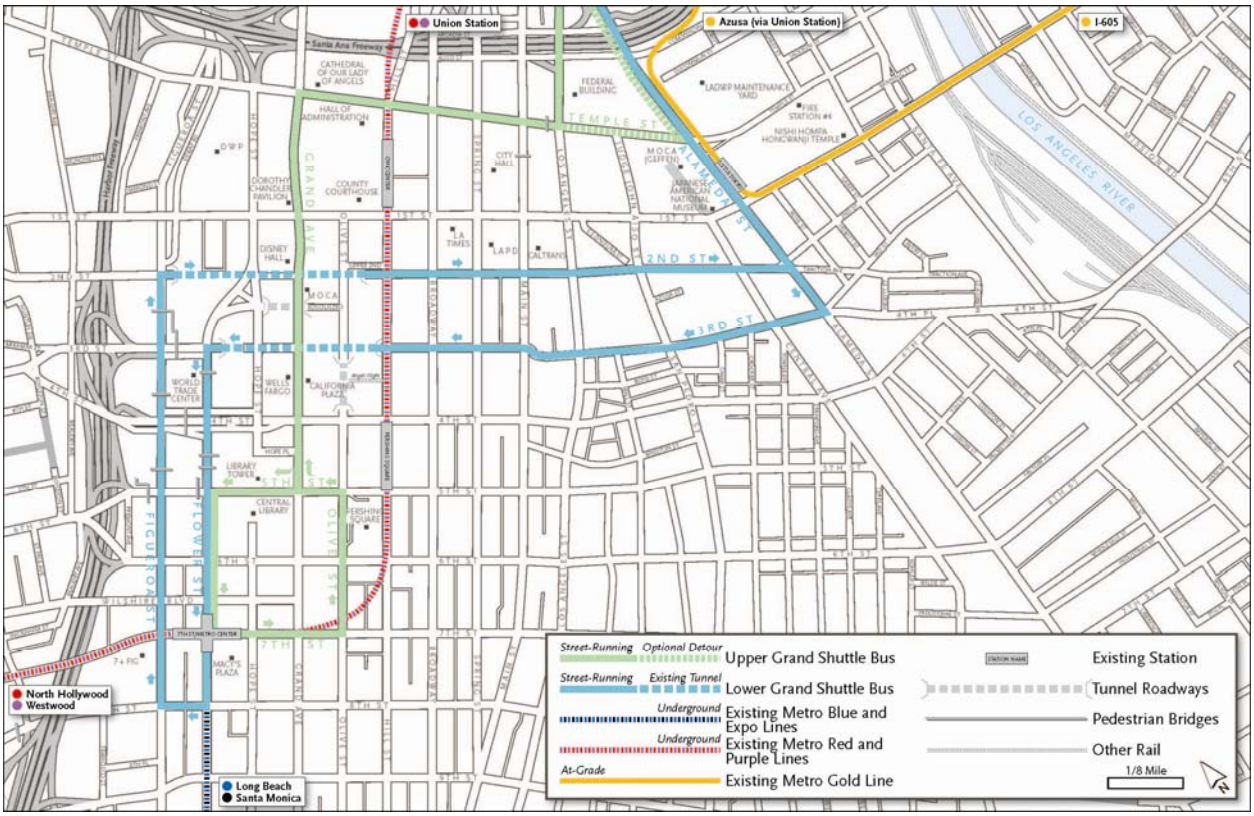

Figure 5-2. Transportation System Management (TSM) Alternative

5.2.2 Indirect Impacts

No indirect construction or operation impacts to scenic vistas, scenic resources, nighttime lighting, and shading and shadowing would occur under the TSM Alternative because there would be no major construction or new light rail operation. Additionally, because the streetscape would remain unchanged except for new and expanded bus stops, the existing visual character of the project area would not be indirectly degraded.

5.2.3 Cumulative Impacts

No cumulative impacts would result from the TSM Alternative because there would be no direct or indirect impacts.

Figure 5-3a and Figure 5-3b. Enhanced Bus Stops

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative extends from the underground 7th Street/Metro Center Station, heads north under Flower Street, resurfaces to at grade north of 4th Street, crosses 3rd Street at grade, enters Bunker Hill, and turns northeast through a new entrance to the existing 2nd Street tunnel. The new underground portions of the alignment would be constructed using the cut-and-cover method.

After entering the 2nd Street tunnel, the alignment continues along 2nd Street and splits into an at-grade couplet configuration traveling north on Main and Los Angeles Streets (one track on each roadway). The alignment then heads east on Temple Street, realigns into a dual-track configuration just east of Los Angeles Street, and connects to the Metro Gold Line in a three-way junction north of the Little Tokyo/Arts District Station on Alameda Street. An automobile underpass and a potential pedestrian overpass would be constructed at the intersection of Temple and Alameda Streets to reduce pedestrian-train and automobile-train conflicts associated with the high volume of auto and truck traffic that would traverse the Regional Connector alignment.

A pedestrian bridge may also be constructed from the 2nd/Hope Street Station to Upper Grand Avenue in the Bunker Hill area. The At-Grade Emphasis LRT Alternative is shown in Figure 5-4. As discussed in Section 4, there are no scenic vistas identified in the project area and therefore no scenic vista impacts would occur. Other potential visual and aesthetic impacts associated with implementation of the At-Grade Emphasis LRT Alternative are discussed in the following subsections.

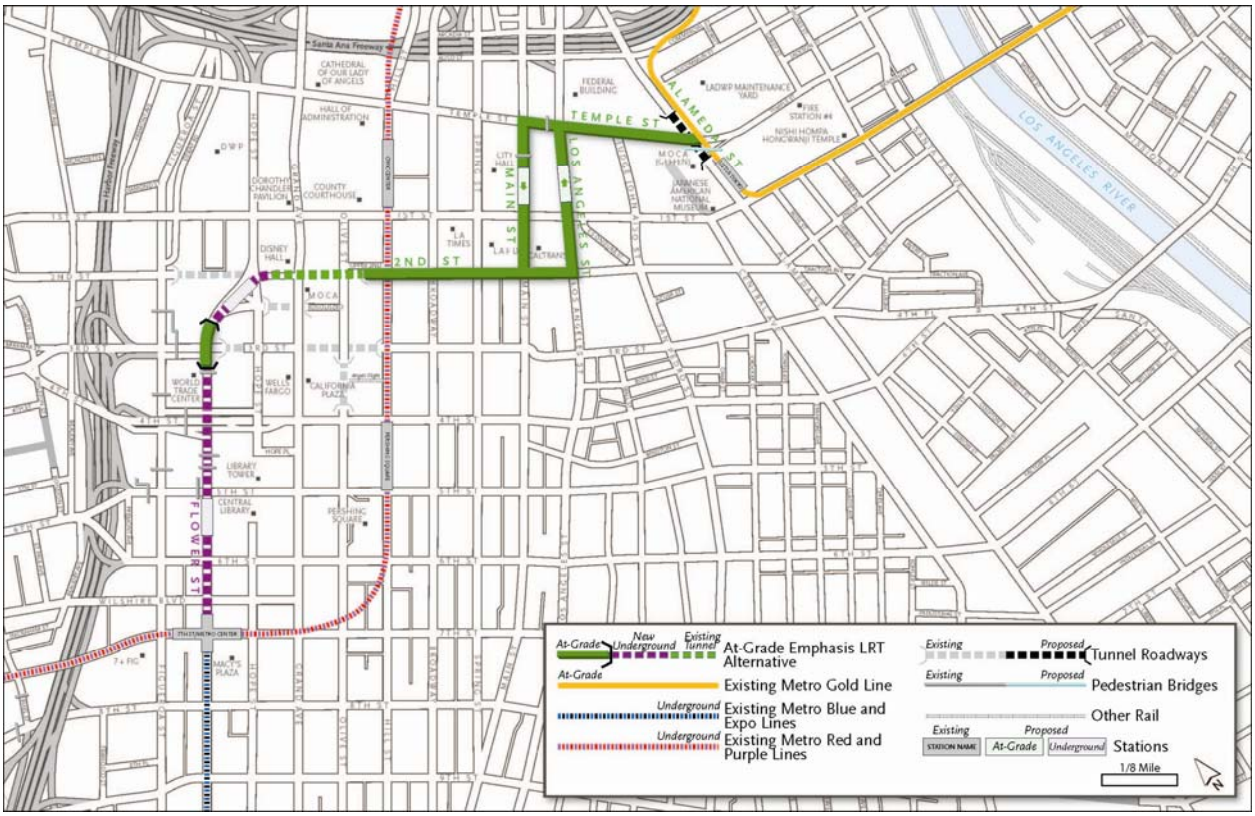

Figure 5-4. At-Grade Emphasis LRT Alternative

5.3.1 Direct Construction Impacts

Construction of the At-Grade Emphasis LRT Alternative would involve both at-grade and underground construction activities. At-grade construction would include installing tracks and guideway structures and constructing station platforms and ancillary facilities along roadways in the Historic Core, Civic Center, and Little Tokyo areas of downtown Los Angeles. At-grade construction activities would also include streetscape improvements along the entire alignment.

For above-ground construction, activities, equipment, and staging locations would be visible to nearby land uses and passersby. Proposed construction staging locations for the at-grade portion of this alternative include the Main/1st Street station, the Los Angeles/1st Street station, and the Temple and Alameda junction. At each of these three staging locations, construction equipment, worker vehicles, and construction trailers would be visible to nearby land uses and passersby for a period of two to three years.

For underground construction activities, tracks, guideways, and ancillary facilities would be installed by cut-and-cover construction techniques. Cut-and-cover construction would be conducted primarily below ground along approximately 1,600 feet of Flower Street north of

the existing 7th Street/Metro Center Station and extend to the proposed 2nd/Hope Street station. At any given time, two to three blocks would be closed during cut-and-cover construction activities. Above-ground activities associated with cut-and-cover construction would be visible to nearby land uses and passersby; however, the bulk of construction would occur below ground and, therefore, would not obstruct views or substantially alter the visual character of the Flower Street corridor in the Financial District.

Also associated with underground construction are construction staging areas. Staging locations are proposed at the Flower/6th/5th Street station site and the 2nd/Hope Street station site. Construction staging locations would be visible to nearby land uses and passersby; however, the construction sites themselves would be sheltered from direct public view by temporary construction walls.

After underground construction activities are complete, pedestrian station entrances would be constructed using methods involving placement of concrete inverts, walls, and walkways. Station entrance locations are generally used as access points to the underground station, including during the construction process. Exterior entrances would be constructed after the station structure has been completed.

Table 5-1 summarizes construction impacts on scenic resources associated with construction of the At-Grade Emphasis LRT Alternative.

Table 5-1. Scenic Resources Potentially Affected by Construction of the At-Grade Emphasis LRT Alternative

Resources	Cut and Cover for Guideway	Construction Staging	Stations and Portals	Tunnel Boring
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	LTS	NO	NO	NO
811 Wilshire Blvd	LTS	NO	NO	NO
Engine Co. No. 28	LTS	NO	NO	NO

Table 5-1. Scenic Resources Potentially Affected by Construction of the At-Grade Emphasis LRT Alternative				
Resources	**Cut and Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Standard Hotel	LTS	NO	NO	NO
California Club	LTS	NO	NO	NO
LA Central Library & Maguire Gardens	LTS	LTS	LTS	NO
City National Plaza	LTS	LTS	LTS	NO
Citigroup Center Plaza	LTS	LTS	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	NO	LTS	LTS	NO
2nd Street Tunnel	LTS	LTS	LTS	NO
Grassy Open Space at General Thaddeus Kosciuszko Way	LTS	LTS	LTS	NO
Historic Core				
LA Law Center	NO	NO	NO	NO
Times Annex	NO	NO	NO	NO
Times Building	NO	NO	NO	NO
Higgins Building	NO	NO	NO	NO
St. Vibiana's Cathedral	NO	NO	NO	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				

Table 5-1. Scenic Resources Potentially Affected by Construction of the At-Grade Emphasis LRT Alternative				
Resources	**Cut and Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Civic Center Historic District	NO	LTS	LTS	NO
City Hall South	NO	LTS	LTS	NO
Los Angeles City Hall	NO	LTS	LTS	NO
U.S. Courthouse	NO	LTS	LTS	NO
Fletcher Bowron Square	NO	LTS	LTS	NO
Parker Center	NO	LTS	LTS	NO
Tinker Toy Parking Structure	NO	LTS	LTS	NO
Little Tokyo				
Little Tokyo Historic District	NO	LTS	NO	NO
Union Center Arts	NO	LTS	NO	NO

NO = No impact
LTS = Less than significant impact

5.3.1.1 Scenic Resource Impacts

There would be temporary impacts to views of historic buildings during construction. Construction staging areas and temporary construction walls surrounding these staging areas, movement of construction equipment, and stockpiling could temporarily hinder views of historic buildings from selected locations in downtown Los Angeles.

To summarize findings shown in Table 5-1, buildings and/or recognized visual resources could potentially be affected by construction activities associated with installation of tracks and poles, station construction, cut-and-cover activities, and pedestrian and train portal construction. These construction activities are discussed in more detail in the following subsections.

Installation of Tracks and Poles

Above-ground portions of the trackwork construction would involve demolition of the roadway section being displaced by the LRT trackway, preparation of the track bed, construction of the supporting track slab, and laying of rail. Foundations for overhead wire poles may be installed with the track. Given the urban context, approximately two-block segments of roadway are likely to be reserved at a time for construction activities. Construction durations for a two-block segment are estimated to be two to four months to complete trackwork in each roadway segment.

These activities would occur in the vicinity of the Los Angeles Law Center, the Times Annex, the Higgins Building, Saint Vibiana's Cathedral, City Hall and the open space area located immediately south of the building, the United States Courthouse, Fletcher Bowron Square/Los Angeles Mall, Parker Center, and the Tinker Toy Parking Structure. Given the temporary and short-term (two to four months) nature of construction activities immediately adjacent to these visual resources, no permanent or adverse impacts would occur to these scenic resources. All construction activities would remain off-site from the resources, and views of these resources within the surrounding area would remain intact. Therefore, impacts associated with installation of tracks and poles along the above-ground portions of this alternative would be less than significant.

Installation activities for tracks and poles along the underground portions of this alternative would not be visible to nearby land uses or passersby. Therefore, no visual impacts would result to scenic resources along Flower Street in the Bunker Hill and Financial District areas of downtown Los Angeles.

Above-ground Station Construction

The at-grade stations on Main Street and Los Angeles Street would be constructed simultaneously with other segments of the alternative. These would be single, high floor station platforms constructed from standard building materials such as concrete, steel, aluminum, and heavy plastic. The stations would be similar in size and scale to the existing Metro Blue Line and Gold Line stations.

Buildings located in the vicinity of station locations include City Hall South, the Los Angeles City Hall building and open space plaza south of the building, and Parker Center. Impacts to views of scenic buildings and resources along Main Street and Los Angeles Street just north of 1st Street, and to the resources themselves, would be less than significant due to the location of the platforms within existing street rights-of-way and the limited height, size, and scale of these platforms.

Underground Stations and Pedestrian Portals

Two underground stations would be constructed along the At-Grade Emphasis LRT Alternative alignment: the Flower/6th/5th Street station and the 2nd/Hope Street station. Similar to construction of the tunnel and trackwork for the underground portion of this alternative, stations would be constructed using cut-and-cover techniques. Buildings and scenic resources located within the immediate proximity of the proposed Flower/6th/5th Street underground station and pedestrian portal include the Central Library and Maguire Gardens, the City National Plaza, and the Citigroup Center Plaza. No identified scenic resources or buildings are located immediately adjacent to the proposed 2nd/Hope Street station.

Most station construction activities would occur below ground, and therefore would not be visible to nearby buildings, land uses, and passersby. Following underground construction, the ground surface would be completed and pedestrian portals would be finished. Therefore, construction activities for the underground stations, ancillary facilities, and pedestrian portals for this alternative would be primarily invisible to nearby land uses; impacts to surrounding visual resources would be less than significant.

Train Portal

Under the At-Grade Emphasis LRT Alternative, one train portal would be constructed along the southern wall in the central portion of the 2nd Street Tunnel. Creating the portal in the 2nd Street Tunnel would require major construction work and closure of the tunnel during portal construction. Views of the central portion of this tunnel, where the bulk of construction activities would occur, are limited and available only to drivers using the tunnel. Therefore, by closing the tunnel during construction activities, visual impacts associated with portal construction in the 2nd Street Tunnel would be limited and no impacts would occur.

5.3.1.2 Visual Character Impacts

Both above and below ground construction activities—including installation of the tracks and poles, station construction, and pedestrian and train portal construction—would temporarily alter the existing visual character of downtown Los Angeles. Areas of downtown Los Angeles through which the underground portions of the alternative would pass consist of high-rise and high-density development.

Wide sidewalks and avenues provide pedestrians and vehicles with views along corridors in the project area. Construction activities would result in two- to four-month street and sidewalk closures on a two-block basis. Construction staging areas with tall walls surrounding construction sites would be placed in specific locations for periods ranging from 12 to 48 months. Construction activities would result in overall congestion and temporary obstructions to views currently experienced along corridors. There would not be a significant effect on visual character of the historic districts because potential impacts to historic buildings that contribute to these districts would be less than significant.

Construction activities occurring in roadways and sidewalks would have the potential to temporarily disrupt views along the corridors as well as impede views of historic resources, visual resources, and viewshed corridors. However, no recognized or valued views are located in the project area. Viewers would see construction-related activities and equipment, and the urban streetscape would be temporarily altered. However, the project would be constructed in a heavily urbanized environment where construction activities are not uncommon. Construction of the project would not noticeably reduce visual quality or alter viewing context. Therefore, temporary construction impacts would be less than significant.

5.3.1.3 Nighttime Illumination Impacts

During construction, nighttime lighting would be introduced into the project area at construction staging locations. Lighting would predominantly consist of security lighting, and light would be directed on-site. As such, nighttime lighting impacts would be less than significant during construction of the At-Grade Emphasis LRT Alternative.

5.3.1.4 Shade and Shadow Impacts

The At-Grade Emphasis LRT Alternative would involve both at-grade and underground construction. Heights of structures and construction-related facilities and equipment located above ground would be limited; as such, the potential for construction activities to result in shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment's corridors would be minimal. No shade or shadow impacts would result from construction of the At-Grade Emphasis LRT Alternative.

5.3.2 Indirect Construction Impacts

Construction of the At-Grade Emphasis LRT Alternative would result in limited localized visual impacts on the Financial District, Bunker Hill, Historic Core, Civic Center, and Little Tokyo areas of downtown.

5.3.2.1 Scenic Resource Impacts

Construction activities for the proposed project would be localized and not result in any indirect impacts to scenic resources beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. No indirect visual impacts to scenic resources would occur as a result of construction.

5.3.2.2 Visual Character Impacts

Construction activities for the proposed project would be localized and not result in any indirect impacts to visual character beyond those discussed in the Built Environment Technical Memorandum. No indirect impacts to visual character would occur as a result of construction activities.

5.3.2.3 Nighttime Illumination Impacts

During construction, nighttime lighting would be introduced into the immediate project area at construction staging locations, along Flower Street at cut-and-cover construction sites, and along the two-block at-grade segments on 2nd, Los Angeles, Main, and Temple Streets. The project is located in an urban environment with substantial existing nighttime lighting. All lighting associated with project construction activities would be localized. Therefore, no indirect nighttime lighting impacts would occur from construction of the At-Grade Emphasis LRT Alternative.

5.3.2.4 Shade and Shadow Impacts

The At-Grade Emphasis LRT Alternative would involve both at-grade and underground construction. Heights of structures and construction-related facilities and equipment located above ground would be limited and localized to the areas immediately surrounding the facilities themselves; therefore, no indirect shade and shadow impacts would result from construction activities.

5.3.3 Direct Operational Impacts

Operation of the At-Grade Emphasis LRT Alternative would include both underground and at-grade segments of the project. Underground operations would occur beneath Flower Street, extending north from the existing 7th Street/Metro Center Station through the Financial District and Bunker Hill to the 2nd Street Tunnel. At the 2nd Street Tunnel the line would continue at-grade in an easterly direction through the Historic Core and Civic Center and ultimately connect with the existing Little Tokyo/Arts District Station.

Three new stations are proposed: one at-grade couplet and two underground stations. The at-grade couplet station would be located in the existing street rights-of-way on Los Angeles Street and Main Street and include single, high floor station platforms. The underground stations, at Flower/6th/5th Streets and 2nd/Hope Streets, would be accessed by pedestrian portals with above-ground entrances. Table 5-2 summarizes impacts on scenic resources associated with operation of the At-Grade Emphasis LRT Alternative.

Table 5-2. Scenic Resources Potentially Affected by Operation of the At-Grade Emphasis LRT Alternative

Resources	Poles and Track	Stations	Pedestrian Portals	Train Portals
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	NO	NO	NO	NO
811 Wilshire Blvd	NO	NO	NO	NO
Engine Co. No. 28	NO	NO	NO	NO
Standard Hotel	NO	NO	NO	NO
California Club	NO	NO	NO	NO
LA Central Library & Maguire Gardens	NO	NO	LTS	NO
City National Plaza	NO	NO	LTS	NO
Citigroup Center Plaza	NO	NO	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	NO	NO	NO	NO
2nd Street Tunnel	NO	NO	LTS	LTS
Grassy Open Space at General Thaddeus Kosciuszko Way	NO	NO	LTS	LTS
Historic Core				
LA Law Center	LTS	NO	NO	NO
Times Annex	LTS	NO	NO	NO

Table 5-2. Scenic Resources Potentially Affected by Operation of the At-Grade Emphasis LRT Alternative				
Resources	**Poles and Track**	**Stations**	**Pedestrian Portals**	**Train Portals**
Times Building	NO	NO	NO	NO
Higgins Building	LTS	NO	NO	NO
St. Vibiana's Cathedral	LTS	NO	NO	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Civic Center Historic District	LTS	LTS	NO	NO
City Hall South	LTS	LTS	NO	NO
Los Angeles City Hall	LTS	LTS	NO	NO
U.S. Courthouse	LTS	LTS	NO	NO
Fletcher Bowron Square	LTS	LTS	NO	NO
Parker Center	LTS	LTS	NO	NO
Tinker Toy Parking Structure	LTS	LTS	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	NO	NO	NO
Union Center Arts	NO	NO	NO	NO

NO = No impact
LTS = Less than significant impact

5.3.3.1 Scenic Resource Impacts

Views of several historic buildings in the Historic Core and Civic Center could be minimally disrupted during project operations due to the presence of overhead contact wire and catenary poles. Table 5-2 summarizes potential impacts to scenic resources along the route of the proposed At-Grade Emphasis LRT Alternative.

Historic buildings within the Historic Core include the Los Angeles Law Center, Times Annex, Higgins Building, and Redwing Shoes. Historic buildings within the Civic Center include City Hall South, Los Angeles City Hall, the U.S. Courthouse, Fletcher Bowron Square/Los Angeles Mall, Parker Center, and the Tinker Toy parking structure. Of these buildings, the first three are large in scale and would experience only minimally visual impacts by the overhead contact systems and catenary poles. Even the three-story Redwing Shoes building is tall enough to experience only minor impacts from the overhead wires and catenary poles, which would be approximately two stories in height. This minimal impact would be visible only from the far side of the street beyond the overhead contact system. Viewers on the same side of the street as the building would experience no visual impact.

The overhead catenary system features would not degrade views of historic buildings in the Historic Core, nor would they contrast with the buildings' form, size, color, or texture. Therefore, operation impacts to these buildings in the Historic Core would be less than significant under the At-Grade Emphasis LRT Alternative.

Views of several historic buildings located in the Civic Center would potentially be minimally disrupted during project operations due to the presence of overhead contact wire and catenary poles. These include City Hall South, Los Angeles City Hall, the U.S. Courthouse, Fletcher Bowron Square/Los Angeles Mall, Parker Center, and the Tinker Toy parking structure. All of these buildings are tall and would be only minimally impacted by the proposed overhead contact system and catenary poles, which would be approximately two stories high.

The potential effect of the LRT facilities on these historic buildings is described in the Cultural Resources – Built Environment Technical Memorandum. The LRT facilities would be consistent with the historical context of many of the structures and reminiscent of the historic system of trolleys and street cars. These buildings are all institutional in scale, and their large sizes would visually outweigh the minor intrusion of the LRT facilities. The LRT facilities would not degrade views of historic buildings in the Civic Center, nor would they contrast with the buildings' form, size, color, or texture. Therefore, visual impacts to these resources would be less than significant.

Three Civic Center buildings along the At-Grade Emphasis LRT Alternative alignment would experience minimal to no potential visual impacts from station platforms and associated appurtenances. These include City Hall South, Los Angeles City Hall, and Parker Center. These buildings are much greater in scale than the light rail platforms and, therefore, would experience only minimal visual disturbance at the first floor level.

The stations would not degrade views of historic buildings in the Civic Center, nor would they contrast with the buildings' form, size, color or texture. Therefore, visual resource impacts would be less than significant.

One building in the project area, the Los Angeles Central Library (and the adjacent Maguire Gardens), may experience potential visual impacts from entrances to underground stations. The entrance to the proposed Flower/6th/5th Street station would be located in a widened sidewalk area and have low visual impact on the Central Library. Pedestrians walking along the west side of Flower Street would experience low visual impacts looking across the street toward Maguire Gardens. People walking along the east side of Flower Street would not experience any visual impacts. The entrance would not degrade views of the Central Library, nor would it contrast greatly with its appearance. Therefore, visual impacts to the Los Angeles Central Library and Maguire Gardens would be less than significant.

Train portals would be located:

- Within Flower Street between 3rd Street and 4th Street
- On Bunker Hill
- On 2nd Street between Olive Street and Hill Street (existing 2nd Street Tunnel portal)
- Inside the 2nd Street Tunnel (where the new tunnel from the south punches into the existing 2nd Street Tunnel)

The proposed train portals would not be tall enough to degrade views of any historic buildings, nor would they contrast visually with the buildings. As such, no impacts from train portals would occur.

In the Bunker Hill area, there may be a pedestrian bridge constructed from the 2nd/Hope Street Station to Upper Grand Avenue above the existing General Thaddeus Koscuiszko Way right-of-way. The bridge would not be visible from any historic buildings, and thus no adverse visual impacts to historic buildings would occur.

Several scenic resources are near the underground portion of the At-Grade Emphasis LRT Alternative alignment, but there would be no visible project facilities nearby. These include the Fine Arts Building, the 818 Building, Roosevelt Lofts, Pegasus, 811 Wilshire Boulevard, Engine Company Number 28, the Standard Hotel, and the California Club. No features of the proposed project would be visible to these buildings and therefore no visual impacts would occur.

Other buildings within the Area of Potential Visual Impact are located too far from the at-grade portions of the At-Grade Emphasis LRT Alternative alignment to be visually affected. These include the Times Building, St. Vibiana's Cathedral, Union Arts Center, and San Pedro Farm Building. Therefore, no visual impacts to these buildings would occur.

5.3.3.2 Visual Character Impacts

The At-Grade Emphasis LRT Alternative would be located in a heavily urbanized environment and adding a fixed guideway, whether at grade or underground, would not noticeably reduce visual quality or alter the viewing context in the Financial District, Bunker Hill, Historic Core, Civic Center, or Little Tokyo areas of downtown Los Angeles. The introduction and operation of these improvements would contribute to the existing urban character and high-density, pedestrian friendly environment that already exists in downtown Los Angeles. There would not be a significant effect on the visual character of the historic districts because potential impacts to historic buildings that contribute to the historic districts would be less than significant. Therefore, visual character impacts associated with the At-Grade Emphasis LRT Alternative would be less than significant.

5.3.3.3 Nighttime Illumination Impacts

The At-Grade Emphasis LRT Alternative would introduce new nighttime lighting to the immediate project area and at station locations. Nighttime lighting would primarily consist of security lighting and would be similar to the existing lighting located throughout downtown Los Angeles. Therefore, no new nighttime lighting impacts would result from implementation or operation of the At-Grade Emphasis LRT Alternative.

5.3.3.4 Shade and Shadow Impacts

Operation of the At-Grade Emphasis LRT Alternative would involve light rail trains running both at-grade and underground. Above-ground structures, including station platforms and catenary structures (which include poles and wires), would be limited to approximately two stories in height; therefore, the potential for the project to result in increased shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment corridors would be minimal. No shade or shadow impacts would result from implementation or operation of the At-Grade Emphasis LRT Alternative.

5.3.4 Indirect Operational Impacts

5.3.4.1 Scenic Resource Impacts

The At-Grade Emphasis LRT Alternative would not result in indirect operational impacts to the visual environment of downtown historic buildings.

5.3.4.2 Visual Character Impacts

Implementation and operation of the At-Grade Emphasis LRT Alternative would be localized and would not result in indirect impacts to visual character beyond those discussed in the Built Environment Technical Memorandum. No indirect impacts to visual character would occur.

5.3.4.3 Nighttime Illumination Impacts

New nighttime lighting would be introduced into the immediate project area and at station locations as a result of implementation of this alternative. All project-related lighting would be localized. Therefore, no indirect nighttime lighting impacts would result from operation of the At-Grade Emphasis LRT Alternative.

5.3.4.4 Shade and Shadow Impacts

Implementation and operation of the At-Grade Emphasis LRT Alternative would include both at-grade and underground operations. Structures located above ground, including station platforms and catenary structures, would be limited in height. Therefore, the potential for this alternative to result in shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment's corridors is limited. No indirect shade or shadow impacts would result from implementation or operation of the At-Grade Emphasis LRT Alternative.

5.3.5 Cumulative Construction Impacts

5.3.5.1 Scenic Resource Impacts

Construction projects besides the proposed LRT project are planned throughout the downtown Los Angeles area. Construction of the At-Grade Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of the proposed project would not contribute to a cumulatively considerable visual resource impact. Nor would the project, in combination with other future construction projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.3.5.2 Visual Character Impacts

The proposed project is located in greater downtown Los Angeles, which is a dynamic environment where new projects are being constructed on an on-going basis. Construction projects are seen throughout the project vicinity and, in addition to construction of the proposed LRT project, additional development projects are planned throughout the downtown Los Angeles area.

Construction of the At-Grade Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of this alternative would not contribute to a cumulatively considerable visual character impact. Nor would the project, in combination with other future projects in the downtown Los Angeles area. result in significant cumulative visual impacts to the visual character of downtown.

5.3.5.3 Nighttime Illumination Impacts

The At-Grade Emphasis LRT Alternative would not result in direct or indirect nighttime illumination impacts during construction. Therefore, the alternative would not result in, or contribute to, cumulatively considerable nighttime illumination impacts.

5.3.5.4 Shade and Shadow Impacts

The At-Grade Emphasis LRT Alternative would not result in direct or indirect shade and shadow impacts during construction. Therefore, the alternative would not result in, or contribute to cumulatively considerable shade and shadow impacts.

5.3.6 Cumulative Operational Impacts

5.3.6.1 Scenic Resource Impacts

Other development projects are planned throughout the downtown Los Angeles area in addition to the operation of the LRT project. Operation of this LRT alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, implementation of the alternative would not contribute to a cumulatively considerable visual resource impact. Nor would the project, in combination with other future construction projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.3.6.2 Visual Character Impacts

The proposed project is located in greater downtown Los Angeles, which is a dynamic environment where new projects are being implemented on an on-going basis. Additional development projects are planned throughout the downtown Los Angeles area. Operation of the At-Grade Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, operation of this alternative would not contribute to a cumulatively considerable visual resource impact. Nor would the alternative, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative visual impacts to the visual character of downtown.

5.3.6.3 Nighttime Illumination Impacts

The At-Grade Emphasis LRT Alternative would not result in direct or indirect nighttime illumination impacts from operations. Therefore, the alternative would not result in or contribute to significant cumulative nighttime illumination impacts.

5.3.6.4 Shade and Shadow Impacts

The At-Grade Emphasis LRT Alternative would not result in direct or indirect shade and shadow impacts from operations. Therefore, the alternative would not result in or contribute to significant cumulative shade and shadow impacts.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would connect directly to the tracks at 7th Street/Metro Center Station, continue north underneath Flower Street to 3rd Street, and then northeast to 2nd and Hope Streets. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue, where they would then veer north into a new portal on the private property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue.

The tracks would then enter the intersection of 1st and Alameda Streets in the same type of three-way junction planned for the At-Grade Emphasis LRT Alternative, with a potential pedestrian overpass and a vehicular underpass for through traffic on Alameda Street. A pedestrian bridge may also be constructed from the 2nd/Hope Street station to Upper Grand Avenue in the Bunker Hill area.

The proposed Underground Emphasis LRT Alternative alignment is shown in Figure 5-5. No identified scenic vistas are within the project area and therefore no scenic vista impacts would occur. Potential visual and aesthetic impacts associated with implementation of the Underground Emphasis LRT Alternative are discussed in the following subsections of this technical memorandum.

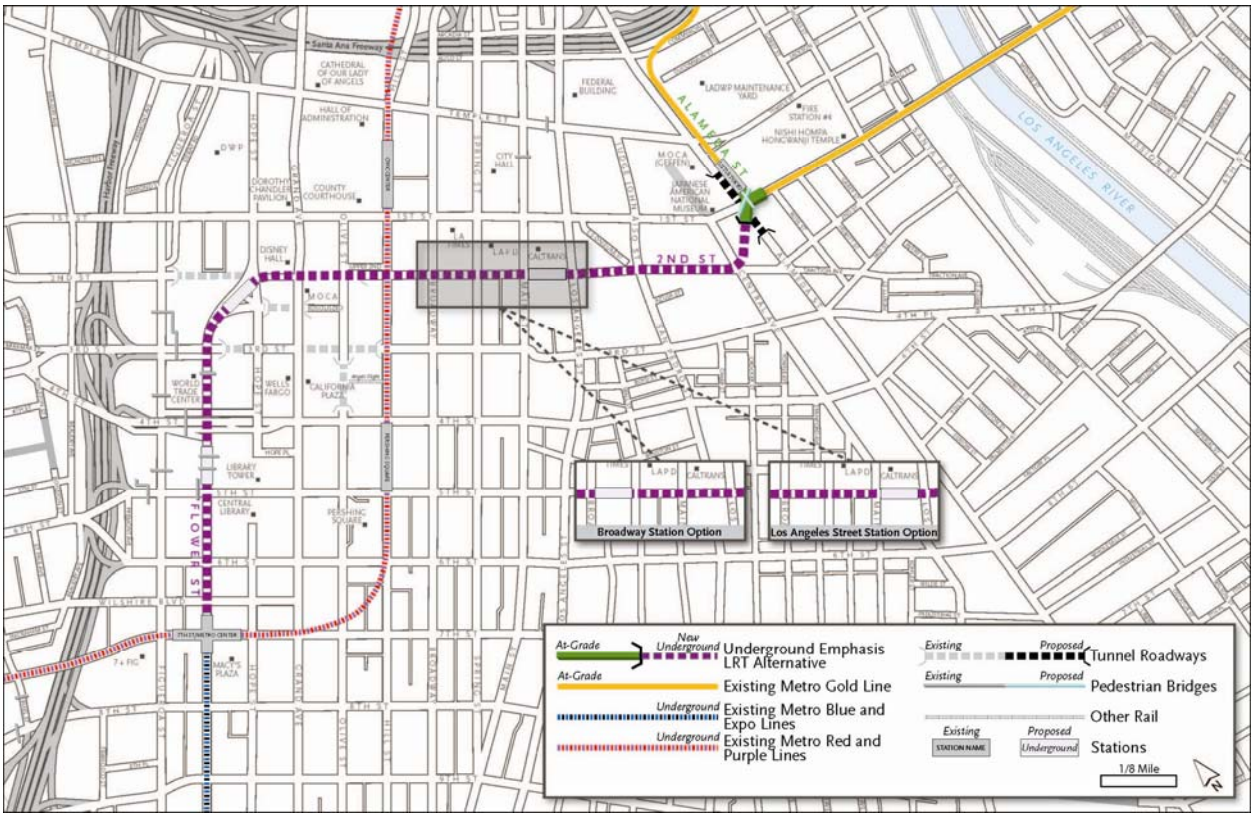

Figure 5-5. Underground Emphasis LRT Alternative

5.4.1 Direct Construction Impacts

The Underground Emphasis LRT Alternative would involve primarily underground construction due to the proposed configuration of the alignment. The portion of the alignment located beneath Flower Street, through the Financial District and Bunker Hill, would involve 2,200 feet of cut-and-cover tunneling and the portion of the alignment along 2nd Street, through the Historic Core and Little Tokyo, would be constructed using a Tunnel Boring Machine (TBM). Where cut-and-cover construction occurs, portions of two- to three-block segments of Flower Street through the Financial District and Bunker Hill would be closed at any given time.

The TBM could be launched from two potential sites: the proposed 2nd/Hope Street station site on the western end of alignment, or the block at the 1st Street and Alameda Street junction on the eastern end of the alignment. The selected launch site would be one of the three proposed construction staging locations. The other two construction staging sites would be at the proposed Flower/5th/4th Street station site and either the 2nd Street station – Los Angeles Street option or the 2nd Street station – Broadway option, depending on which is selected.

Nearby land users and passersby would have visual access to cut-and-cover construction, construction staging locations, and potential TBM launch sites. However, most construction would occur below ground, and temporary construction walls would prevent direct public view of construction staging and TBM launch sites. TBM operation would be entirely below ground and not visible to nearby land uses or passersby in the Historic Core and Little Tokyo areas of downtown Los Angeles.

After construction of the three stations is completed, pedestrian access portals would be constructed using methods involving placement of concrete inverts, walls, and walkways. Station entrances to access underground stations and ancillary facilities would be constructed above ground and over the pedestrian portals. Table 5-3 summarizes potential impacts on scenic resources associated with construction of the Underground Emphasis LRT Alternative.

Table 5-3. Scenic Resources Potentially Affected by Construction of the Underground Emphasis LRT Alternative				
Resources	**Cut and Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	LTS	NO	NO	NO
811 Wilshire Blvd	LTS	NO	NO	NO
Engine Co. No. 28	LTS	NO	NO	NO
Standard Hotel	LTS	NO	NO	NO
California Club	LTS	NO	NO	NO
LA Central Library & Maguire Gardens	LTS	LTS	LTS	NO
City National Plaza	LTS	LTS	LTS	NO
Citigroup Center Plaza	LTS	LTS	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	LTS	LTS	LTS	LTS
2nd Street Tunnel	LTS	LTS	LTS	LTS
Grassy Open Space at General Thaddeus Kosciuszko Way	LTS	LTS	LTS	LTS
Historic Core				
LA Law Center	NO	LTS	LTS	NO

Table 5-3. Scenic Resources Potentially Affected by Construction of the Underground Emphasis LRT Alternative				
Resources	**Cut and Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Times Annex	NO	LTS	LTS	NO
Times Building	NO	LTS	LTS	NO
Higgins Building	NO	LTS	LTS	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	LTS	NO	LTS
Union Center Arts	LTS	LTS	NO	LTS
Koyasan Buddhist Temple	LTS	LTS	NO	LTS
Brunswick Square	LTS	LTS	NO	LTS
Señor Fish	LTS	LTS	LTS	LTS

NO = No impact.
LTS = Less than significant impact

5.4.1.1 Scenic Resource Impacts

There would be temporary impacts to views of historic buildings during construction. Construction staging areas and temporary construction walls surrounding these staging and stockpiling areas, as well as movement of construction equipment, could temporarily hinder views of historic buildings from selected locations in downtown Los Angeles.

Table 5-3 summarizes findings regarding buildings and/or recognized visual resources that could potentially be affected by installation of tracks and poles, cut-and-cover activities, and construction of station and pedestrian portals.

Installation of Tracks and Poles

Above-ground portions of the trackwork under the Underground Emphasis LRT Alternative would be much less than the At-Grade Emphasis Alternative and limited to the vicinity of 1st Street and Alameda Street in Little Tokyo. Trackwork construction would involve demolition of the roadway section being displaced by the LRT trackway, preparation of the track bed, construction of the supporting track slab, and laying of rail. These activities would occur near the Little Tokyo Historic District.

Given the temporary and short-term nature of construction activities related to installation of tracks and poles (between two and four months) and the distance to the nearest scenic resource (approximately one block), no permanent or adverse impacts would occur to these scenic resources. Construction activities would occur only on affected streets, and resources and views of these resources within the surrounding area would remain intact. Therefore, potential impacts associated with installation of tracks and poles along the above-ground portion of this alternative would be less than significant.

Installation of tracks and poles along the underground portions of this alternative would not be visible to nearby land uses or passersby. Therefore, no visual impacts would result to scenic resources along Flower Street in the Bunker Hill and Financial District areas of downtown Los Angeles or along 2nd Street through Bunker Hill and the Historic Core.

Underground Station Sites and Pedestrian Portals

The Underground Emphasis LRT Alternative would include construction of three underground stations at three of the four identified construction staging sites along the alignment: the Flower/5th/4th Street station, the 2nd/Hope Street station, and either the 2nd Street station – Los Angeles Street or 2nd Street station – Broadway Options. Stations would be constructed using cut-and-cover techniques similar to construction of the tunnel and trackwork for the underground portion of this alternative.

Buildings and scenic resources located within the immediate proximity of the proposed Flower/5th/4th Street station and pedestrian portal include the Central Library and Maguire Gardens, City National Plaza, and Citigroup Center Plaza. No identified scenic resources or buildings are located immediately adjacent to the 2nd/Hope Street station. In the immediate vicinity of both 2nd Street station options are the Times Annex building, Higgins Building, and St. Vibiana's Cathedral.

Most station construction would occur below ground, and therefore would not be visible to nearby buildings, land uses, and passersby. After underground construction is complete, the

ground surface would be restored and the pedestrian portals finished. Therefore, construction activities for the underground stations, ancillary facilities, and pedestrian portals for this alternative would be primarily invisible to nearby land uses; impacts to surrounding visual resources would be less than significant.

Train Portal

Construction of the train portal just west of Alameda Street would result in removal of the Señor Fish building. Removal of this structure would result in a less than significant visual impact to the Little Tokyo area because of the building's modest size and reduced level of historical significance. Through appropriate urban design, the portal area structures and surrounding streetscape and landscaping would comply with the Secretary of the Interior's *Standards for Rehabilitation*. Furthermore, design of the Underground Emphasis LRT Alternative would incorporate historical and visual references to the surrounding Little Tokyo and Arts District neighborhoods that complement these important communities.

5.4.1.2 Visual Character Impacts

Construction activities—including cut-and-cover construction, installation of the tracks and poles in the at-grade segment of the Underground Emphasis LRT Alternative, and station and pedestrian portal construction—would temporarily alter the existing visual character of downtown Los Angeles. The areas of downtown Los Angeles through which the underground portions of this alignment would pass currently consist of high- and mid-rise buildings and high-density construction.

The at-grade portion of this alternative would be limited to the area of the 1st Street and Alameda Street junction in the immediate vicinity of the existing Little Tokyo/Arts District Station. The Little Tokyo Historic District is about one block away. Wide sidewalks and avenues in the project area provide pedestrians and vehicles with views along the alignment. Construction activities would result in partial two- to three-block closures of the street and sidewalks along Flower Street through the Financial District and Bunker Hill. Construction staging areas and their associated construction walls would be visible for a period ranging from 12 to 48 months. During construction of the Underground Emphasis LRT Alternative, activities occurring above ground in the roadways and along sidewalks would have the potential to temporarily disrupt views along the corridors and impede views of historic resources, visual resources, and viewshed corridors. No recognized or valued views have been identified in the project area. Viewers would see construction equipment and construction-related activities, and the urban streetscape would be temporarily altered. However, the Underground Emphasis LRT Alternative would be constructed in a heavily urbanized environment where construction activities are not uncommon, and would not noticeably reduce visual quality or alter viewing context. Therefore, temporary construction impacts would be less than significant.

5.4.1.3 Nighttime Lighting Impacts

During construction, nighttime lighting would be introduced into the project area at construction staging locations. Lighting would predominantly consist of security lighting, and would be directed on-site. Therefore, nighttime lighting impacts would be less than significant during construction of the Underground Emphasis LRT Alternative.

5.4.1.4 Shade and Shadow Impacts

Construction of the Underground Emphasis LRT Alternative would occur primarily underground. Heights of structures and construction-related facilities located above ground would be limited to no more than two stories. Therefore, the potential for construction activities to result in shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment corridors is limited. No shade or shadow impacts would result from construction of the Underground Emphasis LRT Alternative.

5.4.2 Indirect Construction Impacts

Construction of the Underground Emphasis LRT Alternative would result in limited localized visual impacts on the Financial District, Bunker Hill, Historic Core, and Little Tokyo areas of downtown.

5.4.2.1 Scenic Resource Impacts

Construction activities for the Underground Emphasis LRT Alternative would be localized and not result in any indirect impacts to scenic resources beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. Construction of this alternative would not create indirect visual impacts to scenic resources.

5.4.2.2 Visual Character Impacts

Construction activities for the Underground Emphasis LRT Alternative would be localized and not result in any indirect impacts to visual character beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. Construction of this alternative would not create indirect impacts to visual character.

5.4.2.3 Nighttime Illumination Impacts

During construction, nighttime lighting would be introduced into the immediate project area at construction staging locations. All lighting impacts would be localized and, therefore, would not result in indirect nighttime lighting impacts.

5.4.2.4 Shade and Shadow Impacts

Construction of the Underground Emphasis LRT Alternative would occur primarily underground. Above-ground construction and related facilities and equipment would be limited in height and extent, and any related shadows would be localized to the areas

immediately surrounding these facilities. Therefore, no indirect shade and shadow impacts would result from construction activities.

5.4.3 Direct Operational Impacts

The Underground Emphasis LRT Alternative would operate primarily underground, with a short at-grade segment in Little Tokyo near the existing Little Tokyo/Arts District Station. Underground operations would occur beneath Flower Street, extending north from the existing 7th Street/Metro Center Station through the Financial District and Bunker Hill to 2nd Street. At 2nd Street the line would continue underground in an easterly direction through the Historic Core and Little Tokyo before traveling up to an at-grade elevation and joining with the existing Little Tokyo/Arts District Station at the 1st and Alameda Street junction.

The Underground Emphasis LRT Alternative would require construction of three new underground stations: the Flower/5th/4th Street station, the 2nd/Hope Street station, and either the 2nd Street station – Los Angeles Street or the 2nd Street station – Broadway Option. Above-ground entrances would provide access to pedestrian portals. With the exception of these above-ground entrances and the at-grade portion of the alignment at the 1st and Alameda Street junction, all operations of this alternative would be located underground. Table 5-4 summarizes potential impacts to scenic resources associated with operation of the Underground Emphasis LRT Alternative.

Table 5-4. Scenic Resources Potentially Affected by Operation of the Underground Emphasis LRT Alternative

Resources	Poles and Track	Stations	Pedestrian Portals	Train Portals
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	NO	NO	NO	NO
811 Wilshire Blvd	NO	NO	NO	NO
Engine Co. No. 28	NO	NO	NO	NO

Table 5-4. Scenic Resources Potentially Affected by Operation of the Underground Emphasis LRT Alternative				
Resources	**Poles and Track**	**Stations**	**Pedestrian Portals**	**Train Portals**
Standard Hotel	NO	NO	NO	NO
California Club	NO	NO	NO	NO
LA Central Library & Maguire Gardens	NO	NO	LTS	NO
City National Plaza	NO	NO	LTS	NO
Citigroup Center Plaza	NO	NO	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	NO	NO	NO	NO
2nd Street Tunnel	NO	NO	NO	NO
Grassy Open Space at General Thaddeus Kosciuszko Way	NO	NO	NO	NO
Historic Core				
LA Law Center	NO	NO	NO	NO
Times Annex	NO	NO	LTS	NO
Times Building	NO	NO	NO	NO
Higgins Building	NO	NO	NO	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				

Table 5-4. Scenic Resources Potentially Affected by Operation of the Underground Emphasis LRT Alternative

Resources	Poles and Track	Stations	Pedestrian Portals	Train Portals
Little Tokyo Historic District	LTS	NO	NO	LTS
Union Center Arts	LTS	NO	NO	LTS
Koyasan Buddhist Temple	LTS	NO	NO	LTS
Brunswick Square	LTS	NO	NO	LTS

NO = No impact.
LTS = Less than significant impact

5.4.3.1 Scenic Resource Impacts

Operation of the Underground Emphasis LRT Alternative would result in only minimal potential visual impacts to scenic resources. Potential impacts to identified scenic resources along the route of the Underground Emphasis LRT Alternative are summarized in Table 5-4.

Other than pedestrian access and egress through pedestrian portals at the Flower/5th/4th Street station, 2nd/Hope Street station, and either the 2nd Street station – Los Angeles Street Option or 2nd Street station – Broadway Option, most operational activities associated with this alternative would occur underground. Therefore, there would be no degradation of views of historic buildings and little or no contrasting visual conditions. There would be no visual impacts as a result of the new trackway and systems appurtenances, which would be located underground except where the trackway returns to street level at the intersection of 1st and Alameda Streets. These impacts would be the same regardless of which 2nd Street station option is selected.

The only above-ground features of this alternative would be station entrances within the Financial District, Bunker Hill, and Historic Core areas of downtown Los Angeles. Identified scenic buildings and scenic resources are located within close proximity of only two of the proposed station locations. These include the Los Angeles Central Library and Maguire Gardens, City National Plaza, and Citigroup Center Plaza near the proposed Flower/5th/4th Street station, and the Times Annex building and St. Vibiana's Cathedral near the proposed 2nd Street station options.

The Los Angeles Central Library and Maguire Gardens would experience low visual impacts by locating the underground station entrance in a widened sidewalk area adjacent to the northern half of the garden. Pedestrians walking along the west side of Flower Street would

experience low visual impacts looking across the street toward Maguire Gardens. People walking along the east side of Flower Street would not experience any visual impacts.

The pedestrian portal and station entrance would not degrade views of the Central Library, nor would it contrast heavily with the building. Therefore, potential visual impacts to the Central Library and Maguire Gardens would be less than significant.

In the Bunker Hill area, there may be a pedestrian bridge constructed from the 2nd/Hope Street station to Upper Grand Avenue above the existing General Thaddeus Koscuiszko Way right-of-way. The bridge would not be visible from any historic buildings, and thus no adverse visual impacts to historic buildings would occur.

There would be station entrances at up to four potential locations within one block of the Times Annex for the 2nd Street station - Broadway Option, though not all of the potential locations would be developed. None of these entrances would be immediately adjacent to the Times Annex site. Three would be located on the south side of 2nd Street. Of these, only one would be directly across 2nd Street from the Times Annex property. This station entrance would be located in the northeastern corner of the parking lot at the southwest corner of Spring and 2nd Streets.

None of these station entrances would adversely affect views of the Times Annex Building from the pedestrian right-of-way. Therefore, potential visual impacts to this building would be less than significant.

There would be three pedestrian portal locations within one-half block of St. Vibiana Cathedral, assuming the 2nd Street station – Los Angeles Street option is selected. However, only one of these portals would be proximate to St. Vibiana Cathedral. This pedestrian portal would be located in the triangular space between the St. Vibiana property and the Little Tokyo Library, adjacent to the sidewalk. The view of St. Vibiana from the public right-of-way is of the institutional/office side of the building, and visual impacts would be less than significant.

At the easternmost terminus of the Underground Emphasis LRT Alternative alignment, the underground alignment would ascend up through a portal to meet the existing at-grade Metro Gold Line alignment at the 1st Street and Alameda Street junction. This portal would be located on the block bounded by Alameda Street on the east, Central Avenue on the west, 2nd Street on the south, and 1st Street on the north. Within this block, the light rail tracks would rise to the surface, then cross the intersection of 1st and Alameda Street at grade. Alameda Street would pass below 1st Street in a new underpass that would begin more than one-half block south of 1st Street and continue one-half block north of 1st Street.

At-grade overhead contact systems, catenary poles, and trackway (standard features required for a light rail system to operate) would be located only at the easternmost end of the

Underground Emphasis LRT Alternative alignment. The block bordered by Alameda Street, 2nd Street, 1st Street, and Central Avenue is the only block that would have exposed overhead contact wires, catenary poles, and track.

Older buildings on this block include the Señor Fish and John A. Roebling structures. The Cultural Resources – Built Environment Technical Memorandum describes these buildings and potential project impacts. The portal area structures and surrounding streetscape and landscaping would incorporate historical and visual references to the surrounding Little Tokyo and Arts District neighborhoods, complementing these important communities.

Given that most features associated with the Underground Emphasis LRT Alternative would be located below ground, and that only one city block would experience potential visual changes associated with the above-ground operations of this alternative, no significant visual impacts to scenic resources would occur. Therefore, any potential impacts to visual resources would be less than significant.

5.4.3.2 Visual Character Impacts

The Underground Emphasis LRT Alternative is located in a heavily urbanized environment, and adding primarily underground structures and a limited fixed guideway would not noticeably reduce visual quality or alter the viewing context in the Financial District, Bunker Hill, Historic Core, and Little Tokyo areas of downtown Los Angeles. Construction and operation of these features would contribute to the existing urban character and high-density, pedestrian friendly environment that already exists in downtown Los Angeles.

The alternative's alignment and proposed pedestrian portals are located outside the Civic Center and Little Tokyo Historic Districts. Additionally, the Underground Emphasis LRT Alternative would be primarily underground and not visually accessible to the public. Therefore, potential visual character impacts associated with the Underground Emphasis LRT Alternative would be less than significant.

5.4.3.3 Nighttime Lighting Impacts

With operation of a new underground LRT project, limited new nighttime lighting would be introduced into the project area. Lighting would predominantly consist of security lighting at pedestrian portal locations, and would be directed on-site. Therefore, no nighttime lighting impacts would occur during operation of the Underground Emphasis LRT Alternative.

5.4.3.4 Shade and Shadow Impacts

Operation of the Underground Emphasis LRT Alternative would introduce limited, new above-ground structures in the already heavily urbanized Financial District, Bunker Hill, Historic Core, and Little Tokyo areas of downtown Los Angeles. The only above-ground structures would be pedestrian portals to underground stations and one block with at-grade light rail

operations and associated structures and facilities. Heights of structures located above ground would be limited to approximately two stories. Therefore, the potential for shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment's corridors would be limited. No shade or shadow impacts would result from construction of the Underground Emphasis LRT Alternative.

5.4.4 Indirect Operational Impacts

5.4.4.1 Scenic Resource Impacts

All potential impacts to scenic resources would be localized. Therefore, no indirect impacts to the downtown historic buildings' visual environment would occur from operation of the Underground Emphasis LRT Alternative.

5.4.4.2 Visual Character Impacts

Changes in visual character from operation of this alternative would be localized and not result in any indirect impacts to visual character beyond those discussed above and within the Cultural Resources – Built Environment Technical Memorandum. No indirect impacts to visual character would occur.

5.4.4.3 Nighttime Illumination Impacts

New nighttime lighting would be introduced into the immediate project area and at pedestrian portal locations. Nighttime lighting, however, would primarily consist of security lighting and would be localized. Therefore, no indirect nighttime lighting impacts would result from implementation and operation of the Underground Emphasis LRT Alternative.

5.4.4.4 Shade and Shadow Impacts

Operation of the Underground Emphasis LRT Alternative would primarily occur underground. Placement of structures above ground would be limited to facilities associated with pedestrian portals to stations and one block with at-grade light rail operations and associated structures and facilities. The shading and shadows associated with these structures would be localized to the immediate vicinity of the facilities themselves. Therefore, no indirect shade or shadow impacts would result from operation of the Underground Emphasis LRT Alternative.

5.4.5 Cumulative Construction Impacts

5.4.5.1 Scenic Resource Impacts

Other construction projects are planned throughout the downtown Los Angeles area. Construction of the Underground Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of the proposed project would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future construction projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.4.5.2 Visual Character Impacts

The proposed project is located in greater downtown Los Angeles, which is a dynamic environment where new projects are constructed on an ongoing basis. Additional development projects are planned throughout the downtown Los Angeles area. Construction of the Underground Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of the proposed alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative impacts to the visual character of downtown.

5.4.5.3 Nighttime Illumination Impacts

Construction of the Underground Emphasis LRT Alternative would not result in nighttime illumination impacts; therefore, it would not result in or contribute to significant cumulative nighttime illumination impacts.

5.4.5.4 Shade and Shadow Impacts

Construction of the Underground Emphasis LRT Alternative would not result in shade and shadow impacts; therefore, this alternative would not result in or contribute to significant cumulative shade and shadow impacts.

5.4.6 Cumulative Operational Impacts

5.4.6.1 Scenic Resource Impacts

Other development projects are planned throughout the downtown Los Angeles area. Operation of the Underground Emphasis LRT Alternative would not result in either direct or indirect significant impacts to scenic resources. Therefore, operation of this alternative would not contribute to cumulatively considerable visual resource impacts. Nor would the alternative, in combination with other future development projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.4.6.2 Visual Character Impacts

The Underground Emphasis LRT Alternative alignment is located in greater downtown Los Angeles, which is a dynamic environment where new projects are being implemented on an ongoing basis. Development of additional projects is planned throughout downtown. Operation of the Underground Emphasis LRT Alternative would not result in direct or indirect significant impacts to scenic resources. Therefore, operation of the proposed project would not contribute to a cumulatively considerable visual resource impact. Nor would it result in significant cumulative impacts to the visual character of downtown in combination with other future projects in the downtown Los Angeles area.

5.4.6.3 Nighttime Illumination Impacts

The Underground Emphasis LRT Alternative would not result in direct or indirect nighttime illumination impacts from operations. Therefore, it would not result in or contribute to significant cumulative nighttime illumination impacts.

5.4.6.4 Shade and Shadow Impacts

The Underground Emphasis LRT Alternative would not result in direct or indirect shade and shadow impacts. Therefore, it would not result in or contribute to significant cumulative shade and shadow impacts.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Alignment of the Fully Underground LRT Alternative – Little Tokyo Variation 1 is very similar to the Underground Emphasis LRT Alternative. Therefore, only specific differences between the two alternatives are addressed in this section.

The proposed alignment for the Fully Underground LRT Alternative – Little Tokyo Variation 1 is the same as the Underground Emphasis LRT Alternative from the 7th Street/Metro Center Station to 2nd Street and Central Avenue. East of 2nd Street and Central Avenue, the tracks would veer northeast under the property bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue, where the alignment would connect with a new underground station within this block. The tracks would continue from the station under the 1st and Alameda Streets intersection into a new underground three-way junction.

Leaving the junction, one set of tracks would continue north underground along the eastern side of Alameda Street, beneath Temple Street, and surface in the Los Angeles Department of Water and Power yard. The other set of tracks leaving the three-way junction would rise to the east within 1st Street to accommodate a new portal as well as the Metro Gold Line tracks.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment is shown in Figure 5-6. No identified scenic vistas are within the project area; therefore, no scenic vista impacts would occur. Potential visual and aesthetic impacts associated with implementation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 are discussed in the following paragraphs.

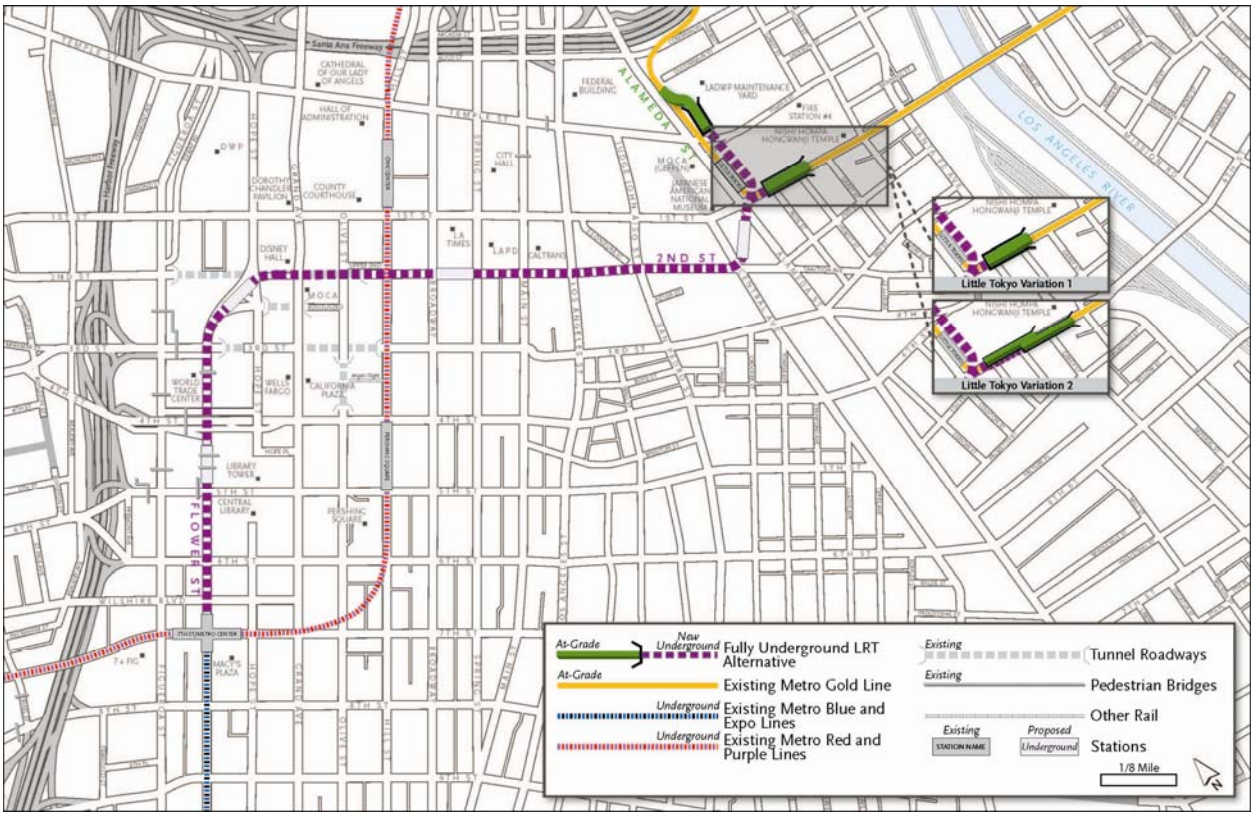

Figure 5-6. Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2

5.5.1 Direct Construction Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require mostly underground construction due to the proposed configuration of the alignment. A cut-and-cover section would begin west of Central Avenue through the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue.

A center platform station would be constructed under this block, with tracks to the north and east proceeding at the same grade. The tracks leaving this block would split into two different directions. One set of tracks would head east within 1st Street, where it would rise up to an at-grade elevation and join the Metro Gold Line to I-605 about one and a half blocks east of Alameda. The other set of tracks would head northerly east of and parallel to Alameda Street, joining the Metro Gold Line to Azusa and heading north to Union Station. Both north and east portals would be wide enough to accommodate out-bound and in-bound trains in a single structure.

Nearby land users and passersby would have visual access to cut-and-cover construction, construction staging locations, and TBM launch sites. However, most of the construction

associated with this alternative would be below ground and the construction staging sites themselves would be sheltered from direct view by temporary construction walls. TBM construction activities would be entirely below ground and would not be visible to nearby land users or passersby in the Little Tokyo area of downtown Los Angeles.

Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities. Metro may also use the site to launch TBMs and transport material from the tunnels.

Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that would not directly be impacted by construction. This would represent a worst-case scenario. Reductions in acquisition may occur based on further engineering analysis during the preliminary engineering and final design stages. Compared to the Underground Emphasis LRT Alternative, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would require removal of two additional businesses and their associated parking. This construction scenario would not have a different visual effect than already described.

Table 5-5. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1

Resources	Cut-and-Cover for Guideway	Construction Staging	Stations and Portals	Tunnel Boring
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	LTS	NO	NO	NO
811 Wilshire Blvd	LTS	NO	NO	NO
Engine Co. No. 28	LTS	NO	NO	NO
Standard Hotel	LTS	NO	NO	NO
California Club	LTS	NO	NO	NO

Table 5-5. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1				
Resources	**Cut-and-Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
LA Central Library & Maguire Gardens	LTS	LTS	LTS	NO
City National Plaza	LTS	LTS	LTS	NO
Citigroup Center Plaza	LTS	LTS	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	LTS	LTS	LTS	LTS
2nd Street Tunnel	LTS	LTS	LTS	LTS
Grassy Open Space at General Thaddeus Kosciuszko Way	LTS	LTS	LTS	LTS
Historic Core				
LA Law Center	NO	LTS	LTS	NO
Times Annex	NO	LTS	LTS	NO
Times Building	NO	LTS	LTS	NO
Higgins Building	NO	LTS	LTS	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	LTS	NO	LTS

Table 5-5. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1				
Resources	**Cut-and-Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Union Center Arts	LTS	LTS	NO	LTS
Koyasan Buddhist Temple	LTS	LTS	NO	LTS
Brunswick Square	LTS	LTS	NO	LTS
Señor Fish	LTS	LTS	LTS	LTS
Arts District				
Nishi Hompa Hongwanji Buddhist Temple	LTS	LTS	LTS	NO
900 East 1st Street	NO	NO	NO	NO
1ST Street Viaduct	NO	NO	NO	NO

NO = No impact
LTS = Less than significant impact

5.5.1.1 Scenic Resource Impacts

Construction staging areas and associated temporary construction walls would be located on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. These areas would not be visible to anyone but those in the vicinity of this block. There would be no impact to scenic resources in this vicinity because there are no nearby resources. There would be no potential impacts to views of historic buildings during construction because the existing historic resources along 1st Street are too far to the east.

Nearby historic resources include a brick building located at 900 East 1st Street and the 1st Street Viaduct. These two structures are each located more than one and a half blocks east of the portal entrance of the Fully Underground LRT Alternative – Little Tokyo Variation 1, and therefore would not experience potential visual impacts.

The Los Angeles Hompa Hongwanji Temple, an important community/cultural resource, is located at approximately 800 East 1st Street. Construction of the portal within 1st Street would

involve cut-and-cover methods and occur in the vicinity of the temple. There would be moderate potential visual impacts during construction near this Buddhist temple.

Table 5-5 includes the only buildings and/or recognized visual resources that could potentially be affected by construction activities associated with installation of tracks and poles, cut-and-cover activities, station construction, and pedestrian and LRT portals. These findings would be the same regardless of whether the entire block or only a portion of the block at 1st, 2nd, and Alameda Streets, and Central Avenue is acquired during construction.

Installation of Tracks and Poles

Installation of tracks and poles along the underground portions of this alternative would not be visible to nearby land users or passersby. Above-ground trackwork already exists at the eastern end of the Fully Underground LRT Alternative – Little Tokyo Variation 1 as part of the Metro Gold Line. This alternative would include construction of tracks and poles to link the Regional Connector to existing structures. The only locations where construction of tracks and poles would be visible would be associated with the train portals in 1st Street and between Temple and Commercial Streets just east of Alameda Street. At these locations, the tracks and poles would transition from fully underground, sloping uphill out of the tunnel portals, to at-grade level with the existing tracks. Therefore, no or very low visual impacts would result to scenic resources along 1st or Alameda Streets during construction.

Underground Station Sites and Pedestrian Portals

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require one more underground station than the Underground Emphasis LRT Alternative. This additional station would be located under the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. The station would be constructed using cut-and-cover techniques.

Construction of this underground station would result in removal of the Señor Fish building. Removal of this structure would result in a less than significant visual impact to the Little Tokyo area because of the building's modest size and its reduced level of historical significance. Through Appropriate urban design of pedestrian portals and surrounding streetscape and landscaping would incorporate historical and visual references of the surrounding Little Tokyo and Arts District neighborhoods that complement these important communities.

No other scenic resources or buildings are located immediately adjacent to the proposed 2nd Street/Central Avenue station. Most of the station construction would occur below ground, and therefore would not be visible to nearby buildings, land users, or passersby. After underground construction is complete, the pedestrian portals would be finished and the ground surface restored. Therefore, construction of the underground station, ancillary facilities, and pedestrian portals—as with all other proposed underground stations—would

be primarily invisible to nearby land uses. Potential impacts to visual resources would be less than significant.

5.5.1.2 Visual Character Impacts

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 1 would include cut-and-cover methods, installation of tracks and poles in the at-grade locations within this alternative, and station and pedestrian portal construction. These activities would temporarily alter the existing visual character of downtown Los Angeles. Areas of downtown Los Angeles through which the underground portions of this alignment would pass currently consist of high- and mid-rise buildings and high-density construction. The at-grade portion of this alternative would be limited to the transition areas at the 1st Street and Alameda Street portals, interfacing with the existing at-grade LRT trackway of the Metro Gold Line. The Little Tokyo Historic District would be more than a block away from the proposed train portals and almost a block from the pedestrian portals to the proposed underground station. Construction staging areas and the surrounding walls would be visible for a period ranging from 12 to 48 months.

No recognized or valued views are located in the project area. During construction, activities occurring above ground in roadways and along sidewalks could potentially temporarily disrupt views along the corridors and impede views of historic resources and visual resources. Viewers would see construction-related equipment and activities, and the urban streetscape would be temporarily altered. However, the project would be constructed in a heavily urbanized environment where construction activities are not uncommon. Therefore, project construction would not noticeably reduce visual quality or alter viewing context. Furthermore, temporary construction impacts on visual character would be less than significant.

5.5.1.3 Nighttime Lighting Impacts

During construction, nighttime lighting would be introduced into the project area at the construction staging locations. Lighting would predominantly consist of security lighting and be directed on-site. Therefore, nighttime lighting impacts would be less than significant during construction of Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.1.4 Shade and Shadow Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would primarily involve underground construction. In addition, the heights of structures and construction-related facilities located above ground would be limited to no more than two stories. Therefore, the potential for construction activities to result in shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment corridor is limited. Along 1st Street, east of Alameda Street, several of the existing buildings on the south side of the street that cast shade are two stories high. No shade or shadow impacts would result from construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.2 Indirect Construction Impacts

5.5.2.1 Scenic Resource Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in limited localized visual impacts on the Little Tokyo and Arts District areas of downtown. Construction activities would be localized and would not result in any indirect impacts to scenic resources beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. No indirect visual impacts to scenic resources would occur as a result of construction activities.

5.5.2.2 Visual Character Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be localized and not result in any indirect impacts to visual character beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. No indirect impacts to visual character would occur as a result of construction activities.

5.5.2.3 Nighttime Illumination Impacts

During construction, nighttime security lighting would be introduced into the immediate project area at construction staging locations. All potential lighting impacts would be localized and therefore would not result in indirect nighttime lighting impacts.

5.5.2.4 Shade and Shadow Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would mostly occur underground. Above ground construction and related facilities and equipment, including portals, would be limited, and resulting shadows would be localized to the immediate area. Therefore, no indirect shade and shadow impacts would result from construction activities.

5.5.3 Direct Operations Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would operate primarily underground with short at-grade segments in the Little Tokyo and Arts District vicinity where the alignment transitions to connect to the existing Metro Gold Line tracks. These transition areas would be adjacent to proposed portals in 1st Street and parallel to Alameda Street. Construction of above-ground entrances to provide access to pedestrian portals at underground stations, including at the proposed 2nd Street/Central Avenue station, would be the same as the Underground Emphasis LRT Alternative. With the exception of these above-ground entrances and the at-grade portion of the alignment at the 1st Street and Alameda Street train portals, all operations of this alternative would be located underground. Table 5-6 summarizes potential impacts to scenic resources associated with operation of Fully Underground LRT Alternative – Little Tokyo Variation 1.

Table 5-6. Scenic Resources Potentially Affected by Operation of Fully Underground LRT Alternative – Little Tokyo Variation 1				
Resources	**Poles and Track**	**Stations**	**Pedestrian Portals**	**Train Portals**
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	NO	NO	NO	NO
811 Wilshire Blvd	NO	NO	NO	NO
Engine Co. No. 28	NO	NO	NO	NO
Standard Hotel	NO	NO	NO	NO
California Club	NO	NO	NO	NO
LA Central Library & Maguire Gardens	NO	NO	LTS	NO
City National Plaza	NO	NO	LTS	NO
Citigroup Center Plaza	NO	NO	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	NO	NO	NO	NO
2nd Street Tunnel	NO	NO	NO	NO
Grassy Open Space at General Thaddeus Kosciuszko Way	NO	NO	NO	NO
Historic Core				
LA Law Center	NO	NO	NO	NO
Times Annex	NO	NO	LTS	NO

Table 5-6. Scenic Resources Potentially Affected by Operation of Fully Underground LRT Alternative – Little Tokyo Variation 1				
Resources	**Poles and Track**	**Stations**	**Pedestrian Portals**	**Train Portals**
Times Building	NO	NO	NO	NO
Higgins Building	NO	NO	NO	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	NO	NO	LTS
Union Center Arts	LTS	NO	NO	LTS
Koyasan Buddhist Temple	LTS	NO	NO	LTS
Brunswick Square	LTS	NO	NO	LTS
Arts District				
Nishi Hompa Hongwanji Buddhist Temple	LTS	NO	NO	LTS
900 East 1st Street	NO	NO	NO	NO
1ST Street Viaduct	NO	NO	NO	NO

NO = No impact
LTS = Less than significant impact

5.5.3.1 Scenic Resource Impacts

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in only minimal potential visual impacts to scenic resources. Other than pedestrian access and egress through pedestrian portals at the proposed underground stations, most operational

activities would occur underground, with no degradation of views of historic buildings and little or no contrasting visual conditions. There would be no visual impacts as a result of the new trackway and systems appurtenances, which would be located underground, except where the trackway returns to grade in 1st Street and at the Alameda Street train portal.

In the Bunker Hill area, there may be a pedestrian bridge constructed from the 2nd/Hope Street station to Upper Grand Avenue above the existing General Thaddeus Koscuiszko Way right-of-way. The bridge would not be visible from any historic buildings, and thus no adverse visual impacts to historic buildings would occur.

Within the Little Tokyo and Arts District areas, the only above-ground features associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be station pedestrian entrances, and the train portals in 1st Street and next to Alameda Street. Two identified visual resources near the eastern end of the alignment are the 900 East 1st Street building and the 1st Street viaduct, both of which are located too far east along 1st Street to experience any impacts.

The Los Angeles Hompa Hongwanji Buddhist Temple at 800 East 1st Street, an important community and cultural resource, would experience low visual impacts from the train portal just west of this location. Pedestrians walking along the north or south sides of 1st Street would experience low to moderate visual impacts looking into the street corridor toward the train portal. People walking along the east side of Alameda on the block between Temple and Commercial Streets would experience low visual impacts when looking east into the block at the train portal.

There would be station entrances at up to four potential locations within one block of the proposed 2nd Street/Central Avenue station, though not all of the potential locations would necessarily be used. None of these would adversely affect views due to their relatively small size.

At-grade overhead contact systems, catenary poles, and trackway for the Fully Underground LRT Alternative – Little Tokyo Variation 1 (standard features required for a light rail system to operate) would be located only at the easternmost train portal (1st Street) and northernmost train portal (located on the block east of and adjacent to Alameda Street, north of Temple Street). The rest of the alignment and potential visual effects would be the same as described for the Underground Emphasis LRT Alternative. Given that the majority of the features associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be located below ground, potential impacts to scenic resources would be less than significant.

5.5.3.2 Visual Character Impacts

Fully Underground LRT Alternative – Little Tokyo Variation 1 is located in a heavily urbanized environment, and adding primarily underground structures and a limited fixed guideway

would not noticeably reduce visual quality or alter the viewing context in the Little Tokyo or Arts District areas of downtown Los Angeles. Implementation and operation of the alternative would contribute to the existing urban character and high-density, pedestrian friendly environment that already exists in downtown Los Angeles.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be primarily underground and thereby not visually accessible to the public. Therefore, potential visual character impacts associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less than significant.

5.5.3.3 Nighttime Lighting Impacts

With operation of a new underground LRT project, limited new nighttime lighting would be introduced into the project area. Lighting would predominantly consist of security lighting at pedestrian portal locations, and nighttime lighting would be directed on site. Therefore, no nighttime lighting impacts would occur during operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.3.4 Shade and Shadow Impacts

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would introduce limited new above-ground structures in the already heavily urbanized Little Tokyo and Arts District areas of downtown Los Angeles. The only new above-ground structures would be pedestrian portals to underground stations and two train portals located in 1st Street and east of and adjacent to Alameda Street north of Temple Street. Heights of structures located above ground would be limited to approximately two stories; therefore, the potential for shading and shadows beyond those currently created by the buildings along the alignment's corridors would be limited. No shade or shadow impacts would result from operation of Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.4 Indirect Operational Impacts

5.5.4.1 Scenic Resource Impacts

All potential impacts to scenic resources would be localized. Therefore, no indirect impacts would occur to scenic resources from operation of Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.4.2 Visual Character Impacts

Potential changes in visual character from operation of this alternative would be localized and therefore not result in any indirect impacts to visual character beyond those discussed above and within the Cultural Resources - Built Environment Technical Memorandum. No indirect impacts to visual character would occur.

5.5.4.3 Nighttime Illumination Impacts

New nighttime lighting would be introduced into the immediate project area and at pedestrian portal locations. Nighttime lighting, however, would primarily consist of security lighting and improved pedestrian streetscape lighting where necessary, and effects would be localized. Therefore, no indirect nighttime lighting impacts would result from implementation or operation of Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.4.4 Shade and Shadow Impacts

Operation of Fully Underground LRT Alternative – Little Tokyo Variation 1 would be primarily limited to underground LRT operations. Placement of structures above ground would be limited to facilities associated with pedestrian portals to stations and the two train portals discussed previously. Shade and shadows associated with these structures would be localized to the immediate vicinity of the facilities themselves. Therefore, no indirect shade or shadow impacts would result from operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.5.5 Cumulative Construction Impacts

5.5.5.1 Scenic Resource Impacts

Other construction projects are planned throughout the downtown Los Angeles area. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of this alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future construction projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.5.5.2 Visual Character Impacts

Fully Underground LRT Alternative – Little Tokyo Variation 1 is located in greater downtown Los Angeles, which is a dynamic environment where new projects are constructed on an ongoing basis. Additional development projects are planned throughout the downtown Los Angeles area. Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in either direct or indirect significant impacts to visual character. Therefore, construction of this alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative impacts to the visual character of downtown.

5.5.5.3 Nighttime Illumination Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in nighttime illumination impacts. Therefore, this alternative would not result in or contribute to significant cumulative nighttime illumination impacts.

5.5.5.4 Shade and Shadow Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in shade and shadow impacts. Therefore, this alternative would not result in or contribute to significant cumulative shade and shadow impacts.

5.5.6 Cumulative Operational Impacts

5.5.6.1 Scenic Resource Impacts

Other development projects besides the Regional Connector Transit Corridor project are planned throughout the downtown Los Angeles area. Operation of Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in either direct or indirect significant impacts to scenic resources. Therefore, operation of this alternative would not contribute to cumulatively considerable scenic resource impacts, nor would it, in combination with other future development projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.5.6.2 Visual Character Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 1 is located in greater downtown Los Angeles, which is a dynamic environment where new projects are being implemented on an ongoing basis. Additional development projects are planned throughout downtown. Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in either direct or indirect significant impacts to visual character. Therefore, operation of this alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative impacts to the visual character of downtown.

5.5.6.3 Nighttime Illumination Impacts

Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in direct or indirect nighttime illumination impacts from operation. Therefore, this alternative would not result in or contribute to significant cumulative nighttime illumination impacts.

5.5.6.4 Shade and Shadow Impacts

Fully Underground LRT Alternative – Little Tokyo Variation 1 would not result in direct or indirect shade and shadow impacts. Therefore, this alternative would not result in or contribute to significant cumulative shade and shadow impacts.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1 for most of its alignment. Therefore, only differences in potential impacts between these two alternatives are addressed in this section.

The proposed alignment for the Fully Underground LRT Alternative – Little Tokyo Variation 2 is the same as Variation 1 from the 7th Street/Metro Center Station to the proposed 2nd Street/Central Avenue station. One exception is that, as the tunnels turn northeast from 2nd Street, the northbound tunnel would descend and the southbound tunnel would rise so that the southbound tunnel would be stacked on top of the northbound tunnel. The 2nd Street/Central Avenue station would have two underground levels, each with a single-track platform. The tracks would then leave the 2nd Street/Central Avenue station and proceed northeast under the intersection of 1st and Alameda Streets, where a two-level underground junction would be constructed.

Another difference between Little Tokyo Variations 1 and 2 is that there are two train portals that would extend farther east on 1st Street under Little Tokyo Variation 2. The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment is shown in Figure 5-6.

No scenic vistas were identified within the project area; therefore, no impacts to scenic vistas would occur. Potential visual and aesthetic impacts associated with implementation of Fully Underground LRT Alternative – Little Tokyo Variation 2 are discussed in the following subsections.

5.6.1 Direct Construction Impacts

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2 would mostly occur underground due to the proposed configuration of the alignment. The cut-and-cover section would begin west of Central Avenue through the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue. A single-track, stacked platform station would be constructed underground at this site.

One set of tracks would travel east within 1st Street, rise up to street level over a three-block stretch, and join the Metro Gold Line to East Los Angeles. The other set of tracks would travel north, just east of and parallel to Alameda Street, to join the tracks heading north to Union Station between Temple and Commercial Streets. The north portal would be wide enough to accommodate out-bound and in-bound trains in a single structure. The east portals would separate eastbound and westbound tracks into two distinct structures.

Nearby land uses and passersby would have visual access to cut-and-cover construction, construction staging locations, and TBM launch locations; however most construction would

be below ground and temporary construction walls would shelter construction staging sites from direct view by the public. TBM construction activities would be entirely below ground and would not be visible to nearby land users or passersby in the Little Tokyo area.

Metro has identified the entire block for acquisition to stage construction and build a new underground station, station entrances, and ancillary facilities. Metro may use the site to launch tunnel boring machines and transport material from the tunnels.

Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1st and 2nd Streets that are not directly impacted by construction activities. This would represent a worst-case scenario. Fewer acquisitions may occur based on further engineering analysis during the preliminary engineering and final design stages. This would result in removal of two more businesses and associated parking than the Underground Emphasis LRT Alternative. This construction scenario would not have a different visual effect than described in this technical memorandum.

Table 5-7. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2

Resources	Cut-and-Cover for Guideway	Construction Staging	Stations and Portals	Tunnel Boring
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	LTS	NO	NO	NO
811 Wilshire Blvd	LTS	NO	NO	NO
Engine Co. No. 28	LTS	NO	NO	NO
Standard Hotel	LTS	NO	NO	NO
California Club	LTS	NO	NO	NO
LA Central Library & Maguire Gardens	LTS	LTS	LTS	NO

Table 5-7. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2				
Resources	**Cut-and-Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
City National Plaza	LTS	LTS	LTS	NO
Citigroup Center Plaza	LTS	LTS	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	LTS	LTS	LTS	LTS
2nd Street Tunnel	LTS	LTS	LTS	LTS
Grassy Open Space at General Thaddeus Kosciuszko Way	LTS	LTS	LTS	LTS
Historic Core				
LA Law Center	NO	LTS	LTS	NO
Times Annex	NO	LTS	LTS	NO
Times Building	NO	LTS	LTS	NO
Higgins Building	NO	LTS	LTS	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	LTS	NO	LTS
Union Center Arts	LTS	LTS	NO	LTS
Koyasan Buddhist Temple	LTS	LTS	NO	LTS

Table 5-7. Scenic Resources Potentially Affected by Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2				
Resources	**Cut-and-Cover for Guideway**	**Construction Staging**	**Stations and Portals**	**Tunnel Boring**
Brunswick Square	LTS	LTS	NO	LTS
Señor Fish	LTS	LTS	LTS	LTS
Arts District				
Nishi Hompa Hongwanji Buddhist Temple	LTS	LTS	LTS	NO
900 East 1st Street	NO	NO	NO	NO
1ST Street Viaduct	NO	NO	NO	NO

NO = No impact.
LTS = Less than significant impact.

5.6.1.1 Scenic Resource Impacts

Construction staging areas and associated temporary construction walls would be located on the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue, and would, therefore, not be visible to anyone but those in the vicinity of this block. There would be no impact to scenic resources in this vicinity because there are no nearby resources.

There would be no potential impacts to views of historic buildings during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 because existing historic resources along 1st Street are too far to the east. Two local historic resources include a brick building located at 900 East 1st Street and the 1st Street Viaduct. These structures are each located more than one-half block east of the easternmost portal of the Fully Underground LRT Alternative – Little Tokyo Variation 2. Therefore, there would be no visual impacts to or from these two resources. The Los Angeles Hompa Hongwanji Buddhist Temple another important community/cultural resource, is located at approximately 800 East 1st Street. Construction of the portal within 1st Street would involve cut-and-cover methods and occur in the vicinity of the temple, creating moderate potential visual impacts to this resource during construction. In consultation with the Los Angeles Hompa Hongwanji Temple, the Reverend indicated to Metro that the portal's proximity to the temple would be visually intrusive.

Table 5-7 shows buildings and/or recognized visual resources that could potentially be affected by construction activities associated with installation of tracks and poles, cut-and-cover methods, station construction, and pedestrian and LRT portals. Impacts to these resources would be the same regardless of whether the entire block or only a portion of the block at 1st, 2nd, and Alameda Streets, and Central Avenue is acquired.

Installation of Tracks and Poles

Installation of tracks and poles along the underground portions of this alternative would not be visible to nearby land uses or passersby. Above-ground trackwork already exists at the eastern end of Fully Underground LRT Alternative – Little Tokyo Variation 2 as part of the Metro Gold Line.

The proposed alternative would include construction of tracks and poles to link the Regional Connector to the existing structures. The only locations where construction of tracks and poles would be visible would be associated with the train portals in 1st Street and between Temple and Commercial Streets just east of Alameda Street. At these locations, the tracks and poles transition from fully underground, sloping uphill out of the tunnel portals, to at grade with the existing tracks. Therefore, no or very low visual impacts would potentially result to scenic resources along 1st Street or Alameda Street during construction.

Underground Station Sites and Pedestrian Portals

Fully Underground LRT Alternative – Little Tokyo Variation 2 would require that another underground station be constructed under the block bounded by 1st, 2nd, and Alameda Streets, and Central Avenue. This additional proposed station would be constructed using cut-and-cover methods.

Construction of this underground station would result in removal of the Señor Fish building. Removal of this structure would result in a less than significant visual impact to the Little Tokyo area because of its modest size and reduced level of historical significance. Appropriate urban design of pedestrian portals and surrounding streetscape and landscaping would incorporate historical and visual references of the surrounding Little Tokyo and Arts District neighborhoods that complement these important communities.

No other scenic resources or buildings are located immediately adjacent to the proposed 2nd Street/Central Avenue station. Construction of this station would occur below ground and therefore would not be visible to nearby buildings, land uses, or passersby. After underground construction is complete, the pedestrian portals would be finished and the ground surface restored. Therefore, construction activities for this underground station, ancillary facilities, and pedestrian portals—as with the other proposed underground stations—would be primarily invisible to nearby land users. Potential impacts to visual resources would be less than significant.

5.6.1.2 Visual Character Impacts

Cut-and-cover construction, installation of tracks and poles in the at-grade locations within this alternative, and station and pedestrian portal construction would temporarily alter the existing visual character of downtown Los Angeles. Areas of downtown Los Angeles through which the underground portions of this alignment would pass currently consist of high- and mid-rise buildings and high-density construction. The at-grade portion of this alternative would be limited to the transition areas at the 1st Street and Alameda Street portals, interfacing with the existing at-grade LRT trackway of the Metro Gold Line.

The Little Tokyo Historic District would be more than a block away from the proposed train portals and almost a block from the pedestrian portals to the proposed underground station. Construction staging areas and surrounding construction walls would be visible for a period ranging from 12 to 48 months.

During construction, activities occurring above ground in the roadways and along sidewalks could potentially temporarily disrupt views along corridors and impede views of historic resources, visual resources, and viewshed corridors. However, no recognized or valued views are located in the project area.

Viewers would see construction-related equipment and activities, and the urban streetscape would be temporarily altered. However, construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would occur in a heavily urbanized environment where construction activities are not uncommon, and would not noticeably reduce visual quality or alter viewing context. Therefore, temporary construction impacts would be less than significant.

5.6.1.3 Nighttime Lighting Impacts

During construction, nighttime lighting would be introduced into the project area at construction staging locations. Lighting would predominantly consist of security lighting, and light would be directed on-site. Therefore, potential nighttime lighting impacts would be less than significant during construction of Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.1.4 Shade and Shadow Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would mostly occur underground. Heights of structures and construction-related facilities located above ground would be limited to no more than two stories. Therefore, the potential for construction to result in shading and shadows beyond those currently created by the high- and mid-rise buildings along the alignment corridors is limited. Even along 1st Street, east of Alameda Street, several of the existing buildings on the south side of the street cast shade

that is two stories high. No shade or shadow impacts would result from construction of Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.2 Indirect Construction Impacts

5.6.2.1 Scenic Resource Impacts

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in limited localized visual impacts on the Little Tokyo and Arts District areas of downtown. Construction of this alternative would be localized and not result in any indirect impacts to scenic resources beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. No indirect visual impacts to scenic resources would occur as a result of construction of this alternative.

5.6.2.2 Visual Character Impacts

Construction activities for the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be localized and not result in any indirect impacts to visual character beyond those discussed in the Cultural Resources – Built Environment Technical Memorandum. No indirect impacts to visual character would occur as a result of construction of this alternative.

5.6.2.3 Nighttime Illumination Impacts

During construction, nighttime security lighting would be introduced into the immediate project area at construction staging locations. All potential lighting impacts would be localized and therefore would not result in indirect nighttime lighting impacts.

5.6.2.4 Shade and Shadow Impacts

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2 would mostly occur underground. Above ground construction-related facilities and equipment would be limited, and shadows cast by these facilities and equipment would be localized to the immediate area and at the portal locations. Therefore, no indirect shade and shadow impacts would result from construction of this alternative.

5.6.3 Direct Operational Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would occur primarily underground with short at-grade segments in the Little Tokyo and Arts District vicinity where the alignment transitions connect to the existing Metro Gold Line tracks. These transition areas would be adjacent to the portals in 1st Street and parallel to Alameda Street.

As with the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 includes above-ground entrances to access to pedestrian portals to underground stations, including the proposed 2nd Street/Central Avenue station. With the exception of these above-ground entrances and the at-grade portion of the alignment at the 1st

Street and Alameda Street train portals, all operations of this alternative would be located underground. Table 5-8 summarizes potential impacts to scenic resources associated with operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 5-8. Scenic Resources Potentially Affected by Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2

Resources	Poles and Track	Stations	Pedestrian Portals	Train Portals
Financial District				
Fine Arts Building	NO	NO	NO	NO
818 Building	NO	NO	NO	NO
Roosevelt Lofts	NO	NO	NO	NO
Pegasus	NO	NO	NO	NO
811 Wilshire Blvd	NO	NO	NO	NO
Engine Co. No. 28	NO	NO	NO	NO
Standard Hotel	NO	NO	NO	NO
California Club	NO	NO	NO	NO
LA Central Library & Maguire Gardens	NO	NO	LTS	NO
City National Plaza	NO	NO	LTS	NO
Citigroup Center Plaza	NO	NO	LTS	NO
Bunker Hill				
Walt Disney Concert Hall	NO	NO	NO	NO
2nd Street Tunnel	NO	NO	NO	NO
Grassy Open Space at General Thaddeus Kosciuszko Way	NO	NO	NO	NO

Table 5-8. Scenic Resources Potentially Affected by Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2				
Resources	**Poles and Track**	**Stations**	**Pedestrian Portals**	**Train Portals**
Historic Core				
LA Law Center	NO	NO	NO	NO
Times Annex	NO	NO	LTS	NO
Times Building	NO	NO	NO	NO
Higgins Building	NO	NO	NO	NO
St. Vibiana's Cathedral	NO	LTS	LTS	NO
Redwing Shoes	NO	NO	NO	NO
Civic Center				
Tinker Toy Parking Structure	NO	NO	NO	NO
Little Tokyo				
Little Tokyo Historic District	LTS	NO	NO	LTS
Union Center Arts	LTS	NO	NO	LTS
Koyasan Buddhist Temple	LTS	NO	NO	LTS
Brunswick Square	LTS	NO	NO	LTS
Arts District				
Nishi Hompa Hongwanji Buddhist Temple	LTS	NO	NO	LTS
900 East 1st Street	NO	NO	NO	NO
1ST Street Viaduct	NO	NO	NO	NO

NO = No impact.
LTS = Less than significant impact.

5.6.3.1 Scenic Resource Impacts

Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in only minimal visual impacts to scenic resources. Other than pedestrian access and egress through pedestrian portals at the proposed underground stations, most operational activities would occur underground, with no degradation of views of historic buildings and little or no contrasting visual conditions. There would be no visual impacts as a result of the new trackway and system appurtenances, which would be located underground except where the trackway returns to grade in 1st Street, and at the Alameda Street train portal.

In the Bunker Hill area, there may be a pedestrian bridge constructed from the 2nd/Hope Street station to Upper Grand Avenue above the existing General Thaddeus Koscuiszko Way right-of-way. The bridge would not be visible from any historic buildings, and thus no adverse visual impacts to historic buildings would occur.

Within the Little Tokyo and Arts District areas, the only above-ground features associated with the project would be station pedestrian entrances and the train portals in 1st Street and next to Alameda Street. Two identified visual resources near the eastern end of the alignment are the 900 East 1st Street building and the 1st Street Viaduct. Both of these resources are located too far east along 1st Street to experience any visual impacts.

The Los Angeles Hompa Hongwanji Buddhist Temple at 800 East 1st Street, an important community and cultural resource, would experience low to moderate visual impacts from the train portal in front of and west of this location. Pedestrians walking along the north or south sides of 1st Street would experience low to moderate visual impacts looking into the street corridor toward the train portal. People walking along the east side of Alameda on the block between Temple and Commercial Streets would experience low visual impacts when looking east into the block at the train portal. In consultation with the Los Angeles Hompa Hongwanji Temple, the Reverend indicated to Metro that the portal's proximity to the temple would be visually intrusive.

There would be station entrances at up to four potential locations within one block of the proposed 2nd Street/Central Avenue station, though not all of the potential locations would necessarily be used. None of these entrances would adversely affect views due to their relatively small size.

At-grade overhead contact systems, catenary poles, and trackway for the Fully Underground LRT Alternative – Little Tokyo Variation 2 (standard features required for a light rail system to operate) would be located only at the easternmost train portals on 1st Street and the northernmost train portal adjacent to Alameda Street between Temple and Commercial Streets. The rest of the alignment and potential visual effects would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1. Given that the majority of features

associated with Fully Underground LRT Alternative – Little Tokyo Variation 2 would be below ground, potential impacts to scenic resources would be less than significant.

5.6.3.2 Visual Character Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 is located in a heavily urbanized environment, and adding primarily underground structures and a limited fixed guideway would not noticeably reduce visual quality or alter the viewing context in the Little Tokyo or Arts District areas of downtown Los Angeles.

Construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would contribute to the existing urban character and high-density, pedestrian friendly environment that already exists in downtown Los Angeles. Additionally, this alternative would be primarily underground and thereby not visually accessible to the public. Therefore, potential visual character impacts associated with Fully Underground LRT Alternative – Little Tokyo Variation 2 would be less than significant.

5.6.3.3 Nighttime Lighting Impacts

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would introduce limited new nighttime lighting into the project area. Lighting would predominantly consist of security lighting at pedestrian portal locations, and nighttime lighting would be directed on site. Therefore, no nighttime lighting impacts would occur during operation of this alternative.

5.6.3.4 Shade and Shadow Impacts

Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2 would introduce limited new above-ground structures in the already heavily urbanized Little Tokyo and Arts District areas of downtown Los Angeles. The only new above-ground structures would be pedestrian portals to underground stations and two train portals in 1st Street and east of and adjacent to Alameda Street north of Temple Street. Heights of structures located above ground would be limited to approximately two stories. Therefore, the potential for shading and shadows beyond those currently created by the buildings along the alignment's corridors is limited. No shade or shadow impacts would result from operation of Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4 Indirect Operational Impacts

5.6.4.1 Scenic Resource Impacts

All potential impacts to scenic resources would be localized. Therefore, no indirect impacts to scenic resources would occur from operation of Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4.2 Visual Character Impacts

Potential changes in visual character from operation of Fully Underground LRT Alternative – Little Tokyo Variation 2 would be localized and not result in any indirect impacts to visual character beyond those discussed above and within the Cultural Resources - Built Environment Technical Memorandum. No indirect impacts to visual character would occur with this alternative.

5.6.4.3 Nighttime Illumination Impacts

Fully Underground LRT Alternative – Little Tokyo Variation 2 would introduce new nighttime lighting into the immediate project area and at pedestrian portal locations. Nighttime lighting, however, would primarily consist of security lighting and improved pedestrian streetscape lighting where necessary, and effects would be localized. Therefore, no indirect nighttime lighting impacts would result from implementation or operation of Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4.4 Shade and Shadow Impacts

Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2 would be primarily limited to underground LRT operations. Placement of structures above ground would be limited to facilities associated with pedestrian portals to stations and the three train portals discussed previously. Shade and shadows associated with these structures would be localized to the immediate vicinity of the facilities themselves. Therefore, no indirect shade or shadow impacts would result from operation of this alternative.

5.6.5 Cumulative Construction Impacts

5.6.5.1 Scenic Resource Impacts

Other construction projects besides the proposed Regional Connector Transit Corridor project are planned throughout the downtown Los Angeles. Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in either direct or indirect significant impacts to scenic resources. Therefore, construction of this alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future construction projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.6.5.2 Visual Character Impacts

The alignment of Fully Underground LRT Alternative – Little Tokyo Variation 2 is located in greater downtown Los Angeles, which is a dynamic environment where new projects are constructed on an ongoing basis. Additional development projects are planned throughout the downtown Los Angeles area.

Construction of Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in either direct or indirect significant impacts to visual character. Therefore, construction of this alternative would not contribute to a cumulatively considerable visual resource impact, nor would it, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative impacts to the visual character of downtown.

5.6.5.3 Nighttime Illumination Impacts

During construction, Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in nighttime illumination impacts; therefore, this alternative would not result in or contribute to significant cumulative nighttime illumination impacts.

5.6.5.4 Shade and Shadow Impacts

During construction Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in shade and shadow impacts; therefore, this alternative would not result in or contribute to significant cumulative shade and shadow impacts.

5.6.6 Cumulative Operational Impacts

5.6.6.1 Scenic Resource Impacts

Other development projects are planned throughout the downtown Los Angeles area. Operation of Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in either direct or indirect significant impacts to scenic resources. Therefore, operation of this alternative would not contribute to cumulatively considerable scenic resource impacts, nor would it in combination with other future development projects in the downtown Los Angeles area, result in significant cumulative visual impacts to scenic resources.

5.6.6.2 Visual Character Impacts

The alignment of Fully Underground LRT Alternative – Little Tokyo Variation 2 is located in greater downtown Los Angeles, which is a dynamic environment where new projects are being implemented on an ongoing basis. Additional development projects are planned throughout downtown.

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in either direct or indirect significant impacts to visual character. Therefore, operation of this alternative would not contribute to a cumulatively considerable visual resource impact. Nor would the alternative, in combination with other future projects in the downtown Los Angeles area, result in significant cumulative impacts to the visual character of downtown.

5.6.6.3 Nighttime Illumination Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in direct or indirect nighttime illumination impacts from operations. Therefore, this alternative would not result in or contribute to significant cumulative nighttime illumination impacts.

5.6.6.4 Shade and Shadow Impacts

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would not result in direct or indirect shade and shadow impacts. Therefore, this alternative would not result in or contribute to significant cumulative shade and shadow impacts.

6.0 POTENTIAL MITIGATION MEASURES

6.1 Potential Construction-Related Mitigation Measures

6.1.1 No Build Alternative

No significant construction-related visual impacts were identified for the No Build Alternative. Therefore, no mitigation measures would be required.

6.1.2 Transportation System Management (TSM) Alternative

No significant construction-related visual impacts were identified for the TSM Alternative. Therefore, no mitigation measures would be required.

6.1.3 At-Grade Emphasis LRT Alternative

While no significant construction-related visual impacts were identified. The following mitigation measure would further reduce potential impacts.

- Construction staging areas would be screened to the extent necessary to minimize potential effects on scenic resources.

6.1.4 Underground Emphasis LRT Alternative

While no significant construction-related visual impacts were identified for the Underground Emphasis LRT Alternative, the mitigation measure described previously for the At-Grade Emphasis LRT Alternative would further reduce less than significant potential impacts.

6.1.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

While no significant construction-related visual impacts were identified for the Fully Underground LRT Alternative – Little Tokyo Variation 1, the mitigation measure identified previously under the At-Grade Emphasis LRT Alternative would further reduce less than significant potential impacts.

6.1.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

While no significant construction-related visual impacts were identified for the Fully Underground LRT Alternative – Little Tokyo Variation 2, the mitigation measure described previously for the At-Grade Emphasis LRT Alternative would further reduce less than significant potential impacts.

6.2 Potential Operation-related Mitigation Measures

6.2.1 No Build Alternative

No significant operation-related visual impacts were identified for the No Build Alternative. Therefore, no mitigation measures would be required.

6.2.2 Transportation System Management (TSM) Alternative

No significant operation-related visual impacts were identified for the TSM Alternative. Therefore, no mitigation measures would be required.

6.2.3 At-Grade Emphasis LRT Alternative

While no significant impacts to the Historic Core, Civic Center, or Little Tokyo communities would result from operation of the At-Grade Emphasis LRT Alternative, the following mitigation measures would further reduce less than significant impacts.

- Metro would work cooperatively with the City of Los Angeles to develop detailed urban design guidelines that could guide future development in and around the Little Tokyo community and in the vicinity of the Regional Connector Transit Corridor project.
- Metro would coordinate with the Little Tokyo community to obtain input on the urban design of the project within the community. Urban design measures would be developed to integrate the LRT facilities into each community as appropriate. Designs might address elements such as catenary poles, materials, station colors, etc.

6.2.4 Underground Emphasis LRT Alternative

While no significant visual impacts to the Little Tokyo community would result from operation of the Underground Emphasis LRT Alternative, the mitigation measures described previously for the At-Grade Emphasis LRT Alternative would further reduce less than significant impacts.

6.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

While no significant visual impacts to the Little Tokyo or Arts District community would result from operation of Fully Underground LRT Alternative – Little Tokyo Variation 1, the mitigation measures described previously for the At-Grade Emphasis LRT Alternative and the additional measure provided below would further reduce less than significant impacts.

- The train portal in 1st Street would be screened with appropriate, context sensitive urban design features.

6.2.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

While no significant visual impacts to the Little Tokyo or Arts District community would result from operation of Fully Underground LRT Alternative – Little Tokyo Variation 2, the mitigation measures described for Variation 1 would further reduce less than significant impacts.

7.0 CONCLUSIONS

Table 7-1 summarizes the overall visual and aesthetic impacts associated with each Regional Corridor Transit Connection Project alternative. As the table shows, there would either be no visual or aesthetic impacts or the impacts would be less than significant.

7.1 No Build Alternative

7.1.1 NEPA Findings

No visual impacts would result under this alternative.

7.1.2 CEQA Determination

No visual impacts would result under this alternative.

7.2 TSM Alternative

7.2.1 NEPA Findings

No adverse visual impacts would result under this alternative.

7.2.2 CEQA Determination

The visual character of the corridor would not change with construction and operation of the TSM Alternative. No visual impacts would result under this alternative.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would result in minor changes in visual character. However, all potential impacts would be less than significant.

7.3.2 CEQA Determination

The visual character of the corridor would change slightly with the At-Grade Emphasis LRT Alternative. The LRT trackway embedded in the street pavement, catenary poles, and overhead wires would result in less than significant visual impacts to the corridor environment. Views would not be degraded under this alternative, and no impacts to existing views from scenic highways would occur. Any potential impacts would be less than significant.

Table 7-1. Summary of Visual and Aesthetic Impacts

Impacts	No Build	TSM		At-Grade Emphasis LRT		Underground Emphasis LRT		Fully Underground LRT			
								Little Tokyo Variation 1		Little Tokyo Variation 2	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
Scenic Vistas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scenic Resources	NO	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Visual Character	NO	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Nighttime Illumination	NO	NO	NO	LTS	NO	LTS	NO	LTS	NO	LTS	NO
Shade and Shadows	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Indirect Impacts	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Direct Impacts	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Cumulative Impacts	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

[1] *No scenic vistas are located in the project area; therefore, no analysis of impacts is included.*
NO = No impact.
LTS = Less than significant impact.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

The Underground Emphasis LRT Alternative would result in minor changes to visual character in localized places along the proposed alignment. However, all potential impacts would be less than significant.

7.4.2 CEQA Determination

The visual character of the corridor would slightly change with the Underground Emphasis LRT Alternative. The principal features visible above ground would be station entrances and visual alterations in the vicinity of 1st, 2nd, and Alameda Streets. These visual alternations would not result in significant visual impacts. Views would not be degraded under this alternative, and no impacts to existing views from scenic highways would occur. Any impacts would be less than significant.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in minor changes to visual character in localized places along the proposed alignment. However, all impacts would be less than significant.

7.5.2 CEQA Determination

The visual character of the corridor would slightly change with the Fully Underground LRT Alternative – Little Tokyo Variation 1. The principal features visible above ground would be station entrances, visual alterations in the vicinity of the proposed 2nd/ Central Avenue station, and the train portals in 1st Street and just east of Alameda Street between Temple and Commercial Streets. These visual alterations would not result in significant visual impacts. Views would not be degraded under this alternative, and no impacts to existing views from scenic highways would occur. All impacts would be less than significant.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in minor changes to visual character in localized places along the proposed alignment. However, potential impacts would be less than significant.

7.6.2 CEQA Determination

The visual character of the corridor would slightly change with the Fully Underground LRT Alternative – Little Tokyo Variation 2. The principal features visible above ground would be

station entrances, visual alterations in the vicinity of the 2nd/ Central Avenue station, and the train portals in 1st Street and just east of Alameda Street between Temple and Commercial Streets. These visual alterations would not result in significant visual impacts. Views would not be degraded under this alternative, and no impacts to existing views from scenic highways would occur. All impacts would be less than significant.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX Q

AIR QUALITY IMPACTS AND HEALTH RISK ASSESSMENT

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Air Quality Impacts and Health Risk Assessment
Technical Memorandum

April 2, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

CAA – Clean Air Act

CAAQS – California Ambient Air Quality Standards

CARB – California Air Resources Board

CCAA – California Clean Air Act

CNG – Compressed Natural Gas

HARP – Hotspots Analysis Reporting Program

HIA – Acute Hazard Index

HIC – Chronic Hazard Index

LST – Localized Significance Thresholds

MICR – Maximum Individual Cancer Risk

MSAT – Mobile Source Air Toxics

NAAQS – National Ambient Air Quality Standards

RTIP – Regional Transportation Improvement Program

RTP – Regional Transportation Plan

SCAQMD – South Coast Air Quality Management District

SoCAB – South Coast Air Basin

SIP – State Implementation Plan

TAC – Toxic Air Contaminant

1.0 SUMMARY

This technical memorandum (memo) discusses the results of the proposed Regional Connector Transit Corridor project air quality impact analysis and health risk assessment. The analysis and assessment fulfill project impact disclosure requirements under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). This section summarizes potential impacts to air quality and inhalation health risks associated with the proposed construction and operation of the Regional Connector Transit Corridor project. The analysis includes the preparation of emissions inventories for construction and operations, health risk assessments for construction activities, and a carbon monoxide (CO) hot spots analysis.

This analysis discusses both criteria pollutants and toxic air contaminants (TACs). Criteria pollutants, which are regulated by human health-based permissible levels (hence, "criteria"), include six common pollutants: particulate matter (PM_{10} and $PM_{2.5}$), ozone (O_3)[1] (commonly known as "smog"), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). A TAC is an air pollutant that can cause or contribute to an increase in mortality or serious illness or that may pose another potential hazard to human health. Common TACs associated with mobile sources, such as passenger vehicles and construction equipment, include: toluene, xylenes, acrolein, and diesel particulate matter (DPM).

This memo discusses potential impacts from both construction activities and operations. For operations-related impacts, the analysis provides a comparison between the air quality conditions that currently exist without the proposed project (i.e., existing conditions in 2009)and air quality conditions projected to occur in the future with implementation of each alternative being considered for the proposed project (i.e., full implementation of each alternative in the future horizon year of 2035). The focus of the operations impact analysis is on the change in vehicle traffic, and associated air pollutant emissions, that would result from implementation of each alternative. While this type of direct comparison can help characterize how existing air quality conditions may be different in the future with implementation of the proposed project, it is not a true representation of the impacts directly attributable to the project. This is because background traffic conditions will change substantially between 2009 and 2035 due to regional population growth and development that is anticipated to occur irrespective of the Regional Connector Transit Corridor project. A more accurate and meaningful delineation of air quality impacts directly attributable to

[1] Ozone is a secondary pollutant, formed from "precursor compounds" - volatile organic compounds (VOCs) and oxides of nitrogen (NOx) - in the presence of sunlight. Because the formation of ozone is complex and difficult to assess on a project level, air quality impact analyses address ozone by analyzing emissions of NOx and VOC precursors instead.

project-related changes in traffic is achieved through a comparison of a proposed future alternative (2035) and the No Build Alternative (2035). In assessing the difference in vehicle-related air pollutant emissions for future conditions with and without the project, the amount of change was compared to thresholds of significance developed by the South Coast Air Quality Management District (SCAQMD) to evaluate project significance under CEQA. The increment between a proposed future alternative (2035) and the No Build Alternative (2035) was also compared against general conformity thresholds established in 40 CFR 51. A transportation conformity analysis was also completed.

1.1 Operational Emissions Results

Incremental daily operational emissions associated with each of the proposed alternatives above existing conditions are summarized in Table 1-1. For the reasons discussed in Section 1.0, this increment is provided for informational purposes only and is not intended to be the basis for any determination of significance. Rather, incremental daily operational emissions associated with each of the proposed alternatives above the No Build Alternative (2035) are summarized in Table 1-2 for CEQA. Incremental annual operational emissions associated with each of the proposed alternatives above the No Build Alternative are summarized in Table 1-3 for NEPA.

1.1.1 CEQA Analysis

A CEQA analysis typically evaluates project-related impacts measured against a "baseline" that is defined by the physical environmental conditions occurring at the time the EIR Notice of Preparation was published. In the case of the Regional Connector Transit Corridor project, the CEQA baseline year would be 2009. Based on the long-term regional nature of the proposed project, a horizon year of 2035 is used for characterizing the project's operational characteristics at full implementation. As such, the CEQA analysis completed for the Regional Connector Transit Corridor project includes a delineation of the emissions for the future project year (2035) as compared to those for existing conditions (2009); however, this increment is provided for informational purposes only.

Table 1-1 delineates the incremental increase in emissions associated with each alternative, as measured against the 2009 baseline year. Future emission levels will be affected primarily by regional growth and associated increases in vehicle travel that are projected to occur between 2009 and 2035, as evidenced by comparing each of the build alternatives to the No Build Alternative (i.e., the increased emissions associated with the No Build Alternative, as measured from the 2009 baseline year, reflect the emissions from regional growth and associated increases in background traffic). Despite the increase in vehicle miles traveled (VMT), improvements in engine technology are expected to reduce emission rates of several

pollutants in future years, including VOCs, CO, and NOx. These reductions are shown in parentheses in Table 1-1.

PM_{10} and $PM_{2.5}$ emissions associated with re-entrained road dust, which consists of a mixture of brake wear and tire wear emissions, and the re-suspension of loose material on the road surface, are unaffected by engine technology. In addition, SO_2 emission rates are dependent on sulfur content of fuel. California already capped sulfur content of fuel at 15 parts per million (ppm) and is not expected to substantially reduce the cap in the future. Therefore, PM_{10}, $PM_{2.5}$, and SO_2 emission factors (in grams/mile) are expected to remain relatively flat from 2009 through 2035. The large increase in PM_{10}, $PM_{2.5}$, and SO_2 emissions reflects the magnitude of the study area that includes emissions from a four-county region (Los Angeles, Orange, Riverside, and San Bernardino Counties). In fact, regional population growth, which is predicted to cause an increase in vehicle miles traveled, and hence, an increase in engine exhaust emissions, between 2009 and 2035 would be the source of increased emissions of PM_{10}, $PM_{2.5}$, and SO_2.

Table 1-1. Incremental Daily Operational Emissions Compared to Baseline Year

Alternative	Incremental Emissions[1,2] (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
No Build	(35,100)	(884,700)	(114,700)	2,900	200,300	53,900
TSM	(35,100)	(885,100)	(114,700)	2,800	200,100	53,900
At-Grade Emphasis	(35,100)	(885,200)	(114,800)	2,800	200,000	53,900
Underground Emphasis	(35,100)	(885,300)	(114,800)	2,800	200,000	53,900
Fully Underground[3]	(35,100)	(885,300)	(114,800)	2,800	200,000	53,900

Notes:
[1] Incremental emissions are determined by subtracting the given alternative emissions from the Baseline emissions.
[2] Emission reductions (beneficial impacts) are shown in parentheses.
[3] Emissions for Fully Underground LRT Alternative are the same for Variation 1 and Variation 2.

As noted above, the determination of significant impacts within the CEQA analysis of daily, traffic-related operational emissions is based on a comparison to the No Build Alternative,

which accounts for regional growth and increases in background traffic that would occur independent of the project. Compared to the No Build Alternative, the daily incremental emissions associated with each action alternative would either decrease or remain unchanged for all pollutants under all alternatives; thus all operational emission impacts are less than significant under CEQA. Overall, vehicular travel would decrease as a result of the project. This result would be consistent with air quality goals in the region.

Table 1-2. Incremental Daily Operational Emissions Compared to the No Build Alternative (2035)

Alternative	Incremental Emissions[1,2] (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
TSM	0	(400)	0	(100)	(200)	0
At-Grade Emphasis	0	(500)	(100)	(100)	(300)	0
Underground Emphasis	0	(600)	(100)	(100)	(300)	0
Fully Underground[3]	0	(600)	(100)	(100)	(300)	0
CEQA Threshold	55	550	55	150	150	55

Notes:
[1] *Incremental emissions are determined by subtracting the given alternative emissions from the No Build Alternative emissions.*
[2] *Emission reductions (beneficial impacts) are shown in parentheses.*
[3] *Emissions for Fully Underground LRT Alternative are the same for Variation 1 and Variation 2.*

1.1.2 NEPA Analysis

NEPA analysis requires comparing emissions for the future project year (2035) to those for the No Build Alternative (2035). Operational emissions of all project alternatives would be less than significant under the NEPA analysis. Each of the alternatives reduced highway VMT when compared to the No Build Alternative. The TSM Alternative, however, would result in additional compressed natural gas (CNG) bus emissions. NOx emissions would increase beyond the NEPA significance threshold under the TSM Alternative.

Table 1-3. Incremental Annual Operational Emissions Compared to No Build Alternative

Alternative	Incremental Emissions (tons per year)[1,2]					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
TSM	(2)	(85)	**16**	(1)	(43)	(7)
At-Grade Emphasis	(2)	(105)	(7)	(1)	(51)	(11)
Underground Emphasis	(2)	(109)	(7)	(1)	(53)	(12)
Fully Underground[3]	(2)	(112)	(7)	(1)	(55)	(12)
NEPA Threshold	10	100	10	100	70	100

*Note: Emissions greater than threshold of significance are shown in **bold**.*
Notes:
[1] Incremental emissions are determined by subtracting the given alternative emissions from the No Build Alternative emissions.
[2] Emission reductions (beneficial impacts) are shown in parentheses.
[3] Emissions for the Fully Underground LRT Alternatives are the same for Variation 1 and Variation 2.

1.1.3 CO Hot Spots

This memo evaluates the significance of localized concentrations of CO under the proposed project. The analysis used the methodology in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) that was developed by the University of California Davis for the California Department of Transportation (Caltrans). A screening analysis was completed using Appendix A of the CO Protocol. It evaluated which street intersections under the project alternatives would contribute the most to adverse impacts to localized air quality.

This memo analyzes the five intersections with the most potential for adverse impacts using the CAL3QHC model. This is the Environmental Protection Agency's (EPA) preferred model for CO hot spots modeling. Concentrations of CO at the intersections would not exceed the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS). Thus, the CO hot spots would not be significant. The results of the analysis are provided in Table 1-4.

Table 1-4. Summary of CO Hot Spots Analysis (Localized Concentrations of CO)

ID	Intersection	Max. CO Conc. (ppm)[1]		Significance	
		1-Hour	8-Hour	1-Hour[2]	8-Hour[3]
Existing Conditions (2009)					
5	1st Street and Main Street	4.20	3.17	no	no
12	2nd Street and Hill Street	3.90	2.96	no	no
57	Temple Street and Main Street	4.20	3.17	no	no
58	Temple Street and Los Angeles Street	4.20	3.17	no	no
60	Temple Street and Alameda Street	4.20	3.17	no	no
No Build Alternative (2035)					
5	1st Street and Main Street	1.40	1.04	no	no
12	2nd Street and Hill Street	1.30	0.97	no	no
57	Temple Street and Main Street	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	1.30	0.97	no	no
60	Temple Street and Alameda Street	1.40	1.04	no	no
TSM Alternative (2035)					
5	1st Street and Main Street	1.40	1.04	no	no
12	2nd Street and Hill Street	1.30	0.97	no	no
57	Temple Street and Main Street	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	1.30	0.97	no	no
60	Temple Street and Alameda Street	1.40	1.04	no	no

Table 1-4. Summary of CO Hot Spots Analysis (Localized Concentrations of CO)

ID	Intersection	Max. CO Conc. (ppm)[1]		Significance	
		1-Hour	8-Hour	1-Hour[2]	8-Hour[3]
At-Grade Emphasis LRT Alternative (2035)					
5	1st Street and Main Street	1.40	1.04	no	no
12	2nd Street and Hill Street	1.30	0.97	no	no
57	Temple Street and Main Street	1.50	1.11	no	no
58	Temple Street and Los Angeles Street	1.30	0.97	no	no
60	Temple Street and Alameda Street	1.40	1.04	no	no
Underground Emphasis LRT Alternative (2035)					
5	1st Street and Main Street	1.40	1.04	no	no
12	2nd Street and Hill Street	1.30	0.97	no	no
57	Temple Street and Main Street	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	1.40	1.04	no	no
60	Temple Street and Alameda Street	1.40	1.04	no	no
Fully Underground LRT Alternative (2035)					
5	1st Street and Main Street	1.40	1.04	no	no
12	2nd Street and Hill Street	1.30	0.97	no	no
57	Temple Street and Main Street	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	1.40	1.04	no	no
60	Temple Street and Alameda Street	1.40	1.04	no	no

Notes:
[1] Maximum concentrations for a given year include the ambient background CO concentrations (1-hour and 8-hour) for that year.
[2] 1-Hour CAAQS = 9.0 ppm; 1-Hour NAAQS = 9 ppm
[3] 8-Hour CAAQS = 20 ppm; 8-Hour NAAQS = 35 ppm
[4] Intersection data do not change between the Fully Underground LRT Alternative Alternatives.

1.2 Construction Emission Results

This memo estimates potential construction emissions and compares them to thresholds of significance published by the SCAQMD. The SCAQMD also recommends that localized impacts be evaluated for significance. Thus, this section summarizes construction air quality impacts locally and regionally.

1.2.1 Regional Construction Emissions

Emissions from construction of the project are analyzed under CEQA. Thresholds of significance developed for CEQA were also used for the NEPA analysis, since CEQA requirements are at least as stringent as NEPA requirements. Construction emissions would not occur if not for the project, so baseline emissions are assumed to be zero. Short-term, peak, daily emissions of VOC, NOx, CO, and $PM_{2.5}$ would exceed thresholds of significance for CEQA under all build alternatives. In addition, emissions of PM_{10} would exceed thresholds of significance for CEQA for the At-Grade Emphasis LRT Alternative. Emissions are summarized in Table 1-5.

Table 1-5. Summary of Unmitigated Peak Daily Construction Emissions

Alternative	Unmitigated Peak Daily Construction Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
At-Grade Emphasis LRT Alternative	**289**	**2,175**	**1,150**	4	**151**	**126**
Underground Emphasis LRT Alternative						
2nd/Hope Streets Station (SEM) + Broadway Station	**308**	**2,336**	**1,249**	4	111	**89**
2nd/Hope Streets Station (Cut & Cover) + Broadway Station	**313**	**2,375**	**1,272**	4	113	**90**

Table 1-5. Summary of Unmitigated Peak Daily Construction Emissions						
Alternative	**Unmitigated Peak Daily Construction Emissions (lbs/day)**					
	VOC	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2nd/Hope Streets Station (SEM) + Los Angeles Street Station	**308**	**2,332**	**1,247**	4	110	**89**
2nd/Hope Streets Station (Cut & Cover) + Los Angeles Street Station	**313**	**2,371**	**1,270**	4	113	**90**
Fully Underground LRT Alternative – Little Tokyo Variation 1						
2nd/Hope Streets Station (SEM)	**376**	**2,699**	**1,542**	5	129	**102**
2nd/Hope Streets Station (Cut & Cover)	**386**	**2,777**	**1,593**	5	133	**105**
Fully Underground LRT Alternative – Little Tokyo Variation 2						
2nd/Hope Streets Station (SEM)	**376**	**2,698**	**1,545**	5	131	**102**
2nd/Hope Streets Station (Cut & Cover)	**386**	**2,777**	**1,597**	5	135	**105**
Threshold of Significance	75	100	550	150	150	55

*Note: Emissions greater than threshold of significance are shown in **bold**.*

Since emissions from construction would exceed thresholds of significance for CEQA, it would be necessary to mitigate emissions from off-road construction equipment. Significant emission levels would be exceeded even if construction contractors used the cleanest equipment technology available at the time of construction. However, such adverse impacts would end after project construction was completed.

1.2.2 SCAQMD Localized Significance Thresholds (LST)

In June 2003 (revised July 2008), the SCAQMD developed a methodology to evaluate localized construction impacts on air quality that would account for air dispersion. The SCAQMD developed localized significance thresholds (LSTs) for projects based on the project location,

size (acreage), and distance to the nearest receptor. Look-up tables were published for NOx, CO, PM_{10}, and $PM_{2.5}$ for both construction and operational impacts.

Maximum daily emissions for each project construction activity, considering their locations, were compared to relevant LSTs. The comparison assumes a one acre site for each construction activity and a distance of 25 meters to the nearest sensitive receptor. This approach provides conservative results for the LST analysis. After mitigation measures, emissions of all pollutants would be less than LST thresholds. Thus, construction-related pollutant concentrations would not be significant.

1.3 Mitigation Measures

Emissions of VOC, NOx, CO, and $PM_{2.5}$ would exceed thresholds of significance for construction emissions under CEQA (see Table 1-5). It would be necessary to apply mitigation measures to reduce emissions of these pollutants. This study uses the same criteria for determining significance under CEQA and NEPA. Construction that used new equipment (model year 2014 or newer) would reduce emissions, but emissions of VOC, NOx, and CO would still remain significant (see Table 1-6).

After applying mitigation measures, emissions of PM_{10} (for the At-Grade Emphasis LRT Alternative) and $PM_{2.5}$ would be less than regional thresholds of significance, but emissions of NOx, VOC, and CO would still exceed relevant thresholds. All mitigation measures would be implemented to the maximum extent possible. Measures like installing catalytic convertors or diesel particulate filters would reduce NOx emissions but would not reduce emissions of VOC and CO. Thus, significant regional emission levels of VOC and CO would be unavoidable under all project alternatives.

Long-term benefits of the project would outweigh adverse impacts from emission levels that temporarily exceeded acceptable levels during construction. The proposed Regional Connector Transit Corridor project would improve transportation in the region, helping to remove vehicles from the region's roadways. Operational emissions for build alternatives would be less than baseline emissions for key criteria pollutants (VOC, CO, and NOx). The project build alternatives would improve air quality in the region.

Table 1-6. Summary of Maximum Daily Mitigated Construction Emissions (lbs/day)						
Alternative	**Maximum Daily Construction Mitigated Emissions (lbs/day)**					
	VOC	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
At-Grade Emphasis LRT Alternative	**119**	**432**	**908**	4	27	12
Underground Emphasis LRT Alternative						
2nd/Hope Streets Station (SEM) + Broadway Station	**144**	**473**	**978**	4	27	12
2nd/Hope Streets Station (Cut & Cover) + Broadway Station	**147**	**488**	**998**	4	28	12
2nd/Hope Streets Station (SEM) + Los Angeles Street Station	**144**	**469**	**977**	4	27	12
2nd/Hope Station (Cut & Cover) + Los Angeles Street Station	**146**	**485**	**997**	4	28	12
Fully Underground LRT Alternative – Little Tokyo Variation 1						
2nd/Hope Station (SEM)	**189**	**602**	**1,266**	5	35	16
2nd/Hope Station (Cut & Cover)	**193**	**626**	**1,304**	5	36	16
Fully Underground LRT Alternative – Little Tokyo Variation 2						
2nd/Hope Station (SEM)	**188**	**601**	**1,268**	5	37	16
2nd/Hope Station (Cut & Cover)	**193**	**626**	**1,307**	5	38	16
Threshold of Significance	75	100	550	150	150	55

*Note: Emissions greater than threshold of significance are shown in **bold**.*
Mitigated emissions are based on the assumption that new model year engines (2014 or newer) will be used in project construction equipment.

2.0 INTRODUCTION

Air basins are defined as areas that share similar geographical and meteorological conditions. The South Coast Air Basin (SoCAB) consists of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is confined by the Pacific Ocean and the San Gabriel, San Bernardino, San Jacinto, and Santa Ana Mountains. Normally, temperature decreases with altitude. However, the SoCAB is marked by frequent temperature inversions, where the temperature at higher elevations is higher than at lower elevations.

Furthermore, the region has very low average traffic speeds. The combination of low traffic speeds, temperature inversions, and surrounding mountains, creates a situation where pollutants are readily trapped in the basin. Pollutants cannot easily disperse horizontally or vertically. These factors, along with high population and high reliance on the automobile, make air quality in the SoCAB among the worst in the nation.

The Regional Connector Transit Corridor project would ultimately decrease air pollution in the region by removing vehicles from the roads and increasing regional transportation from clean emission sources. Although the addition of electric vehicles would be expected to cause an increase in emissions at the source of fossil fuel-fired electricity generation (power plant), the emission reduction from the motor vehicles being taken off the road due to persons mode switching to transit outweighs the effect of increased emissions from fossil fuel-fired electricity generation; therefore, a net benefit remains for air quality. However, construction of the project could cause a temporary increase in air pollution and negatively impact air quality temporarily. Therefore, this memo evaluates the potential for adverse impacts from construction and operation of the proposed Regional Connector Transit Corridor project.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section describes the methodology for analyzing potential impacts to air quality and assessing potential health risks. Emissions from construction equipment and the generation of dust could negatively impact air quality. Conversely, the operation of mass transit systems would benefit air quality through reducing vehicle traffic.

3.1 Standards of Significance

3.1.1 NEPA Guidelines

Pursuant to the Clean Air Act, EPA has established NAAQS for six criteria pollutants that are considered harmful to public health and welfare; the primary NAAQS set limits with an adequate margin of safety to protect public health, whereas the secondary NAAQS set limits to protect public welfare from any known or anticipated adverse effects. A project is considered significant under NEPA if it causes or contributes to ambient air concentrations that exceed NAAQS. The EPA developed emission levels that identify major stationary sources in nonattainment areas (40 CFR 51.165). These levels are also used to define de minimis thresholds for general conformity evaluations (40 CFR 51.853). Potentially adverse impacts may occur if project emissions exceed these thresholds (see Table 3-1). If project emissions do not exceed these thresholds, it would indicate that the project would not cause or contribute to emission levels that exceed NAAQS; thus, emissions would not be significant under NEPA.

Table 3-1. Federal Thresholds

Pollutants	Emissions Increase
Volatile organic compounds (VOC)	10 tons per year
Oxides of nitrogen (NOx)	10 tons per year
Carbon monoxide (CO)	100 tons per year
Inhalable Particulate Matter (PM_{10})	70 tons per year
Fine Particulate Matter ($PM_{2.5}$)	100 tons per year

Source: EPA, 40 CFR 51, 2009.
Note: On August 27, 2009, the EPA proposed to approve a "bump-up" request to reclassify the South Coast Air Basin from severe-17 nonattainment to extreme nonattainment for ozone (74 FR 43654). When finalized, this action would reduce the threshold of significance from 25 tons per year to 10 tons per year for VOC and NOx.

This memo analyzes both short-term impacts of emissions during construction and long-term impacts associated with operations. The analysis considers the long-term effect of the project on local and regional traffic emissions.

For construction emissions, this memo uses CEQA thresholds of significance to analyze NEPA compliance because NEPA does not contain thresholds specific to construction. Since CEQA has stricter requirements than NEPA, this is a conservative assumption. Construction emission sources considered include trucks used to haul material and debris to and from the project sites, fugitive dust from tunneling, earthwork and storage piles, and construction worker vehicles traveling to and from the sites. This analysis used the construction activity summaries provided in the proposed project's Description of Construction to estimate construction activities, equipment, and associated emissions.

From an operational standpoint, incremental project emissions were determined for motor vehicles based on the change in VMT between each alternative and the No Build Alternative. Changes in VMT were determined by project traffic consultants for each alternative. VMT estimates include project impacts on individual automobile VMT as well as transit bus VMT. The analysis assumes that electric light rail transit (LRT) motors would not generate any local exhaust emissions.

Finally, the analysis looks at surface traffic intersections that would be altered by the project, either during construction or after project completion. The memo analyzes CO concentration impacts at five intersections. The analysis focuses on these intersections because they were estimated to have the highest potential CO concentrations. Transportation Conformity (40 CFR 93, Subpart A) requires localized concentrations ("hot spots") of pollutants be analyzed for CO, PM_{10}, and $PM_{2.5}$. Other pollutants are either reactive in the atmosphere (such as NOx) or dissipate rapidly (such as SO_2) and do not contribute to local concentrations. A quantitative analysis of PM_{10}/$PM_{2.5}$ is not required unless the project results in an increase in diesel vehicles, which is not the case for this project.

This analysis uses the same emissions models for both NEPA and CEQA analyses. The EPA approved the current California Air Resources Board (CARB) motor vehicle emissions model, EMFAC2007, for use in developing on-road motor vehicle emission inventories in California after April 18, 2008 (73 FR 3464). Recently, the EPA approved baseline and projected emissions inventories contained in the 2003 Air Quality Management Plan (AQMP) for the SoCAB (74 FR 10176) as part of the California State Implementation Plan (SIP). The 2003 AQMP used the CARB OFFROAD model to estimate emissions from construction equipment and other off-road mobile sources. Therefore, the current versions of EMFAC (EMFAC2007) and OFFROAD (OFFROAD2007) were used to estimate on-road and off-road mobile source

emissions, respectively. The NEPA analysis was completed with limited air dispersion modeling (CO hot spot modeling only).

3.1.2 CEQA

3.1.2.1 Regional Criteria Pollutant Emissions

The SCAQMD is the agency most responsible for improving air quality in the SoCAB. The SCAQMD published CEQA significance thresholds for analyzing the significance of project air quality impacts in the *CEQA Air Quality Handbook* (SCAQMD 1993). Regular updates are published on the SCAQMD website (SCAQMD 2009). The City of Los Angeles has also published significance thresholds for CEQA in the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006). Since the most recent thresholds of significance published by the SCAQMD on its website were released in 2009, these thresholds supersede the City of Los Angeles thresholds; therefore, this analysis uses the most recent significance thresholds from the SCAQMD.

The SCAQMD developed significance thresholds for mass daily emission rates of criteria pollutants for both construction and operational sources. These thresholds are summarized in Table 3-2.

Project emissions for typical developments are usually defined as the difference between future project alternatives and existing conditions at the time the project NOP was published. However, that approach ignores the regional background growth in population, traffic, and transportation infrastructure that would occur between the NOP date and project build-out. Considering such growth is critical when determining future mitigation for transit projects designed to reduce traffic congestion and associated air quality impacts. Therefore, project emissions for this CEQA analysis are defined as the difference between a project alternative (2035) and the 2009 Baseline adjusted for regional growth that would occur by 2035. The emissions associated with this adjusted baseline are equivalent to those for the No Build Alternative (2035). Project emissions greater than thresholds for a given air pollutant would be considered significant under CEQA. Thresholds in Table 3-2 indicate the maximum emissions that would not be expected to cause a violation of an air quality standard and consequently are used as surrogates for the CAAQS.

Table 3-2. SCAQMD Mass Daily Thresholds		
Pollutant	**Construction**	**Operation**
Oxides of nitrogen (NOx)	100 lbs/day	55 lbs/day
Volatile organic compounds (VOC)	75 lbs/day	55 lbs/day
Inhalable particulate matter (PM_{10})	150 lbs/day	150 lbs/day
Fine particulate matter ($PM_{2.5}$)	55 lbs/day	55 lbs/day
Oxides of sulfur (SOx)	150 lbs/day	150 lbs/day
Carbon monoxide (CO)	550 lbs/day	550 lbs/day
Lead (Pb)	3 lbs/day	3 lbs/day

Source: SCAQMD, 2009.

3.1.2.2 Localized Significance Thresholds (LSTs)

The SCAQMD has developed thresholds for local air quality impacts from construction activity (SCAQMD 2003 and SCAQMD 2006). Localized significance thresholds (LSTs) are applicable to the following criteria pollutants: NOx, CO, inhalable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). LSTs are analogous to NAAQS and CAAQS (pollutant levels below LSTs necessarily do not violate NAAQS and CAAQs). LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor. For PM_{10}, LSTs were based on SCAQMD Rule 403 – Fugitive Dust.

LST emission tables have been developed for project sizes up to 5 acres. Most construction sites could be partitioned into active areas less than or equal to 5 acres in size. If two active areas of 5 acres each were adjacent to each other (meaning there is a common boundary between them) then the LST value was reduced to one-half of the single 5-acre value.

Applying LST methodology reduces the need to conduct dispersion modeling of construction emissions. If construction emission rates were less than the LST thresholds, the analysis assumed that concentration impacts would not cause NAAQS or CAAQS to be exceeded. Even if a pollutant exceeds a LST, a significant impact could be avoided through mitigation measures. Furthermore, a detailed dispersion analysis could be conducted to quantify the predicted ambient air quality concentration.

3.1.2.3 Toxic Air Contaminants

The SCAQMD established thresholds of significance for both carcinogenic and non-carcinogenic TACs. A significant adverse health risk impact would occur if a project alternative would result in a:

- Maximum Incremental Cancer Risk ≥ 10 in 1 million, or
- Hazard Index ≥ 1.0 (project increment for either chronic or acute exposure)

3.1.3 FTA Guidance for Air Quality Conformity

Approval, funding, and implementation of Federal Highway Administration (FHWA) and Federal Transit Authority (FTA) projects are subject to transportation conformity regulations under the Clean Air Act. (40 CFR 93, Subpart A). The SoCAB is defined as a non-attainment area for O_3, PM_{10}, and $PM_{2.5}$. The SoCAB is defined as a maintenance area for CO and nitrogen dioxide (NO_2). If a potential project is included in a conforming Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), the project is already included in emission budgets developed for the region. Thus, a unique, regional analysis of project emissions would not be required. However, analysis regarding possible localized impacts is still required.

The Southern California Association of Governments (SCAG) adopted a 2008 RTP and 2008 RTIP. The FHWA/FTA approved and made a positive conformity determination in June 2008 for the RTP and January 2009 for the RTIP. The Regional Connector Transit Corridor project was included in the list of modeled projects for the Final 2008 RTP and RTIP. Therefore, it is assumed that the project was considered in the transportation conformity determination for the 2008 RTP and RTIP.

Since the Regional Connector Transit Corridor project is included in the Final 2008 RTP and RTIP, the following parameters were evaluated as part of the conformity determination as required by 40 CFR 93:

- §93.110 – The conformity determination must be based upon the most recent planning assumptions in force at the time the conformity analysis begins.
- §93.111 – The conformity determination must be based on the latest emission estimation model available, including EMFAC for California-based projects.
- §93.112 – Conformity must be determined according to the consultation procedures in 40 CFR 93; the Southern California Association of Governments (SCAG) will be consulted regarding this project.

- §93.114 – There must be a currently conforming transportation plan and currently conforming Transportation Improvement Program at the time of project approval.
- §93.115 – The project must come from a conforming plan and program.
- §93.116 – The project must not cause or contribute to any new localized CO, PM_{10}, and/or $PM_{2.5}$ violations or increase the frequency or severity of any existing CO, PM_{10}, and $PM_{2.5}$ violations.
- §93.117 – The project must comply with any PM_{10} and $PM_{2.5}$ control measures in the applicable SIP.

3.2 Area of Potential Impact

The area of potential impact must be sufficiently large to identify the location of the maximum exposed individual for health risk purposes. The zone of impact normally encompasses the area where a person would be subject to an added lifetime cancer risk of one in one million or greater ($\geq 1.0 \times 10^{-6}$). However, the project is expected to have a long-term beneficial impact on air quality and inhalation risk. The area of potential impact was limited to a one kilometer radius around each exposed excavation site, which, based on related experience, is a sufficient distance to encompass the zone of impact related to cancer risk. In addition, emissions were quantified for haul trucks, delivery trucks, and construction worker vehicle trips from the site to trip ends (landfills, material source locations, or construction worker homes).

3.3 Analysis Methodology

3.3.1 Construction Emissions

This memo analyzes construction emissions with the methodology developed by the SCAQMD in its *CEQA Air Quality Handbook* (1993). Fugitive dust and engine exhaust emissions were characterized into the following main categories:

- Grading and excavation
- Heavy-duty equipment on unpaved areas
- Paved road dust (haul/delivery trucks)
- Loading/unloading of trucks
- Vehicle trips (including construction worker commuting and haul/delivery trucks)

Although the analysis used the *CEQA Air Quality Handbook* to estimate emissions, several emission factors and calculation methods in the Handbook are outdated. Thus, the analysis used current versions of the EMFAC and OFFROAD models, to generate on- and off-road emission factors, respectively, instead of the mobile source emission factors established in the *CEQA Air Quality Handbook*. The analysis used the Midwest Research Institute (MRI) *Improvement of Specific Emission Factors* report as necessary to update the fugitive dust emission factors identified in the *CEQA Air Quality Handbook*. (MRI 1996)

The analysis used EPA's *Compilation of Air Pollutant Emission Factors* (AP-42) to estimate emissions from fugitive dust (EPA 1995).

Dust emissions and dirt track-out will be minimized through compliance with SCAQMD Rule 403. Although projects are required to follow all of the Best Available Control Measures described in the rule, several of the key measures applicable to this project are as follows:

- For cut and fill at large sites, pre-water with sprinklers or water trucks and allow time for penetration.
- Apply water or stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
- Track-out shall not extend 25 feet or more in cumulative length from the point of origin from an active operation. All track-out from an active operation shall be removed at the conclusion of each workday or evening shift.

If the disturbed surface area is five acres or more, or if the daily import or export of bulk material is 100 cubic yards or more, then at least one of the following precautions must also be taken:

- Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least size inches and extending at least 30 feet wide and at least 50 feet long.
- Pave the surface extending at least 100 feet and at least 20 feet wide.
- Use a wheel shaker/wheel spreading device consisting of raise divides at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- Install and use a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

3.3.2 Operational Emissions

3.3.2.1 CO Hot Spots

The first step in an air dispersion analysis is the selection of an applicable model. Two models commonly used to assess CO concentrations at roadway intersections (CO hot spots) are CAL3QHC and CALINE4. The EPA's *Guideline on Air Quality Models* (40 CFR 51, Appendix W) recommends the use of CAL3QHC. CAL3QHC combines CALINE3 with a traffic model to calculate delays and queues that occur at signalized intersections. Recent Metro projects requiring NEPA and CEQA findings have relied on the CAL3QHC model for CO hot spots analysis, and this memo follows suit.

3.3.2.2 Regional Emissions

Regional emissions were calculated from projected VMT for each of the project alternatives. Regional VMT data for each alternative was developed by project traffic consultants. This report used the current EPA-approved version of EMFAC to develop emission factors for different vehicle classes. EMFAC was used to describe the on-road fleet mix (relative ratio of light duty automobiles and trucks) for Los Angeles County in each year of the analysis. Passenger vehicles are the basic unit of traffic for modeling purposes. Other types of regional vehicles use regional highways, and the model accounts for large trucks by lowering roadway capacity. Changes in usage of other types of vehicles are not expected to occur as a result of this project.

3.3.3 Health Risk Assessment

CEQA analysis typically includes a health risk assessment for sensitive receptors (e.g., residents, workers, school children) near the project site that are likely to be exposed to TACs emitted from project activities. Most TACs are categorized as organic emissions or inorganic (primarily particulate) emissions. Therefore, emissions of TACs are typically calculated by applying chemical-specific mass fractions (also called speciation profiles) to VOC or PM_{10} emission rates calculated for criteria pollutant emission inventories.

CARB has developed speciation profiles for a variety of sources including diesel and gasoline motor vehicles, off-road diesel and gasoline mobile equipment, and fugitive dust. This analysis uses speciation profiles with projected VOC and PM_{10} emission levels to determine TAC emissions for each alternative.

This analysis uses SCAQMD Rule 1401 to determine the TACs to be evaluated for risk. Rule 1401 contains requirements related to New Source Review of TACs. In addition to specifying the risk limits for carcinogens and non-carcinogens (i.e., pollutants with chronic or acute hazards), the rule defines the pollutants that the SCAQMD considers to be toxic. This study identified 25 TACs from the speciation profiles for mobile emission sources. Several common

TACs from mobile sources (engine exhaust) include benzene, 1,3- butadiene, formaldehyde, acrolein, and diesel particulate matter (DPM). The analysis calculates speciated emissions for exhaust, tire wear, brake wear, paved road dust, and construction dust.

3.3.3.1 Construction Health Risk Assessment

This memo analyzes short-term, construction-related TAC emissions to determine acute risk impacts to those nearby. The SCAQMD developed a tiered approach to assessing risk from exposure to TACs (SCAQMD 2005a and SCAQMD 2008b). The memo applies tier 1 analysis (a series of lookup tables) to the construction phase to determine if acute impacts may be significant. Tier 1 analysis predicted no acute health risks from project construction, so further analysis did not need to be completed.

3.3.3.2 Operational Health Risk Assessment

Although emissions of particulate matter are expected to increase in the future alternatives (2035) when compared to existing conditions (2009) (see Table 1-1), this increment should not be used as the basis for determinations of significance, as noted in Section 3.1.2.1. Rather, an adjusted CEQA increment that compares the difference between a future alternative with the No Build Alternative would be used to evaluate significance. As shown in Table 1-2, emissions of all pollutants will either be less than or equal to the adjusted CEQA baseline. Since there will be a net benefit to air quality for operational emissions, an operational health risk assessment was not completed.

4.0 AFFECTED ENVIRONMENT

This section describes the area of analysis and the regulatory and environmental setting for air quality.

4.1 Area of Analysis

The air quality area of analysis includes the four-county region covered by the SoCAB (all of Orange County and the urban, non-desert portions of Los Angeles, Riverside, and San Bernardino Counties).

4.1.1 Regulatory Setting

Federal, state and local government all share responsibility for air quality management. The Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) are the primary statutes that establish ambient air quality standards. They establish regulatory authorities to design and enforce air quality regulations.

4.1.1.1 Federal

The EPA is responsible for implementation of the CAA. The CAA was enacted in 1955 and has amended in 1963, 1965, 1967, 1970, 1977, 1990, and 1997. Under authority of the CAA, EPA established NAAQS for the following criteria pollutants: CO, Pb, NO_2, O_3, particulate matter (PM_{10} and $PM_{2.5}$), and SO_2.

Table 4-1 presents current NAAQS for criteria air pollutants. Ozone is a secondary pollutant, meaning that it is formed in the atmosphere from reactions of precursor compounds under certain conditions. Primary precursor compounds that lead to formation of O_3 include VOC and NOx. Fine particulate matter ($PM_{2.5}$) can be emitted directly from sources (engines) or can form in the atmosphere from precursor compounds. $PM_{2.5}$ precursor compounds in SCoAB include SOx, NOx, VOC, and ammonia.

The CAA specifies dates for achieving compliance with NAAQS and mandates that states submit and implement a SIP for local areas not meeting these standards. SIPs must include pollution control measures and demonstrate how standards will be met. The CAA identifies specific emission reduction goals for areas not meeting NAAQS. The act requires a demonstration of reasonable further progress toward attainment and provides additional sanctions for failure to attain or meet interim milestones.

The SoCAB is designated as a federal non-attainment area for O_3, PM_{10}, and $PM_{2.5}$. Non-attainment designations are classified into levels of severity based on the pollutant concentration levels. Pollution concentration levels determine the mandated attainment date.

In 1998, the EPA designated the SoCAB as an attainment/maintenance area for NO_2. NO_2 levels in SoCAB dropped below NAAQS in the early 1990s. The EPA designated SoCAB as a maintenance area for CO in 2007.

An attainment/maintenance designation means a pollutant is currently in attainment. It indicates measures included in the SIP will ensure that the NAAQS for a pollutant are not exceeded. Table 4-2 presents the attainment designation for each of the federal criteria air pollutants.

Table 4-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS Primary	NAAQS Secondary
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	NS	NS
	8-Hour	0.070 ppm (137 µg/m^3)	0.075 ppm (147 µg/m^3) [1]	Same as primary [2]
Inhalable particulate matter (PM_{10})	24-Hour	50 µg/m^3	150 µg/m^3	Same as primary
	Annual	20 µg/m^3	NS	NS
Fine particulate matter ($PM_{2.5}$)	24-Hour	No separate State standard	35 µg/m^3	Same as primary
	Annual	12 µg/m^3	15.0 µg/m^3	Same as primary
Carbon monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	NS
	1-Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	NS
Nitrogen dioxide (NO_2)	Annual	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as primary
	1-Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (189 µg/m^3) [3]	NS

Table 4-1. National and California Ambient Air Quality Standards				
Pollutant	**Averaging Time**	**CAAQS**	**NAAQS Primary**	**NAAQS Secondary**
Sulfur dioxide (SO_2)[4]	Annual	NS	0.030 ppm (80 µg/m^3)	NS
	24-Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	NS
	3-Hour	NS	NS	0.5 ppm (1,300 µg/m^3)
	1-Hour	0.25 ppm (655 µg/m^3)	NS	NS
Lead (Pb) [5]	30-Day Average	1.5 µg/m^3	NS	NS
	Calendar Quarter	NS	1.5 µg/m^3	Same as primary
	Rolling 3-Month Average	NS	0.15 µg/m^3	Same as primary

Source: CARB 2008

Notes:

[1] On January 19, 2010, the EPA released a proposed rule to strengthen the 8-hour primary O_3 NAAQS to a level within the range of 0.060 to 0.070 parts per million by volume (ppmv).

[2] On January 19, 2010, the EPA proposed to establish a cumulative, seasonal secondary O_3 NAAQS within the range of 7 to 15 ppm-hours.

[3] On February 9, 2010, the EPA finalized a rule to supplement the current annual NO_2 standard by establishing a new 1-hour NO_2 standard at a level of 100 parts per billion (ppb), based on the 3-year average of the 98th percentile of the yearly distribution of the 1-hour daily maximum concentrations (75 FR 6474). For comparison, this would be more stringent than the current California 1-hour CAAQS of 180 ppbv. The final rule is effective on April 12, 2010.

[4] On December 8, 2009, the EPA proposed to establish a new one-hour primary SO_2 NAAQS within the range of 50 – 100 parts per billion by volume (ppbv), based on the 3-year average of the annual 99th percentile of one-hour daily maximum concentrations (74 FR 64810). The EPA also proposed to revoke the existing 24-hour and annual primary SO_2 NAAQS.

[5] On November 12, 2008, the EPA revised the primary lead standard to 0.15 µg/m^3 and revised the averaging period to a rolling 3-month period with a not-to-be-exceeded form, evaluated over a 3-year period (73 FR 66964).

Key:
NAAQS = National Ambient Air Quality Standard
CAAQS = California Ambient Air Quality Standard
ppm = parts per million
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
NS = no standard

Table 4-2. Federal and State Attainment Status

Pollutant	State Status	Federal Status
O_3	Non-attainment, Extreme	Non-attainment, Extreme [1]
PM_{10}	Non-attainment	Non-attainment, Serious
$PM_{2.5}$	Non-attainment	Non-attainment [2]
CO	Attainment	Maintenance
NO_2	Attainment	Maintenance
SO_2	Attainment	Attainment
Pb	Attainment	Attainment [3]

Source: CARB 2009
Notes:
[1] On August 27, 2009, the EPA proposed to reclassify the SoCAB non-attainment area from severe-17 to extreme (74 FR 43654).
[2] On October 8, 2009, the EPA issued a final Federal Register notice designating the attainment status for the 24-hour NAAQS for $PM_{2.5}$ (EPA 2009). The notice was effective on December 14, 2009.
[3] Los Angeles County was designated as in attainment for the previous Pb NAAQS; however, the EPA has not proposed area designations under the current NAAQS. CARB recommended that Los Angeles County be designated as in non-attainment in August 2009 (CARB 2009).
Key:
O_3 = ozone
PM_{10} = inhalable particulate matter
$PM_{2.5}$ = fine particulate matter
CO = carbon monoxide
NO_2 = nitrogen dioxide
SO_2 = sulfur dioxide
Pb = lead

4.1.1.2 State

The CCAA, signed into law in 1988, requires all areas of the state to achieve and maintain CAAQS by the earliest practicable date. CAAQS are at least as stringent as, and often more stringent than, NAAQS. Table 4-1 lists currently applicable CAAQS and NAAQS. Attainment status for each pollutant with regard to CAAQS is presented in Table 4-2.

The California Air Resources Board (CARB) has jurisdiction over a number of air pollutant emission sources in the state. Specifically, CARB can develop emission standards for on-road motor vehicles, stationary sources and some off-road mobile sources. CARB has delegated authority to regional air pollution control and air quality management districts to develop stationary source emission standards, issue air quality permits, and enforce permit conditions.

4.1.1.3 Regional

Under conformity regulations of the CAA, SCAG is the metropolitan planning organization (MPO) responsible for coordinating the development of transportation infrastructure in the Southern California region. This ensures that air quality objectives are included with transportation goals in regional transportation plans. (40 CFR 93) SCAG predicts population and business growth in the region.

SCAG estimates future demand for traffic (VMT) seaports, airports, and heavy and light rail infrastructure. From the demand estimates, SCAG develops a Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) to guide transportation growth and infrastructure development. The RTIP and RTP consider air quality requirements in the region. SCAG updates its forecasts approximately every three years. SCAQMD uses VMT, as well as activities predicted for seaports, airports, and rail, to develop updates to Air Quality Management Plans (AQMPs) discussed below.

4.1.1.3 Local

The SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County, the non-desert portions of Los Angeles, Riverside and San Bernardino counties, and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The SoCAB is a sub-region within SCAQMD's jurisdiction covering an area of 6,745 square miles. While air quality in this area has improved, activity in the basin requires more regulation to meet ambient air quality standards.

The SCAQMD has adopted a series of AQMPs to meet CAAQS and NAAQS. These plans mandate control technology for existing sources, control programs for area sources and indirect sources, a permitting system designed to ensure no net increase in emissions from any new or modified permitted sources of emissions, transportation control measures,

sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for VOC, NOx, CO, and PM_{10}, and demonstration of compliance with CARB's established reporting periods for compliance with air quality goals.

The current, EPA-approved SIPs for each federal nonattainment or maintenance pollutant in the SoCAB are summarized below:

- O_3 – 1997 Air Quality Management Plan and 1999 amendments, approved by EPA on April 10, 2000 (65 FR 18903)
- CO – 2005 maintenance plan and request for re-designation to attainment status, approved by EPA on May 11, 2007 (72 FR 26718)
- PM_{10} – 1997 Air Quality Management Plan and supplemental information, approved by EPA on April 18, 2003 (68 FR 19315)
- PM2.5 – No EPA-approved SIP
- NO_2 – SIP approved by EPA on July 24, 1998 (63 FR 39747), based on the 1997 AQMP. In this SIP approval, EPA also re-designated the SoCAB from nonattainment to attainment/maintenance for NO_2.

On June 1, 2007, SCAQMD adopted a comprehensive update, the 2007 AQMP for the SoCAB. The 2007 AQMP outlines air pollution control measures needed to meet federal O_3 and $PM_{2.5}$ standards. The 2007 AQMP was approved by CARB and submitted to EPA for its final approval on September 27, 2007.

4.1.2 Existing Conditions

4.1.2.1 Climate and Atmospheric Conditions

The climate of the SoCAB is determined primarily by terrain and geography. Regional meteorology is dominated by a persistent high pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in strength and position of this pressure cell cause changes in area weather patterns. Local climactic conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity. The SoCAB's normally mild climate is occasionally interrupted by periods of hot weather, winter storms, and hot easterly Santa Ana winds.

The SoCAB area has high levels of air pollution, particularly from June through September. Factors leading to high levels of pollution include a large amount of pollutant emissions, light

winds, and shallow vertical atmospheric mixing. These factors reduce pollutant dispersion, exacerbating elevated air pollution levels. Pollutant concentrations in the SoCAB vary by location, season and time of day. Concentrations of O_3, for example, tend to be lower along the coast and in far inland areas of the basin and adjacent desert and higher in and near inland valleys.

Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. Previously, the EPA designated SoCAB as a non-attainment area for all NAAQS except SO_2. The EPA now designates SoCAB as in attainment for NO_2, lead, SO_2, and CO. PM_{10}, $PM_{2.5}$, and O_3 levels, while reduced substantially from their peak, remain above relevant NAAQS and CAAQS.

4.1.2.2 Existing Air Quality Conditions

Air quality conditions for a project area are typically the result of meteorological conditions and existing emission sources in an area.

Monitoring Data – Criteria Pollutants

Air quality data from a monitoring station near the area of analysis is summarized in Table 4-3. This memo used monitoring data from the central Los Angeles station (North Main Street, CARB Number 70087). This station best represents air quality conditions at the project area; or, in the case of ozone, best represents air quality conditions for the region as a whole.

1-hour O_3 CAAQS were exceeded up to 8 times a year between 2006 and 2008 (see Table 4-3). Recorded 8-hour O_3 concentrations exceeded NAAQS up to 3 times a year between 2006 and 2008. Substantial year-to-year variations in monitored O_3 levels are common. No clear trend in O_3 levels is demonstrated by monitoring results from 2006 through 2008.

The 24-hour and annual PM_{10} and annual $PM_{2.5}$ CAAQS were exceeded during the 2006 to 2008 monitoring period. However, the PM_{10} NAAQS was not exceeded (see Table 4-3).

Table 4-3. Summary of Pollutant Monitoring Data Near Study Area

Criteria Air Pollutant	Annual Monitoring Data		
	2006	2007	2008
Carbon Monoxide (CO)			
Highest 1-hour concentration (ppmv)	3.5	3.2	2.9

Table 4-3. Summary of Pollutant Monitoring Data Near Study Area			
Criteria Air Pollutant	**Annual Monitoring Data**		
	2006	**2007**	**2008**
Highest 8-hour concentration (ppmv)	2.68	2.15	1.96
Days above CAAQS [1]	0	0	0
Days above NAAQS [2]	0	0	0
Ozone (O_3), 1-hour			
1st High (ppmv)	0.108	0.115	0.109
2nd High (ppmv)	0.108	0.111	0.103
Days above CAAQS [3]	8	3	3
Ozone (O_3), 8-hour			
1st High (ppmv)[4]	0.079/0.079	0.102/0.103	0.09/0.09
2nd High (ppmv)[4]	0.077/0.077	0.093/0.094	0.081/0.081
Days above CAAQS [5]	7	6	6
Days above NAAQS [6]	3	3	3
Sulfur Dioxide (SO_2)			
Maximum 24-hour concentration (ppmv)	0.006	0.005	0.003
Annual Average	0.002	0.001	0.001
Inhalable Particulate Matter (PM_{10})			
Highest 24-hour concentration ($\mu g/m^3$)[4]	59/58	78/77	66/64
Annual mean ($\mu g/m^3$)[4]	30.1/30.1	33.3/33	32.2/*
Estimated number of days above CAAQS [7,8]	18.1	31	*

Table 4-3. Summary of Pollutant Monitoring Data Near Study Area			
Criteria Air Pollutant	**Annual Monitoring Data**		
	2006	**2007**	**2008**
Estimated number or days above NAAQS [8,9]	0	0	0
Fine Particulate Matter ($PM_{2.5}$)			
Highest 24-hour concentration (µg/m^3)[4]	56.2/56.2	64.1/64.1	43.7/43.7
Annual mean (µg/m^3)[4]	15.6/16	16.8/*	*/*
Estimated number of days above NAAQS [8,10]	11.7	*	*

Source: CARB 2009
Notes:
[1] Days above standard = days above 8-hour CAAQS of 9.0 ppmv
[2] Days above standard = days above 8-hour NAAQS of 9 ppmv
[3] Days above standard = days above 1-hour CAAQS of 0.09 ppmv
[4] Different methods of analyzing monitoring pollutants are used by EPA and CARB; therefore, both data are provided, respectively, separated by "/"
[5] Days above standard = days above 8-hour CAAQS of 0.070 ppmv
[6] Days above standard = days above 8-hour NAAQS of 0.075 ppmv
[7] Days above standard = days above 24-hour CAAQS of 50 µg/m3
[8] Most PM measurements are taken every 6 days; therefore, the number of days over the 24-hour standard in any year is estimated mathematically.
[9] Days above standard = days above 24-hour NAAQS of 150 µg/m3
[10] Days above standard = days above 24-hour NAAQS of 35 µg/m3
Key:
** = There was insufficient data available throughout the year to determine the value.*
ppmv = parts per million by volume
CAAQS = California Ambient Air Quality Standard
NAAQS = National Ambient Air Quality Standard
µg/m3 = micrograms per cubic meter

Intersection Analysis – CO Hot Spots

Carbon monoxide pollution can have localized impacts that require additional analysis if a roadway's level of service (LOS) could change or if sensitive populations could be adversely affected. In this case, a CO hot spots analysis, including a microscale analysis for CO concentrations, must be prepared. The SCAQMD requires that the following steps be used to determine if a localized CO impact exists (SCAQMD 1993):

- Determine "No Project" ambient concentration of CO emissions
- Estimate CO emissions from the project by modeling
- Add the "No Project" ambient concentration level of CO emissions to those generated by the project
- Compare the total project impact to the state 1-hour and 8-hour CO standards
- If modeling indicates a CO hot spot could occur, determine if any sensitive receptors are located in the area
- Identify the level of CO emissions at sensitive receptors
- Compare the levels of CO emissions at sensitive receptors to the state 1-hour and 8-hour CO standards

Existing ambient CO concentrations for 1-hour and 8-hour standards are 3.5 ppm and 2.68 ppm respectively. These values represent the maximum concentration observed during the past three years of sampling data. The analysis estimated future background concentrations by multiplying existing ambient background conditions by the ratio of future and current traffic and the ratio of future to current emission factors. This approach follows the requirements of 40 CFR 93.123(c)(2). This study predicts background 1-hour and 8-hour CO concentrations in 2035 of 1.2 ppm and 0.9 ppm respectively.

This study conducted a CO hot spots analysis for five intersections. This study used the screening procedure included in the CO Protocol to identify the worst intersections. The CAL3QHC model was used to estimate existing CO concentrations at each intersection (see Table 4-4). Under existing conditions, none of the study intersections exceed the 1-hour or 8-hour CO CAAQS of 9 and 20 ppm respectively. (The 8-hour CO NAAQS is 35 ppm.)

Sensitive Receptors

In completing the health risk assessment required under CEQA, this study identified sensitive receptors within the project area. Sensitive receptors are typically locations where the elderly, children, or other groups with a greater susceptibility to adverse health effects could be located. These locations include schools, hospitals, convalescent homes, parks, and daycares. Sensitive receptors identified in the project area are listed in Table 4-5.

Table 4-4. Maximum Carbon Monoxide Concentrations at Roadway Intersections – Baseline (2009)					
ID	Intersection	Traffic CO Conc. (ppm)		Max. Conc. (ppm)	
		1-Hour	8-Hour	1-Hour[1]	8-Hour[2]
5	1st St & Main St	0.70	0.49	4.20	3.17
12	2nd St & Hill St	0.40	0.28	3.90	2.96
57	Temple St and Main St	0.70	0.49	4.20	3.17
58	Temple St and Los Angeles St	0.70	0.49	4.20	3.17
60	Temple St and Alameda St	0.70	0.49	4.20	3.17

[1] *Background (1-Hour): 3.5 ppm*
[2] *Background (8-Hour): 2.68 ppm*

Table 4-5. Sensitive Receptors in Study Area			
Type	Description	Approximate Location (UTM, meters)	
		Easting	Northing
Park	Pershing Square	384365	3768245
Park	Grand Hope Park	383651	3767793
Park	Fort Moore Pioneer Memorial	385419	3769303
School	Gratts Elementary School	383419	3769295
School	Kedren Maryland Preschool	383586	3769119
School	Riley High School	383410	3768925
School	CDS Elementary School	383960	3769106

Table 4-5. Sensitive Receptors in Study Area			
Type	Description	Approximate Location (UTM, meters)	
		Easting	Northing
School	The Colburn School	384702	3768841
School	Animo High Schools	384207	3768855
School	Roybal High School	384213	3769624
School	Downtown Business Magnet School/High School	384547	3769832
School	LA Unified Alternative Education High School	385144	3769504
School	Pacific Charter School Development	384923	3768679
School	Contreras High School	383566	3769304
School	LA Schools	386484	3769050
Hospital	Good Samaritan Hospital	383226	3768774
Hospital	Community Hospital of Huntington Park	384432	3768639
Hospital	VA Greater LA Healthcare Systems LA Ambulatory Care Center	385679	3768680

UTM Zone 11

Existing Operational Emissions

In determining impact significance, CEQA analysis requires comparing future project alternatives to existing conditions. This analysis compiled emissions inventories for the baseline year (2009). These figures were used to calculate the difference between future and existing conditions.

Operational emissions in this project analysis include emissions from traffic VMT and operation of LRT vehicles. Since LRT vehicles would be operated by electricity, there would be no direct emissions of criteria pollutants. Thus, LRT vehicle-related emissions are not further considered for air quality impacts (see chapter 6.4.11 that addresses potential climate-change impacts and indirect emissions of greenhouse gases from proposed project operations).

Emission modeling in this memo considers only passenger vehicles (light-duty automobiles and trucks in the model). This analysis used the EMFAC2007 model to generate emission factors for these vehicle types. Table 4-6 provides a summary of highway traffic emissions in the study area.

Table 4-6. Existing Conditions 2009 Highway Traffic Emissions

Highway Type	Emissions					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Emission Factor (g/mi)	0.084	2.760	0.266	0.004	0.404	0.075
Daily Emissions (lbs/day)	56,200	1,847,200	178,000	2,700	270,400	49,900
Annual Emissions (tpy)	10,300	337,100	32,500	500	49,300	9,100

Key:
g/mi = grams per mile
lbs/day – pounds per day
tpy = tons per year

Operation of vehicles associated with this project would result in emissions of TACs. Emissions of TACs are summarized in Table 4-7 for informational purposes only. VMT numbers provided by the project traffic consultant consider only light-duty automobiles and trucks. Since the majority of these vehicles are gasoline-fueled, the TAC emission calculations assumed that all emissions would come from gasoline-fueled vehicles.

This analysis used speciation profiles obtained from CARB. The analysis includes emissions from exhaust (VOC profile no. 441; PM profile no. 400), tire wear (PM profile no. 472), brake wear (PM profile no. 473), and paved road dust (PM profile no. 471).

Table 4-7. Existing Conditions 2009 Toxic Air Contaminant Operational Emissions			
TAC	CAS #	Emissions	
		(lbs/hr)	(lbs/yr)
Volatile Organic Compounds			
1,3-Butadiene	106-99-0	0.050	435
Acetaldehyde	75-07-0	0.022	190
Acrolein	107-02-8	0.012	107
Benzene	71-43-2	0.24	2,083
Ethyl benzene	100-41-4	0.10	847
Formaldehyde	50-00-0	0.15	1,342
Methanol	67-56-1	0.037	321
Methyl ethyl ketone	78-93-3	0.0017	15
Methyl t-butyl ether	1634-04-4	0.18	1,534
m-Xylene	108-38-3	0.33	2,876
Naphthalene	91-20-3	0.0043	38
n-Hexane	110-54-3	0.14	1,251
o-Xylene	95-47-6	0.11	999
Propylene	115-07-1	0.28	2,471
Styrene	100-42-5	0.011	100
Toluene	108-88-3	0.53	4,646

Table 4-7. Existing Conditions 2009 Toxic Air Contaminant Operational Emissions			
TAC	CAS #	Emissions	
		(lbs/hr)	(lbs/yr)
Inorganic Compounds			
Arsenic	7440-38-2	0.00023	2.0
Cadmium	7440-43-9	0.000052	0.45
Chlorine	7782-50-5	0.084	737
Copper	7440-50-8	0.010	89
Lead	7439-92-1	0.0022	20
Manganese	7439-96-5	0.015	135
Mercury	7439-97-6	0.00016	1.4
Nickel	7440-02-0	0.0011	10
Selenium	7782-49-2	0.000054	0.47

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.0 IMPACTS

This section describes the results of the impact analysis conducted for the proposed Regional Connector Transit Corridor project.

5.1 Transportation Conformity

A transportation conformity determination is required for approval, funding, or implementation of FWHA/FTA projects. Transportation conformity provisions apply to emissions of O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ in nonattainment and maintenance areas. Transportation conformity determinations ensure that projects receiving federal funding or approval are consistent with air quality goals. A conformity determination demonstrates that the total emissions for a project are within emissions budgets established in a SIP.

The current, regional RTIP already includes the Regional Connector Transit Corridor project. As a result, this analysis is not required to demonstrate compliance with emissions budgets. It is necessary, however, to complete an analysis for localized impacts of CO, PM_{10}, and $PM_{2.5}$. As listed in 40 CFR 93 Subpart A, project-level conformity occurs when the following three conditions are met:

- The FHWA/FTA project must not cause or contribute to any new localized CO, PM_{10}, and/or $PM_{2.5}$ violations (§93.116).
- The project must not increase the frequency or severity of any existing CO, PM_{10}, and/or $PM_{2.5}$ violations in nonattainment or maintenance areas (§93.116).
- The project must comply with any PM_{10} and $PM_{2.5}$ control measures in the applicable implementation plan (§93.117).

The EPA published standards in *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (2006). A PM_{10} or $PM_{2.5}$ hot spots analysis must be completed only for "projects of air quality concern," as defined in 40 CFR 93.123(b)(1). A project of air quality concern is defined as a project that could result in a significant increase in the number of diesel vehicles.

The proposed project would decrease the overall number of vehicles in the region, and it would not cause an increase in diesel vehicles. As a result, the proposed project would neither cause new PM_{10} or $PM_{2.5}$ hot spots nor increase the frequency or severity of existing PM_{10} or $PM_{2.5}$ violations. No localized adverse impacts from CO are expected under this project. The proposed project would implement the various PM_{10} and $PM_{2.5}$ control measures contained in

the RTP and RTIP and meet the requirements of §93.117. No further action is required for transportation conformity.

5.2 Mobile Source Air Toxics

The FHWA published an *Interim Guidance Update on Mobile Source Air Toxic Analyses in NEPA Documents* on September 30, 2009. This guidance document establishes the following tiered approach for analyzing mobile source air toxics (MSAT) in NEPA:

- No analysis for projects with no potential for meaningful MSAT effects
- Qualitative analysis for projects with low potential MSAT effects
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

The proposed project would have no MSAT effects because VMT for each of the build alternatives would decrease compared to the No Build Alternative. The proposed project falls within the first tier of MSAT analysis, so no further action is required.

5.3 No Build Alternative

The No Build Alternative assumes none of the project alternatives would be built. This section provides a summary of the emissions associated with the No Build Alternative.

5.3.1 Operational Emissions

The No Build Alternative would not create new emissions or have negative operational air quality impacts. However, the No Build Alternative would not reduce regional VMT-related emissions like other alternatives.

NEPA requires project emissions to be compared to the future No Build Alternative. This analysis calculated operational emissions from predicted VMT under the No Build Alternative. Emissions of CO, NOx, and SO_2 represent emissions from vehicle exhaust only. Emissions of PM_{10} and $PM_{2.5}$ include exhaust, tire wear, brake wear, and paved road dust. VOC emissions include exhaust and evaporative losses. Table 5-1 summarizes operational emissions associated with the No Build Alternative.

Table 5-1. No Build Alternative 2035 Highway Traffic Emissions						
Highway Type	Emissions					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Emission Factor (g/mi)	0.019	0.867	0.057	0.005	0.424	0.094
Daily Emissions (lb/day)	21,100	962,500	63,300	5,600	470,700	103,800
Annual Emissions (tpy)	3,800	175,700	11,500	1,000	85,900	18,900

5.3.2 Construction Emissions

The No Build Alternative would not result in any construction emissions.

5.3.3 Cumulative Emissions

The No Build Alternative would involve neither construction nor new transit operations; therefore, there would be no cumulative impacts under the No Build Alternative.

5.4 Transportation System Management (TSM) Alternative

5.4.1 Operational Regional Emissions

The TSM Alternative focuses on enhancements to and restructuring of existing transit service in the project area. In addition to provisions in Metro's LRTP, two new shuttle bus routes would link the 7th Street/Metro Center Station to Union Station. The TSM Alternative would not involve construction of tracks or stations outside of projects already approved in the LRTP. The creation of peak hour bus-only lanes would not require new construction. New bus lanes would be created by restricting parking on streets that do not already have dedicated bus lanes.

5.4.1.1 Criteria Pollutant Emissions

Bus Operations

Buses added under the TSM Alternative would be fueled by CNG. Emission factors for CNG buses were estimated from technical studies provided by CARB. Table 5-2 shows emissions from CNG buses.

Table 5-2. TSM Alternative Bus Operations Emissions

Line	Service Line	Emissions (lbs/day)				
		VOC	CO	NOx	SO_2	PM
1	Upper Grand Southbound via Los Angeles	<1	7	14	<1	2
2	Upper Grand Northbound via Los Angeles	<1	7	16	<1	2
3	Upper Grand Southbound via Alameda	<1	8	16	<1	2
4	Upper Grand Northbound via Alameda	<1	8	18	<1	3
5	3rd Street Southbound	<1	17	35	<1	5
6	2nd Street Northbound	<1	18	37	<1	6
	Total	**1**	**65**	**136**	**<1**	**21**

Highway Traffic

The TSM Alternative would indirectly affect emissions from highway traffic. Table 5-3 shows operational emissions from VMT. Operational emissions were calculated using the same methodology as in the No Build Alternative analysis.

Table 5-3. TSM Alternative 2035 Highway Traffic Emissions						
Highway Type	Emissions					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Emission Factors (g/mi)	0.019	0.867	0.057	0.005	0.424	0.094
Daily Emissions (lbs/day)	21,100	962,000	63,200	5,500	470,500	103,800
Annual Emissions (tpy)	3,800	175,600	11,500	1,000	85,900	18,900

Total Emissions for TSM Alternative

Emissions from operation of buses associated with the TSM Alternative are considered together with highway emissions. The resulting emissions were compared to thresholds of significance for CEQA and NEPA. NOx emissions would exceed NEPA significance criteria. Emissions of other criteria pollutants under this alternative would not exceed CEQA or NEPA thresholds; thus, they would not be significant. Table 5-4 shows total regional operational emissions under this alternative.

Table 5-4. Total Regional Operational Impacts for TSM Alternative						
Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
CEQA Analysis						
Bus Operations	1	65	136	<1	21	21
Highway	21,100	962,000	63,200	5,500	470,500	103,800
Total	**21,100**	**962,100**	**63,300**	**5,500**	**470,500**	**103,800**
Existing Conditions	56,200	1,847,200	178,000	2,700	270,400	49,900

Table 5-4. Total Regional Operational Impacts for TSM Alternative						
Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Increment above Existing Conditions	(35,100)	(885,100)	(114,700)	2,800	200,102	53,900
No Build Alt (2035).	21,100	962,500	63,300	5,600	470,700	103,800
Increment above No Build Alt.	0	(400)	0	(100)	(200)	0
CEQA Threshold	55	150	55	550	150	55
Significant?	No	No	No	No	No	No
NEPA Analysis						
Bus Operations	<1	11	23	<1	3	3
Highway	3,800	175,600	11,500	1,000	85,900	18,900
Total	**3,800**	**175,600**	**11,500**	**1,000**	**85,900**	**18,900**
No Build Alternative	3,800	175,700	11,500	1,000	85,900	18,900
Increment	(2)	(85)	**16**	(1)	(43)	(7)
NEPA Threshold	10	100	10	100	70	100
Significant	No	No	No	No	No	No

*Note: Negative numbers (beneficial impacts) are shown in parentheses. Emissions greater than threshold of significance are shown in **bold**.*

5.4.1.2 Toxic Air Contaminant Emissions

The TSM Alternative would result in emissions of TACs from bus operations. This alternative would indirectly result in added TAC emissions from highway vehicles. Emissions under this alternative (emissions from buses and highway traffic) were compared to existing conditions

(2009) for informational purposes only. Since the EMFAC model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs.

Table 5-5 shows a summary of project-related emissions. The emission increment (TSM Alternative compared to Existing Conditions) is provided for informational purposes, but is not used for significance determinations as noted in Section 3.1.2.1.

Table 5-5. TSM Alternative 2035 Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Volatile Organic Compounds					
1,3-Butadiene	106-99-0	0.011	96	(0.039)	(339)
Acetaldehyde	75-07-0	0.0048	42	(0.017)	(148)
Acrolein	107-02-8	0.0027	23	(0.0095)	(83)
Benzene	71-43-2	0.052	459	(0.19)	(1,624)
Ethyl benzene	100-41-4	0.021	187	(0.075)	(660)
Formaldehyde	50-00-0	0.034	296	(0.12)	(1,047)
Methanol	67-56-1	0.0081	71	(0.029)	(250)
Methyl ethyl ketone	78-93-3	0.00038	3.3	(0.0013)	(12)
Methyl t-butyl ether	1634-04-4	0.039	338	(0.14)	(1,196)
m-Xylene	108-38-3	0.072	633	(0.26)	(2,242)
Naphthalene	91-20-3	0.0010	8.4	(0.0034)	(30)
n-Hexane	110-54-3	0.031	276	(0.11)	(976)
o-Xylene	95-47-6	0.025	220	(0.089)	(779)

Table 5-5. TSM Alternative 2035 Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Propylene	115-07-1	0.062	544	(0.22)	(1,927)
Styrene	100-42-5	0.0025	22	(0.0089)	(78)
Toluene	108-88-3	0.12	1,023	(0.41)	(3,622)
Inorganic Compounds					
Arsenic	7440-38-2	0.00026	2.3	0.000035	0.30
Cadmium	7440-43-9	0.000060	0.52	0.0000078	0.068
Chlorine	7782-50-5	0.15	1,283	0.062	545
Copper	7440-50-8	0.012	106	0.0019	17
Lead	7439-92-1	0.0026	22	0.00034	2.9
Manganese	7439-96-5	0.018	158	0.0027	23
Mercury	7439-97-6	0.00018	1.6	0.000023	0.20
Nickel	7440-02-0	0.0017	15	0.00052	4.6
Selenium	7782-49-2	0.000062	0.54	0.0000081	0.071

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.4.2 CO Hot Spots

This analysis completed a CO hot spots evaluation that calculated localized impacts of CO concentrations at several intersections. A screening level analysis was completed using Appendix A of the CO Protocol to determine five intersections that would be most adversely affected under this alternative. The CAL3QHC model was used to evaluate whether CO

concentrations at these intersections would exceed CAAQS or NAAQS for CO concentrations. Table 5-6 shows the results of the analysis.

Table 5-6. Maximum Carbon Monoxide Concentrations at Roadway Intersections Under TSM Alternative (2035)

ID	Intersection	Traffic CO Conc. (ppm)		Max. Conc. (ppm)		Exceeds Threshold?	
		1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
5	1st Street and Main Street	0.20	0.14	1.40	1.04	No	No
12	2nd Street and Hill Street	0.10	0.07	1.30	0.97	No	No
57	Temple Street and Main Street	0.20	0.14	1.40	1.04	No	No
58	Temple Street and Los Angeles Street	0.10	0.07	1.30	0.97	No	No
60	Temple Street and Alameda Street	0.20	0.14	1.40	1.04	No	No

Notes:
1-Hour CAAQS = 9.0 ppm; 1-Hour NAAQS = 9 ppm
8-Hour CAAQS = 20 ppm; 8-Hour NAAQS = 35 ppm

5.4.3 Construction Emissions

The TSM Alternative would not involve any construction. As a result, there would be no emissions associated with construction.

5.4.4 Cumulative Emissions

Operational emissions associated with the TSM Alternative would not exceed NEPA or CEQA significance thresholds for all criteria pollutants. It is difficult to specify what other projects will be undertaken in 2035. However, this alternative would result in substantial reductions in peak daily emissions of CO, SO_2, and PM_{10}. Impacts from emissions of these pollutants would not be cumulatively significant. However, the federally-approved RTP and RTIP include an electric light rail project like the Regional Connector project. Not developing such a project would result in higher VMT and emissions than listed in the RTP Programmatic Environmental Impact Report. Thus, cumulative impacts could be significant under NEPA.

5.5 At-Grade Emphasis LRT Alternative

Under the At-Grade Emphasis LRT Alternative, about half of the operation of the proposed light rail extension would run at street level. This section summarizes emissions associated with this alternative.

5.5.1 Operational Emissions

Operational emissions associated with the At-Grade Emphasis LRT Alternative include emissions from highway traffic that would exist after this project alternative is operational. The proposed project would provide an alternative to automobile transportation in the region; therefore, it was necessary to evaluate highway traffic to assess how the proposed project would increase or decrease operational emissions from passenger vehicles.

5.5.1.1 Criteria Pollutant Emissions

Table 5-7 shows operational emissions from VMT under this alternative. Emissions of all pollutants would not be significant under a NEPA or CEQA analysis.

Table 5-7. At-Grade Emphasis LRT Alternative 2035 Operational Emissions

Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
CEQA Analysis						
Project Emissions	21,000	962,000	63,200	5,500	470,400	103,800
Existing Conditions	56,200	1,847,200	178,000	2,700	270,400	49,900
Increment above Existing Conditions	(35,100)	(885,200)	(114,800)	2,800	200,000	53,900
No Build Alt (2035).	21,100	962,500	63,300	5,600	470,700	103,800
Increment above No Build Alt.	0	(500)	(100)	(100)	(300)	0
CEQA Threshold	55	150	55	550	150	55
Significant?	No	No	No	No	No	No

Table 5-7. At-Grade Emphasis LRT Alternative 2035 Operational Emissions						
Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
NEPA Analysis						
Project Emissions	3,800	175,600	11,500	1,000	85,900	18,900
No Build Alternative	3,800	175,700	11,500	1,000	85,900	18,900
Increment	(2)	(105)	(7)	(1)	(51)	(11)
NEPA Threshold	10	100	10	100	70	100
Significant	No	No	No	No	No	No

Note: Negative numbers (beneficial impacts) are shown in parentheses.

5.5.1.2 Toxic Air Contaminant Emissions

The At-Grade Emphasis LRT Alternative would indirectly result in increased emissions of TACs from highway traffic. Emissions under this alternative were compared to existing conditions (2009) for informational purposes only. Since the EMFAC model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs.

Table 5-8 shows a summary of project-related emissions. The emission increment (At-Grade Emphasis LRT Alternative compared to Existing Conditions) is provided for informational purposes, but is not used for significance determinations as noted in Section 3.1.2.1.

Table 5-8. At-Grade Emphasis LRT Alternative 2035 Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Volatile Organic Compounds					
1,3-Butadiene	106-99-0	0.011	95	(0.039)	(339)
Acetaldehyde	75-07-0	0.0048	42	(0.017)	(149)
Acrolein	107-02-8	0.0027	23	(0.010)	(83)
Benzene	71-43-2	0.052	457	(0.19)	(1,625)
Ethyl benzene	100-41-4	0.021	186	(0.075)	(661)
Formaldehyde	50-00-0	0.034	295	(0.12)	(1,047)
Methanol	67-56-1	0.0080	70	(0.029)	(250)
Methyl ethyl ketone	78-93-3	0.00038	3.3	(0.0013)	(12)
Methyl t-butyl ether	1634-04-4	0.038	337	(0.14)	(1,197)
m-Xylene	108-38-3	0.072	632	(0.26)	(2,244)
Naphthalene	91-20-3	0.0010	8.3	(0.0034)	(30)
n-Hexane	110-54-3	0.031	275	(0.11)	(977)
o-Xylene	95-47-6	0.025	220	(0.089)	(780)
Propylene	115-07-1	0.062	543	(0.22)	(1,929)
Styrene	100-42-5	0.0025	22	(0.0089)	(78)
Toluene	108-88-3	0.12	1,020	(0.41)	(3,625)
Inorganic Compounds					

Table 5-8. At-Grade Emphasis LRT Alternative 2035 Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Arsenic	7440-38-2	0.00026	2.3	0.000034	0.30
Cadmium	7440-43-9	0.000059	0.52	0.0000076	0.067
Chlorine	7782-50-5	0.15	1,279	0.062	542
Copper	7440-50-8	0.012	106	0.0019	16
Lead	7439-92-1	0.0026	22	0.00033	2.9
Manganese	7439-96-5	0.018	158	0.0026	23
Mercury	7439-97-6	0.00018	1.6	0.000023	0.20
Nickel	7440-02-0	0.0017	14	0.00052	4.6
Selenium	7782-49-2	0.000062	0.54	0.0000080	0.070

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.5.2 CO Hot Spots

This analysis completed a CO hot spots evaluation that calculated localized impacts of CO concentrations at several intersections. A screening level analysis was completed using Appendix A of the CO Protocol to determine five intersections that would be most adversely affected under this alternative. The CAL3QHC model was used to evaluate whether CO concentrations at these intersections would exceed CAAQS or NAAQS for CO concentrations. Table 5-9 shows the results of the analysis.

5.5.3 Construction Emissions

The At-Grade Emphasis LRT Alternative would result in temporary emissions associated with construction. Construction would occur between and including the years 2014 and 2017.

5.5.3.1 Criteria Pollutants

Regional Construction Emissions

SCAQMD requires an analysis of construction-related emissions. This analysis estimates emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul truck emissions. Table 5-10 shows construction emissions by peak day of operation.

Table 5-9. Maximum Carbon Monoxide Concentrations at Roadway Intersections Under At-Grade Emphasis LRT Alternative (2035)

ID	Intersection	Traffic CO Conc. (ppm)		Max. Conc. (ppm)		Exceeds Threshold?	
		1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
5	1st Street and Main Street	0.20	0.14	1.40	1.04	No	No
12	2nd Street and Hill Street	0.10	0.07	1.30	0.97	No	No
57	Temple Street and Main Street	0.30	0.21	1.50	1.11	No	No
58	Temple Street and Los Angeles Street	0.10	0.07	1.30	0.97	No	No
60	Temple Street and Alameda Street	0.20	0.14	1.40	1.04	No	No

Notes:
1-Hour CAAQS = 9.0 ppm; 1-Hour NAAQS = 9 ppm
8-Hour CAAQS = 20 ppm; 8-Hour NAAQS = 35 ppm

Emissions of VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ would be significant, and mitigation measures would need to be implemented.

Localized Significance Thresholds

This analysis evaluated construction emissions on a regional level and compared them to SCAQMD's LSTs. The analysis used a series of look-up tables for NOx, CO, PM_{10}, and $PM_{2.5}$. These tables show maximum allowable emission levels, which vary based on project location, size (acreage), and distance to the nearest receptor.

Most project construction sites would be approximately one acre in size and located within 25 meters of the nearest receptors. Although receptors in the project area may be closer than 25

meters to construction, it is the minimum distance allowed in the LST. Table 5-11 shows onsite emissions for each construction activity and location.

Table 5-10. At Grade Emphasis LRT Alternative (2014-2017) Maximum Daily Construction Emissions

Location	Daily Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Onsite	281	2,088	1,088	3	131	120
Offsite	8	87	62	<1	21	6
Total	**289**	**2,175**	**1,150**	4	**151**	**126**
Threshold	75	100	550	150	150	55
Significant	Yes	Yes	Yes	No	No	Yes

*Note: Emissions greater than threshold of significance are shown in **bold**.*

Table 5-11. At-Grade Emphasis LRT Alternative Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	**163**	65	**9**	**8**
2	Site Preparation	52	32	3	3
3	Cut & Cover Along Flower Street	**305**	150	**18**	**17**
4	Cut & Cover Flower/6th Street Station	**240**	127	**16**	**14**
5	U-Portal at Flower	**240**	127	**16**	**14**

Table 5-11. At-Grade Emphasis LRT Alternative Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
6	Portal NE of Flower & 3rd	**225**	114	**14**	**13**
7	Cut & Cover 2nd/Hope Street Station	**240**	127	**16**	**14**
8	Portal into 2nd Street Tunnel	**274**	145	**17**	**16**
9	Surface Trackwork	**217**	108	**13**	**12**
10	Improvements at Alameda/Temple Streets	**274**	145	**17**	**16**
11	At-Grade Stations	**106**	51	**6**	**6**
12	Operation Systems Installation	**168**	96	**11**	**10**
Allowable Emissions		74	680	5	3

*Note: Emissions greater than threshold of significance are shown in **bold**.*

LST evaluation indicates that NOx, PM_{10}, and $PM_{2.5}$ emissions would be greater than maximum allowable levels during several construction phases. Impacts of these pollutants would have to be mitigated.

5.5.3.2 Toxic Air Contaminants

Construction of the At-Grade Emphasis LRT Alternative would indirectly result in increased emissions of TACs. Projected emissions under this alternative were compared to existing conditions (2009) for CEQA analysis. The analysis includes a Tier 1 HRA, which compares emission levels to published screening limits.

The analysis considered only acute risks because construction impacts are temporary. Speciation profiles from CARB were used to estimate emissions of TACs from construction. Since the OFFROAD model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs. The analysis used profiles for diesel vehicle exhaust (profile no.

425) and construction dust (profile no. 420). Although DPM is a toxic air contaminant, it does not cause acute health effects and was not included in the analysis.

Table 5-12 shows a summary of project-related emissions and Tier 1 HRA results. Diesel exhaust does not have an organic profile in CARB's speciation profiles; therefore, the analysis was restricted to inorganic emissions. Impacts from construction emissions under the At-Grade Emphasis LRT Alternative would not be significant under CEQA.

Table 5-12. At-Grade Emphasis LRT Alternative (2014-2017)
Construction Health Risk Assessment

TAC	CAS #	Emissions (lb/hr)	PSL (lb/hr)	PSI
Arsenic	7440-38-2	0.000028	0.00010	0.28
Chlorine	7782-50-5	0.0020	0.11	0.019
Copper	7440-50-8	0.00014	0.050	0.0028
Mercury	7439-97-6	0.00016	0.00090	0.18
Nickel	7440-02-0	0.00011	0.0030	0.035
ASI				0.52
Threshold				1

Key:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant

5.5.4 Cumulative Emissions

Operational emissions associated with the At-Grade Emphasis LRT Alternative would not exceed NEPA or CEQA significance thresholds for all criteria pollutants. It is difficult to specify what other projects will be undertaken in 2035. However, this alternative would result in substantial reductions in peak daily emissions of CO, NOx, SO_2, and PM_{10}. Impacts from emissions of these pollutants would not be cumulatively significant.

5.6 Underground Emphasis LRT Alternative

With the Underground Emphasis LRT Alternative, operation of the proposed light rail extension would run largely underground. This section summarizes emissions associated with this alternative.

5.6.1 Operational Emissions

Operational emissions associated with the Underground Emphasis LRT Alternative include emissions from highway traffic that would exist after this project alternative is operational. The proposed project would provide an alternative to automobile transportation in the region; therefore, it was necessary to evaluate highway traffic to assess how the proposed project would increase or decrease operational emissions from passenger vehicles.

5.6.1.1 Criteria Pollutant Emissions

Table 5-13 shows operational emissions from VMT under this alternative. Emissions of all pollutants would not be significant under a NEPA or CEQA analysis.

Table 5-13. Underground Emphasis LRT Alternative 2035 Operational Emissions

Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
CEQA Analysis						
Project Emissions	21,100	961,900	63,200	5,500	470,400	103,800
Existing Conditions	56,200	1,847,200	178,000	2,700	270,400	49,900
Increment above Existing Conditions	(35,100)	(885,300)	(114,800)	2,800	200,000	53,900
No Build Alt (2035).	21,100	962,500	63,300	5,600	470,700	103,800
Increment above No Build Alt.	0	(600)	(100)	(100)	(300)	0
CEQA Threshold	55	150	55	550	150	55
Significant?	No	No	No	No	No	No

Table 5-13. Underground Emphasis LRT Alternative 2035 Operational Emissions						
Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
NEPA Analysis						
Project Emissions	3,800	175,600	11,500	1,000	85,900	18,900
No Build Alternative	3,800	175,700	11,500	1,000	85,900	18,900
Increment	(2)	(109)	(7)	(1)	(53)	(12)
NEPA Threshold	10	100	10	100	70	100
Significant	No	No	No	No	No	No

Note: Negative numbers (beneficial impacts) are shown in parentheses.

5.6.1.2 Toxic Air Contaminant Emissions

The Underground Emphasis LRT Alternative would indirectly result in increased emissions of TACs from highway traffic. Emissions under this alternative were compared to existing conditions (2009) for informational purposes. Since the EMFAC model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs.

Table 5-14 shows a summary of project-related emissions. The emission increment (Underground Emphasis LRT Alternative compared to Existing Conditions) is provided for informational purposes, but is not used for significance determinations as noted in Section 3.1.2.1.

Table 5-14. Underground Emphasis LRT Alternative 2035 Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Volatile Organic Compounds					
1,3-Butadiene	106-99-0	0.011	95	(0.039)	(339)
Acetaldehyde	75-07-0	0.0048	42	(0.017)	(149)
Acrolein	107-02-8	0.0027	23	(0.010)	(83)
Benzene	71-43-2	0.052	457	(0.19)	(1,625)
Ethyl benzene	100-41-4	0.021	186	(0.075)	(661)
Formaldehyde	50-00-0	0.034	295	(0.12)	(1,048)
Methanol	67-56-1	0.0080	70	(0.029)	(250)
Methyl ethyl ketone	78-93-3	0.00038	3.3	(0.0013)	(12)
Methyl t-butyl ether	1634-04-4	0.038	337	(0.14)	(1,197)
m-Xylene	108-38-3	0.072	631	(0.26)	(2,245)
Naphthalene	91-20-3	0.0010	8.3	(0.0034)	(30)
n-Hexane	110-54-3	0.031	275	(0.11)	(977)
o-Xylene	95-47-6	0.025	219	(0.089)	(780)
Propylene	115-07-1	0.062	542	(0.22)	(1,929)
Styrene	100-42-5	0.0025	22	(0.0089)	(78)
Toluene	108-88-3	0.12	1,020	(0.41)	(3,626)
Inorganic Compounds					

Table 5-14. Underground Emphasis LRT Alternative 2035 Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Arsenic	7440-38-2	0.00026	2.3	0.000034	0.30
Cadmium	7440-43-9	0.000059	0.52	0.0000076	0.066
Chlorine	7782-50-5	0.15	1,278	0.062	541
Copper	7440-50-8	0.012	106	0.0018	16
Lead	7439-92-1	0.0026	22	0.00033	2.9
Manganese	7439-96-5	0.018	157	0.0026	23
Mercury	7439-97-6	0.00018	1.6	0.000023	0.20
Nickel	7440-02-0	0.0017	14	0.00052	4.6
Selenium	7782-49-2	0.000062	0.54	0.0000079	0.069

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.6.2 CO Hot Spots

This analysis completed a CO hot spots evaluation that looked at localized impacts of CO concentrations at several intersections. A screening level analysis was completed using Appendix A of the CO Protocol to determine five intersections that could be most adversely affected under this alternative. The CAL3QHC model was used to evaluate whether CO concentrations at these intersections would exceed CAAQS or NAAQS for CO concentrations. Table 5-15 shows the results of the analysis.

Table 5-15. Maximum Carbon Monoxide Concentrations at Roadway Intersections Under Underground Emphasis LRT Alternative (2035)

ID	Intersection	Traffic CO Conc. (ppm)		Max. Conc. (ppm)		Exceeds Threshold?	
		1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
5	1st Street and Main Street	0.20	0.14	1.40	1.04	no	no
12	2nd Street and Hill Street	0.10	0.07	1.30	0.97	no	no
57	Temple Street and Main Street	0.20	0.14	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	0.20	0.14	1.40	1.04	no	no
60	Temple Street and Alameda Street	0.20	0.14	1.40	1.04	no	no

Notes:
1-Hour CAAQS = 9.0 ppm; 1-Hour NAAQS = 9 ppm
8-Hour CAAQS = 20 ppm; 8-Hour NAAQS = 35 ppm

5.6.3 Construction Emissions

The Underground Emphasis LRT Alternative would result in temporary emissions associated with construction. Construction would occur between and including the years 2014 and 2017.

The Underground Emphasis LRT Alternative has four construction sub-alternatives. The proposed 2nd/Hope Street station could be constructed using either SEM or cut & cover. Furthermore, a second proposed station could be built at either Broadway or Los Angeles Street. This emissions analysis evaluates all four construction options.

5.6.3.1 Criteria Pollutants

Regional Construction Emissions

SCAQMD requires an analysis of construction-related emissions. This analysis estimates emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul truck emissions. Table 5-16 shows construction emissions by peak day of operation.

Table 5-16. Underground Emphasis LRT Alternative (2014-2017)
Maximum Daily Construction Emissions

Location	Daily Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Streets Station (SEM) + Broadway Station Option						
Onsite	**300**	**2,247**	**1,189**	4	92	**83**
Offsite	8	89	59	<1	19	6
Total	**308**	**2,336**	**1,249**	4	111	**89**
2nd/Hope Streets Station (Cut & Cover) + Broadway Station Option						
Onsite	**304**	**2,280**	**1,210**	4	93	**84**
Offsite	9	94	62	<1	20	6
Total	**313**	**2,375**	**1,272**	4	113	**90**
2nd/Hope Streets Station (SEM) + Los Angeles Street Station						
Onsite	**300**	**2,247**	**1,189**	4	91	**83**
Offsite	8	85	58	<1	19	5
Total	**308**	**2,332**	**1,247**	4	110	**89**
2nd/Hope Streets Station (Cut & Cover) + Los Angeles Street Station						
Onsite	**304**	**2,280**	**1,210**	4	93	**84**
Offsite	8	91	61	<1	19	6
Total	**313**	**2,371**	**1,270**	4	113	**90**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold**.*

Emissions of VOC, NOx, CO, and $PM_{2.5}$ would be significant, and mitigation measures would need to be employed.

Localized Significance Thresholds

This analysis evaluated construction emissions on a regional level and compared them to SCAQMD's LSTs. The analysis used a series of look-up tables for NOx, CO, PM_{10}, and $PM_{2.5}$. These tables show maximum allowable emission levels, which vary based on project location, size (acreage), and distance to the nearest receptor.

Most project construction sites would be approximately one acre in size and located within 25 meters of the nearest receptors. Although receptors in the project area may be closer than 25 meters to construction, it is the minimum distance allowed in the LST. Table 5-17 shows onsite emissions for each construction activity and location.

LST evaluation indicates that NOx, PM_{10}, and $PM_{2.5}$ emissions would be greater than maximum allowable levels during several construction phases. Impacts of these pollutants would have to be mitigated.

Table 5-17. Underground Emphasis LRT Alternative Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	**163**	65	**6**	**5**
2	Site Preparation	52	32	2	2
3	Cut & Cover Tunnel - Flower St	**307**	165	**13**	**11**
4	Cut & Cover Flower/5th Street Station	**307**	165	**13**	**11**
5	Approach to 2nd/Hope	**274**	145	**11**	**10**
6	2nd/Hope Station (SEM)	**265**	138	**11**	**10**
7	2nd/Hope Station (Cut & Cover)	**298**	159	**12**	**11**

Table 5-17. Underground Emphasis LRT Alternative Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
8	TBM Launch Site	**225**	114	**9**	**8**
9	TBM Tunnel - 2nd St	**298**	159	**12**	**11**
10	Cut & Cover 2nd Street Station (Broadway option)	**307**	165	**13**	**11**
11	Cut & Cover 2nd Street Station (Los Angeles Street option)	**307**	165	**13**	**11**
12	U-Portal at 2nd/Central Streets	**265**	138	**11**	**10**
13	Improvements at 1st/Alameda Streets	**225**	114	**9**	**8**
14	Operation Systems Installation	**168**	96	**6**	**6**
Allowable Emissions		74	680	5	3

*Note: Emissions greater than threshold of significance are shown in **bold**.*

5.6.3.2 Toxic Air Contaminants

Construction of the Underground Emphasis LRT Alternative would indirectly result in increased emissions of TACs (Table 5-18). Projected emissions under this alternative were compared to existing conditions (2009) for CEQA analysis. The analysis includes a Tier 1 HRA, which compares emission levels to published screening limits. The analysis considered only acute risks because construction impacts are temporary.

Table 5-19 shows a summary of project-related emissions and Tier 1 HRA results. Diesel exhaust does not have an organic profile in CARB's speciation profiles; therefore, the analysis was restricted to inorganic emissions. Impacts from construction emissions under the Underground Emphasis LRT Alternative would not be significant under CEQA.

Table 5-18. Underground Emphasis LRT Alternative (2014-2017) Toxic Air Contaminant Construction Emissions

TAC	CAS #	Emissions (lbs/hr)			
		Alt 2a	Alt 2b	Alt 2c	Alt 2d
Arsenic	7440-38-2	0.000020	0.000021	0.000020	0.000021
Chlorine	7782-50-5	0.0015	0.0016	0.0015	0.0016
Copper	7440-50-8	0.00010	0.00010	0.00010	0.00010
Mercury	7439-97-6	0.00011	0.00012	0.00011	0.00012
Nickel	7440-02-0	0.000079	0.000078	0.000076	0.000077

Note:
Alt 2a = 2nd/Hope Streets Station (SEM) + Broadway Station
Alt 2b = 2nd/Hope Streets Station (Cut & Cover) + Broadway Station
Alt 2c = 2nd/Hope Streets Station (SEM) + Los Angeles Street Station
Alt 2d = 2nd/Hope Streets Station (Cut & Cover) + Los Angeles Street Station
Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour

Table 5-19. Underground Emphasis LRT Alternative (2014-2017) Construction Health Risk Assessment

TAC	CAS #	PSL (lbs/hr)	PSI			
			Alt 2a	Alt 2b	Alt 2c	Alt 2d
Arsenic	7440-38-2	0.00010	0.20	0.21	0.20	0.21
Chlorine	7782-50-5	0.11	0.015	0.015	0.015	0.015
Copper	7440-50-8	0.050	0.0020	0.0021	0.0020	0.0021

Table 5-19. Underground Emphasis LRT Alternative (2014-2017) Construction Health Risk Assessment

TAC	CAS #	PSL (lbs/hr)	PSI			
			Alt 2a	Alt 2b	Alt 2c	Alt 2d
Mercury	7439-97-6	0.00090	0.13	0.13	0.13	0.13
Nickel	7440-02-0	0.0030	0.025	0.026	0.025	0.026
ASI			0.37	0.38	0.37	0.38
Threshold			1.0			

Key:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Note:
Alt 2a = 2nd/Hope Streets Station (SEM) + Broadway Station
Alt 2b = 2nd/Hope Streets Station (Cut & Cover) + Broadway Station
Alt 2c = 2nd/Hope Streets Station (SEM) + Los Angeles Street Station
Alt 2d = 2nd/Hope Streets Station (Cut & Cover) + Los Angeles Street Station

5.6.4 Cumulative Emissions

Operational emissions associated with the Underground Emphasis LRT Alternative would not exceed NEPA or CEQA significance thresholds for all criteria pollutants. It is difficult to specify what other projects will be undertaken in 2035. However, this alternative would result in substantial reductions in peak daily emissions of CO, NOx, SO_2, and PM_{10}. Impacts from emissions of these pollutants would not be cumulatively significant.

5.7 Fully Underground LRT Alternative – Little Tokyo Variation 1

With the Fully Underground LRT Alternative – Little Tokyo Variation 1, operation of the proposed light rail extension would run entirely underground. Under this alternative, opposing light rail train movements in the junction beneath the intersection of 1st and Alameda Streets would occur on the same level. This section summarizes emissions associated with this alternative.

5.7.1 Operational Emissions

Operational emissions associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 include emissions from highway traffic that would exist after this project alternative is operational. The proposed project would provide an alternative to automobile transportation in the region; therefore, it was necessary to evaluate highway traffic to assess how the proposed project would increase or decrease operational emissions from passenger vehicles.

5.7.1.1 Criteria Pollutant Emissions

Table 5-20 shows operational emissions from VMT under this alternative. Emissions of all pollutants would not be significant under a NEPA or CEQA analysis.

Table 5-20. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Operational Emissions

Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
CEQA Analysis						
Project Emissions	21,100	961,900	63,200	5,500	470,400	103,800
Existing Conditions	56,200	1,847,200	178,000	2,700	270,400	49,900
Increment	(35,100)	2,800	(114,800)	2,800	200,000	53,900
No Build Alt (2035).	21,100	962,500	63,300	5,600	470,700	103,800
Increment above No Build Alt.	0	(600)	(100)	(100)	(300)	0
CEQA Threshold	55	150	55	550	150	55
Significant?	No	No	No	No	No	No
NEPA Analysis						
Project Emissions	3,800	175,600	11,500	1,000	85,900	18,900
No Build Alternative	3,800	175,700	11,500	1,000	85,900	18,900

Table 5-20. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Operational Emissions

Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Increment	(2)	(112)	(7)	(1)	(55)	(12)
NEPA Threshold	10	100	10	100	70	100
Significant	No	No	No	No	No	No

Note: Negative numbers (beneficial impacts) are shown in parentheses.

5.7.1.2 Toxic Air Contaminant Emissions

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would indirectly result in increased emissions of TACs from highway traffic. Emissions under this alternative were compared to existing conditions (2009) for informational purposes only. Since the EMFAC model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs.

Table 5-21 shows a summary of project-related emissions. The emission increment (Fully Underground LRT Alternative – Little Tokyo Variation 1) is provided for informational purposes, but is not used for significance determinations as noted in Section 3.1.2.1.

Table 5-21. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Volatile Organic Compounds					
1,3-Butadiene	106-99-0	0.011	95	(0.039)	(339)
Acetaldehyde	75-07-0	0.0048	42	(0.017)	(149)
Acrolein	107-02-8	0.0027	23	(0.010)	(83)

Table 5-21. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Benzene	71-43-2	0.052	457	(0.19)	(1,626)
Ethyl benzene	100-41-4	0.021	186	(0.075)	(661)
Formaldehyde	50-00-0	0.034	294	(0.12)	(1,048)
Methanol	67-56-1	0.0080	70	(0.029)	(250)
Methyl ethyl ketone	78-93-3	0.00038	3.3	(0.0013)	(12)
Methyl t-butyl ether	1634-04-4	0.038	336	(0.14)	(1,197)
m-Xylene	108-38-3	0.072	630	(0.26)	(2,245)
Naphthalene	91-20-3	0.00095	8.3	(0.0034)	(30)
n-Hexane	110-54-3	0.031	274	(0.11)	(977)
o-Xylene	95-47-6	0.025	219	(0.089)	(780)
Propylene	115-07-1	0.062	542	(0.22)	(1,930)
Styrene	100-42-5	0.0025	22	(0.0089)	(78)
Toluene	108-88-3	0.12	1,018	(0.41)	(3,627)
Inorganic Compounds					
Arsenic	7440-38-2	0.00026	2.3	0.000033	0.29
Cadmium	7440-43-9	0.000059	0.52	0.000008	0.066
Chlorine	7782-50-5	0.15	1,277	0.062	539
Copper	7440-50-8	0.012	105	0.0018	16

Table 5-21. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Lead	7439-92-1	0.0026	22	0.00032	2.8
Manganese	7439-96-5	0.018	157	0.0026	23
Mercury	7439-97-6	0.00018	1.6	0.000023	0.20
Nickel	7440-02-0	0.0017	14	0.00052	4.5
Selenium	7782-49-2	0.000062	0.54	0.0000079	0.069

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.7.2 CO Hot Spots

This analysis completed a CO hot spots evaluation that looked at localized impacts of CO concentrations at several intersections. A screening level analysis was completed using Appendix A of the CO Protocol to determine five intersections that could be most adversely affected under this alternative. The CAL3QHC model was used to evaluate whether CO concentrations at these intersections would exceed CAAQS or NAAQS for CO concentrations. Table 5-22 shows the results of the analysis.

5.7.3 Construction Emissions

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in temporary emissions associated with construction. Construction would occur between and including the years 2014 and 2017.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 has two construction sub-alternatives. The proposed 2nd/Hope Street station could be constructed using either SEM or cut & cover. This emissions analysis evaluates both construction options.

Table 5-22. Maximum Carbon Monoxide Concentrations at Roadway Intersections Under Fully Underground LRT Alternative (2035)

ID	Intersection	Traffic CO Conc. (ppm)		Max. Conc. (ppm)		Exceeds Threshold?	
		1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
5	1st Street and Main Street	0.20	0.14	1.40	1.04	no	no
12	2nd Street and Hill Street	0.10	0.07	1.30	0.97	no	no
57	Temple Street and Main Street	0.20	0.14	1.40	1.04	no	no
58	Temple Street and Los Angeles Street	0.20	0.14	1.40	1.04	no	no
60	Temple Street and Alameda Street	0.20	0.14	1.40	1.04	no	no

Note: CO Hot Spots evaluation the same for both variations of Fully Underground LRT Alternative.

5.7.3.1 Criteria Pollutants

Regional Construction Emissions

SCAQMD requires an analysis of construction-related emissions. This analysis estimates emissions from off-road construction equipment, fugitive dust, construction worker commuting, and haul truck emissions. Table 5-23 shows construction emissions by peak day of operation.

Table 5-23. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2014-2017) Maximum Daily Construction Emissions

Location	Daily Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Station (SEM)						
Onsite	**367**	**2,596**	**1,474**	5	105	**95**
Offsite	10	104	69	<1	24	7
Total	**377**	**2,699**	**1,542**	5	129	**102**
2nd/Hope Station (Cut & Cover)						
Onsite	**376**	**2,670**	**1,523**	5	108	**98**
Offsite	10	107	71	<1	24	7
Total	**386**	**2,777**	**1,593**	5	133	**105**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold**.*

Emissions of VOC, NOx, CO, and $PM_{2.5}$ would be significant, and mitigation measures would need to be employed.

Localized Significance Thresholds

This analysis evaluated construction emissions on a regional level and compared them to SCAQMD's LSTs. The analysis used a series of look-up tables for NOx, CO, PM_{10}, and $PM_{2.5}$. These tables show maximum allowable emission levels, which vary based on project location, size (acreage), and distance to the nearest receptor.

Most project construction sites would be approximately one acre in size and located within 25 meters of the nearest receptors. Although receptors in the project area may be closer than 25 meters to construction, it is the minimum distance allowed in the LST. Table 5-24 shows onsite emissions for each construction activity and location.

LST evaluation indicates that NOx, PM_{10}, and $PM_{2.5}$ emissions would be greater than maximum allowable levels during several construction phases. Impacts of these pollutants would have to be mitigated.

Table 5-24. Fully Underground LRT Alternative – Little Tokyo Variation 1 Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	**163**	65	**6**	**5**
2	Site Preparation	52	32	2	2
3	Cut & Cover Tunnel - Flower St	**307**	165	**13**	**11**
4	Cut & Cover Flower/5th Street Station	**307**	165	**13**	**11**
5	Approach to 2nd/Hope	**225**	114	**9**	**8**
6	2nd/Hope Streets Station (SEM)	**217**	108	**9**	**8**
7	2nd/Hope Streets Station (Cut & Cover)	**298**	159	**12**	**11**
8	TBM Launch Site	**225**	114	**9**	**8**
9	TBM Tunnel - 2nd St	**398**	159	**12**	**11**
10	Cut & Cover - 2nd/Broadway Station	**307**	165	**13**	**11**
11	Cut & Cover Tunnel from TBM	**225**	114	**9**	**8**
12	Cut & Cover 2nd/Central Ave Station	**265**	138	**11**	**10**
13	Cut & Cover to East Portal	**201**	111	**8**	**7**
14	Cut & Cover to North Portal	**275**	161	**11**	**10**
15	1st/Alameda Junction	**217**	108	**9**	**8**

Table 5-24. Fully Underground LRT Alternative – Little Tokyo Variation 1 Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
16	Operation Systems Installation	**168**	96	**6**	**6**
Allowable Emissions		74	680	5	3

*Note: Emissions greater than threshold of significance are shown in **bold**.*

5.7.3.2 Toxic Air Contaminants

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would indirectly result in increased emissions of TACs. Projected emissions under this alternative were compared to existing conditions (2009) for CEQA analysis. The analysis includes a Tier 1 HRA, which compares emission levels to published screening limits. The analysis considered only acute risks because construction impacts are temporary.

Table 5-25 shows a summary of project-related emissions and Tier 1 HRA results. Diesel exhaust does not have an organic profile in CARB's speciation profiles; therefore, the analysis was restricted to inorganic emissions. Impacts from construction emissions under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not be significant under CEQA.

5.7.4 Cumulative Emissions

Operational emissions associated with the Fully Underground LRT Alternative - Little Tokyo Variation 1 would not exceed NEPA or CEQA significance thresholds for all criteria pollutants. It is difficult to specify what other projects will be undertaken in 2035. However, this alternative would result in substantial reductions in peak daily emissions of CO, NOx, SO_2, and PM_{10}. Impacts from emissions of these pollutants would not be cumulatively significant.

Table 5-25. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2014-2017) Toxic Air Contaminant Construction Emissions and HRA

TAC	CAS #	Emissions (lbs/hr)		PSL	PSI	
		Alt 3a	Alt 3b	(lb/hr)	Alt 3a	Alt 3b
Arsenic	7440-38-2	0.000023	0.000024	0.00010	0.23	0.24
Chlorine	7782-50-5	0.0018	0.0019	0.11	0.017	0.018
Copper	7440-50-8	0.00012	0.00012	0.050	0.0024	0.0025
Mercury	7439-97-6	0.00013	0.00014	0.00090	0.15	0.15
Nickel	7440-02-0	0.000088	0.000091	0.0030	0.029	0.030
ASI					0.43	0.44
Threshold					1.0	

Key:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)
TAC = toxic air contaminant
Note:
Alt 3a = 2nd/Hope Streets Station (SEM)
Alt 3b = 2nd/Hope Streets Station (Cut & Cover)

5.8 Fully Underground LRT Alternative – Little Tokyo Variation 2

With the Fully Underground LRT Alternative – Little Tokyo Variation 2, operation of the proposed light rail extension would run entirely underground. Under this alternative, tracks at the proposed 2nd/Central Avenue station and the junction beneath the intersection of 1st and Alameda Streets would run on two levels. There would be two single-track portals in the median of 1st Street. This section summarizes emissions associated with this alternative.

5.8.1 Operational Emissions

Operational emissions associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 include emissions from highway traffic that would exist after this project

alternative is operational. The proposed project would provide an alternative to automobile transportation in the region; therefore, it was necessary to evaluate highway traffic to assess how the proposed project would increase or decrease operational emissions from passenger vehicles.

5.8.1.1 Criteria Pollutant Emissions

Table 5-26 shows operational emissions from VMT under this alternative. Emissions of all pollutants would not be significant under a NEPA or CEQA analysis. Emissions of SO_2, PM_{10}, and $PM_{2.5}$ would exceed daily thresholds of significance under CEQA. Emissions of criteria pollutants would not exceed NEPA thresholds and would not be significant.

5.8.1.2 Toxic Air Contaminant Emissions

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would indirectly result in increased emissions of TACs from highway traffic. Emissions under this alternative were compared to existing conditions (2009) for informational purposes only. Since the EMFAC model only provides emission results for criteria pollutants, it is necessary to use published profiles of the individual compounds emitted in the exhaust to create an inventory of TACs.

Table 5-26. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Operational Emissions

Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
CEQA Analysis						
Project Emissions	21,100	961,900	63,200	5,500	470,400	103,800
Existing Conditions	56,200	1,847,200	178,000	2,700	270,400	49,900
Increment	(35,100)	(885,300)	(114,800)	2,800	200,000	53,900
No Build Alt (2035).	21,100	962,500	63,300	5,600	470,700	103,800
Increment above No Build Alt.	0	(600)	(100)	(100)	(300)	0
CEQA Threshold	55	150	55	550	150	55

Table 5-26. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Operational Emissions						
Type	Emissions (lbs/day)					
	VOC	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Significant?	No	No	No	No	No	No
NEPA Analysis						
Project Emissions	3,800	175,600	11,500	1,000	85,900	18,900
No Build Alternative	3,800	175,700	11,500	1,000	85,900	18,900
Increment	(2)	(112)	(7)	(1)	(55)	(12)
NEPA Threshold	10	100	10	100	70	100
Significant	No	No	No	No	No	No

Table 5-27 shows a summary of project-related TAC emissions. The emission increment (Fully Underground LRT Alternative – Little Tokyo Variation 2) is provided for informational purposes, but is not used for significance determinations as noted in Section 3.1.2.1.

Table 5-27. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Volatile Organic Compounds					
1,3-Butadiene	106-99-0	0.011	95	(0.039)	(339)
Acetaldehyde	75-07-0	0.0048	42	(0.017)	(149)
Acrolein	107-02-8	0.0027	23	(0.010)	(83)

Table 5-27. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Toxic Air Contaminant Operational Emissions					
TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Benzene	71-43-2	0.052	457	(0.19)	(1,626)
Ethyl benzene	100-41-4	0.021	186	(0.075)	(661)
Formaldehyde	50-00-0	0.034	294	(0.12)	(1,048)
Methanol	67-56-1	0.0080	70	(0.029)	(250)
Methyl ethyl ketone	78-93-3	0.00038	3.3	(0.0013)	(12)
Methyl t-butyl ether	1634-04-4	0.038	336	(0.14)	(1,197)
m-Xylene	108-38-3	0.072	630	(0.26)	(2,245)
Naphthalene	91-20-3	0.00095	8.3	(0.0034)	(30)
n-Hexane	110-54-3	0.031	274	(0.11)	(977)
o-Xylene	95-47-6	0.025	219	(0.089)	(780)
Propylene	115-07-1	0.062	542	(0.22)	(1,930)
Styrene	100-42-5	0.0025	22	(0.0089)	(78)
Toluene	108-88-3	0.12	1,018	(0.41)	(3,627)
Inorganic Compounds					
Arsenic	7440-38-2	0.00026	2.3	0.000033	0.29
Cadmium	7440-43-9	0.000059	0.52	0.000008	0.066
Chlorine	7782-50-5	0.15	1,277	0.062	539
Copper	7440-50-8	0.012	105	0.0018	16

Table 5-27. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Toxic Air Contaminant Operational Emissions

TAC	CAS	Emissions		Emission Increment	
		(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)
Lead	7439-92-1	0.0026	22	0.00032	2.8
Manganese	7439-96-5	0.018	157	0.0026	23
Mercury	7439-97-6	0.00018	1.6	0.000023	0.20
Nickel	7440-02-0	0.0017	14	0.00052	4.5
Selenium	7782-49-2	0.000062	0.54	0.0000079	0.069

Key:
TAC = toxic air contaminant
CAS = Chemical Abstracts Service
lbs/hr = pounds per hour
lbs/yr = pounds per year

5.8.2 CO Hot Spots

The CO Hot Spots analysis mirrors that of the Fully Underground LRT Alternative – Little Tokyo Variation 1. Table 5-22 shows the results of the analysis.

5.8.3 Construction Emissions

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in temporary emissions associated with construction. Construction would occur between and including the years 2014 and 2017.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 has two construction sub-alternatives. The proposed 2nd/Hope Street station could be constructed using either SEM or cut & cover. This emissions analysis evaluates both construction options.

5.8.3.1 Criteria Pollutants

Regional Construction Emissions

SCAQMD requires an analysis of construction-related emissions. This analysis estimates emissions from off-road construction equipment, fugitive dust, construction worker

commuting, and haul truck emissions. Table 5-28 shows construction emissions by peak day of operation.

Table 5-28. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2014-2017) Maximum Daily Construction Emissions

Location	Daily Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2nd/Hope Streets Station (SEM)						
Onsite	**367**	**2,596**	**1,474**	5	105	**95**
Offsite	10	102	72	<1	25	7
Total	**377**	**2,698**	**1,545**	5	131	**102**
2nd/Hope Streets Station (Cut & Cover)						
Onsite	**176**	**2,670**	**1,523**	5	109	**98**
Offsite	10	107	74	<1	26	7
Total	**386**	**2,777**	**1,597**	5	135	**105**
Threshold	75	100	550	150	150	55

*Note: Significant emissions are shown in **bold**.*

Localized Significance Thresholds

This analysis evaluated construction emissions on a regional level and compared them to SCAQMD's LSTs. The analysis used a series of look-up tables for NOx, CO, PM_{10}, and $PM_{2.5}$. These tables show maximum allowable emission levels, which vary based on project location, size (acreage), and distance to the nearest receptor.

Most project construction sites would be approximately one acre in size and located within 25 meters of the nearest receptors. Although receptors in the project area may be closer than 25 meters to construction, it is the minimum distance allowed in the LST. Table 5-29 shows onsite emissions for each construction activity and location.

Table 5-29. Fully Underground LRT Alternative – Little Tokyo Variation 2 Localized Significance Thresholds (LST) for Construction Emissions

ID	Phase	Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	**163**	65	**6**	**5**
2	Site Preparation	52	32	2	2
3	Cut & Cover Tunnel - Flower St	**307**	165	**13**	**11**
4	Cut & Cover Flower/5th Street Station	**307**	165	**13**	**11**
5	Approach to 2nd/Hope	**225**	114	**9**	**8**
6	2nd/Hope Streets Station (SEM)	**217**	108	**9**	**8**
7	2nd/Hope Streets Station (Cut & Cover)	**298**	159	**12**	**11**
8	TBM Launch Site	**225**	114	**9**	**8**
9	TBM Tunnel - 2nd St	**298**	159	**12**	**11**
10	Cut & Cover - 2nd/Broadway Station	**307**	165	**13**	**11**
11	Cut & Cover Tunnel from TBM	**225**	114	**9**	**8**
12	Cut & Cover 2nd/Central Ave Station	**265**	138	**11**	**10**
13	Cut & Cover to East Portal	**201**	111	**8**	**7**
14	Cut & Cover to North Portal	**275**	161	**11**	**10**
15	1st/Alameda Junction	**217**	108	**9**	**8**
16	Operation Systems Installation	**168**	96	**6**	**6**
Allowable Emissions		74	680	5	3

*Note: Emissions greater than threshold of significance are shown in **bold**.*

LST evaluation indicates that NOx, PM_{10}, and $PM_{2.5}$ emissions would be greater than maximum allowable levels during several construction phases. Impacts of these pollutants would have to be mitigated.

5.8.3.2 Toxic Air Contaminants

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would indirectly result in increased emissions of TACs. Projected emissions under this alternative were compared to existing conditions (2009) for CEQA analysis. The analysis includes a Tier 1 HRA, which compares emission levels to published screening limits. The analysis considered only acute risks because construction impacts are temporary.

Table 5-30 shows a summary of project-related emissions and Tier 1 HRA results. Diesel exhaust does not have an organic profile in CARB's speciation profiles; therefore, the analysis was restricted to inorganic emissions. Impacts from construction emissions under the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not be significant under CEQA.

Table 5-30. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2014-2017) Toxic Air Contaminant Construction Emissions and HRA

TAC	CAS #	Emissions (lbs/hr)		PSL	PSI	
		Alt 4a	Alt 4b	(lb/hr)	Alt 4a	Alt 4b
Arsenic	7440-38-2	0.000024	0.000025	0.00010	0.24	0.25
Chlorine	7782-50-5	0.0019	0.0019	0.11	0.018	0.019
Copper	7440-50-8	0.00012	0.00012	0.050	0.0024	0.0025
Mercury	7439-97-6	0.00013	0.00014	0.00090	0.15	0.15
Nickel	7440-02-0	0.000089	0.000092	0.0030	0.030	0.031
ASI					0.43	0.45
Threshold					1.0	

Key:
ASI = application screening index (total PSI)
CAS = Chemical Abstracts Service
lb/hr = pounds per hour
PSI = pollutant screening index (PSL divided by project emissions)
PSL = pollutant screening level (minimum level expected to exceed health risk)

TAC = toxic air contaminant
Note:
Alt 4a = 2nd/Hope Streets Station (SEM)
Alt 4b = 2nd/Hope Streets Station (Cut & Cover)

5.8.4 Cumulative Emissions

Operational emissions associated with the Fully Underground LRT Alternative - Little Tokyo Variation 2 would not exceed NEPA or CEQA significance thresholds for all criteria pollutants. It is difficult to specify what other projects will be undertaken in 2035. However, this alternative would result in substantial reductions in peak daily emissions of CO, NOx, SO_2, and PM_{10}. Impacts from emissions of these pollutants would not be cumulatively significant.

6.0 POTENTIAL MITIGATION MEASURES

This section describes recommendations for mitigation measures that could be used to reduce significant emissions from project construction and operations.

6.1 Potential Construction Mitigation Measures

Emissions of VOC, NOx, CO, and $PM_{2.5}$ would be significant during construction for all build alternatives and emissions of PM_{10} would be significant during construction for the At-Grade Emphasis LRT Alternative. Exhaust emissions from the operation of off-road vehicles are responsible for most of the emissions during construction. As a result, reducing emissions from these sources is essential.

Off-road engines could be retrofitted with add-on control devices such as catalytic oxidizers and diesel particulate filters, which would typically reduce NOx emissions by up to 40 percent and PM_{10} emissions by 85 percent; however, it would not reduce emissions of VOC and CO. It is expected that $PM_{2.5}$ emissions would be reduced to similar levels as PM_{10}.

To control emissions of other pollutants (VOC and CO), Metro could require contractors to use to use up-to-date (2014 to 2017) equipment during project construction. It is not uncommon for old construction equipment to be used at project sites because diesel engines have long lifetimes and can last over 30 years. Engine technology has improved with time, and requiring construction contractors to use up-to-date (2014 to 2017) engines could significantly reduce emissions.

6.1.1 Regional Construction Emissions

Separate emissions were calculated to evaluate how using up-to-date engines during the year 2014 to 2017 project construction period could reduce emissions of criteria pollutants. The results of this analysis are provided in Table 6-1.

Mitigated emissions of VOC, NOx, and CO still exceed the CEQA thresholds of significance for construction and are therefore significant and unavoidable. Although the regional construction impacts remain significant, the benefits of the project override the temporary adverse effects associated with construction. The proposed Regional Connector Transit Corridor project would improve transportation in the region, helping to remove vehicles from the region's roadways. Operational emissions in the future build alternatives are less than the baseline emissions for several pollutants.

Table 6-1. Mitigated (2014-2017) Maximum Daily Construction Emissions for All Alternatives

Alternative	Mitigated Daily Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
At-Grade Emphasis LRT Alternative	**119**	**432**	**908**	4	27	12
Underground Emphasis LRT Alternative						
SEM/Broadway	**144**	**473**	**978**	4	27	12
Cut & Cover/ Broadway	**147**	**488**	**998**	4	28	12
SEM/Los Angeles	**144**	**469**	**977**	4	27	12
Cut & Cover/Los Angeles Street	**146**	**485**	**997**	4	28	12
Fully Underground LRT Alternative – Little Tokyo Variation 1						
SEM	**189**	**602**	**1,266**	5	35	16
Cut & Cover	**193**	**626**	**1,304**	5	36	16
Fully Underground LRT Alternative – Little Tokyo Variation 2						
SEM	**188**	**601**	**1,268**	5	37	16
Cut & Cover	**193**	**626**	**1,307**	5	38	16
Threshold	75	100	550	150	150	55

*Note: Emissions greater than threshold of significance are shown in **bold**.*

6.1.2 Localized Significance Thresholds

Mitigated emissions were also compared to the SCAQMD's LST to evaluate significance.

6.1.2.1 At-Grade Emphasis LRT Alternative

Table 6-2 summarizes mitigated emissions for each construction activity and site for the At-Grade Emphasis LRT Alternative.

Table 6-2. At-Grade Emphasis LRT Alternative Localized Significance Thresholds (LST) for Mitigated Construction Emissions

ID	Phase	Mitigated Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	14	51	<1	<1
2	Site Preparation	10	17	<1	<1
3	Cut & Cover Along Flower Street	46	110	1	1
4	Cut & Cover Flower/6th Street Station	45	107	1	1
5	U-Portal at Flower	44	103	1	1
6	Portal NE of Flower & 3rd	36	91	1	1
7	Cut & Cover 2nd/Hope Street Station	45	107	1	1
8	Portal into 2nd Street Tunnel	46	110	1	1
9	Surface Trackwork	34	84	1	1
10	Improvements at Alameda/Temple Streets	47	114	1	1
11	At-Grade Stations	13	39	<1	<1
12	Operation Systems Installation	27	82	1	1
Allowable Emissions		74	680	5	3

Mitigated emissions for each construction site are less than the maximum allowable emissions under the LST methodology. Localized emissions from mitigated construction activities are therefore less than significant for the At-Grade Emphasis LRT Alternative.

6.1.2.2 Underground Emphasis LRT Alternative

Table 6-3 provides a summary of mitigated emissions for each construction activity and site for the Underground Emphasis LRT Alternative.

Table 6-3. Underground Emphasis LRT Alternative Localized Significance Thresholds (LST) for Mitigated Construction Emissions

ID	Phase	Mitigated Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	14	51	<1	<1
2	Site Preparation	10	18	<1	<1
3	Cut & Cover Tunnel - Flower St	58	131	1	1
4	Cut & Cover Flower/5th Street Station	58	131	1	1
5	Approach to 2nd/Hope	47	114	1	1
6	2nd/Hope Streets Station (SEM)	46	107	1	1
7	2nd/Hope Streets Station (Cut & Cover)	56	125	1	1
8	TBM Launch Site	35	87	1	1
9	TBM Tunnel - 2nd St	56	125	1	1
10	Cut & Cover 2nd Street Station (Broadway option)	58	131	1	1
11	Cut & Cover 2nd Street Station (Los Angeles Street option)	58	131	1	1
12	U-Portal at 2nd/Central Streets	46	107	1	1
13	Improvements at 1st/Alameda Streets	36	91	1	1
14	Operation Systems Installation	27	82	1	1
Allowable Emissions		74	680	5	3

Mitigated emissions for each construction site are less than the maximum allowable emissions under the LST methodology. Localized emissions from mitigated construction activities are therefore less than significant for the Underground Emphasis LRT Alternative.

6.1.2.3 Fully Underground LRT Alternative – Little Tokyo Variation 1

Table 6-4 summarizes mitigated emissions for each construction activity and site for the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Table 6-4. Fully Underground LRT Alternative – Little Tokyo Variation 1 Localized Significance Thresholds (LST) for Mitigated Construction Emissions

ID	Phase	Mitigated Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	14	51	<1	<1
2	Site Preparation	10	18	<1	<1
3	Cut & Cover Tunnel - Flower St	58	131	1	1
4	Cut & Cover Flower/5th Street Station	58	131	1	1
5	Approach to 2nd/Hope	36	94	1	1
6	2nd/Hope Streets Station (SEM)	35	88	1	1
7	2nd/Hope Streets Station (Cut & Cover)	56	125	1	1
8	TBM Launch Site	35	87	1	1
9	TBM Tunnel - 2nd St	56	125	1	1
10	Cut & Cover - 2nd/Broadway Station	58	131	1	1
11	Cut & Cover Tunnel from TBM	36	91	1	1
12	Cut & Cover 2nd/Central Ave Station	46	107	1	1
13	Cut & Cover to East Portal	36	94	1	1

Table 6-4. Fully Underground LRT Alternative – Little Tokyo Variation 1 Localized Significance Thresholds (LST) for Mitigated Construction Emissions

ID	Phase	Mitigated Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
14	Cut & Cover to North Portal	58	131	1	1
15	1st/Alameda Junction	35	88	1	1
16	Operation Systems Installation	27	82	1	1
Allowable Emissions		74	680	5	3

Mitigated emissions for each construction site are less than the maximum allowable emissions under the LST methodology. Localized emissions from mitigated construction activities are therefore less than significant for the Fully Underground LRT Alternative – Little Tokyo Variation 1.

6.1.2.4 Fully Underground LRT Alternative – Little Tokyo Variation 2

Table 6-5 summarizes mitigated emissions for each construction activity and site for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Mitigated emissions for each construction site are less than the maximum allowable emissions under the LST methodology. Localized emissions from mitigated construction activities are therefore less than significant for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

6.2 Potential Operational Mitigation Measures

Operational NOx emissions for the TSM Alternative would be significant under NEPA. Use of alternative fuels for the TSM buses may offset the significance of this impact, but this will need to be confirmed through future modeling. As such, it is assumed that the TSM Alternative's NOx emissions may remain significant after mitigation. Operational emissions were not found to be significant for either CEQA or NEPA for any of the other alternatives. As a result, no further mitigation measures are required for operational emissions.

Table 6-5. Fully Underground LRT Alternative – Little Tokyo Variation 2 Localized Significance Thresholds (LST) for Mitigated Construction Emissions

ID	Phase	Mitigated Maximum Daily Onsite Emissions (lbs/day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Pre-Construction	14	51	<1	<1
2	Site Preparation	10	18	<1	<1
3	Cut & Cover Tunnel - Flower St	58	131	2	1
4	Cut & Cover Flower/5th Street Station	58	131	1	1
5	Approach to 2nd/Hope	36	94	1	1
6	2nd/Hope Streets Station (SEM)	35	88	1	1
7	2nd/Hope Streets Station (Cut & Cover)	56	125	1	1
8	TBM Launch Site	35	87	1	1
9	TBM Tunnel - 2nd St	56	125	1	1
10	Cut & Cover - 2nd/Broadway Station	58	131	1	1
11	Cut & Cover Tunnel from TBM	36	91	1	1
12	Cut & Cover 2nd/Central Ave Station	46	107	1	1
13	Cut & Cover to East Portal	36	94	1	1
14	Cut & Cover to North Portal	58	131	1	1
15	1st/Alameda Junction	35	88	1	1
16	Operation Systems Installation	27	82	1	1
Allowable Emissions		74	680	5	3

7.0 CONCLUSIONS

This section summarizes conclusions for both NEPA and CEQA based on the air quality impact analysis results.

7.1 No Build Alternative

The No Build Alternative is used to calculate increments among future build alternatives and does not have its own NEPA threshold of significance.

7.2 TSM Alternative

Operational emissions for the TSM Alternative, including both buses and regional traffic, were found to be less than significant for CEQA and significant under NOx for NEPA. The alternative does not include any construction and therefore would have less than significant construction impacts.

7.3 At-Grade Emphasis LRT Alternative

Operational emissions for the At-Grade Emphasis LRT Alternative were less than significant for both CEQA and NEPA. Unmitigated regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would be greater than the significance criteria under CEQA and mitigation would be necessary. Even if mitigation required up-to-date (2014 to 2017) equipment during construction, regional construction emissions would still remain significant and unavoidable.

Although regional construction emissions under the At-Grade Emphasis LRT Alternative would be significant and unavoidable, the net benefits to air quality by reducing regional VMT would override the temporary adverse impacts.

7.4 Underground Emphasis LRT Alternative

Operational emissions for the Underground Emphasis LRT Alternative were less than significant for both CEQA and NEPA. Unmitigated regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would be greater than the significance criteria under CEQA and mitigation would be necessary. Even if mitigation required up-to-date (2014 to 2017) equipment during construction, regional construction emissions would still remain significant and unavoidable. Localized construction emissions would be less than the maximum allowable emissions under the LST methodology and therefore less than significant.

Although regional construction emissions would be significant and unavoidable, the net benefits to air quality by reducing regional VMT under the build alternative would override the temporary adverse impacts.

7.5 Fully Underground LRT Alternative

Operational emissions for the Fully Underground LRT Alternative (Little Tokyo Variations 1 and 2) were less than significant for both CEQA and NEPA. Unmitigated regional construction emissions of VOC, NOx, CO, and $PM_{2.5}$ would be greater than the significance criteria under CEQA and mitigation would be necessary. Even if mitigation required only current year (2014 to 2017) equipment during construction, regional construction emissions would remain significant and unavoidable. Localized construction emissions would be less than the maximum allowable emissions under the LST methodology and therefore less than significant.

Although regional construction emissions would be significant and unavoidable, the net benefits to air quality by reducing regional VMT would override the temporary adverse impacts.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX R

CLIMATE CHANGE

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Climate Change
Technical Memorandum

April 2, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

AB	Assembly Bill
BART	San Francisco Bay Area Rapid Transit
BAU	Business-as-usual
BRT	Bus Rapid Transit
CAHSR	California High Speed Rail
CALEPA	California Climate Action Team
CARB	California Air Resources Board
CBC	California Building Code
CCA	Clean Air Act
CCAR	California Climate Action Registry
CEC	California Education Code
CEQA	California Environmental Quality Act
CH_4	Methane
CNG	Compressed Natural Gas
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalents
eGRID	USEPA Emissions & Generation Resource Integrated Database
EIR	Environmental Impact Report
EMFAC	Emission Factor Model for Onroad Motor Vehicles
GCC	Global Climate Change
GHG	Greenhouse Gases

GWP	Global warming potential
HFC	Hydrofluorocarbons
IPCC	United Nations Intergovernmental Panel on Climate Change
kWH/mi	Kilowatt Hours per Mile
LADWP	Los Angeles Department of Water and Power
LRT	Light Rail Transit
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
MPO	Metropolitan Planning Organization
Muni	San Francisco Municipal Railway
NEPA	National Environmental Policy Act
N_2O	Nitrous oxide
NTD	National Transit Database
OAL	Office of Administrative Law
OFFROAD	Emission Factor Model for Offroad Mobile Equipment
PFC	Perfluorocarbons
RPS	Renewable Portfolio Standard
RTAC	Regional Targets Advisory Committee
RTP	Regional Transportation Plan
SAR	Second Assessment Report
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District

SCoAB	South Coast Air Basin
SCS	Sustainable Community Strategies
SEM	Sequential Excavation Method
SF_6	Sulfur hexafluoride
TSM	Transportation Management System
USEPA	United States Environmental Protection Agency
VMT	Vehicle Miles Traveled

1.0 SUMMARY

This technical memorandum discusses the results of a climate change analysis of the proposed Regional Connector Transit Corridor project completed in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Potential climate change-related impacts associated with greenhouse gas (GHG) emissions from the proposed construction and operation of the Regional Connector Transit Corridor project are summarized in this section. The analysis considers emissions inventories for electricity used for light rail operations, regional traffic, bus operations, construction, and calculations of potential contributions by build alternatives to GHG reduction.

This analysis considers three common GHG pollutants typically included in mandatory and voluntary reporting programs: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Non-CO_2 pollutants are modified by global warming potential (GWP) factors that reflect the degree to which these pollutants affect climate change compared to CO_2. The addition of each GHG with its GWP is known as CO_2 equivalent (CO_2e).

This memo discusses potential impacts from both construction activities and operations. For operations-related impacts, the analysis provides a comparison between the climate change conditions that currently exist without the proposed project (i.e., existing conditions in 2009)and climate change conditions projected to occur in the future with implementation of each alternative being considered for the proposed project (i.e., full implementation of each alternative in the future horizon year of 2035). The focus of the operations impact analysis is on the change in vehicle traffic and light rail transit vehicles, and associated air pollutant emissions, that would result from implementation of each alternative. While this type of direct comparison can help characterize how existing climate change conditions may be different in the future with implementation of the proposed project, it is not a true representation of the impacts directly attributable to the project. This is because background traffic conditions will change substantially between 2009 and 2035 due to regional population growth and development that is anticipated to occur irrespective of the Regional Connector Transit Corridor project. A more accurate and meaningful delineation of climate change impacts directly attributable to project-related changes in traffic is achieved through a comparison of a proposed future alternative (2035) and the No Build Alternative (2035).

1.1 Operational Emissions

A summary of operational emissions from regional traffic, compressed natural gas (CNG) buses, and electricity used to power trains and new stations for each alternative is presented in Table 1-1. A summary of incremental emissions as compared to existing conditions (2009) is provided in Table 1-2 for informational purposes only, and a summary of incremental emissions as compared to the No Build Alternative (2035) is provided in Table 1-

3. GHG emissions for each future scenario, including the No Build Alternative, are greater than emissions in 2009 because of a forecasted increase in automobile vehicle miles traveled (VMT) between future conditions and the baseline.

A future increase in emissions beyond those for existing conditions stems from predicted growth in regional traffic as a result of a forecasted increase in population in the region and other factors unrelated to the proposed project. According to the Southern California Association of Government's (SCAG's) Regional Transportation Plan (2008), the SCAG region is the second most populated metropolitan area in the United States.

Half of the population in California lives in the SCAG region, and 1 in 17 people in the United States resides in the area. SCAG predicts that 5.9 million people would be added to the SCAG region's population between 2005 and 2035, bringing the State's population to 24 million people in 2035. As shown in Table 1-3, the project is expected to reduce emissions when compared to the No Build Alternative and would have a beneficial impact on GHG emissions. If not for the project, emissions in the horizon year (2035) would likely be greater than what is currently shown in Table 1-2.

This type of quantitative analysis does not fully show the expected benefits from improved public transit in the region. As shown by the reduction in VMT between the build alternatives and No Build Alternative, increasing public transportation options in an urban area is expected to reduce automobile usage and associated emissions in a four-county region (Los Angeles, Orange, Riverside, and San Bernardino). Studies, including a twenty-year study evaluating land-use development in the vicinity of the San Francisco Bay Area Rapid Transit (BART) system, indicate that growth in commercial, industrial, mixed use, and residential areas may occur near certain transit corridors (Cervero and Landis 1997).

International experience has shown that a high-quality, urban, regional transportation system can promote environmentally sustainable, livable communities, especially when part of wider regional policies such as those that discourage car traffic through a city or promote road pricing (Priemus and Konings 2001). The Regional Connector Transit Corridor project would support development projects stressing density and pedestrian activity along the proposed alignment.

The proposed Regional Connector Transit Corridor project is a key link in the regional light rail network. The proposed project would provide a direct connection from the underground 7th Street/Metro Center Station to the Metro Gold Line, thereby avoiding multiple transfers under the current rail and bus network. Additionally, the proposed project would ultimately improve connections with the Metro Gold Line to the San Gabriel Valley and the Metro Expo Line to Santa Monica as well as additional projects proposed for the region.

The proposed project would increase ridership by improving the light-rail connections across the region. As shown in Figure 1-1, each of the build alternatives is expected to increase the number of transit trips (i.e., bus, urban rail, and commuter rail) as compared to the No Build TSM Alternative. Consequently, automobile-related trips would decrease. This relationship highlights the importance of the Regional Connector Transit Corridor project in reducing regional VMT and encouraging area residents to use transit options other than the automobile. The proposed project is consistent with the overall goals stated in Metro's Baseline Sustainability Report (2009).

The addition of light rail stations can provide benefits to local housing and mixed land uses, providing residents an alternative to automobile transportation. The proposed Regional Connector Transit Corridor project is consistent with the City of Los Angeles' *Green LA Plan* (City of Los Angeles 2007). The Plan seeks to extend the regional rail network to increase regional mobility and as a method to reduce impacts associated with climate change.

Table 1-1. Summary of Operational GHG Emissions for Each Alternative

Alternative	Annual Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[4]
Existing Conditions (2009)[1, 2]	40,552,000	65,100	5,952,000	46,569,100
No Build Alternative (2035)[1, 2]	106,521,100	58,800	9,858,000	116,437,900
TSM Alternative (2035)[3]				
Regional Traffic	106,463,200	58,800	9,858,000	116,380,000
CNG Buses	3,100	500	50	3,650
Total	106,466,300	59,300	9,858,050	116,383,650
At-Grade Emphasis LRT Alternative (2035)[2]				
Light Rail Operation	1,100	1	2	1,100
New Station Operation	100	<1	<1	100
Regional Traffic	106,457,400	58,800	9,858,000	116,374,200
Total	106,458,600	58,800	9,858,000	116,375,400

Table 1-1. Summary of Operational GHG Emissions for Each Alternative

Alternative	Annual Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[4]
Underground Emphasis LRT Alternative (2035)[2]				
Light Rail Operation	1,100	1	2	1,100
New Station Operation	100	<1	<1	100
Regional Traffic	106,455,200	58,800	9,858,000	116,372,000
Total	106,456,400	58,800	9,858,000	116,373,200
Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035)[2]				
Light Rail Operation	1,000	1	2	1,000
New Station Operation	200	<1	<1	200
Regional Traffic	106,453,200	58,800	9,858,000	116,370,000
Total	106,454,400	58,800	9,858,000	116,371,200
Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035)[2]				
Light Rail Operation	1,000	1	2	1,000
New Station Operation	200	<1	<1	200
Regional Traffic	106,453,000	58,800	9,858,000	116,369,800
Total	106,454,200	58,800	9,858,000	116,371,000

Notes:
[1] *Operational emissions only include those associated with regional traffic.*
[2] *Emissions associated with buses not included because the alternatives would not cause a change in bus operation or routes.*
[3] *The TSM Alternative would add bus rapid transit (BRT) lanes and additional bus routes but would not include improvements to the light rail network.*
[4] *Totals may vary slightly due to rounding*

Table 1-2. Summary of Incremental Emissions for Each Alternative as Compared to Existing Conditions (2009)

Alternative	Annual Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total
No Build Alternative	65,969,100	(6,300)	3,906,000	69,868,800
TSM Alternative	65,914,300	(5,800)	3,906,050	69,814,550
At-Grade Emphasis LRT Alternative	65,906,600	(6,300)	3,906,000	69,806,300
Underground Emphasis LRT Alternative	65,904,400	(6,300)	3,906,000	69,804,100
Fully Underground LRT Alternative – Little Tokyo Variation 1	65,902,400	(6,300)	3,906,000	69,802,100
Fully Underground LRT Alternative – Little Tokyo Variation 2	65,902,200	(6,300)	3,906,000	69,801,900

Note: Operational emissions include regional traffic (Los Angeles, Orange, Riverside, and San Bernardino Counties), CNG buses (TSM Alternative only), and light rail plus new stations (excluding No Build and TSM Alternatives). Totals may vary slightly due to rounding.

Table 1-3. Summary of Incremental Emissions for Each Alternative As Compared to No Build Alternative (2035)

Alternative	Annual Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total
TSM Alternative	(54,800)	500	50	(54,250)
At-Grade Emphasis LRT Alternative	(62,500)	1	2	(62,500)
Underground Emphasis LRT Alternative	(64,700)	1	2	(65,700)
Fully Underground LRT Alternative – Little Tokyo Variation 1	(66,700)	1	2	(66,700)

Table 1-3. Summary of Incremental Emissions for Each Alternative As Compared to No Build Alternative (2035)

Alternative	Annual Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total
Fully Underground LRT Alternative – Little Tokyo Variation 2	(66,900)	1	2	(66,900)

Note: Operational emissions include regional traffic (Los Angeles, Orange, Riverside, and San Bernardino Counties), CNG buses (TSM Alternative only), and light rail plus new stations (excluding No Build and TSM Alternatives). Totals may vary slightly due to rounding.

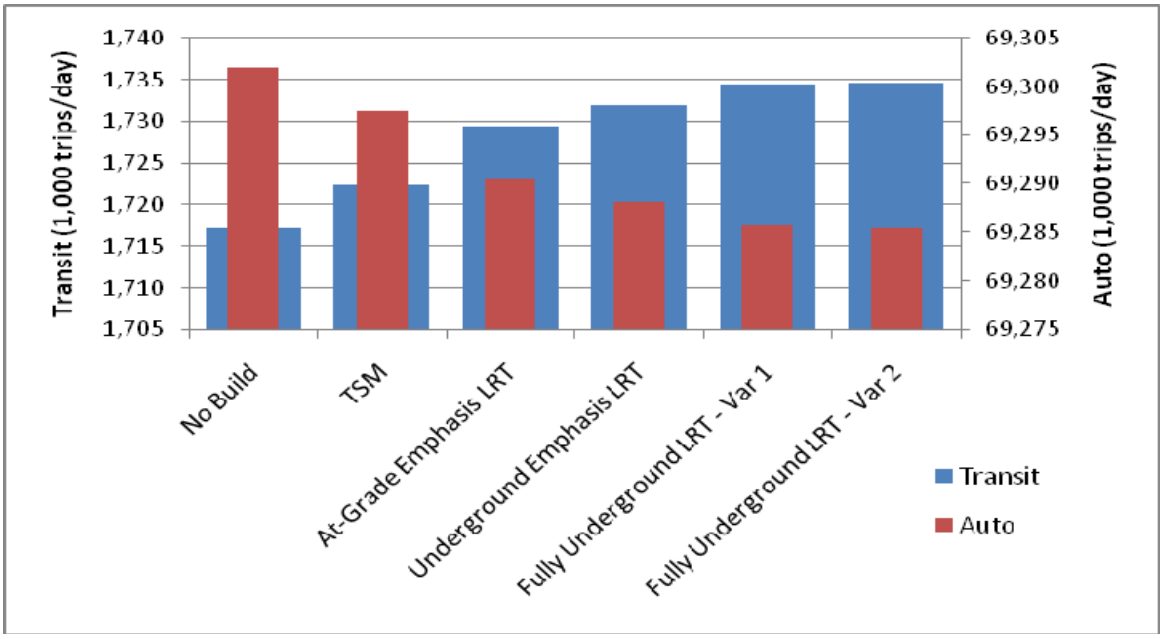

Figure 1-1. Travel Forecasting by Mode Choice (System-Wide Linked Trips)

Key:
TSM = Transportation System Management
LRT = Light rail transit

A 2008 study by Mikhail Chester and Arpad Horvath reviewed the life-cycle impacts of various transit modes including automobiles, buses, rail, and air. The study estimated GHG emissions from the life-cycle of a transit mode, including operations, maintenance, infrastructure, and other emission sources. Figure 1-2 shows the relative GHG emissions by each transit mode.

Light rail transportation, such as the San Francisco Municipal Railway (Muni) and the Massachusetts Bay Transportation Authority Green Line, as shown in Figure 1-2, produces substantially lower emissions than those associated with automobile travel. Based on this study, it would be expected that increases in light rail networks in the Los Angeles region would substantially offset GHG emissions associated with automobile travel.

1.2 Construction Emissions

Construction activities required for all build alternatives, (defined as all alternatives except the No Build Alternative and the TSM Alternative), would result in GHG emissions from diesel-fueled construction equipment, construction worker commuting, and haul trucks. Table 1-4 provides a summary of GHG emissions from these emission sources.

Table 1-4. Summary of Annual Construction GHG Emissions

Alternative	Annual CO_2e Emissions (metric tons per year)					
	2014	2015	2016	2017	Total[1]	Amortized[2]
At-Grade Emphasis LRT Alternative	2,700	23,300	36,500	13,900	76,400	2,500
Underground Emphasis LRT Alternative						
2nd/Hope Street station + 2nd Street station - Broadway Option (SEM)	1,900	17,500	47,300	32,400	99,100	3,300
2nd/Hope Street station + 2nd Street station -Broadway Option (Cut & Cover)	1,900	17,700	48,100	32,900	100,600	3,400
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (SEM)	1,900	17,500	47,200	32,300	98,900	3,300
2nd/Hope Street Station + 2nd Street station -Los Angeles Street Option (Cut & Cover)	1,900	17,700	48,000	32,800	100,400	3,300
Fully Underground LRT Alternative – Little Tokyo Variation 1						
2nd/Hope Street station (SEM)	1,800	18,400	54,600	40,700	115,400	3,800

Table 1-4. Summary of Annual Construction GHG Emissions						
Alternative	Annual CO_2e Emissions (metric tons per year)					
	2014	2015	2016	2017	Total[1]	Amortized[2]
2nd/Hope Street station (Cut & Cover)	1,800	18,900	56,000	41,600	118,300	3,900
Fully Underground LRT Alternative – Little Tokyo Variation 2						
2nd/Hope Street station (SEM)	1,800	17,600	54,600	40,700	114,800	3,800
2nd/Hope Street station (Cut & Cover)	1,800	18,000	56,100	41,700	117,600	3,900

Notes:
[1] *Annual emissions from each year of construction (2014-2017) are added to estimate the total project emissions. Totals may vary slightly due to rounding.*
[2] *Total project emissions are divided by 30 (30-year average) in estimating amortized emissions.*

Since construction emissions are temporary, total project construction emissions are amortized over thirty years (defined as a 30-year average), following South Coast Air Quality Management District (SCAQMD) recommendations (SCAQMD 2008). To estimate total project impact, these amortized construction-related emissions are added to the incremental project-related operational emissions for each build alternative. The adjusted total project impact is provided in Table 1-5 as compared to estimated 2009 emissions for informational purposes only and in Table 1-6 as compared to the estimated 2035 No Build condition.

Several build alternatives could be constructed by multiple methods. For example, the proposed 2nd/Hope Street station could be constructed by either the Sequential Excavation Method (SEM) or Cut & Cover method. Certain build alternatives also include a choice of possible station locations. For example, the Underground Emphasis LRT Alterative offers the option for a station at 2nd Street and either Broadway or Los Angeles Street.

As such, multiple construction options are shown in the tables below. The No Build Alternative and the TSM Alternative do not require construction to move forward and are not included in the summary table. Operational impacts for these two alternatives are provided in Table 1-1.

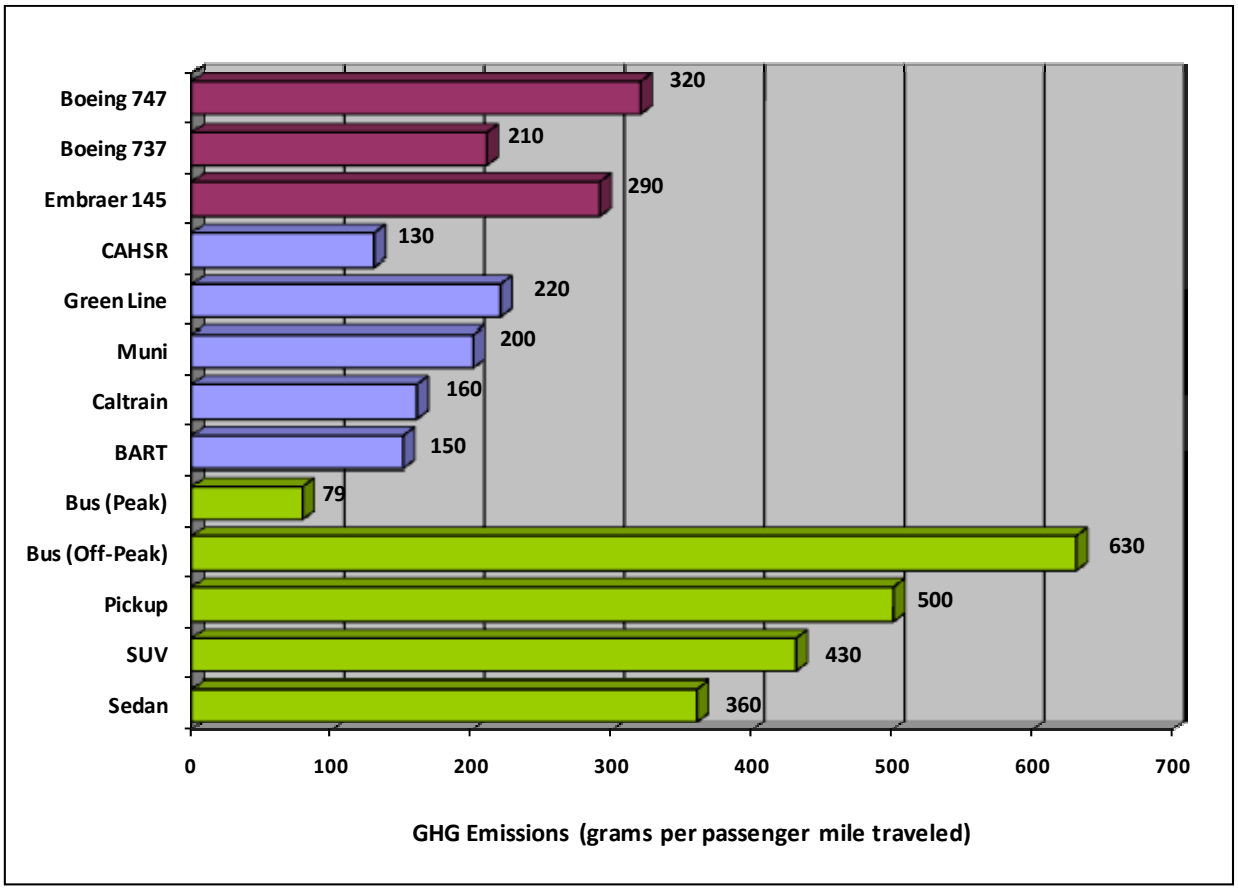

Figure 1-2. Life-Cycle GHG Emissions for Various Transit Modes

Source: Chester and Horvath (2008).
Key:
Boeing 747 = long-haul aircraft (305 passengers per flight)
Boeing 737 = medium-haul aircraft (94 passengers per flight)
Embraer 145 = short-haul aircraft (34 passengers per flight)
CAHSR = California High Speed Rail
Green Line = Massachusetts Bay Transportation Authority Green Line Light Rail
Muni = San Francisco Municipal Railway Light Rail
Caltrain = Diesel-powered heavy rail Amtrak-style commuter train (Gilroy to San Francisco)
BART = Bay Area Rapid Transit
Notes:
Red bars – Air travel
Blue bars – Rail
Green bars – Automobile and

Table 1-5. Summary of Incremental GHG Emissions (Operational and Construction) Compared to Existing Conditions (2009)

Alternative	Annual CO_2e Emissions (metric tons per year)		
	Construction[1]	Operations[2]	Amortized Total[3]
No Build Alternative	NA	69,876,000	69,876,000
TSM Alternative	NA	69,816,400	69,816,400
At-Grade Emphasis LRT Alternative	2,500	69,807,500	69,810,100
Underground Emphasis LRT Alternative			
2nd/Hope Street station + 2nd Street station - Broadway Option (SEM)	3,300	69,805,100	69,808,400
2nd/Hope Street station + 2nd Street station – Broadway Option (Cut & Cover)	3,400	69,805,100	69,808,500
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (SEM)	3,300	69,805,100	69,808,400
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (Cut & Cover)	3,300	69,805,100	69,808,500
Fully Underground LRT Alternative – Little Tokyo Variation 1			
2nd/Hope Street station (SEM)	3,800	69,803,000	69,806,800
2nd/Hope Street station (Cut & Cover)	3,900	69,803,000	69,806,900
Fully Underground LRT Alternative – Little Tokyo Variation 2			
2nd/Hope Street station (SEM)	3,800	69,802,700	69,806,600
2nd/Hope Street station (Cut & Cover)	3,900	69,802,700	69,806,700

Key:
NA = not applicable
Notes:
[1] *Construction emissions include the total emissions that would occur over the life of the construction phase (2014-2017) amortized over 30 years.*
[2] *Incremental project-related operational emissions (i.e., increment between future build alternative and existing conditions).*

[3] *Amortized construction emissions added to incremental operational emissions. Totals may vary slightly due to rounding.*

Table 1-6. Summary of Incremental GHG Emissions (Operational and Construction) Compared to the No Build Alternative (2035)

Alternative	Annual CO_2e Emissions (metric tons per year)		
	Construction[1]	Operations[2]	Amortized Total[3]
TSM Alternative	NA	(59,600)	(59,600)
At-Grade Emphasis LRT Alternative	2,500	(68,400)	(65,900)
Underground Emphasis LRT Alternative			
2nd/Hope Street station + 2nd Street station - Broadway Option (SEM)	3,300	(70,800)	(67,500)
2nd/Hope Street station + 2nd Street station Broadway option (Cut & Cover)	3,400	(70,800)	(67,500)
2nd/Hope Street station + 2nd Street station Los Angeles Street Option (SEM)	3,300	(70,800)	(67,500)
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (Cut & Cover)	3,300	(70,800)	(67,500)
Fully Underground LRT Alternative – Little Tokyo Variation 1			
2nd/Hope Street station (SEM)	3,800	(73,000)	(69,100)
2nd/Hope Street station (Cut & Cover)	3,900	(73,000)	(69,000)
Fully Underground LRT Alternative – Little Tokyo Variation 2			
2nd/Hope Street station (SEM)	3,800	(73,200)	(69,400)
2nd/Hope Street station (Cut & Cover)	3,900	(73,200)	(69,300)

Key:
NA = not applicable
Notes:

[1] *Construction emissions include total emissions that would occur over the life of the construction phase (2014-2017) amortized over 30 years.*
[2] *Incremental project-related operational emissions (i.e., increment between future build alternative and No Build Alternative).*
[3] *Amortized construction emissions added to incremental operational emissions. Totals may vary slightly due to rounding.*

The proposed Regional Connector Transit Corridor project is consistent with SB 375 because it establishes a key part of the regional transportation network that serves to remove vehicles from the roadways. The proposed project decreases VMT and GHG when compared to the No Build Alternative. Although each of the proposed project alternatives here foresees increased GHG emissions when compared to existing conditions, this can be attributed to a forecasted growth in population unrelated to this proposal. The quantitative analysis here does not take into account several additional requirements identified in the Scoping Plan including the Pavley regulations[1] and the low carbon fuel standard[2]. Thus, when the Scoping Plan and SB 375 are fully implemented, regional emissions could be reduced to below existing conditions.

Lastly, no mitigation measures would be required to reduce emissions. The proposed Regional Connector Transit Corridor project is also identified in the SCAG 2008 Regional Transportation Plan, and the Regional Connector Transit Corridor project is consistent with regional and statewide plans to reduce GHG emissions.

[1] The Pavley regulations (Assembly Bill 1493) reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley regulations reflect tailpipe emission standards for specific vehicle model years. The United States Environment Protection Agency (USEPA) decided to grant a waiver of Clean Air Act preemption on June 30, 2009, which allows California to implement the GHG emission standards (74 FR 32744).

[2] The Low Carbon Fuel Standard, adopted by the Office of Administrative Law (OAL) on January 12, 2010, requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020 (17 CCR 95480).

2.0 INTRODUCTION

Briefly stated, global climate change (GCC) is a change in the average climatic conditions of the earth, characterized by changes in wind patterns, storms, precipitation, and temperature. The baseline by which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. Analyzing these records shows a statistically significant difference in the rate and magnitude of GCC in the last 150 years (the Industrial Age) as compared to historical climate change.

The United Nations Intergovernmental Panel on Climate Change (IPCC) calculated GHG emission projections that would be needed to stabilize global temperatures and GCC impacts. The IPCC predicted that the range of global mean temperature increases from 1990 to 2100, given six scenarios, could range from 1.4 to 5.8 degrees Celsius (°C) (IPCC 2001). Regardless of analytical methodology, global average temperature and mean sea level are expected to rise under all scenarios.

Climate models for California project that temperatures in California will increase anywhere from 3 to 10.5 degrees Fahrenheit (°F) (California Climate Change Center 2006). Almost all climate change scenarios include a continuing trend of warming through the end of the 21st century due to substantial amounts of GHG already released and the difficulty of reducing emissions to a level that would stabilize the climate. According to the 2006 California Climate Action Team Report (CalEPA 2006), the following climate change effects are predicted in California over the course of the 21st century.

- A diminishing Sierra snowpack declining by 70 to 90 percent, threatening the State's water supply.
- Increasing temperatures of up to approximately 10 °F under the higher emission scenarios, leading to a 25 to 35 percent increase in the number of days ozone pollution levels are exceeded in most urban areas.
- Coastal erosion along the length of California and seawater intrusion into estuarine areas from a 4- to 33-inch rise in sea level. This would exacerbate flooding in already vulnerable regions.
- Increased vulnerability of forests due to pest infestation and increased temperatures.
- Increased challenges for the State's important agricultural industry from water shortages, increasing temperatures, and saltwater intrusion.
- Increased electricity demand, particularly in the hot summer months.

Temperature increases would lead to adverse environmental impacts in a wide variety of areas, including sea level rise, reduced snowpack resulting in changes to existing water resources, increased risk of wildfires, public health hazards associated with higher peak temperatures, heat waves, and deteriorated air quality.

In December 2008, the California Air Resources Board (CARB) released a Climate Change Scoping Plan (CARB 2008a) outlining the State's strategy to achieve the 2020 GHG emissions limit mandated by Assembly Bill 32 (AB 32). AB 32 requires the State to reduce GHG emissions to 1990 levels by 2020. As is shown in Figure 2-1, GHG emissions in the State are expected to increase by nearly 30 percent between the 2002-2004 levels (average emissions) and 2020 levels under the business-as-usual (BAU) conditions. Transportation emissions are expected to increase nearly 25 percent between now and 2020 in the BAU scenario (i.e., in the absence of AB 32).

In a staff report entitled "California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit," CARB estimated the 1990 emission level as approximately 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) (CARB 2007a). The State would need to reduce emissions by 169 $MMTCO_2e$ in 2020 as compared to BAU to meet the emission targets; a nearly 30 percent decrease in emissions from BAU.

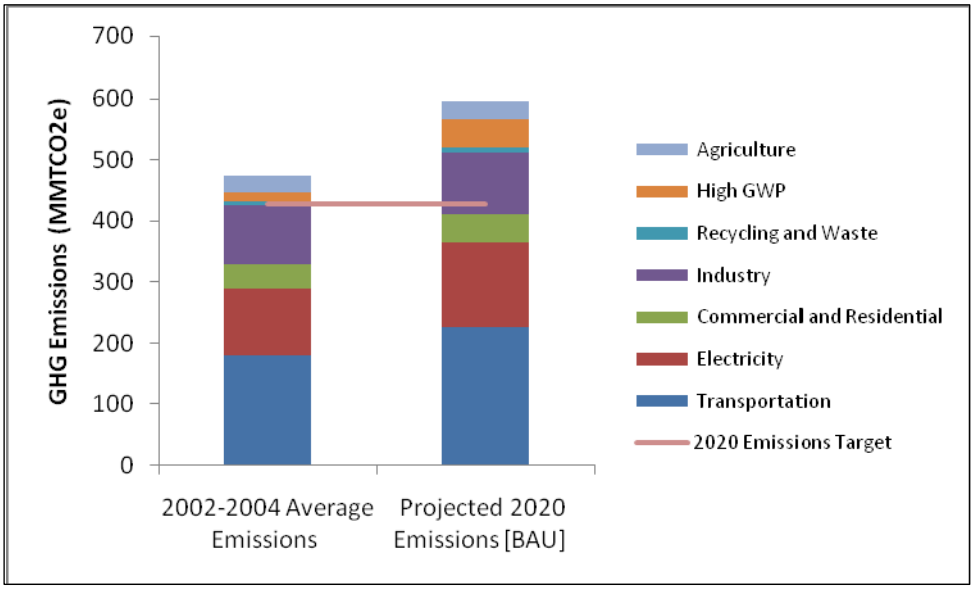

Figure 2-1. Current Emissions Compared to 2020 Business-as-Usual

In its Scoping Plan, CARB proposed a series of measures to reduce GHG emissions, several of which relate to transportation. The California Light-Duty Vehicle GHG Standards ("Pavley Regulations"), for example, are predicted to reduce emissions by 31.7 $MMTCO_2e$ or 18 percent of the total emission reductions included in the Scoping Plan[3]. Other reductions include the Low Carbon Fuel Standard (15 $MMTCO_2e$ reduction), regional transportation-related GHG targets[4] (5 $MMTCO_2e$ reduction), and medium/heavy-duty vehicle reduction measures (1.4 $MMTCO_2e$ reduction).

The measures included in the Scoping Plan are not included in the various models used to quantify emissions in this report. Since it is difficult to quantify the exact amount of emissions reductions the Scoping Plan will achieve by 2035, its effect is discussed only qualitatively. GHG emissions are typically reported in units of $MMTCO_2e$, and it may be difficult to understand the magnitude of such high levels of emissions. To put GHG emissions in perspective, the following examples illustrate measures that would create reductions in one $MMTCO_2e$ (CARB 2007b):

- 216,000 passenger cars not driven for one year
- 179,000 passenger cars and light trucks not driven for one year
- 114 million gallons of gasoline saved
- 13,400 tanker trucks of gasoline saved
- One year of electricity use by 193,000 California households
- The energy savings in one year from replacing 13 million standard light bulbs with compact fluorescent lamps
- 26,000,000 tree seedlings grown for 10 years

[3] The Scoping Plan includes measures to reduce emissions by 174 $MMTCO_2e$, which is slightly above the target reduction goal of 169 MMTCO2e.

[4] This reduction measure is an estimate of reductions that may be achieved from local land use changes. It is not the SB 375 regional target.

3.0 METHODOLOGY FOR IMPACT EVALUATION

The Regional Connector Transit Corridor project would provide a direct link between the Metro Gold Line, Metro Blue Line, and Metro Expo Line in downtown Los Angeles. The project is anticipated to produce regional benefits in the South Coast Air Basin (SCoAB) by increasing regional mobility, minimizing transfers on the LRT system, and allowing connections to future new rail lines. The project is predicted to reduce VMT and associated GHG emissions by providing an alternative to single occupancy vehicle travel.

Mass transit has been identified at the regional, state and national levels as a crucial tool to reduce GHG emissions and climate change. Additionally, Metro has committed to, and is implementing a strong environmental sustainability policy focused on reducing CO_2 emissions through efficient uses of fuels and electricity (Metro 2007). The proposed project, in addition to improving transit access and mobility, would be developed consistent with Metro's sustainability policy.

The following section describes the methodology for analysis of potential project benefits and impacts relating to GHG emissions during both construction and operation.

3.1 Regulatory Framework

The current regulatory setting related to climate change and GHG emissions is summarized below.

3.1.1 Federal

3.1.1.1 Massachusetts et al. v. Environmental Protection Agency et al.

Twelve U.S. states and cities (including California) in conjunction with several environmental organizations, brought suit to force the USEPA to regulate GHGs as a pollutant pursuant to the Federal Clean Air Act (CAA) (Massachusetts et al. v. Environmental Protection Agency et al. [U.S. Supreme Court No. 05–1120]; argued November 29, 2006—decided April 2, 2007). The Court ruled that the plaintiffs had standing to sue, that GHGs fit within the CAA's definition of an air pollutant, and that the USEPA's reasons for not regulating GHGs were insufficiently grounded in the CAA.

3.1.1.2 Mandatory GHG Reporting Rule

On October 30, 2009, the USEPA published the final mandatory greenhouse gas reporting rule in the Federal Register (74 FR 56260). This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more of CO_2e per year to submit annual reports to the USEPA. Reporting will start in 2011 for the calendar year 2010 except for vehicle and engine manufacturers who will begin reporting for model year 2011.

3.1.1.3 Endangerment Finding

On December 15, 2009, the USEPA published its endangerment finding for GHGs in the Federal Register (74 FR 66496). The USEPA Administrator determined that six GHGs, taken in combination, endanger both the public health and welfare of current and future generations. Although the endangerment finding discusses the effects of six GHGs, it acknowledges that transportation sources only emit four of the key GHGs: CO_2, CH_4, N_2O, and HFCs. Further, the Administrator found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to air pollution that endangers the public health and welfare under CAA Section 202(a). These findings are expected to pave the way for future regulations to control emissions of GHGs on a nationwide basis.

3.1.1.4 American Clean Energy and Security Act of 2009

On June 26, 2009, the American Clean Energy and Security Act of 2009 (HR 2454) was approved by the House of Representatives. This bill, also known as the Waxman-Markey Bill, requires entities to report their operational emissions if they exceed 10,000 tons (assumed to be metric tons) of CO_2e per year and to enter a cap-and-trade program if they exceed 25,000 tons of CO_2e per year. The cap-and-trade program aims to reduce emissions by 17 percent of 2005 levels by 2020 and by 83 percent of 2005 levels by 2050. The bill is waiting for Senate approval.

3.1.1.5 Clean Energy Jobs and American Power Act

On September 30, 2009, the Clean Energy Jobs and American Power Act (SB 1733) was introduced in the Senate. Also known as the Kerry-Boxer Bill, the bill provides for the establishment of a cap-and-trade system for GHG emissions and sets goals of reducing U.S. emissions by 20 percent from 2005 levels by 2020 and by 83 percent from 2005 levels by 2050. The bill was passed by the Committee on Environment and Public Works on November 5, 2009, but has since been stalled in the Senate.

3.1.2 State

3.1.2.1 California Assembly Bill 1493 (AB 1493)

California Assembly Bill (AB) 1493 required CARB to develop and adopt GHG emission standards for automobiles. The legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in the state. It cited several risks that California faces from climate change, including reduction in the State's water supply, increased air pollution creation by higher temperatures, harm to agriculture, increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. Further, the legislation stated that technological solutions to reduce GHG emissions would stimulate the California economy and provide jobs.

Assembly Bill 1493 became law in 2002, and CARB enacted subsequent regulations in September 2004. States are prevented from adopting motor vehicle emission standards that are contrary to federal law; however, California is allowed to adopt its own motor vehicle emission standards that are at least as stringent as the federal requirements if the USEPA grants California a waiver request.

Other states can either elect to follow the California standards or continue to follow federal requirements. The USEPA originally declined California's waiver request in March 2008, citing a failure to demonstrate "compelling and extraordinary" conditions that would make the new regulations necessary. The USEPA then reversed its waiver denial on June 30, 2009, granting California authority to implement new standards.

3.1.2.2 California Executive Order S-3-05

California Executive Order S-3-05 established the following GHG emission reduction targets for California:

- Reduce GHG emissions to 2000 levels by 2010;
- Reduce GHG emissions to 1990 levels by 2020; and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.

3.1.2.3 Global Warming Solutions Act of 2006 (AB 32)

California AB 32, the Global Warming Solutions Act of 2006, codifies the State's GHG emissions target. It requires California to reduce GHG emissions to 1990 levels by 2020 and CARB to enforce a statewide cap on GHG that must be phased in by 2012. AB 32 was passed into on September 27, 2006. Key AB 32 milestones are as follows:

- June 30, 2007—Identification of "discrete" early action GHG emissions reduction measures.
- January 1, 2008—Identification of the 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level. Adoption of reporting and verification requirements concerning GHG emissions.
- January 1, 2009—Adoption of a scoping plan for achieving GHG emission reductions.
- January 1, 2010—Adoption and enforcement of regulations to implement the "discrete" actions.
- January 1, 2011—Adoption of GHG emission limits and reduction measures by regulation.

- January 1, 2012—GHG emission limits and reduction measures adopted in 2011 become enforceable.

3.1.2.4 Senate Bill 97 (SB 97)

Senate Bill 97 (SB 97) mandates that the Governor's Office of Planning and Research amend the State's CEQA Guidelines to address impacts from GHGs, and these amendments must be adopted by the California Natural Resources Agency. The California Natural Resources Agency adopted CEQA Guidelines Amendments on December 30, 2009. In the CEQA Guideline Amendments, the California Natural Resources Agency recommended the following criteria for determining significance of GHG emissions:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
- The extent to which the project complies with the regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

3.1.2.5 CARB Interim Significance Thresholds

CARB released a Preliminary Draft Staff Proposal for Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act (CEQA) in October 2008 (CARB 2008b). CARB's guidelines provide recommendations for assessing significance of operational and construction emissions from industrial and commercial/residential projects.

Although CARB's preliminary draft staff proposal suggests a quantitative threshold for assessing impacts from the operation of industrial projects, it prescribes the use of performance standards for construction-related emissions from all types of projects. CARB does not provide specific performance standards to address construction-related impacts. The California Natural Resources Agency is proceeding with amendments to the CEQA Guidelines that would better define the analytical requirements for climate change and GHG emissions in environmental documents (Ito 2009). As a result, CARB is currently taking no further action to define its interim thresholds of significance.

3.1.2.6 Senate Bill 375 (SB 375)

Senate Bill 375 (SB 375) requires CARB to set regional targets for 2020 and 2035 to reduce GHG emissions from passenger vehicles. A regional target will be developed for each of the 18 metropolitan planning organizations (MPOs) in the state; SCAG is the MPO that would have jurisdiction over the Regional Connector Transit Corridor project area. A Regional

Targets Advisory Committee (RTAC) was appointed by CARB to provide recommendations to be considered and methodologies to be used in CARB's target setting process. The final RTAC report was released on January 23, 2009. CARB is required to propose draft targets by June 30, 2010 and adopt final targets by September 30, 2010.

Each MPO is required to develop "Sustainable Community Strategies" (SCS) through integrated land use and transportation planning and to demonstrate an ability to attain the proposed reduction targets by 2020 and 2035. SCAG is proceeding with the SCS process on the tentative assumption that the region will have an approximate reduction target of 2.5 $MMCO_2e$ for 2020 (SCAG 2009). This target is based on the fact that the statewide reduction target is 5 $MMTCO_2e$, and the SCAG region accounts for roughly half of the State's population and emissions.

3.1.3 Local

The SCAQMD Governing Board adopted guidelines relating to GHG significance. The guidelines set a threshold of significance for industrial sources of 10,000 metric tons of CO_2e per year for operational emissions plus construction emissions amortized over 30 years. The guidelines do not provide guidance on non-industrial projects, such as for transportation-related projects.

3.2 Standards of Significance

3.2.1 NEPA Guidance

NEPA does not include specific requirements for analysis of potential impacts related to GCC, and a specific quantitative threshold of significance was not established for this project. However, incremental project emissions were determined for motor vehicles and project electricity use based on the change in VMT between each build alternative and the No Build Alternative. Changes in motor vehicle VMT were determined by the project traffic analysis for each alternative and include the potential project impacts for automobile VMT, transit bus VMT, and operation of light rail trains and new stations.

Although light rail would not contribute to local (direct) emissions, it would generate regional (indirect) emissions from the in-state generation of electricity used to operate the trains and new stations. Changes in the future fuel mix used to produce electricity by the Los Angeles Department of Water and Power (LADWP) were also taken into consideration. For example, LADWP intends to increase its renewable energy portfolio from eight percent in 2008 to 35 percent by 2020; therefore, GHG emissions from the regional generation of electricity would decrease in the future from the decreased reliance on fossil fuels.

As discussed in Section 4.0 below, the EMFAC2007 and OFFROAD2007 models were used to estimate emissions from regional highway traffic. Technical studies published by the CARB were used to estimate emission factors from CNG buses. Emissions from the generation of

electricity were calculated from emission factors obtained from LADWP and the USEPA's Emissions & Generation Resource Integrated Database (eGRID) (USEPA 2009a).

3.2.2 CEQA Guidance

3.2.2.1 South Coast Air Quality Management District (SCAQMD) Guidance

A tiered approach to evaluating the significance of GHG impacts was adopted by the SCAQMD Governing Board on December 5, 2008. The SCAQMD's Interim GHG Significance Threshold Staff Proposal (SCAQMD 2008) states that project GHG emissions analysis should include direct, indirect, and, if possible, life-cycle emissions during construction and operation. The SCAQMD's recommendations regarding the quantification of emissions were followed for this project; however, the SCAQMD interim thresholds are largely geared towards industrial, residential, and commercial projects, and do not specifically address transportation projects. Since a transportation-specific threshold of significance has not been established by the SCAQMD, a quantitative threshold was not established for the proposed project.

3.2.2.2 CEQA Guideline Amendments

In addition to the SCAQMD's guidance document, the California Natural Resources Agency released CEQA Guideline Amendments in December 2009 (Natural Resources Agency 2009). The Office of Administrative Law (OAL) finished its review of the amended CEQA guidelines on February 16, 2010 and submitted the amended CEQA Guidelines to the Secretary of State. The guidelines will be adopted as final on March 18, 2010. In the CEQA Guideline Amendments, the California Natural Resources Agency recommended the following criteria for determining the significance of GHG emissions (14 CCR §15064.4):

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency[5] determines applies to the project; or
- The extent to which the project complies with the regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding

[5] The lead agency is defined as "the public agency which has the primary responsibility for carrying out or approving a project which may have a significant effect upon the environment" under CEQA (Pub. Resources Code, §21067). For the Regional Connector Transit Corridor project, the lead agency would be Metro.

compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The plans addressed in the final bullet can include regional transportation plans, regional blueprint plans, and plans for the reduction of GHG emissions (14 CCR §15125). The CEQA Guidelines identify specific plan elements that must be considered for any plans developed to reduce GHG emissions. At the very least, the plan should do the following (14 CCR §15183.5):

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; and
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.

Although specific quantitative thresholds of significance for CEQA are not provided in any of the referenced guidance documents, incremental project emissions were calculated as the difference between each project alternative as of 2035 and existing conditions (2009). Changes in motor vehicle VMT, transit bus VMT, and operation of light rail vehicles and new stations were included in the analysis.

The Draft 2008 Regional Transportation Plan (RTP) Update Program Environmental Impact Report (PEIR) and Addendum analyzed GHG emissions and included all feasible mitigation measures. The PEIR is therefore consistent with the CEQA significance criteria discussed above. The proposed project was evaluated for compliance with the regional transportation plan (RTP). If the proposed project is found to be consistent with the RTP, then the project would not be significant for GHG emissions.

3.3 Area of Potential Impact

The area of potential impact was defined as the SCoAB, which includes all of Orange County and the urban, non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Although the area of potential impact is extensive, the analysis focused only on sources that

impact or are impacted by the project with regard to GHGs. Specifically, the analysis included the four-county region to capture the changes in VMT that could occur as a direct result of each project alternative as determined by the project traffic analysis. The analysis also covered emissions from project-related construction sources (construction equipment, haul and delivery trucks, and construction worker vehicles) in the SCoAB, as well as project sources located within construction sites and staging areas of the light rail alternatives.

3.4 Analysis Methodology

Although thresholds of significance for GHG are not well-established, methodologies and protocols for analyzing GHG emissions have been extensively documented and were used in this analysis. The analysis used protocols established by the California Climate Action Registry (CCAR), namely the General Reporting Protocol (CCAR 2009) and the Local Government Operations Protocol (CCAR 2008). Generally, GHG impact analyses follow the same quantification methodologies as air quality studies for criteria pollutants.

Greenhouse gas emissions were calculated for direct and indirect sources of GHG, including engine exhaust and purchased electricity. Emissions were estimated for three GHG pollutants regulated under the Kyoto Protocol: CO_2, CH_4, and N_2O. Although the Kyoto Protocol also regulated three other GHG pollutants (hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]), these pollutants are not emitted as products of engine exhaust or purchased electricity and are not analyzed further herein[6]. Emissions were converted to CO_2e using the GWPs in the IPCC's Second Assessment Report and documented in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (USEPA 2009b).

Global warming potentials are defined by CARB as the radiative forcing impact (degree of warming to the atmosphere) of one mass-based unit of a given GHG relative to an equivalent unit of CO_2. For example, one ton of CH_4 is equivalent to approximately 21 tons of CO_2 in the atmosphere. Although the IPCC has released several updates to the Second Assessment Report (SAR) since its release in 1996, the international standard is to use the original SAR to maintain consistency with GHG emission inventories already compiled.

3.4.1 Construction Emissions

This analysis followed the SCAQMD's recommendation that construction emissions be amortized over 30 years (defined as life of a project) and added to the operational emissions.

Potential emissions of CO_2, CH_4, and N_2O from construction equipment (e.g., bulldozers, scrapers, graders, off-highway trucks, etc.) were calculated using the OFFROAD model,

[6] Although HFCs may be emitted from mobile sources from air conditioning (e.g., HFC-134a), methods for estimating these emissions are limited and are not included in this evaluation.

developed by CARB, for off-road engine exhaust emissions. Potential emissions of CO_2 and CH_4 were calculated using the EMFAC[7] model for on-road vehicles, and includes construction worker trips to the construction site, on-road haulage trucks, material delivery trucks, and equipment maintenance vehicles. Although N_2O emissions would also occur from the operation of on-road vehicles, the EMFAC model does not currently generate these emissions. Additionally, appropriate sources of GHG emissions were reviewed as part of this analysis to supplement the EMFAC model, as necessary.

3.4.2 Operational Emissions

3.4.2.1 Regional Traffic

Engine exhaust emissions were calculated to quantify predicted reductions in VMT in the region. As with construction emissions, the EMFAC model was used to quantify regional traffic emissions associated with the project. Any increase in transit rider trips to stations proposed under each alternative is assumed to be included in the regional traffic analysis. Regional traffic data was obtained from the project traffic analysis for each alternative.

3.4.2.2 Light Rail and New Station Operations

Although light rail vehicles do not emit GHG, the GHG analyses quantify emissions resulting from the remote generation of electricity to run the light rail vehicles and to power the facilities at the new stations. Emissions were calculated using the most recent LADWP CO_2 emission factor reported to CCAR; CH_4 and N_2O emissions were estimated from the USEPA's eGRID (USEPA 2009a).

Light Rail Operation

Since emission factors are reported in units of grams per mile (g/mi), it was necessary to estimate the total annual mileage associated with the proposed project. Headway information was used to estimate the number of trains that would occur during the year based on the weekday peak, weekday off-peak, and weekend service periods. The single trip distances for each service line were then used with the total number of trains to estimate the annual trip distance for each line. The single trip distances only included new track that would be installed as part of the proposed project.

New Station Operation

Several new stations would be built as part of the proposed project. Emissions associated with electricity at the stations to power lighting, escalators, train control, and general station maintenance were estimated using emission factors from a report prepared by Chester and

[7] The EMission FACtors (EMFAC) model is used to calculate emission rates from on-road motor vehicles in California. It is similar to the USEPA's MOVES2010 model but uses a fleet mix and assumptions specific to California.

Horvath (2008). The emission factors associated with each individual area are provided in units of kilowatts per station; therefore, the number of stations associated with each alternative was used to estimate emissions. Aboveground stations were conservatively estimated to require half the lighting of underground stations and would require minimal station maintenance. The station numbers were adjusted to reflect differences in above- and under-ground stations.

3.4.2.3 Bus Operations

The operating schedule for the proposed bus routes and headway information was used to estimate the number of bus trips that would occur for a weekday peak, weekday off-peak, and weekend service period. Information on the single trip distance for each line was then used to estimate the total annual miles traveled by all of the bus trips associated with the TSM Alternative.

The EMFAC model does not estimate emissions from alternative fuels like CNG; therefore, it was necessary to use research data published by CARB to estimate emissions resulting from the combustion of CNG. CARB provided a list of research reports that contain information on CNG combustion emissions. Several of the research reports contained information that was specific to Metro, predominantly from the New Flyer buses. Average emission factors from these Metro-specific reports were developed to be used in all subsequent calculations.

4.0 AFFECTED ENVIRONMENT

This section describes the existing conditions and affected environment/environmental setting for climate change effects.

4.1 Existing Conditions

Worldwide, California is the 12th to 16th largest emitter of CO_2, and is responsible for approximately two percent of the world's CO_2 emissions (CEC 2006).

As shown in Figure 4-1, transportation is responsible for 39 percent of the State's GHG emissions, followed by electricity generation (22 percent), the industrial sector (20 percent), agriculture and forestry (6 percent), commercial and residential (9 percent), and other sources (4 percent). Passenger vehicles and heavy-duty trucks represent approximately 35 percent of total emissions, with rail contributing only one percent. Rail is therefore a key element in reducing the State's GHG emissions by providing an alternative to passenger vehicles (see Figure 1-1).

Emissions of CO_2 and N_2O are largely byproducts of fossil fuel combustion. Methane, a highly potent GHG, results largely from off-gassing associated with agricultural practices and landfills. Sinks of CO_2 include uptake by vegetation and dissolution into the ocean. California GHG emissions in 2006 totaled approximately 485 $MMTCO_2e$ (CARB 2009).

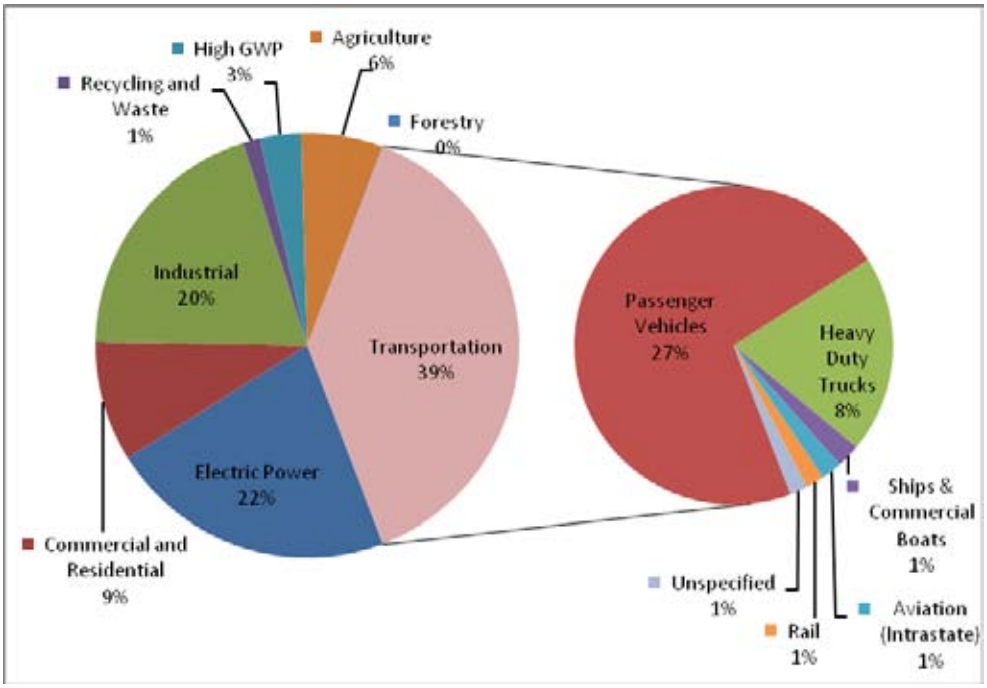

Figure 4-1. California GHG Inventory for 2006

4.1.1 Regional Traffic

As required by CEQA, existing (2009) emissions from regional traffic were estimated in the analysis to compare against future build alternatives. Data on VMT in the region and emission factors from the EMFAC2007 model were used to estimate emissions of GHG. The emissions calculations were based on the total VMT in the region and the average speed on the highway network. Since the EMFAC model only generates emissions of CO_2 and CH_4, the CCAR General Reporting Protocol was used to estimate emissions of N_2O. Table 4-1 summarizes the results of the baseline GHG emissions.

Table 4-1. Existing Conditions: 2009 Annual Highway Traffic GHG Emissions

	CO_2	CH_4	N_2O	Total[2]
Vehicle miles traveled (VMT)	n/a	n/a	n/a	304,212,400
Emission Factor (grams per mile)	365.210	0.028	0.173	N/A
Emissions (metric tons per year)	40,552,000	3,100	19,200	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] (metric tons per year)	40,552,000	65,100	5,952,000	46,569,100

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = not applicable
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary due to rounding*

5.0 IMPACTS

This section analyzes impacts associated with construction and operation of the proposed project alternatives.

5.1 No Build Alternative

The No Build Alternative describes a future condition where none of the alternatives described in this document would be built. This section provides a summary of emissions associated with the No Build Alternative.

5.1.1 Operational Emissions

Under the No Build Alternative, no construction would occur. As a result, no emissions would result from operation of light rail vehicles. Any future increase in emissions under this scenario would result from projected growth in regional traffic.

5.1.1.1 Light Rail Operations

The No Build Alternative assumes that the proposed project would not be built. Thus, no emissions would result from production of electricity needed to operate LRT vehicles or new stations.

5.1.1.2 Regional Traffic

Emissions of GHG that would occur under the No Build Alternative are summarized in Table 5-1. Since the No Build Alternative assumes that the Regional Connector Transit Corridor project would not be built, the GHG emissions reported in this section represent the projected growth of traffic expected to occur in the region of analysis. Emission calculations were based on the total VMT in the region and the average speed on the highway network.

5.1.2 Construction Emissions

The No Build Alternative assumes the proposed project would not be constructed. As a result, no construction emissions would occur under the No Build Alternative.

5.1.3 Cumulative Impacts

The proposed project would not occur under the No Build Alternative. As a result, there would be no project-level emissions associated with the No Build Alternative. Any emissions that would result from regional traffic would also occur with any other project in the area. Thus, emissions would not be cumulatively significant.

Table 5-1. No Build Alternative 2035 Annual Highway Traffic GHG Emissions				
	CO_2	CH_4	N_2O	Total[2]
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,632,600
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,521,100	2,800	31,800	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] (metric tons per year)	106,521,100	58,800	9,858,000	116,437,900
Increment (compared to Existing Conditions [2009]) (metric tons per year)	65,969,100	(6,300)	3,906,000	69,868,800

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = not applicable
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary due to rounding*

5.2 Transportation System Management (TSM) Alternative

The Transportation System Management (TSM) Alternative assumes that the proposed project would not occur. Rather, additional bus lines would be added to improve regional connections across downtown.

5.2.1 Operational Emissions

Emissions from operation of the new buses proposed under the TSM Alternative, and from regional traffic in the project area, were evaluated for operational emissions.

5.2.1.1 Light Rail Operations

An LRT project would not be built under the TSM Alternative. As a result, light rail operational emissions would be zero.

5.2.1.2 Regional Traffic

Emissions of GHG that would occur in the TSM Alternative are summarized in Table 5-2. Since the TSM Alternative assumes that an LRT project would not be built, GHG emissions reported in this section represent the projected growth of traffic in the region of analysis. The emission calculations were based on the total VMT in the region and the average speed on the highway network.

Table 5-2. TSM Alternative 2035 Annual Highway Traffic GHG Emissions

	CO_2	CH_4	N_2O	Total[2]
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,358,400
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,463,200	2,800	31,800	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] (metric tons per year)	106,463,200	58,800	9,858,000	116,380,000

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = not applicable
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary slightly due to rounding*

5.2.1.3 Bus Operation

The TSM Alternative assumes that additional bus lines would be added to the downtown Los Angeles area making connections similar to those under the proposed build alternatives. Information on the methodology used to estimate emissions from bus operations is provided in Section 3.4.2.3. Emissions from the combustion of CNG were estimated for the TSM Alternative. Table 5-3 summarizes estimated emissions associated with bus operation.

5.2.1.4 Total Operational Emissions

Total operational emissions were estimated from CNG bus operation and regional traffic. Emissions were compared to existing conditions (2009) to evaluate significance under CEQA

and to the No Build Alternative (2035) to evaluate significance under NEPA. Total operational emissions are summarized in Table 5-4.

5.2.2 Construction Emissions

The TSM Alternative assumes an LRT project would not be constructed. As a result, no construction emissions would occur under the TSM Alternative.

Table 5-3. TSM Alternative 2035 Bus Operations GHG Emissions

Line #	Service Line	Emissions (metric tons CO_2e per year)			
		CO_2	CH_4	N_2O	Total
1	Upper Grand Southbound via Los Angeles	330	60	6	390
2	Upper Grand Northbound via Los Angeles	350	60	6	420
3	Upper Grand Southbound via Alameda	370	70	6	40
4	Upper Grand Northbound via Alameda	300	70	7	480
5	3rd Street Southbound	800	140	10	960
6	2nd Street Northbound	840	150	20	1,000
Total		3,100	550	50	3,700

Totals may vary slightly due to rounding

5.2.3 Cumulative Emissions

The TSM Alternative would result in a decrease in GHG emissions compared to the No Build Alternative and, because of regional growth, an increase in GHG emissions when compared to existing conditions (2009). The TSM Alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is assumed that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative would involve a light rail extension built partly aboveground. This section provides a summary of the emissions potentially associated with this alternative.

5.3.1 Operational Emissions

Operational emissions associated with the At-Grade Emphasis LRT Alternative would include indirect emissions from electricity needed to operate light rail vehicles and the new stations and direct emissions from highway traffic after construction is completed.

Table 5-4. Summary of Total Operational GHG Emissions for the TSM Alternative

Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Regional Traffic	106,463,200	58,800	9,858,000	116,380,000
CNG Buses	3,100	500	50	3,650
Total Emissions	106,466,300	59,300	9,858,050	116,383,650
CEQA Increment[1]	65,914,300	(5,800)	3,906,050	69,814,550
NEPA Increment[2]	(54,800)	500	50	(54,250)

Notes:
[1] *CEQA Increment is defined as the difference between the proposed alternative (2035) and existing conditions (2009).*
[2] *NEPA Increment is defined as the difference between the proposed alternative (2035) and the No Build Alternative (2035).*
[3] *Totals may vary slightly due to rounding*

5.3.1.1 Light Rail Emissions

Emissions from power generation for electricity needed to operate light rail vehicles were estimated from the route distance, headway between trains, and the average energy intensity for the train operation. Based on data from the National Transit Database (NTD 2010) the average energy intensity for the Metro's light rail service is 23 kilowatt-hours per mile (kWh/mi). Additional information on the methodology used to estimate emissions is provided in Section 3.4.2.2.

Since the LADWP is a member of CCAR, data from the 2007 CCAR report was used to estimate the CO_2 emission factor for electricity. Data from the eGRID was used to obtain the emission factors for CH_4 and N_2O, because this information is not available in CCAR reports.

LADWP adopted a Renewable Energy Policy that has a long-term goal to achieve a Renewable Portfolio Standard (RPS) with 35 percent renewable energy by 2020. According to the LADWP's 2008 Green Power Annual Report, LADWP's current energy mix is 8 percent

renewable energy, including wind energy, hydropower, geothermal energy, biomass energy, and solar power. Since the emission factors used in this analysis were from the 2007 CCAR Report, emission factors were adjusted by increasing the renewable energy mix from 8 percent under existing conditions (2009) to 35 percent under future conditions (2035). Table 5-5 provides a summary of estimated emissions from light rail operations.

Table 5-5. At-Grade Emphasis LRT Alternative
2035 Project Area Light Rail Annual GHG Emissions

Alternative	Annual CO_2e Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total
Current energy mix with 8% renewable energy	4,800	3	10	4,900
Expected Emissions with 35% Renewable Portfolio Standard	1,100	1	2	1,100

Totals may vary slightly due to rounding

5.3.1.2 New Station Emissions

In addition to emissions associated with propulsion of light rail vehicles, emissions would also be generated from the construction of new stations as part of the proposed project. Emissions from the operation of new stations were estimated based on figures from a similar light rail system, the Muni in San Francisco, as calculated in a study by Chester and Horvath (2008). Additional information on the methodology is provided in Section 3.4.2.2. As with light rail operation, emissions were adjusted by the expected 35 percent RPS that LADWP will achieve by 2035. Emissions are summarized in Table 5-6.

Table 5-6. At-Grade Emphasis LRT Alternative New Station Emissions

Infrastructure	Number of New Stations	Energy per Station (kWh/yr)	CO_2e Emissions (metric tons/yr)			
			CO_2	CH_4	N_2O	Total[3]
Station Lighting[1]	3	2,600	4	<1	<1	4
Station Escalators[2]	2	41,200	50	<1	<1	50
Train Control	4	127,200	300	<1	1	300
Station Maintenance[2]	2	159,700	200	<1	1	200

Table 5-6. At-Grade Emphasis LRT Alternative New Station Emissions						
Infrastructure	Number of New Stations	Energy per Station (kWh/yr)	CO_2e Emissions (metric tons/yr)			
			CO_2	CH_4	N_2O	Total[3]
Total			500	<1	1	500
Total (Adjusted for 35% RPS)			100	<1	<1	100

Notes:
[1] *One of the stations is a street-level platform on a one-way couplet. Electricity usage for station lighting for each platform was assumed to be half an underground station; therefore, the total number of stations estimated at 3.*
[2] *Two stations are underground, whereas the remaining station is at street-level.*
[3] *Totals may vary slightly due to rounding.*

5.3.1.3 Regional Traffic

Emissions of GHG from regional traffic under the At-Grade Emphasis LRT Alternative are summarized in Table 5-7. Emission calculations were based on the total VMT in the region and the average speed on the highway network.

Table 5-7. At-Grade Emphasis LRT Alternative 2035 Annual Highway Traffic GHG Emissions				
	CO_2	CH_4	N_2O	Total
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,330,800
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,457,400	2,800	31,800	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] (metric tons per year)	106,457,400	58,800	9,858,000	116,374,200

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary slightly due to rounding.*

5.3.1.4 Bus Operation

Additional bus routes would not be added as part of this alternative. As a result, CNG bus emissions would be zero and are not included in this section.

5.3.1.5 Total Operational Emissions

Total operational emissions were estimated considering light rail operations and regional traffic. Emissions were compared to existing conditions (2009) to evaluate significance under CEQA and to the No Build Alternative (2035) to evaluate significance under NEPA. Total operational emissions are summarized in Table 5-8.

5.3.2 Construction Emissions

Construction of the At-Grade Emphasis LRT Alternative would result in GHG emissions from diesel-fueled construction equipment. Construction emissions were estimated using the OFFROAD emissions model and the construction schedule. Estimated emissions are provided in Table 5-9. The emissions shown indicate the total project emissions and emissions that have been amortized over 30 years as required by SCAQMD. Section 1.2 provides a summary of amortized construction emissions along with the operational emissions increment.

Table 5-8. Summary of Total Operational GHG Emissions for At-Grade Emphasis LRT Alternative

Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Regional Traffic	106,457,400	58,800	9,858,000	116,374,200
Light Rail	1,100	1	2	1,100
New Stations	100	<1	<1	100
Total Emissions	106,458,600	58,800	9,858,000	116,375,400
CEQA Increment[1]	65,906,600	(6,300)	3,906,000	69,806,300
NEPA Increment[2]	(62,500)	1	2	(62,500)

[1] *CEQA Increment is defined as the difference between the proposed alternative (2035) and existing conditions (2009).*
[2] *NEPA Increment is defined as the difference between the proposed alternative (2035) and the No Build Alternative (2035).*
[3] *Totals may vary slightly due to rounding.*

Table 5-9. At-Grade Emphasis LRT Alternative Annual Construction GHG Emissions (2014-2017)						
Phase	Emissions of CO_2e (metric tons per year)					
	2014	2015	2016	2017	Project	Amortized Emissions
Construction Equipment Emissions (onsite)	2,500	21,700	34,100	13,100	71,400	2,400
Construction Worker Commuting (offsite)	90	400	600	200	1,300	40
Haul Truck Emissions (offsite)	200	1,200	1,800	600	3,800	100
Offsite Subtotal	300	1,600	2,400	800	5,000	200
Total (onsite + offsite)	2,700	23,300	36,500	13,900	76,400	2,500

Totals may vary slightly due to rounding

5.3.3 Cumulative Emissions

The At-Grade Emphasis LRT Alternative would result in a decrease in GHG emissions compared to the No Build Alternative and, because of regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The At-Grade Emphasis LRT Alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

5.4 Underground Emphasis LRT Alternative

Under the Underground Emphasis LRT Alternative, operation of the proposed light rail extension would occur largely underground. This section provides a summary of the emissions associated with this alternative.

5.4.1 Operational Emissions

Operational emissions associated with the Underground Emphasis LRT Alternative would include both indirect emissions from electricity needed to operate light rail vehicles and new stations and direct emissions from highway traffic after construction is completed and the project is implemented.

5.4.1.1 Light Rail Emissions

To calculate indirect emissions from remotely generated electricity, the amount of electricity needed to operate the light rail vehicles was estimated based on the route distance, train headways, and the average energy intensity for train operation. The analysis assumed that LADWP would achieve the RPS of 35 percent renewable energy by 2020. Table 5-10 provides a summary of estimated emissions from light rail operation.

Table 5-10. Underground Emphasis LRT Alternative 2035 Project Area Light Rail Annual GHG Emissions

Alternative	Annual CO_2e Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total
Current energy mix with 8% renewable energy	4,800	2	10	4,800
Expected Emissions with 35% Renewable Portfolio Standard	1,100	1	2	1,100

Totals may vary slightly due to rounding.

5.4.1.2 New Station Emissions

In addition to emissions associated with propulsion of light rail vehicles, emissions would be generated from operation of the proposed stations to be constructed. Emissions from the operation of new stations were estimated based on figures from a similar light rail system, the Muni in San Francisco, as calculated in a study by Chester and Horvath (2008). As with light rail operation, the analysis adjusted emissions by the 35 percent RPS that LADWP is expected to achieve by 2035. Emissions are summarized in Table 5-11.

5.4.1.3 Regional Traffic

Emissions of GHG that would occur from regional traffic in the Underground Emphasis LRT Alternative are summarized in Table 5-12. The emission calculations were based on the total VMT in the region and the average speed on the highway network.

5.4.1.4 Bus Operation

Additional bus routes would not be added as part of this alternative. CNG bus emissions would be zero and are not included in this section.

Table 5-11. Underground Emphasis LRT Alternative New Station Emissions						
Infrastructure	Number of New Stations	Energy per Station (kWh/yr)	CO_2e Emissions (metric tons/yr)			
			CO_2	CH_4	N_2O	Total
Station Lighting	3	2,600	4	<1	<1	4
Station Escalators	3	41,200	70	<1	<1	70
Train Control	3	127,200	200	<1	<1	200
Station Maintenance	3	159,700	300	<1	1	300
Total			600	<1	1	600
Total (Adjusted for 35% RPS)			100	<1	<1	100

Totals may vary slightly due to rounding.

Table 5-12. Underground Emphasis LRT Alternative 2035 Annual Highway Traffic GHG Emissions				
	CO_2	CH_4	N_2O	Total[2]
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,320,300
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,455,200	2,800	31,800	N/A
GWP	1	21	300	N/A
CO_2e Emissions[1] (metric tons per year)	106,455,200	58,800	9,858,000	116,372,000

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = Not applicable
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary slightly due to rounding.*

5.4.1.5 Total Operational Emissions

Total operational emissions were estimated from light rail operation and regional traffic. Emissions were compared to existing conditions (2009) to evaluate significance under CEQA and compared to the No Build Alternative (2035) for significance under NEPA. Total operational emissions are summarized in Table 5-13.

5.4.2 Construction Emissions

Construction of the Underground Emphasis LRT Alternative would result in GHG emissions from diesel-fueled construction equipment. Construction emissions were estimated using the OFFROAD emissions model and the proposed construction schedule. The Underground Emphasis LRT Alternative could be realized in several ways. Four scenarios were compared, based on whether SEM or cut & cover is used in construction of the 2nd/Hope Street station and whether the proposed 2nd Street station is built at either Broadway or Los Angeles Street.

Estimated emissions are provided in Table 5-14. The emissions shown indicate the total project emissions and have also been amortized over 30 years as required by the SCAQMD. Section 1.2 provides a summary of amortized construction emissions along with the operational emissions increment.

5.4.3 Cumulative Emissions

The proposed project would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The Underground Emphasis LRT Alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, potential emissions would not be cumulatively significant.

Table 5-13. Summary of Total Operational GHG Emissions for Underground Emphasis LRT Alternative

Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Regional Traffic	106,455,200	58,800	9,858,000	116,372,000
Light Rail	1,100	1	2	1,100
New Stations	100	<1	<1	100

Table 5-13. Summary of Total Operational GHG Emissions for Underground Emphasis LRT Alternative				
Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Total Emissions	106,456,400	58,800	9,858,000	116,373,200
CEQA Increment[1]	65,904,400	(6,300)	3,906,000	69,804,100
NEPA Increment[2]	(64,700)	1	2	(64,700)

Notes:
[1] *CEQA Increment is defined as the difference between the* proposed alternative *(2035) and existing conditions (2009).*
[2] *NEPA Increment is defined as the difference between the* proposed *alternative (2035) and the No Build Alternative (2035).*
[3] *Totals may vary slightly due to rounding.*

5.5 Fully Underground Alternative – Little Tokyo Variation 1

Under Fully Underground LRT Alternative – Little Tokyo Variation 1, the proposed light rail extension would occur entirely underground. Under this alternative, the proposed 2nd Street/Central Avenue station and junction would be on the same level underground. This section summarizes estimated emissions associated with this alternative.

5.5.1 Operational Emissions

Operational emissions associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would include indirect emissions from electricity needed to operate light rail vehicles and new stations and direct emissions from highway traffic after construction is completed and the project is implemented.

Table 5-14. Underground Emphasis LRT Alternative Annual Construction GHG Emissions (2014-2017)

Phase	Emissions of CO_2e (metric tons per year)					
	2014	2015	2016	2017	Project	Amortized Emissions
2nd/Hope Street station + 2nd Street station – Broadway Option (SEM)	1,900	17,500	47,300	32,400	99,100	3,300
2nd/Hope Street station + 2nd Street station - Broadway Option (Cut & Cover)	1,900	17,700	48,100	32,900	100,600	3,400
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (SEM)	1,900	17,500	47,200	32,300	98,900	3,300
2nd/Hope Street station + 2nd Street station - Los Angeles Street Option (Cut & Cover)	1,900	17,700	48,000	32,800	100,400	3,300

Totals may vary slightly due to rounding

5.5.1.1 Light Rail Emissions

Emissions from power generation for electricity needed to operate light rail trains were estimated based on the route distance, train headways, and the average energy intensity for train operation. The analysis assumed that LADWP would achieve the RPS of 35 percent renewable by 2020. Table 5-15 provides a summary of estimated emissions from light rail operation.

5.5.1.2 New Station Emissions

In addition to emissions associated with propulsion of the light rail vehicles, emissions would also be generated from new stations. Emissions from the operation of stations were estimated based on figures from a similar light rail system, the Muni in San Francisco, as calculated in a study by Chester and Horvath (2008). As with light rail operation, emissions were adjusted by the expected 35 percent RPS that LADWP will achieve by 2035. Emissions are summarized in Table 5-16.

5.5.1.3 Regional Traffic

Emissions of GHG that would occur from regional traffic under the Fully Underground LRT Alternative – Little Tokyo Variation 1 are summarized in Table 5-17. The emission

calculations were based on the total VMT in the region and the average speed on the highway network.

Table 5-15. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Project Area Light Rail Annual GHG Emissions

Alternative	Annual CO_2e Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total
Current energy mix with 8% renewable energy	4,600	2	9	4,600
Expected Emissions with 35% Renewable Portfolio Standard	1,000	1	2	1,000

5.5.1.4 Bus Operation

Additional bus routes would not be added as part of this alternative. Therefore, CNG bus emissions would be zero and are not included in this section.

5.5.1.5 Total Operational Emissions

Total operational emissions were estimated from light rail operation and regional traffic. Emissions were compared to existing conditions (2009) to evaluate significance under CEQA and to the No Build Alternative (2035) for significance under NEPA. Total operational emissions are summarized in Table 5-18.

5.5.2 Construction Emissions

Construction of the Fully Underground LRT Alternative – Variation 1 would result in GHG emissions from diesel-fueled construction equipment. Construction emissions were estimated using the OFFROAD emissions model and the proposed construction schedule. Under this alternative, the 2nd/Hope Street station could be constructed either by SEM or cut & cover.

Estimated emissions for both construction methods are provided in Table 5-19. The emissions shown indicate total project emissions and have also been amortized by 30 years as required by the SCAQMD. Section 1.2 provides a summary of amortized construction emissions along with the operational emissions increment.

Table 5-16. Fully Underground LRT Alternative – Little Tokyo Variation 1 New Station Emissions						
Infrastructure	Number of New Stations	Energy per Station (kWh/yr)	CO_2e Emissions (metric tons/yr)			
			CO_2	CH_4	N_2O	Total
Station Lighting	4	2,600	6	<1	<1	6
Station Escalators	4	41,200	90	<1	<1	90
Train Control	4	127,200	300	<1	1	300
Station Maintenance	4	159,700	400	<1	1	400
Total			700	<1	2	700
Total (Adjusted for 35% RPS)			200	<1	<1	200

Table 5-17. Fully Underground LRT Alternative – Little Tokyo Variation 1 (2035) Annual Highway Traffic GHG Emissions				
	CO_2	CH_4	N_2O	Total[2]
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,311,000
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,453,200	2,800	31,800	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] metric tons per year)	106,453,200	58,800	9,858,000	116,370,000

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = not applicable
N_2O = nitrous oxide
Note:

[1] *CO_2e emissions are weighted by the global warming potential (GWP) of each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary slightly due to rounding*

5.5.3 Cumulative Emissions

The proposed alternative would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). The Fully Underground Alternative – Little Tokyo Variation 1 is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

Table 5-18. Summary of Total Operational GHG Emissions for Fully Underground LRT Alternative – Little Tokyo Variation 1

Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Regional Traffic	106,453,200	58,800	9,858,000	116,370,000
Light Rail	1,000	1	2	1,000
New Station	200	<1	<1	200
Total Emissions	106,454,400	58,800	9,858,000	116,371,200
CEQA Increment[1]	65,902,400	(6,300)	3,906,000	69,800,100
NEPA Increment[2]	(66,700)	1	2	66,700

Notes:
[1] *CEQA Increment is defined as the difference between the proposed alternative(2035) and existing conditions (2009).*
[2] *NEPA Increment is defined as the difference between the proposed alternative (2035) and the No Build Alternative (2035).*
[3] *Totals may vary slightly due to rounding.*

Table 5-19. Fully Underground LRT Alternative – Little Tokyo Variation 1 Annual Construction GHG Emissions (2014-2017)						
Phase	Emissions of CO_2e (metric tons per year)					
	2014	2015	2016	2017	Project	Amortized Emissions
2nd/Hope Street station (SEM)	1,800	18,400	54,600	40,700	115,400	3,800
2nd/Hope Street station (Cut & Cover)	1,800	18,900	56,000	41,600	118,300	3,900

Totals may vary slightly due to rounding

5.6 Fully Underground Alternative – Little Tokyo Variation 2

Under the Fully Underground LRT Alternative – Little Tokyo Variation 2, the operation of the proposed light rail extension would occur entirely underground. With this alternative, the proposed 2nd/Central Avenue station and junction would be constructed on two levels. Unlike the single, double-track portal imagined in Fully Underground Alternative – Little Tokyo Variation 1, in this alternative, two single-track portals would be built in the median of 1st Street. This section provides a summary of estimated emissions associated with this alternative.

5.6.1 Operational Emissions

Operational emissions associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would include indirect emissions from electricity generation needed to operate light rail vehicles and the stations and direct emissions from highway traffic after construction is completed and the project is implemented.

5.6.1.1 Light Rail and New Station Emissions

Operation of light rail vehicles and stations associated with the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not differ from those estimated under Variation 1. Emissions from Variation 1 should be reviewed for Variation 2.

5.6.1.2 Regional Traffic

Emissions of GHG that would occur from regional traffic in the Fully Underground LRT Alternative – Little Tokyo Variation 2 are summarized in Table 5-20. Emission calculations were based on the total VMT in the region and the average speed on the highway network.

5.6.1.3 Bus Operation

Additional bus routes would not be added as part of this alternative. Therefore, CNG bus emissions would be zero and are not included in this section.

5.6.1.4 Total Operational Emissions

Total operational emissions were estimated from light rail operation and regional traffic. Emissions were compared to existing conditions (2009) to evaluate significance under CEQA and to the No Build Alternative (2035) for significance under NEPA. Total operational emissions are summarized in Table 5-21.

Table 5-20. Fully Underground LRT Alternative – Little Tokyo Variation 2 (2035) Annual Highway Traffic GHG Emissions

	CO_2	CH_4	N_2O	Total[2]
Vehicle Miles Traveled (VMT)	n/a	n/a	n/a	504,310,000
Emission Factor (grams per mile)	578.319	0.015	0.173	N/A
Emissions (metric tons per year)	106,453,000	2,800	31,800	N/A
GWP	1	21	310	N/A
CO_2e Emissions[1] (metric tons per year)	106,453,000	58,800	9,858,000	116,369,800

Key:
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
CH_4 = methane
GWP = Global Warming Potential
N/A = not applicable
N_2O = nitrous oxide
Note:
[1] *CO_2e emissions are weighted by the global warming potential (GWP) for each non-CO_2 pollutant (i.e., CO_2e equals emissions of non-CO_2 pollutant x GWP)*
[2] *Totals may vary slightly due to rounding*

5.6.2 Construction Emissions

Construction of the Fully Underground LRT Alternative – Variation 2 would result in GHG emissions from diesel-fueled construction equipment. Construction emissions were estimated using the OFFROAD emissions model and the proposed construction schedule. The 2nd/Hope street station in this build alternative could be constructed by either SEM or cut & cover.

Estimated emissions for both construction methods are provided in Table 5-22. The emissions shown indicate the total project emissions and have also been amortized over 30 years, as required by the SCAQMD. Section 1.2 provides a summary of amortized construction emissions along with the operational emissions increment.

5.6.3 Cumulative Emissions

The proposed project would result in a decrease in GHG emissions compared to the No Build Alternative and, due to regional growth unrelated to the project, an increase in GHG emissions compared to existing conditions (2009). This proposed alternative is consistent with CARB's Scoping Plan requirement to reduce GHG emissions. It is expected that other projects operating in 2035 would be consistent with the emission reduction targets of SB 375 and the Regional Transportation Plan. As a result, emissions would not be cumulatively significant.

Table 5-21. Summary of Total Operational GHG Emissions for Fully Underground LRT Alternative – Little Tokyo Variation 2

Mode	Total Operational GHG Emissions (metric tons CO_2e per year)			
	CO_2	CH_4	N_2O	Total[3]
Regional Traffic	106,453,000	58,800	9,858,000	116,369,800
Light Rail	1,000	1	2	1,000
New Station	200	<1	<1	200
Total Emissions	106,454,200	58,800	9,858,000	116,371,000
CEQA Increment[1]	65,902,200	(6,300)	3,906,000	69,800,900
NEPA Increment[2]	(66,900)	1	2	(66,900)

Notes:
[1] *CEQA Increment is defined as the difference between the proposed alternative (2035) and existing conditions (2009).*
[2] *NEPA Increment is defined as the difference between the proposed alternative (2035) and the No Build Alternative (2035).*
[3] *Totals may vary slightly due to rounding.*

Table 5-22. Fully Underground LRT Alternative – Variation 2 Annual Construction GHG Emissions (2014-2017)						
Phase	Emissions of CO_2e (metric tons per year)					
	2014	2015	2016	2017	Project	Amortized Emissions
2nd/Hope Street station (SEM)	1,800	17,600	54,600	40,700	114,800	3,800
2nd/Hope Street station (Cut & Cover)	1,800	18,000	56,100	41,700	117,600	3,900

Totals may vary slightly due to rounding.

6.0 POTENTIAL MITIGATION MEASURES

GHG emissions in each of the build alternatives, and the TSM alternative, are greater than those for existing conditions (see Table 1-2) but less than those for the No Build Alternative (see Table 1-3). The proposed Regional Connector Transit Corridor project is consistent with the requirements of CARB's Scoping Plan and SB 375 by increasing regional transportation capacity and decreasing emissions from passenger vehicles. The proposed alternatives are also consistent with SB 375 and the Regional Connector Transit Corridor project identified in SCAG's 2008 Regional Transportation Plan. Thus, no mitigation measures are required for the proposed project.

7.0 CONCLUSIONS

The build alternatives and the TSM Alternative would cause a decrease in GHG emissions compared to the No Build Alternative and an increase in GHG emissions compared to existing conditions. The build alternatives and the TSM Alternative would be consistent with the requirements of CARB's Scoping Plan and SB 375 to improve mobility in the region and to enhance the regional transportation network infrastructure without encouraging single-vehicle occupancy use.

The increase in GHG emissions among all alternatives in the horizon year (2035) compared to existing conditions is due to increases in the regional VMT from expected growth in the region. This growth is not related to the proposed Regional Connector Transit Corridor project.

Although not reflected quantitatively in this analysis, several of the additional requirements in the Scoping Plan, such as following the Pavley regulations and the low carbon fuel standard, would further reduce GHG emissions. This reduction would occur despite an increase in VMT expected in the region. Therefore, it is expected that GHG emissions would be even less than those calculated in this analysis and, by the horizon year of 2035, could even be less than those for existing conditions.

Since the project is consistent with the area's regional plans, including the Regional Transportation Plan, the project's climate change impacts would not be significant under CEQA. By decreasing the region's GHG emissions, the proposed project's climate change impacts would not be significant under NEPA.

The proposed project would have a net benefit with respect to climate change. Each of the project alternatives decreases overall GHG emissions, including reducing VMT and resulting emissions, when compared to the No Build Alternative (2035). By implementing the proposed project, GHG emissions in the area would be lower than would be expected under a business-as-usual scenario (i.e., No Build Alternative).

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX S

NOISE AND VIBRATION

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Noise and Vibration
Technical Memorandum

March 30, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

ALRT	At-grade Emphasis LRT Alternative
ANSI	American National Standards Institute
CEQA	California Environmental Quality Act
CPUC	California Public Utility Commission
dBA	Decibels
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FULRT	Fully Underground LRT Alternative
GBV	Ground-borne Vibration
JANM	Japanese American National Museum
Ldn	Average day-night Noise Level
Leq	Land Uses Involving only Daytime Activities
LRT	Light Rail Transit
MF	Multi-Family Residence
MOCA	Museum of Contemporary Art
MPH	Miles Per Hour
NEPA	National Environmental Policy Act
PPV	Peak particle velocity
RMS	Root mean squared
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program

RWQCB	Regional Water Quality Control Board
SF	Single Family Residence
TBM	Tunnel boring machine
TPSS	Traction power substations
TSM	Transportation Management System
ULRT	Underground LRT Alternative

1.0 SUMMARY

Noise and vibration impacts may be generated during both construction and operation of the Regional Connector Transit Corridor project. Noise and vibration effects are of concern in residential areas located in proximity to the project. Additionally, vibration impacts may pose a concern for historic properties located very close to construction or operation of the build alternatives. A special vibration analysis would be conducted on fragile and historic structures as is deemed necessary. It is a project goal to prevent damage to any historic structure.

The Regional Connector Transit Corridor project is extremely unlikely to create vibration levels high enough to cause even minor or cosmetic building damage. Vibration may be intrusive to building occupants or interfere with vibration-sensitive equipment; however, a recent Metro study indicates ground-borne vibration (GBV) from train operation would likely be imperceptible at ground elevation. In addition, ground-borne noise (GBN) may be slightly audible at sensitive uses located close to the tracks. This potential impact has also been evaluated.

The No Build Alternative is not expected to change existing noise levels in the project area because traffic in the area is already at or above road capacity and generates substantial noise. New sources of vibration would not be added; therefore, vibration impacts are not expected. The No Build Alternative involves no construction, so there are no noise or vibration impacts predicted for the No Build Alternative.

The Transportation System Management (TSM) Alternative is not expected to change existing noise levels in the project area since traffic is already at or above road capacity and generates substantial noise. Furthermore, buses already operate along the proposed new routes. The high existing ambient noise levels along proposed routes would mask the noise of additional buses associated with this alternative. New sources of vibration would not be added under this alternative so new vibration impacts are not expected. The TSM Alternative may involve minor construction like installation of new bus stop benches and signs. This construction would very short in duration (potentially less than one day) at each potential location and require no heavy equipment. Thus, there would be no negative noise or vibration impacts predicted for the TSM Alternative.

The At-Grade Emphasis LRT Alternative would result in three moderate noise impacts during operation at the following locations: the ground floor of the Kawada Hotel (Site C); the ground floor of the Higgins Building (Site I); and, the ground floor of the New Otani Hotel (Site D). Proposed mitigation measures would reduce noise levels on the ground floor of the Kawada Hotel and the Higgins Building but would not reduce noise to below a moderate impact level. Implementation of proposed mitigation measures would reduce noise levels to below moderate impact levels at the New Otani Hotel. Potential noise impacts associated

with LRT vehicle pass-by would be below a "severe" level; and, therefore, no adverse impact would occur. All other potential noise impacts from operations would be less than significant. Potential adverse vibration impacts from operation are not anticipated for the At-Grade Emphasis Alternative. However, two GBN impacts were identified, which would be mitigated to a level of less than significant if this alternative were selected.

Operation of the Underground Emphasis LRT Alternative would result in moderate noise impacts at the Savoy Condominiums on Alameda and 1st Streets from special track work. Noise impacts associated with special track work would be below "severe" levels. Proposed mitigation measures would further reduce these potential impacts to a "no adverse impact" level. Adverse noise or vibration impacts from operation of the Underground Emphasis LRT Alternative are not anticipated.

The Fully Underground LRT Alternative - Little Tokyo Variations 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in no noise impacts. Adverse vibration impacts from operation of either of these alternatives would not be expected.

Compliance with Section 41.40(a) of the Los Angeles Municipal Code during construction of any of the proposed alternatives would ensure that potential noise and vibration effects do not result in an adverse impact. Sensitive and/or historic buildings within 21 feet of construction activities may be susceptible to vibration damage. Proposed mitigation measures could include conducting a survey of any buildings potentially susceptible to construction vibration. Implementation of proposed mitigation measures described in Section 6.0 would ensure that potential impacts to sensitive and/or historic buildings would be reduced to a less than significant level.

2.0 INTRODUCTION

This Technical Memorandum outlines potential noise and vibration, including ground-borne noise, impacts for the Regional Connector Transit Corridor project alternatives. Noise and vibration impacts may be generated during both construction and operation of the Regional Corridor Connector Transit Corridor project. Noise and vibration effects are of concern in residential areas located in proximity to the project. Additionally, vibration impacts may pose a concern for historic properties within the project area.

This memorandum outlines the methodology and assumptions used to analyze potential effects from noise and vibration generated during construction and operation of the proposed build alternatives. It then analyzes potential noise and vibration impacts associated with each of the alternatives. Potential mitigation measures are discussed to mitigate potential impacts.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section discusses regulatory standards relevant to noise and vibration impacts analysis and discusses the methodology used to evaluate impacts.

3.1 Standards of Significance

3.1.1 Noise Standards

The noise impact analysis for this project is based on criteria defined in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment* (U.S. Department of Transportation 2006). The standards are based on community reaction to noise and evaluate potential changes to existing noise using a sliding scale. If existing noise is already high, a potential project is more limited in the amount of noise it can create.

Table 3-1 and Figure 3-1 show the FTA noise criteria used to determine "moderate" and "severe" levels of impact. Under NEPA a "severe" level of impact is considered an adverse effect.

CEQA Guidelines Appendix G states that a significant adverse effect from noise may exist if the project would result in:

- Exposure of persons to or generation of noise levels exceeding standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Neither CEQA nor the City of Los Angeles provides quantitative thresholds for a substantial noise impact or a significant adverse vibration impact. This analysis applies FTA criteria to determine the threshold for significance.

In an urban setting, a change of 1 dBA or less is generally not detectable by the human ear while a change of 3 dBA will be noticeable to most people. A change of 5 dBA is readily perceived. A change of 10 dBA, up or down, is typically perceived as a doubling or halving of an urban noise level respectively.

Some land use types are more sensitive to noise than others. For example, parks, churches, and residences are typically more noise-sensitive than industrial and commercial areas. The FTA noise impact criteria classify sensitive land uses into three categories:

- Category 1: Buildings or parks where low noise is an essential element of their purpose (e.g., amphitheaters and concert pavilions)
- Category 2: Buildings where people normally sleep, including residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance
- Category 3: Institutional land uses with primarily daytime uses that depend on low noise as an important part of operations (e.g., schools, libraries, churches, theaters, and places of study)

As shown in Figure 3-1, the FTA criteria specify two levels of impact, severe and moderate. The level of severity affects potential mitigation requirements for the project.

Severe noise impact is considered an adverse effect as this term is used in NEPA and implementing regulations. Severe noise impacts represent the most compelling need for mitigation. Before mitigation measures are considered, alternative project locations/alignments must be evaluated to determine whether it is feasible to avoid creating severe impacts altogether.

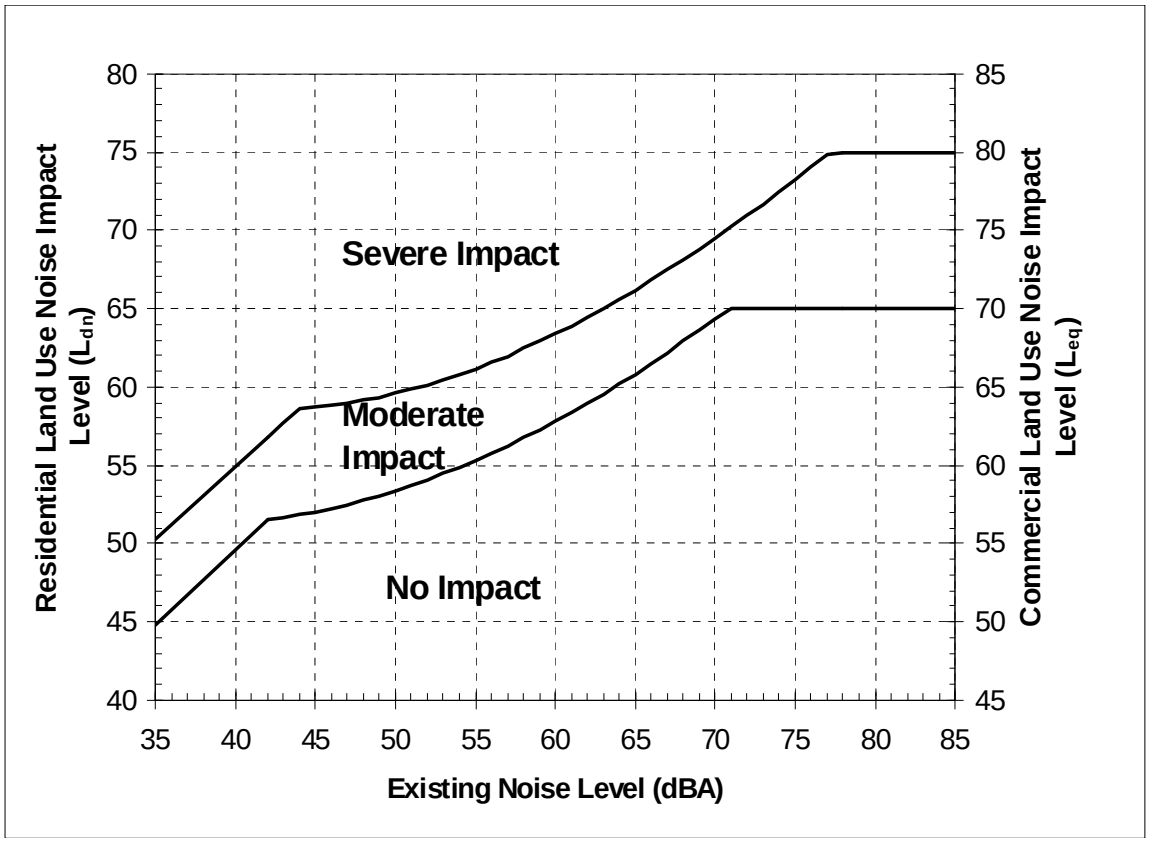

Figure 3-1. Noise Impact Criteria for Transit Projects

If it is not practical to avoid severe impacts by changing the location or design of the project, mitigation measures must be considered. Severe impacts have the greatest adverse effect on the community. Barring extenuating circumstances, there is a presumption by the FTA that mitigation measures would be incorporated into a project with a potential severe noise impact.

Moderate noise impacts also require consideration and adoption of mitigation measures when reasonable. When considering adoption of mitigation measures, factors to be considered include the predicted increase over existing noise levels, the type and number of noise-sensitive land uses affected, existing outdoor/indoor sound insulation, community views, special protection provided by law, and cost-effectiveness of mitigation measures.

Noise impact criteria for transit operations are summarized in Table 3-1. The first column shows existing noise exposure, and the remaining columns show additional noise exposure caused by a potential transit project which is used to determine the level of impact. The future noise exposure would be the combination of existing noise exposure and the additional noise exposure caused by the Regional Connector Transit Corridor project. As the existing noise exposure increases in a particular location the amount of the allowable increase in the overall noise exposure caused by the project decreases.

3.1.2 Vibration Standards

FTA has developed impact criteria for ground-borne vibration (GBV) and ground-borne noise (GBN) due to transit project construction and operation of transit vehicles (U.S. Department of Transportation 2006). Ground-borne noise is created when a vibration source such as a train pass-by causes vibration of floors and walls in nearby buildings resulting in a low frequency rumble sound within the building. Such a rumble is noise radiated from the motion of room surfaces. In essence, the room surfaces act like a loudspeaker. Impacts of ground-borne noise are particularly important for underground transit operations. At-grade and above ground transit operations create airborne noise in greater amounts through other processes, so ground-borne noise is typically less of a specific concern for these type of operations.

There appears to be a relationship between the number of perceived vibration events and the degree of annoyance caused by the vibration. It is intuitive to expect that more frequent vibration events, or events that last longer, will be more annoying to building occupants. There is currently no clear basis for defining an optimal trade-off between frequency and intensity of vibrations in minimizing annoyance. However, FTA guidelines do address vibration frequency by applying different levels of annoyance criteria based on number of transit vibration events per day.

Ground-borne vibration from transit vehicle operations should be characterized in terms of the root mean squared (RMS) vibration velocity amplitude. A one-second RMS time constant

is assumed. The amplitude or strength of vibration is expressed as a velocity level in units of VdB.

Table 3-1. Noise Impact Criteria

Existing Noise Exposure Leq or Ldn[1]	Project Noise Exposure Impact Thresholds: Ldn or Leq[1] (all noise levels in dBA)			
	Category 1 or 2 Sites		Category 3 Sites	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
<43	Amb.+10	Amb.+15	Amb.+15	Amb.+20
43-44	52	58	57	63
45	52	58	57	63
46-47	53	59	58	64
48	53	59	58	64
49-50	54	59	59	64
51	54	60	59	65
52-53	55	60	60	65
54	55	61	60	66
55	56	61	61	66
56	56	62	61	67
57-58	57	62	62	67
59-60	58	63	63	68
61-62	59	64	64	69
63	60	65	65	70
64	61	65	66	70

Table 3-1. Noise Impact Criteria				
Existing Noise Exposure Leq or Ldn[1]	Project Noise Exposure Impact Thresholds: Ldn or Leq[1] (all noise levels in dBA)			
	Category 1 or 2 Sites		Category 3 Sites	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
65	61	66	66	71
66	62	67	67	72
67	63	67	68	72
68	63	68	68	73
69	64	69	69	74
70	65	69	70	74
71	66	70	71	75
72-73	66	71	71	76
74	66	72	71	77
75	66	73	71	78
76-77	66	74	71	79
>77	66	75	71	80

Source: Transit Noise and Vibration Impact Assessment, FTA, May 2006
Notes: [1] Ldn is used for land uses where nighttime sensitivity is a factor; Daytime Leq is used for land uses involving only daytime activities.

A different analysis is used for vibration from construction activities that could cause damage to sensitive buildings. When assessing the potential for building damage, GBV is usually expressed in terms of the peak particle velocity (PPV) in units of inches per second. The threshold of vibration perception for most humans is around 65 to 70 VdB. Levels in the 70 to 75 VdB range are often noticeable but acceptable. Levels greater than 80 VdB are often considered unacceptable.

Table 3-2 summarizes the FTA impact criteria for GBV. Some buildings, such as concert halls, television and recording studios, and theaters, can be very sensitive to vibration but are

not included in the three listed categories. These types of buildings, noted in Table 3-3, usually warrant special attention during the environmental review and engineering/pre-construction phases of a project. Table 3-2 and Table 3-3 list impact criteria for transit operations. Following FTA guidance, some criteria in Table 3-2 may also be used to assess human annoyance caused by vibration from construction activities.

Table 3-2. FTA Ground Borne Vibration (GBV) and Ground-Borne Noise (GBN) Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re: 1 Micro-inch/sec)			GBN Impact Levels (dB re: 20 micro-Pascals)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[4]	N/A[4]	N/A[4]
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB	40 dBA[5]	43 dBA[5]	48 dBA[5]

Source: Transit Noise and Vibration Impact Assessment (U.S. Department of Transportation 2006)

Notes:[1] "Frequent Events" are defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.

[2] "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day. Most commuter rail lines produce at least this many events.

[3] "Infrequent Events" are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

[4] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Buildings used for vibration-sensitive manufacturing or research will require detailed evaluation to define acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

[5] Vibration –sensitive equipment is generally not sensitive to ground-borne noise.

In addition to human annoyance from transit operations, FTA guidelines also address the potential for construction-activity-induced vibration to damage buildings. The potential for GBV to cause damage to a building varies by the type of materials and structural techniques used to construct each building. FTA vibration damage criteria for various structural categories are listed in Table 3-4.

FTA guidelines suggest minimum safe distances between construction equipment and buildings based on the types of construction equipment and the category of a building (see Table 3-4). Minimum safe distances between construction and nearby buildings are presented in Table 3-5. For example, minimum safe distance between the most invasive method of construction (impact pile driving) and a Category IV building (the most vibration sensitive type of building) would be at least 136 feet. Conversely, a small bulldozer could safely operate less than five feet from a Category I building (the least vibration-sensitive type of building). Ground-borne noise (GBN) from at-grade or open excavation construction activities is rarely a concern because the airborne noise from the activity would likely dominate the noise environment. While not generally likely, some GBN from underground construction activity such as tunneling could occasionally be audible. However, this GBN would be temporary and of short duration as the construction activity moved along the project alignment.

Table 3-3. FTA Ground Borne Vibration (GBV) and Ground-Borne Noise (GBN) Impact Criteria for Special Buildings

Type of Building or Room	GBV Impact Levels (VdB re: 1 micro inch/sec)		GBN Impact Levels (dB re: 20 micro Pascals)	
	Frequent Events	Occasional or Infrequent Events[2, 3]	Frequent Events[1]	Occasional or Infrequent Events[2, 3]
Concert Halls	65 VdB	65 VdB	25 dBA	25 dBA
Television Studios	65 VdB	65 VdB	25 dBA	25 dBA
Recording Studios	65 VdB	65 VdB	25 dBA	25 dBA
Auditoriums	72 VdB	80 VdB	30 dBA	38 dBA
Theaters	72 VdB	80 VdB	35 dBA	43 dBA

Source: Transit Noise and Vibration Impact Assessment (U.S. Department of Transportation 2006)
Notes:[1] *"Frequent Events" are defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.*
[2] *"Occasional or Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems .*
[3] *"Infrequent Events" are defined as fewer than 30 vibration events of the same source per day. .*
[2] *"Occasional Events" are defined as between 30 and 70 vibration events of the same kind per day. Most commuter rail lines have this many events.*
[3] *"If the building will rarely be occupied when the trains are operating, there is no need to consider impact.*

Table 3-4. FTA Construction Vibration Damage Criteria	
Building Category and Description	**PPV (in/sec)**
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual, May 2006. FTA-VA-90-1003-06. Table 12-3.

This project will not involve impact or sonic pile driving or large vibratory rollers. As a result, the minimum safe distance between construction activities and buildings would never exceed 37 feet for this project. Distances in Table 3-5 are approximations based on typical equipment and construction activities and the general classification of structures.

Table 3-5. Calculated "Minimum Safe Distances" from Construction Equipment to Reduce Potential for GBV Damage (ft)					
Equipment		**Building Categories and (FTA Guideline Damage Thresholds)**			
		Cat I (0.5 PPV) Inch/sec	**Cat II (0.3 PPV) Inch/sec**	**Cat III (0.2 PPV) Inch/sec**	**Cat IV (0.12 PPV) Inch/sec**
Pile Driver (Impact)	Upper Range	53	74	97	136
	Typical	30	42	55	77
Pile Driver (Sonic)	Upper Range	33	46	60	84
	Typical	13	18	23	32
Large Vibratory Roller		15	20	26	37
Hoe Ram		8	12	15	21
Large Bulldozer		8	12	15	21
Caisson drilling		8	12	15	21

3.2 Evaluation Methodology

3.2.1 Transit Operations Noise

Analysis of potential project-related noise levels for the build alternatives was based on FTA reference sound levels (U.S. Department of Transportation 2006) and sound level data from current Metro Blue and Gold Line operations. This analysis used the project assumptions about how the project would be operated (speed, headways, and schedule) in estimating ridership, fare revenue, and other impacts.

This noise impact analysis compared potential project-related noise levels from each alternative with existing noise levels. The change in cumulative noise levels under each alternative was analyzed under FTA criteria. Appropriate and reasonable mitigation measures are identified in Section 6.0.

Noise from light rail transit operations is generated from the following sources: the interaction of wheels on track, motive power, signaling and warning systems, platform announcements, and the operation of traction power substations (TPSS). Furthermore, steel wheels on rails generate three different types of noise: trackwork noise from wheel squeal on a tightly-curved track, noise from wheels on crossovers or turnouts, and noise from rolling of the wheel over continuous rail. For at-grade portions of build alternatives, this analysis also considered noise from train horns and warning bells near at-grade crossings and stations.

To assess potential noise impacts, long-term (24-hour) measurements of existing ambient noise were conducted near residences and other buildings where people normally sleep (Figure 4-1). Short-term (15-minute) noise measurements were also taken to determine existing noise levels near recreational, institutional, and commercial land uses with primarily daytime and evening non-sleep activities.

If significant, adverse noise impacts were found to be likely under a project alternative, mitigation measures were identified and evaluated for feasibility and reasonableness. Proposed mitigation measures are intended to reduce potential noise impacts to below a significant level.

3.2.2 Transit Operations Vibrations

Vibration impacts from light rail transit operations are generated by motions and actions at the wheel/rail interface. The smoothness of these motions and actions is influenced by wheel and rail roughness, transit vehicle suspension, train speed, track construction (including types of fixation and ballast) the location of switches and crossovers, and the geologic strata (layers of rock and soil) underlying the track and found between the track and sensitive buildings.

Vibration from passing trains has a small potential to traverse geologic strata and negatively impact near-by sensitive buildings. However, the principal concern with light rail transit

vibration is potential annoyance to building occupants. It is extremely unlikely that GBV from transit operations would cause any damage to buildings.

The potential for vibration and ground-borne noise impacts resulting from the build alternatives was determined using the vibration assessment information and procedures contained in Chapters 7, 8, and 10 of the FTA's guidance manual for a general vibration assessment (U.S. Department of Transportation 2006). Standard transfer mobility functions used to determine the ground attenuation of vibration were based on FTA reference data (U.S. Department of Transportation 2006). The conversion from vibration level to ground-borne noise level was accomplished by selecting one of three conversion factors in the FTA manual depending on the frequency content (spectrum) of the vibration generated by the transit vehicles, whether the system is at-grade or a subway, and the local soil characteristics. The spectrum used for the GBN impact analyses was measured from the transit vehicles operating on the Metro Gold Line, which the Regional Connector would join. The spectrum is provided in Appendix 9.2 (ATS Consultants). The spectrum indicates a definite low frequency bias, and selection of the 'low frequency" conversion factor of -50 dB would be reasonable. However, to provide a very conservative analysis, the "typical" conversion factor of -35 dB was used to calculate the GBN level. Note that the vibration levels in the Appendix 9.2 reflect a train traveling 50 miles-per-hour whereas the Regional Connector trains would be travelling at a maximum of 35 miles-per-hour and would generate lower vibration levels.

All estimates of GBV from the potential project alignments were projected to the foundations of the nearest building. The vibration estimates do not include adjustments for a building's specific reaction to ground-borne vibration. Predicted GBV and GBN levels were compared to FTA criteria to determine potential impacts.

If significant or adverse vibration or ground-borne noise levels were found to be likely for a project alternative, mitigation measures were identified and evaluated for feasibility and reasonableness. Mitigation measures would reduce potential adverse impacts to below a significant or adverse level.

3.2.3 Construction Noise and Vibration

The construction noise and vibration analysis used the description of construction methods described in the Construction Technical Memorandum. The analysis considered both daytime and nighttime construction activities using the procedures presented in Chapter 12 of the FTA guidance manual (U.S. Department of Transportation 2006).

4.0 AFFECTED ENVIRONMENT

4.1 Area of Potential Effect

When considering build alternatives with at-grade segments, this analysis follows the FTA guidelines that specify the size of an area where potential noise effects from a new project should be screened (U.S. Department of Transportation 2006). The relevant area for rail rapid transit systems with at-grade facilities is 350 feet from at-grade tracks where there are buildings between the source and the receiver and 700 feet from tracks in unobstructed areas. For rail rapid transit stations, the distances are 100 feet with an obstruction between the receiver and noise source and 200 feet with no obstruction, respectively. For parking facilities the distances are 75 feet and 125 feet, respectively, and for yards and shops the distances are 650 feet and 1000 feet, respectively (U.S. Department of Transportation 2006).

For underground subway systems, screening distances are much smaller. When considering underground portions of the build alternatives, this study assessed the potential for vibration and ground-borne noise impacts at vibration-sensitive uses within 150-200 feet (vertical, diagonal, or horizontal as appropriate) of proposed track alignments. Thus, the Disney Concert Hall was only analyzed for vibration effects because all of the alternatives are below grade in the vicinity of the Disney Hall (site DH) and there is no potential for airborne noise impact.

4.2 Existing Conditions

Figure 4-1 shows FTA land use categories within the project area. Table 4-1 lists noise sensitive uses within the screening distance for the build alternatives. This analysis identified noise-sensitive land uses at twelve locations along the proposed alternative alignments and near proposed station locations (Figure 4-1). Noise levels were measured at nine locations to establish the existing noise environment for the overall project alignments. The measurements included seven 24 hour and three short-term, 10 minute measurements. All noise measurements were conducted consistent American National Standards Institute (ANSI) procedures for community noise measurements.

The project area of potential effect for noise lies within the urban core of the City of Los Angeles. Existing noise levels are typical of an urban environment. The average day-night noise level (Ldn) ranges from 69 to 74 dBA. Figure 4-1 and Table 4-1 show existing noise levels by location. Noise levels and noise sensitive land uses are described by street segment along the proposed alignments. Noise monitoring notes are provided in Appendix 9.1.

Noise levels were measured at four locations along Flower Street, Sites 1, 2, A and B shown on Figure 4-1.

A 24-hour measurement was conducted at Site A on the pool deck of the Westin Bonaventure. The pool deck sits four floors above Flower Street and is the closest open area to hotel rooms.

An Ldn of 71 dBA and a peak-hour Leq of 68 dBA was measured at 6:00 a.m. Noise levels are dominated by traffic noise from Flower and 5th Streets.

Table 4-1. Noise Sensitive Land Use within Screen Distance

Name	Location	Build Alternative within Screen Distance
Park at Central Library	200 N Main Street	ALRT, ULRT, FULRT
Bonaventure Hotel	404 South Figueroa Street	ALRT, ULRT, FULRT
World Trade Center Tennis Courts	333 South Figueroa Street	ALRT, ULRT, FULRT
Open Space Bank of America Building Plaza	333 Hope Street	ALRT, ULRT, FULRT
Bunker Hill Towers	234 South Figueroa Street	ALRT, ULRT, FULRT
Kawada Hotel	200 South Hill Street	ALRT, ULRT, FULRT
Higgins Building	108 South West 2nd Street	ALRT, ULRT, FULRT
Saint Vibiana	206 South Main Street	ALRT, ULRT, FULRT
Los Angeles Library Little Tokyo Branch	203 South Los Angeles Street	ALRT, ULRT, FULRT
New Otani Hotel	120 South Los Angeles Street	ALRT, ULRT, FULRT
Temple Street Jail	150 North Los Angeles Street	ALRT
Hikari Lofts	375 East 2nd Street	ALRT
Japanese American National Museum (JANM)	369 East 1st Street	ULRT, FULRT
Savoy – Alameda Street	100 South Almeda Street	ULRT, FULRT
Los Angeles Hompa Hongwanji Temple	815 E 1st Street	FULRT
Los Angeles Metropolitan Detention Center	535 North Alameda Street	FULRT

Notes: ALRT = At-Grade Emphasis LRT Alternative; ULRT = Underground Emphasis LRT Alternative; FULRT = Fully Underground LRT Alternatives – including both Little Tokyo Variation 1 and Little Tokyo Variation 2.

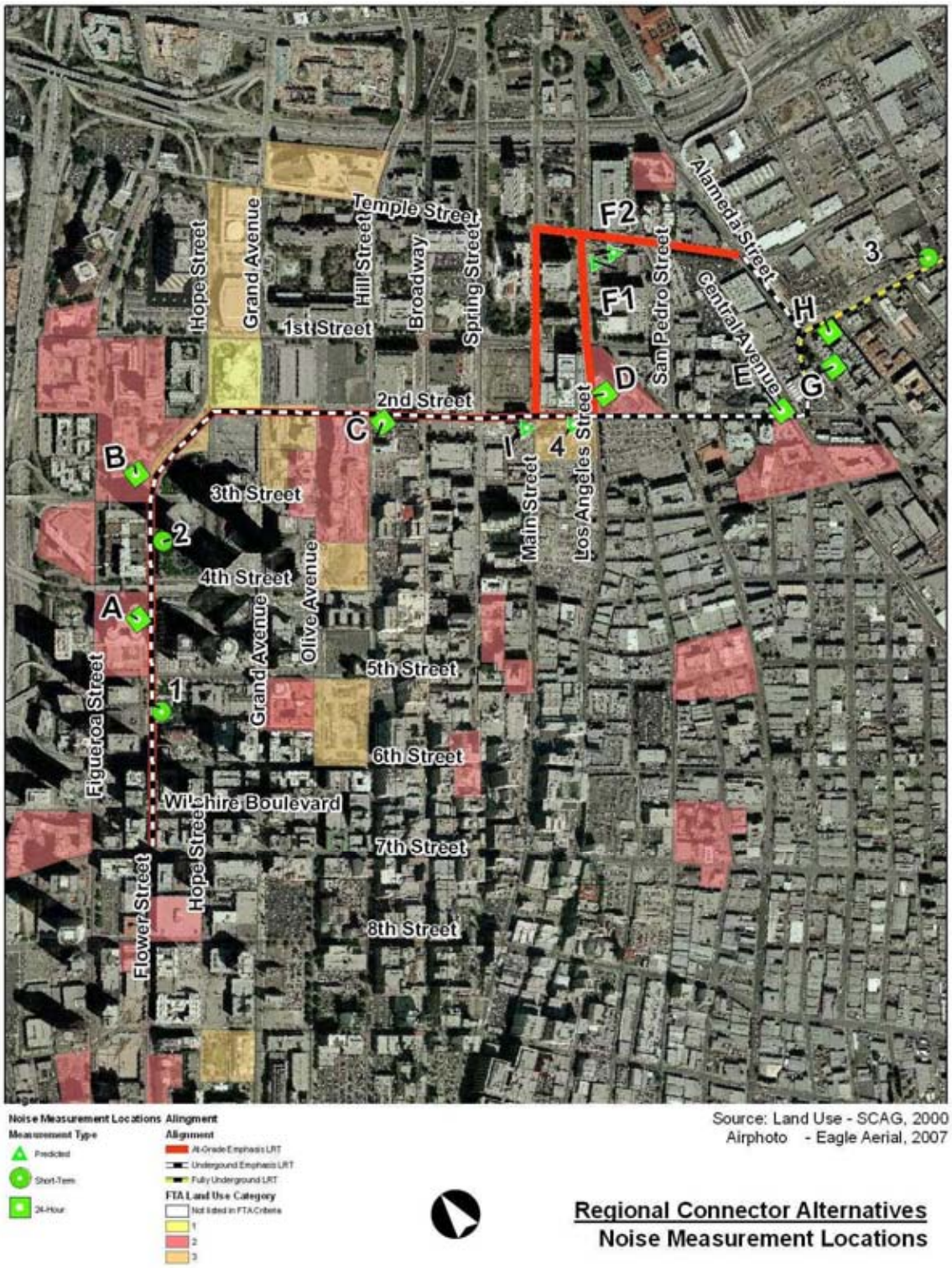

Figure 4-1. Noise Measurement Locations (Site #)

A 24-hour measurement was obtained at Site B outside the ground-floor condominiums of the Bunker Hill Towers at Flower and 3rd Streets. An Ldn of 74 dBA and a peak-hour Leq of 72 dBA were measured at 8:00 a.m. Noise levels are dominated by traffic noise from Flower and 3rd Streets.

A short-term (10-minute) measurement was conducted at Site 1 from the park area outside of the Los Angeles Library on Flower Street. A one-hour Leq of 67 was measured at 2:00 p.m. This analysis estimates a peak-hour Leq of 68 dBA at this location. This was estimated by comparing the short-term measurement to the 24-hour measurement obtained at the Westin Bonaventure. Noise levels are dominated by traffic noise from Flower and 5th Streets.

A short-term measurement was conducted at Site 2 in the Bank of America Building Plaza. The plaza is located five floors above Flower Street at the same level as the tennis courts of the World Trade Center located on the north side of Flower Street. A one-hour Leq of 61 was measured at 1:15 p.m. The peak hour Leq at Site B is estimated at 63 dBA. Noise levels are dominated by traffic noise from Flower Street.

Noise measurements were obtained at two locations along 2nd Street, Sites C and E and existing conditions were estimated at Site I, as shown on Figure 4-1.

A 24-hour measurement was conducted at Site C on the roof of the Kawada Hotel at the intersection of 2nd and Hill Streets. An Ldn of 70 dBA and a peak hour Leq of 70 dBA were measured at 4:00 p.m. Noise levels are dominated by traffic noise from 2nd and Hill Streets.

A 24-hour measurement was conducted at Site E on the roof of the Hikari Loft Apartments at the intersection of 2nd Street and Central Avenue. A 24-hour Ldn of 69 dBA and a peak hour Leq of 71 dBA were measured at 7:00 p.m. Noise levels are dominated by traffic noise from 2nd and Alameda Streets and Central Avenue.

Site I is located at the Higgins Building at the northwest corner of 2nd and Main Streets. This building houses residential lofts. Existing noise levels could not be accurately measured due to construction at Saint Vibiana and on Main Street. Noise levels for Site I were estimated based on the measurements at Sites C and D.

Site 4 lies on 2nd Street between Main and Los Angeles Streets. This site includes Saint Vibiana and the Los Angeles Library, Little Tokyo Branch. Existing noise levels could not be accurately measured due to construction at Saint Vibiana and on Main Street. Peak hour noise levels were estimated based on the measurements at Site D on the southeast corner of 2nd and Los Angeles Streets.

Category 1, 2 or 3 (i.e., potentially sensitive) land uses do not exist on Main Street, so no measurements were conducted there.

On Los Angeles Street, one sensitive land use was observed at Site D. A 24-hour measurement was conducted at Site D on the ground level of the New Otani Hotel midway between 2nd and 1st Streets. This location most approximated noise levels in the tower that houses guest rooms. An Ldn of 73 dBA and a peak hour Leq of 73 dBA were measured at 7:00 a.m. and 6:00 P.M, respectively. The garden terrace on the 4th floor was not used as a measurement location because other noise sources (e.g., waterfalls, piped in music) masked street noise. Noise levels are dominated by traffic noise from Los Angeles Street.

On Temple Street, sensitive land uses exist at Sites F and F1 where the Metropolitan Detention Center is located. Due to construction on Temple Street, and actives at the jail, representative existing noise levels could not be measured. Noise levels for Sites F and F1 were estimated based on measurements at Sites D and H.

One noise measurement was conducted on Alameda Street at Site G. A 24-hour measurement was conducted at ground level to approximate noise in certain units of the Savoy Condominiums where traffic noise levels are dominated by street traffic on Alameda Street. An Ldn of 73 dBA and a peak hour Leq of 75 dBA were measured at 7:00 p.m.

Two noise measurements were conducted on 1st Street, represented by Sites H and 3. A 24-hour measurement was conducted at Site H at ground level to approximate noise in certain condo units in the Savoy Condominium building where noise levels are dominated by the traffic on 1st Street and train noise from Metro Gold Line operations. An Ldn of 72 dBA a peak hour Leq of 72 dBA were measured at 7:00 p.m.

A short-term measurement was conducted at ground level at Site 3, on East 1st street, between Garey and Vignes Streets. This location approximates existing noise effects on the meeting room and meditation area of the Los Angeles Hompa Hongwanji Temple. Ambient noise levels at Site 3 are dominated by traffic on 1st Street and train noise from the Metro Gold Line operations. A one-hour (non-peak) Leq of 66 was measured at 2:00 p.m. At the time of this measurement, lane closures were in effect along 1st Street. This resulted in a lower ambient Leq than would have been expected if all lanes were open. Based on the long-term measurement at site H, the peak hour Leq at Site 3 was calculated at 70 dBA.

5.0 IMPACTS

Potential noise and vibration impacts from transit operations and construction are analyzed and compared to the existing conditions as described in Section 4.0. Operation noise and vibration sources could include the movement of vehicles along each alignment (pass-by), noise from warning signals, locations of special trackwork, ventilation related noise, and operation of traction power substations.

The analysis of construction effects is based on Section 3 of the Construction Staging Plan from the *Traffic Handling and Construction Staging Report* (CDM 2009). Potential construction noise and vibration under the build alternatives could result in a non-permanent impact on sensitive receivers. Construction noise and vibration is generally not considered a significant impact since it is temporary and occurs mainly in the daytime. However, some receivers that are currently adversely impacted by traffic noise could also be adversely impacted by project construction noise. Some receivers could periodically perceive low levels of vibration and ground-borne noise during construction.

Each of the build alternatives would utilize different construction methods, so each alternative would potentially generate different levels of construction noise and vibration. The *Traffic Handling and Construction Staging Report* estimates a four- to five-year construction period with surface street disruption of approximately 24 to 48 months for all build alternatives (CDM 2009).

5.1 No Build Alternative

5.1.1 Transit Operations Noise

Automobile traffic would be the only likely source of increased noise levels under the No Build Alternative. However, traffic in the project area is already at or above road capacity, so increases in automobile traffic volumes are not expected to change existing 24-hour (Ldn) noise levels. If congestion increased, traffic speeds would decline, and noise levels increases would be correspondingly low. In sum, no significant noise impacts are anticipated for the No Build Alternative.

5.1.2. Transit Operations Vibration

Under the No Build Alternative, there would not be any new sources of vibration proposed by this project and there would be no increase in vibration levels over existing sources of vibration. No adverse vibration impacts would be anticipated from operation of the No Build Alternative.

5.1.3 Construction Noise and Vibration

There would be no major construction activities under the No Build Alternative; therefore, no construction noise and vibration impacts would be anticipated.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Transit Operations Noise

The TSM Alternative would have no significant noise impacts. This alternative would add bus routes along Alameda, Temple, 2nd, 3rd, 5th, 7th, Flower, Figueroa, and Olive Streets and Grand Avenue. Intersections would be modified to shorten bus commutes. Bus service frequency would increase from 10-minute to 5-minute headways during peak periods and from 20-minute to 10-minute headways during off-peak periods.

Existing environmental noise levels along the proposed bus routes are 69 to 74 dBA Ldn. The FTA's General Transit Noise Assessment provides a reference sound exposure level of 84 dBA for a bus pass-by at 50 feet at 50 mph. Based on this estimate, noise levels resulting from the proposed doubling of bus traffic are predicted to be 47 to 61 dBA Ldn. Existing noise levels are substantially higher and would mask the noise of additional buses. Under FTA criteria, the potential increase in noise from this alternative would result in no significant noise impacts.

5.2.2 Transit Operation Vibrations

Under the TSM Alternative, there are no new sources of vibration proposed. Operation of additional buses along the proposed route would not result in a noticeable increase in vibration levels over levels generated by existing buses. As a result, no adverse vibration impacts are anticipated from operation of the TSM Alternative.

5.2.3. Construction Noise and Vibration

There would be no major construction activities under the TSM Alternative; therefore, no construction noise and vibration impacts would be anticipated.

5.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

5.3.1 Transit Operations Noise

Operation of the At-Grade Emphasis LRT Alternative could generate six potential sources of noise impacts: pass-by from LRT vehicles, warning signals for at-grade crossings, areas of special trackwork, grade separations, ventilation shafts, and traction power substations (TPSS). Table 5-1 illustrates potential noise impacts under this alternative.

5.3.1.1 Pass-by Impacts From LRT Vehicles

Noise modeling for the At-Grade Emphasis LRT Alternative assumes a three-car train with 2.5-minute headways during peak hours (6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 7:00 p.m.) and 5-minute headways during off peak hours (5:00 a.m. to 6:00 a.m., 9:00 a.m. to 3:00 p.m., and 7:00 p.m. to 1:00 a.m.). There would be no regularly planned service between 1:00 a.m. and 5:00 a.m. However, Metro may run trains later during special events like New Years Eve. The model assumes trains will travel at 35 MPH along Flower and Temple Streets and 25 MPH along 2nd, Main, and Los Angeles Streets.

This analysis predicts three potential moderate level noise impacts from LRT vehicle pass-bys under this alternative. Two impacts would occur on 2nd Street on the ground floor of the Kawada Hotel and the Higgins Building. One impact would occur on Los Angeles Street on the ground floor of the New Otani Hotel (Table 5-1).

5.3.1.2 Impacts From At-Grade Crossing Warning Signals

Warning signals near at-grade rail crossings that include bells and train horns could generate noise impacts and increase potential impacts caused by LRT pass-bys.

The At-Grade Emphasis LRT Alternative would make LRT trains run with existing traffic signals. Warning signals would not be regularly used by LRT trains. The California Public Utility Commission (CPUC) must approve this plan; still, no noise impacts from at-grade warning signals are expected to result under this alternative.

5.3.1.3 Impacts From Special Trackwork

The At-Grade Emphasis LRT Alternative would require special trackwork for turnouts and crossovers. Turnouts, also known as switches, allow trains to move from one track to another. Train movement from the mainline to maintenance and storage yards would utilize turnouts. Crossovers allow trains to move between parallel tracks. They allow a single train to run alternately in both directions. The junction between the Regional Connector and the Gold Line would also include switches.

Noise from switches or crossovers comes from a small gap in the central part of the switch known as a frog. When crossing this gap, train noise levels could increase up to 6 dBA locally.

The At-Grade Emphasis LRT Alternative would have two areas of special trackwork: an at-grade crossover on 2nd Street near Broadway and an at-grade junction near Temple Street and Alameda to connect to the Metro Gold Line tracks.

Noise-sensitive land uses do not exist near areas of special trackwork. The closest noise-sensitive land use to special trackwork is the Geffen Contemporary at the Museum of Contemporary Art (MOCA), which is located at the intersection of Alameda and Temple Streets approximately 200 feet south of the proposed alignment. Noise impacts from special trackwork are not predicted at the Geffen Contemporary at MOCA.

5.3.1.4 Impacts From Grade Separation of Alameda and 1st Street

Under this alternative, a proposed pedestrian overpass and a vehicular underpass would be constructed at Alameda and 1st Streets to provide a grade separation between trains, vehicles, and pedestrians. Traffic on Alameda, Temple and 1st Streets would not change and, therefore, traffic noise levels along Alameda Street from 2nd to 1st Streets are not expected to increase as a result of this alternative.

5.3.1.5 Impacts From Ventilation Shafts

Under this alternative, both normal and emergency ventilation would be supplied to underground segments of the alignment by fans. Potential noise associated with ventilation systems would include pass-by noise from trains transmitted through vent shafts to the street, normal fan operation, and testing of emergency ventilation fans.

Vent shafts and emergency ventilation fans would be designed in accordance with Metro system-wide design criteria noise guidelines for residential areas. These guidelines suggest a ceiling of 60 dBA for train pass-by noise and 50 dBA for fan noise at a distance of 50 feet or to the nearest residential building, whichever is closer. The predicted noise level associated with the proposed ventilation shafts would be 50 dBA at 50 feet or the nearest residential building. Under this alternative, noise levels associated with ventilation would be far lower than current ambient noise levels at Flower and 2nd Streets.

Noise associated with vent shafts would not exceed FTA noise impact criteria, and no significant, adverse noise impact would occur.

5.3.1.6 Impacts From Traction Power Substation (TPSS)

As part of the At-Grade Emphasis LRT Alternative, TPSSs would be installed at the proposed 2nd/Hope Street station and in the Los Angeles Times' parking structure at 2nd and Spring Streets. Each TPSS would be designed in accordance with the Metro system-wide design criteria noise guideline of 50 dBA at 50 feet or the nearest residential building, whichever is closer. The operating noise level for the TPSS would be substantially lower than existing ambient noise levels and LRT pass-by noise. Noise generated by TPSS would not exceed FTA noise impact criteria, and no, significant, adverse noise impact would occur.

Table 5-1. At-Grade Emphasis LRT Predicted Noise Levels and Operational Impacts

Site #	Receptor Description	At-Grade LRT Segment	FTA Land Use[1]	Existing Ldn[2] (dBA)/ Peak Hour Leq (dBA)	Predicted Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project Ldn[2] (dBA)/ Peak Hour Leq (dBA)	Number of Noise Impacts					
							Moderate			Severe		
							SF[3]	MF[3]	Non- Residential	SF	MF	Non- Residential
1	Park at Central Library	Flower Street – Wilshire to 5th	3	68	Proposed Underground	**68**	0	0	0	0	0	0
A	Bonaventure Hotel	Flower Street – 5th to 3rd	2	71	63	**72**	0	0	0	0	0	0
2	Park Area 4th floor deck of Bank of America Building	Flower Street – 5th to 3rd	3	63	54	**64**	0	0	0	0	0	0
B	Bunker Hill Towers	Flower Street – 3rd to 2nd Street	2	74	60	**74**	0	0	0	0	0	0
B1	Bunker Hill Towers – Top Floor	Flower Street – 3rd to 2nd Street	2	71	54	**71**	0	0	0	0	0	0
C	Kawada Hotel	2nd Street – Hill to Los Angeles	2	75	69	**76**	0	1	0	0	0	0
C1	Kawada Hotel – Top Floor	2nd Street – Hill to Los Angeles	2	70	61	**70**	0	0	0	0	0	0
I	Higgins Building	2nd Street – Hill to Los Angeles	2	75	69	**76**	0	1	0	0	0	0
4	Saint Vibiana Little Tokyo Library	2nd Street – Hill to Los Angeles	3	69	61	**70**	0	0	0	0	0	0
D	New Otani Hotel	Los Angeles Street – 2nd to 1st	2	73	67	**74**	0	1	0	0	0	0
D1	New Otani Hotel 3rd Floor Garden	Los Angeles Street – 2nd to 1st	3	70	61	**70**	0	0	0	0	0	0
F1	Temple Street Jail	Los Angeles Street –1st to Temple	2	71	65	**72**	0	0	0	0	0	0
F2	Temple Street Jail	Temple Street –Los Angeles to Alameda	2	67	61	**68**	0	0	0	0	0	0

Source: Parsons Brinckerhoff, 2009

Notes: [1] Land use category descriptors are as follows: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; and FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.

[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

[3] SF = Single family residential; MF = Multi-family residential

5.3.2 Transit Operations Vibration

The At-Grade Emphasis LRT Alternative would have two potential sources of vibration impacts during operations: transit vehicle pass-bys and special trackwork.

5.3.2.1 Pass-by Impacts From LRT Vehicles

Vibration modeling for the At-Grade Emphasis LRT Alternative uses the same assumptions about train traffic as the noise impact analysis. Based on FTA's generalized ground surface vibration curves, no adverse vibration impacts are predicted, but ground-borne noise impact at Site C and Site D is predicted from LRT vehicle pass-bys under this alternative (U.S. Department of Transportation 2006) (See Table 5-2).

Table 5-2. At-Grade Emphasis LRT Predicted Vibration and GBN Levels and Operational Impacts

Site #	FTA Land Use Category 1	FTA Vibration Level Criteria (VdB)	FTA GBN Level Criteria (dBA)[2]	Predicted Project Vibration Levels (VdB)	Predicted Project GBN Levels (dBA)[3]	Vibration and GBN Impact
1	3	75	40	67	32	No Impact
A	2	72	35	64	29	No Impact
2	3	75	40	64	29	No Impact
B	2	72	35	58	23	No Impact
C	2	72	35	70	35	GBN Impact
I	2	72	35	62	27	No Impact
4	3	75	40	60	25	No Impact
D	2	72	35	70	35	GBN Impact
F1	2	72	35	59	24	No Impact
F2	2	72	35	53	18	No Impact
DH	Special Buildings	65	25	57	22	No Impact

Source: Parsons Brinckerhoff, Inc., 2009
Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where quiet is an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches. [2] Impact criteria is for frequent events. [3] Based on more conservative "typical" vibration spectra.

5.3.2.2 Impacts from Special Trackwork

The At-Grade Emphasis LRT Alternative would require special trackwork at two locations as described in Section 5.3.1.3. The areas of special trackwork are not located near any vibration-sensitive land uses. The closest vibration-sensitive land use to the special trackwork is the Geffen Contemporary at the MOCA, which is located at the intersection of Alameda and Temple Streets, approximately 200 feet south of the proposed alignment. Thus, adverse vibration impacts from special trackwork are not predicted under this alternative.

5.3.3 Construction Noise and Vibration

Under the At-Grade Emphasis LRT Alternative, the following construction activities would have the most potential for noise and vibration impacts: cut and cover construction of a tunnel on Flower Street; cut and cover construction of the proposed Flower/6th/5th Street station; cut and cover construction of the proposed 2nd/Hope Street station; and re-grading of Alameda Street near the junction at Alameda and Temple Streets. These four activities have the most potential for noise impacts because of their duration and their proximity to noise-sensitive land uses.

Construction activities, relevant construction equipment and related noise levels for this alternative are shown in Table 5-3.

The *Regional Connector Transit Corridor Description of Construction* states that "Pre-auguring would likely be necessary for installation of the soldier piles, to eliminate impact pile driving which would cause vibration and noise." In pre-auguring, holes for piles would be drilled before they are cast in place. As a result, pile drivers and hoe rams would not be used during construction of this alternative, and no adverse construction vibration impacts related to impact-type equipment are anticipated.

5.3.3.1 Construction Noise

To insure noise impacts are minimized during construction, all construction activities shall conform to the provisions in Section 41.40(a) of the City of Los Angeles Municipal Code. The code states that engaging in construction, repair, or excavation work, with any construction device, or job-site delivery of construction materials without a Police Commission-issued Variance or Permit would constitute a violation:

- Between the hours of 9:00 p.m. and 7:00 a.m.
- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, or at any time on any Sunday
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

The contractor would also be responsible for complying with the applicable local ordinance as it applies to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the contractor. The Los Angeles Municipal Code section 41.40(a) does not set acceptable noise level limits for either daytime or nighttime construction activities. If a noise variance is required, the noise variance will set the acceptable noise level limits.

Typical types of mitigation measures and Best Management Practices the contractor can use to meet the acceptable limits include, but are not limited to, the following:

- placement of temporary noise barriers around the construction site;
- placement of localized barriers around specific items of equipment or smaller areas;
- use of alternative back-up alarms/warning procedures;
- higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Table 5-3. Construction Activity and Equipment Typical Noise Levels in dBA at 50 feet from Source for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
Pre-Construction	4-6	NA	NA	NA	NA	90
Site Preparation	6-12	77	85	82	NA	NA
Flower Street Cut and Cover Tunnel	24-48	77	85	82	81	90
Flower/6th/5th Cut and Cover Station	24-48	77	85	82	81	90
Portal on Flower South of 3rd	12-18	77	85	82	81	90
Portal northeast of Flower and 3rd	TBD	77	85	82	81	90
2nd/Hope Street Cut and Cover Station	24-28	77	85	82	81	90

Table 5-3. Construction Activity and Equipment Typical Noise Levels in dBA at 50 feet from Source for the At-Grade Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
New Portal into 2nd Street Tunnel	TBD	77	85	82	81	90
Surface Trackwork	12-18	77	85	82	81	NA
Main and Los Angeles At-Grade Stations	12-18	77	85	82	81	90
Temple and Alameda Junction	24-36	77	85	82	81	90
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD

5.3.3.2 Construction Vibration

GBV can cause damage to buildings depending on the building type (i.e., building materials and structural techniques) (see Table 3-4). This analysis calculates a "minimum safe distance" (with respect to vibration level) between construction equipment and buildings under various scenarios (See Table 3-5). Using the minimum safe distance for Category IV buildings of 0.12 inch/sec Peak Particle Velocity (PPV) to identify potential impacts, will insure that the potential "worst case" is identified, even for very sensitive or historic buildings. Minimum safe working distances will account for the most sensitive buildings under the strongest potential vibration impact scenarios.

For the At-Grade Emphasis Alternative, pre-auguring of soldier piles at cut and cover sections would eliminate the need for impact pile driving. Equipment such as large bulldozers and drill rigs would be the main construction vibration sources. For the surface trackwork sections on 2nd, Main, Los Angeles, and Temple Streets, drill rigs for installation of the poles to hold catenary wires would be the largest source of vibration. Large bulldozers and drill rigs would operate intermittently during construction and would not be used every day. Track construction could begin simultaneously at several locations in the project area and would be brought to completion at approximately the same time. Construction activities would not dwell in one location for the entire duration of construction.

A survey of structures within 21 feet of potential vibration-producing construction activities would be conducted. The survey would assess the building categories and the potential for GBV to cause damage. The survey would also help to establish baseline, pre-construction conditions for historic or other sensitive buildings. During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment.

During construction of this alternative, building protection measures would be applied. Measures could include underpinning, soil grouting, or other forms of ground improvement, and use of lower vibration equipment or construction techniques. Additionally, a geotechnical and vibration monitoring program would be used to protect identified historic and sensitive structures.

Mitigation measures identified in Section 6.3 would reduce construction-related vibration impacts to historic and sensitive buildings, located within 21 feet of the anticipated vibration-producing construction activity, to a less than significant level.

Large bulldozer and drill rigs, the main construction vibration sources, could exceed levels specified in FTA annoyance criteria for sensitive receptors (See Table 3-2). However, perceptible vibration from construction equipment would be short-term and intermittent. Therefore, perceptible vibration from these pieces of construction equipment is considered an "infrequent event," less than 30 times a day as defined by FTA. Sensitive receptors located along the alignment are considered Category 2 and Category 3 land uses under the FTA annoyance criteria. Short-term vibration levels during construction could exceed the annoyance impact limits for infrequent events if specific construction activities were within 20 feet of a Category 2 land use and within 16 feet of a Category 3 land use. However, taking into account a 10 dBA reduction in vibration for coupling to building foundation loss (Table 10-1, FTA, 2006), occupants would not be subject to vibration annoyance impacts. It should be noted, large bulldozers and drill rigs would operate intermittently and would not be used every day of construction. In addition, construction of the alignment would not dwell in one location for the entire duration of construction. Therefore, vibration impacts (including ground-borne noise) associated with large bulldozer and drill rigs would be less than significant. Implementation of mitigation measures identified in Section 6.1.3 would further reduce impacts below the level of less than significant.

5.4 Underground Emphasis LRT Alternative

5.4.1 Transit Operations Noise

The Underground Emphasis LRT Alternative would involve the same six potential sources of noise impacts during operations as the At-Grade Emphasis LRT Alternative. These include pass-by noise from LRT vehicles, warning signals near at-grade crossings, special trackwork,

grade separations, ventilation shafts, and TPSSs. Table 5-4 illustrates potential noise impacts under this alternative.

5.4.1.1 Pass-by Impacts From LRT Vehicles

Noise modeling for the Underground Emphasis LRT Alternative assumes a three-car train with 2.5-minute headways during peak hours (6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 7:00 p.m.) and 5-minute headways during off peak hours (5:00 a.m. to 6:00 a.m., 9:00 a.m. to 3:00 p.m., and 7:00 p.m. to 1:00 a.m.). There would be no regularly planned service between 1:00 a.m. and 5:00 a.m. The analysis assumed a speed of 30 MPH for all segments of the Underground Emphasis LRT alternative.

The Underground Emphasis LRT Alternative would run in a tunnel from the 7th Street/Metro Center Station to a portal between Central Avenue and Alameda Street. Thus, the only areas with potential noise impacts are the Hikari Lofts at the intersection of 2nd Street and Central Avenue and the Savoy Condominiums on Alameda Street, between 2nd and 1st streets. Based on FTA criteria, no noise impacts are predicted from LRT vehicle pass-bys (See Table 5-4).

5.4.1.2 Impacts From At-Grade Crossing Warning Signals

Warning signals near at-grade rail crossings include bells and train horns and could generate noise impacts, which could increase impacts caused by LRT pass-bys. Under this alternative, LRT vehicles would run underground except crossing Alameda and 1st Streets. The LRT vehicles would run with existing traffic signals on 1st Street and would be separated from traffic on Alameda Street. Therefore, pending CPUC approval, the project would not include the use of warning signals or gates and would not create noise impacts from at-grade warning signals.

5.4.1.3 Impacts from Special Trackwork

The Underground Emphasis LRT Alternative would require special trackwork for crossovers or switches. Like the At-Grade Emphasis LRT Alternative, trains in the Underground Emphasis LRT Alternative would produce noise as they cross switches. Potential noise levels would increase up to six dBA in the vicinity of a switch.

This alternative would have four areas of special trackwork, including an underground crossover north of the proposed Flower/5th/4th Street Station; a set of switches between the proposed underground stations at Flower/5th/4th and 2nd/Hope Street to allow for a pocket track; an underground crossover near the proposed station on 2nd Street (the exact location would depend on which option is chosen); and the at-grade junction near Alameda and 1st Street to connect to the Gold Line tracks. The junction near Alameda and 1st Streets are near the Savoy Condominiums and would be predicted to cause a moderate noise impact at the Condominiums (see Table 5-5).

5.4.1.4 Impacts from Grade Separation of Alameda and 1st Street

Under this alternative, traffic on Alameda Street would be grade separated from the LRT tracks. The traffic capacity of Alameda, Temple, and 1st Streets would remain the same. Therefore, traffic noise levels along Alameda Street from 2nd to 1st Streets would not be expected to increase compared to the No Build Alternative.

5.4.1.5 Impacts from Ventilation Shafts

Under this alternative, both normal and emergency ventilation would be supplied to underground segments of the alignment by fans. Potential noise associated with ventilation systems would include pass-by noise from trains transmitted through vent shafts to the street, normal fan operation, and testing of the emergency ventilation fans.

Vent shafts and emergency ventilation fans would be designed in accordance with Metro system-wide design criteria noise guidelines for residential areas. These guidelines suggest a ceiling of 60 dBA for train pass-by noise and 50 dBA for fan noise at a distance of 50 feet or to the nearest residential building, whichever is closer. Noise levels associated with ventilation would be far lower than current ambient noise levels in areas above underground segments. Noise associated with vent shafts would not exceed FTA noise impact criteria, and no significant, adverse noise impact would occur.

5.4.1.6 Impacts from Traction Power Substations (TPSS)

As part of the Underground Emphasis LRT Alternative, TPSSs would be installed underground near the proposed Flower/5th/4th Street station and the proposed 2nd Street station. Even though each TPSS would be located underground, they would be designed in accordance with the Metro System-wide design criteria noise guideline of 50 dBA at 50 feet or the nearest residential building, whichever is closer. Noise generated by TPSSs would not exceed the FTA noise impact criteria, and no significant, adverse noise impact would occur.

5.4.2. Transit Operations Vibration

The Underground Emphasis LRT Alternative has the same two potential sources of vibration impacts during operations as the At-Grade Emphasis LRT Alternative: pass-by vibration from LRT vehicles and areas of special trackwork.

5.4.2.1 Pass-by Impacts From LRT Vehicles

Vibration modeling for the Underground Emphasis LRT Alternative used the same assumptions about train traffic as the noise impact analysis. Based on FTA criteria, no adverse vibration impacts are predicted from LRT vehicle pass-bys (Table 5-6).

5.4.2.2 Impacts from Special Trackwork

The Underground Emphasis LRT Alternative would require special trackwork in four locations as described in Section 5.4.1.3.

The switches on Alameda and 1st Streets are near the Savoy Condominiums (Site H) and the Japanese American National Museum (JANM). Based on FTA's general vibration assessment guidelines, special trackwork for this alternative would add 10 db to the vibration level for LRT vehicle pass-by. The resulting predicted vibration level would be 68 VdB, which remains under the FTA threshold of 72 VdB. The GBN levels would be 33 dBA, which is below the FTA criterion of 35 VdB. Thus, no adverse vibration or ground-borne noise impacts from special trackwork are predicted for the Underground Emphasis LRT Alternative.

Table 5-4. Underground Emphasis LRT Predicted Noise Levels and Operational Impacts

Site #	Receptor Description	Underground LRT Segment	FTA Land Use[1]	Existing Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Number of Noise Impact					
							Moderate			Severe		
							SF[3]	MF[3]	Non- Residential	SF	MF	Non- Residential
E	Hikari Lofts	Portal to Little Tokyo Station	2	74	57	74	0	0	0	0	0	0
E1	Top Floor of Hikari Lofts	Portal to Little Tokyo Station	2	68	51	68	0	0	0	0	0	0
G	Savoy – Alameda Street	Portal to Little Tokyo Station	2	73	60	73	0	0	0	0	0	0
H	Savoy – 1st Street	Portal to Little Tokyo Station	2	72	60	72	0	0	0	0	0	0

Source: Parsons Brinckerhoff, 2009

Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.

[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

[3] SF = Single family residential; MF = Multi-family residential

Table 5-5. Underground Emphasis LRT Alternative Predicted Noise Levels with Special Trackwork and Operational Impacts

Site #	FTA Land Use Category 1	Existing Ldn2 (dBA)/Peak Hour Leq (dBA)	Predicted Project Ldn2 (dBA)/Peak Hour Leq (dBA)	Noise Impact	Predicted Project+ 6 dBA for Special Trackwork Ldn2 (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project and Special Trackwork $L_{dn}2$ (dBA)/Peak Hour L_{eq} (dBA)	Noise Impact
E	2	74	57	No Impact	63	74	No Impact
E1	2	68	51	No Impact	57	68	No Impact
G	2	73	60	No Impact	66	74	Moderate Impact
H	2	72	60	No Impact	66	73	Moderate Impact

Source: Parsons Brinckerhoff, Inc., 2009

Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.

[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

Table 5-6. Underground Emphasis LRT Alternative Predicted Vibration and GBV Levels and Impacts

Site #	FTA Land Use Category [1]	FTA Vibration Level Criteria (VdB)	FTA GBN Level Criteria (dBA)[2]	Predicted Project Vibration Levels (VdB)	Predicted Project GBN Levels (dBA)[3]	Vibration and GBN Impact
1	3	75	40	65	30	No Impact
A	2	72	35	64	29	No Impact
2	3	75	40	61	26	No Impact
B	2	72	35	58	23	No Impact
C	2	72	35	63	28	No Impact
I	2	72	35	67	32	No Impact
4	3	75	40	67	32	No Impact
D	2	72	35	67	32	No Impact
E	2	72	35	62	27	No Impact
G	2	72	35	58	23	No Impact
H	2	72	35	58/68	23/33	No Impact
DH	Special Buildings	65	25	53	18	No Impact

Source: Parsons Brinckerhoff, Inc., 2009

Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where quiet is an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches. [2] Impact criteria is for frequent events. [3] Based on more conservative "typical" vibration spectra.[4] with special track work.

5.4.3 Construction Noise and Vibration

Considering the Underground Emphasis LRT Alternative, the following construction activities would have the most potential for noise and vibration impacts: cut and cover construction of a tunnel on Flower Street; cut and cover construction of the proposed Flower/5th/4th Street station; cut and cover construction of the approach the proposed 2nd/Hope Street station and the station itself; construction of either of the proposed 2nd Street station alternatives (Los Angeles Street or Broadway Options); grade separation at the junction of 1st and Alameda Streets; and, tunnel boring machine (TBM) tunneling beneath 2nd Street with a launch site near either 2nd Street and Central Avenue or the proposed 2nd/Hope Street station. These eight activities have the most potential for noise and vibration impacts due to the duration and their proximity to sensitive land uses.

5.4.3.1 Construction Noise

Construction activities, relevant construction equipment, and related noise levels for this alternative are shown in Table 5-7.

To insure noise impacts are minimized during construction, all construction activities shall conform to the provisions in Section 41.40(a) of the City of Los Angeles Municipal Code. The code states that engaging in construction, repair, or excavation work, with any construction device, or job-site delivery of construction materials without a Police Commission-issued Variance or Permit would constitute a violation:

- Between the hours of 9:00 p.m. and 7:00 a.m.
- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, or at any time on any Sunday
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

The contractor would also be responsible for complying with the applicable local ordinance as it applies to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the contractor. The Los Angeles Municipal Code section 41.40(a) does not set acceptable noise level limits for either daytime or nighttime construction activities. If a noise variance is required, the noise variance will set the acceptable noise level limits.

Typical types of mitigation measures and Best Management Practices the contractor can use to meet the acceptable limits include, but are not limited to, the following:

- Placement of temporary noise barriers around the construction site;
- Placement of localized barriers around specific items of equipment or smaller areas;

- Use of alternative back-up alarms/warning procedures;
- Higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Table 5-7. Construction Activity and Equipment Typical Noise Levels at 50 feet for the Underground Emphasis LRT Alternative

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
Pre-Construction	4-6	NA	NA	NA	NA	90
Site Preparation	12-18	77	85	82	NA	NA
Flower Street Cut and Cover Tunnel	24-48	77	85	82	81	90
Flower/5th/4th St Cut and Cover Station	24-48	77	85	82	81	90
Cut and Cover Approach to 2nd/Hope Street Station	24-48	77	85	82	81	90
2nd/Hope Street Station (SEM)	24-48	77	85	82	81	NA
2nd/Hope Street Station (Cut and Cover)	24-48	77	85	82	81	90
2nd Street TBM Tunnel	24-48	77	85	82	81	NA
2nd Street Cut and Cover Station (Broadway Option)	24-48	77	85	82	81	NA
2nd Street Cut and Cover Station (Los Angeles Street Option)	24-48	77	85	82	81	90
Portal	12-24	77	85	82	81	90
TBM Launch Site	2-4	77	85	82	81	90
1st and Alameda Junction	24-36	77	85	82	81	NA
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD

5.3.3.2 Construction Vibration

GBV can cause damage to buildings depending on the building type (i.e., building materials and structural techniques) (see Table 3-4). This analysis calculates a "minimum safe distance" (with respect to vibration level) between construction equipment and buildings under various scenarios (see Table 3-5). Minimum safe working distances would account for the most sensitive buildings under the strongest potential vibration impact scenarios.

Potential noise from TBM operations at the launch site, where bored material is hauled out, treated and removed, is listed in Table 5-7. Noise levels for the TBM are not listed for the alignment sections between the TBM launch and recovery sites. The TBM produces little to no noise that reaches surface land uses when it is operating underground. Additionally, the TBM is slow moving and causes very little vibration and related ground-borne noise to the surrounding area.

According to one study, peak particle vibration velocities from tunnel construction (in soft ground) lie in the range from 0.0024 to 0.0394 inches per second PPV at a distance of 33 feet from the vibration source (Verspohl 1995). Another study measured vibration velocities in the range of 0.0157 to 0.0551 inches per second at the same 33 foot distance from the source (New 1990). These PPV vibrations may also be expressed as RMS vibration velocity levels ranging from 56 to 83 VdB. Given this range of potential vibration impacts, and the distance below grade that tunnel boring would occur, vibration produced by a TBM would be well below the FTA threshold for Category IV buildings of 0.12 inches per second PPV.

For the Underground Emphasis LRT Alternative, pre-auguring of soldier piles at cut and cover sections would eliminate the need for impact pile driving. As a result, pile drivers and hoe rams would not be used during construction of this alternative. Equipment such as large bulldozers and drill rigs would be the main construction vibration sources. Large bulldozers and drill rigs would operate intermittently during construction and would not be used every day. Track construction could begin simultaneously at several locations in the project area and would be brought to completion at approximately the same time. Construction activities would not dwell in one location for the entire duration of construction.

A survey of structures within 21 feet of potential vibration-producing construction activity locations would be conducted. The survey would assess the building categories and the potential for GBV to cause damage. The survey would also help to establish baseline, pre-construction conditions for historic or other sensitive buildings. During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment.

During construction of this alternative, building protection measures would be applied. Measures could include underpinning, soil grouting, or other forms of ground improvement, and use of lower vibration equipment or construction techniques. Additionally, a geotechnical and vibration monitoring program would be used to protect identified historic and sensitive

structures. Mitigation measures identified in Section 6.4 would reduce construction-related vibration impacts to historic and sensitive buildings, located within 21 feet of the anticipated vibration-producing construction activity, to a less than significant level.

Large bulldozer and drill rigs, the main construction vibration sources, could exceed levels specified in FTA annoyance criteria for sensitive receptors (See Table 3-2). However, perceptible vibration from construction equipment would be short-term and intermittent. Therefore, perceptible vibration from these pieces of construction equipment is considered an "infrequent event," occurring less than 30 times a day as defined by FTA. Sensitive receptors located along the alignment are considered Category 2 and Category 3 land uses under the FTA annoyance criteria. Short-term vibration levels during construction could exceed the annoyance impact limits for infrequent events if specific construction activities were within 20 feet of a Category 2 land use and within 16 feet of a Category 3 land use. However, taking into account a 10 dBA reduction in vibration for coupling to building foundation loss (Table 10-1, FTA, 2006), sensitive receivers would not be subject to vibration annoyance impacts. It should be noted, large bulldozers and drill rigs would operate intermittently and would not be used every day of construction. In addition, construction of the alignment would not dwell in one location for the entire duration of construction. Therefore, vibration impacts (including ground-borne noise) associated with large bulldozer and drill rigs would be less than significant. Implementation of mitigation measures identified in Section 6.1.3 would further reduce impacts below the level of less than significant.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1 and Little Tokyo Variation 2

5.5.1 Transit Operations Noise

The Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 are expected to have identical noise impacts and are analyzed together. These alternatives would have the same six potential sources of noise impacts during operations as the Underground Emphasis LRT Alternative. These include pass-by noise from LRT vehicles, warning signals near at-grade crossings, areas of special trackwork, grade separation, ventilation shafts, and TPSSs. Table 5-8 illustrates potential noise impacts of these alternatives.

5.5.1.1 Pass-by Impacts From LRT Vehicles

Noise modeling for the Fully Underground LRT alternatives assumes a three-car train with 2.5-minute headways during peak hours (6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 7:00 p.m.) and 5-minute headways during off peak hours (5:00 a.m. to 6:00 a.m., 9:00 a.m. to 3:00 p.m., and 7:00 p.m. to 1:00 a.m.). There would be no regularly planned service between 1:00 a.m. and 5:00 a.m. The model assumed a speed of 30 MPH for all segments of the Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2.

Both of the Fully Underground LRT Alternatives would run in an underground tunnel from the 7th Street/Metro Center Station to a portal between Rose and Garey Streets, north of Temple Street, just east of Alameda Street. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would also exit to the east through a portal on 1st Street east of Alameda Street. The Fully Underground LRT Alternative - Little Tokyo Variation 2 would also exit through two portals located between Alameda and Vignes Streets on 1st Street. Thus, the only area under these alternatives with potential noise impacts would be the Los Angeles Hompa Hongwanji Temple at the intersection of 1st and Vignes Streets. LRT vehicle pass-bys would not result in significant, adverse noise impacts under these alternatives (see Table 5-8).

5.5.1.2 Impacts from At-Grade Crossing Warning Signals

Warning signals near at-grade rail crossings include bells and train horns and could generate noise impacts and increase potential impacts caused by LRT pass-bys.

Under the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2, LRT vehicles would run underground. They rise out of portals east of Alameda Street to connect to existing at-grade tracks of the Gold Line. These alternatives would not add any additional warning signals and would not create noise impacts from at-grade warning signals.

5.5.1.3 Impacts from Special Trackwork

Like other build alternatives, the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 would require special trackwork for crossovers and junctions. Trains under these alternatives would produce noise as they cross switches. Noise levels would increase up to 6 dBA in the vicinity of a switch.

Three areas of special trackwork would exist under these alternatives: an underground crossover just north of the proposed station at Flower/5th/4th, an underground crossover near 2nd Street and Broadway, and the underground junction that allows trains to connect to the Gold Line tracks. The exact configuration of the underground junction would depend on which variation of the Fully Underground LRT Alternative were to be constructed. In addition, both alternatives would include switches at the connection to the Gold Line tracks over US 101 north of Temple and just east of Alameda.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would also include switches on 1st Street between Hewitt and Garey Streets during construction. These switches might be used for operation. These switches would be located within 70 feet of the Los Angeles Hompa Hongwanji Temple but the noise analysis predicts that there would not be an adverse noise impact at this receptor (see Table 5-9).

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would also include switches located between Garey and Vignes Streets. The switches would also be located within 70 feet of the Los Angeles Hompa Hongwanji Temple but would only be used during construction.

The switches for Fully Underground LRT Alternative – Little Tokyo Variation 2 are not predicted to cause an adverse noise impact at the Temple (See Table 5-10).

5.5.1.4 Impacts from Ventilation Shafts

Under both the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative –Little Tokyo Variation 2, both normal and emergency ventilation would be supplied to underground segments of the alignment by fans. Potential noise associated with ventilation systems would include pass-by noise from trains transmitted through vent shafts to the street, normal fan operation, and testing of the emergency ventilation fans.

Vents and emergency ventilation fans would be designed in accordance with Metro system-wide design criteria noise guidelines for residential areas. These guidelines suggest a ceiling of 60 dBA for train pass-by noise and 50 dBA for fan noise at a distance of 50 feet or to the nearest residential building, whichever is closer. Under the Fully Underground LRT alternatives, noise levels associated with ventilation would be lower than current ambient noise levels in areas above underground segments of the alignment. Noise associated with vent shafts would not exceed FTA noise impact criteria, and no significant, adverse noise impact would occur.

5.5.1.5 Impacts from Traction Power Substations (TPSS)

As part of Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2, TPSSs would be installed underground at the proposed Flower/5th/4th Street station and the proposed 2nd Street/Broadway station. Each TPSS would be designed in accordance with the Metro system-wide design criteria noise guideline of 50 dBA at 50 feet or the nearest residential building, whichever is closer. The operating noise level for the TPSSs would be substantially lower than existing ambient noise levels and LRT pass-by noise. Noise generated by TPSSs would not exceed the FTA noise impact criteria, and no, significant, adverse noise impact would occur.

Table 5-8. Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2 Predicted Noise Levels and Operational Impacts

Site #	Receptor Description	Underground LRT Segment	FTA Land Use[1]	Existing Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Number of Noise Impact					
							Moderate			Severe		
							SF	MF	Non- Residential	SF	MF	Non- Residential
3	Los Angeles Hompa Hongwanji Temple	Portal to Gold Line	3	70	60	**70**	0	0	0	0	0	0

Source: Parsons Brinckerhoff, 2009
Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.
[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

Table 5-9. Fully Underground LRT Alternative – Little Tokyo Variation 1 Predicted Noise Levels with Special Trackwork and Operational Impacts

Site #	FTA Land Use Category 1	Existing Ldn2 (dBA)/Peak Hour Leq (dBA)	Predicted Project Ldn2 (dBA)/Peak Hour Leq (dBA)	Noise Impact	Predicted Project+ 6 dBA for Special Trackwork Ldn2 (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project and Special Trackwork Ldn2 (dBA)/Peak Hour Leq (dBA)	Noise Impact
3	3	70	60	No Impact	66	**71**	No Impact

Source: Parsons Brinckerhoff, Inc., 2009
Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.

Table 5-10. Fully Underground LRT Alternatives – Little Tokyo Variation 2 Predicted Noise Levels with Special Trackwork and Operational Impacts

Site #	FTA Land Use Category 1	Existing Ldn2 (dBA)/ Peak Hour Leq (dBA)	Predicted Project Ldn2 (dBA)/ Peak Hour Leq (dBA)	Noise Impact	Predicted Project+ 6 dBA for Special Trackwork Ldn2 (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project and Special Trackwork Ldn2 (dBA)/Peak Hour Leq (dBA)	Noise Impact
3	3	70	60	No Impact	66	**71**	No Impact

Source: Parsons Brinckerhoff, Inc., 2009
Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.
[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

5.5.2. Transit Operations Vibration

The Fully Underground LRT Alternative - Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2 would have similar potential vibration (including ground-borne noise) impacts and the results of the analysis are reported together. These alternatives would involve two potential sources of vibration impacts during operations: pass-by vibration from LRT vehicles and areas of special trackwork.

5.5.2.1 Pass-by Impacts From LRT Vehicles

Vibration modeling for Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2 used the same assumptions about train traffic as the noise impact analysis. Based on FTA criteria, no vibration (including ground-borne noise) impacts are predicted from LRT vehicle pass-bys under these alternatives (see Table 5-11).

5.5.2.2 Impacts from Special Trackwork

Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2 would require special trackwork as described in Section 5.5.1.3.

FTA's general vibration assessment guideline suggests special trackwork will increase vibration levels for LRT vehicle pass-by by 10 db. Because of the depth of the track at underground locations this would not result in an adverse impact to sensitive receptors. At the switches along 1st Street, the predicted vehicle pass-by vibration level at Sites H and 3 would be 68 VdB, which is still below the FTA criterion of 72 VdB. The GBN levels would be 33 dBA, which is below the FTA criterion of 35 VdB. Thus, no adverse vibration or ground-borne noise impacts from special trackwork are predicted for these alternatives.

Table 5-11. Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2 Predicted Vibration Levels (VdB) and Ground-Borne Noise Levels (dBA) and Impacts

Site #	FTA Land Use Category [1]	FTA Vibration Level Criteria (VdB)	FTA GBN Level Criteria (dBA) [2]	Predicted Project Vibration Levels (VdB)	Predicted Project GBN Levels (dBA) [3]	Vibration and GBN Impact
1	3	75	40	65	30	No Impact
A	2	72	35	64	29	No Impact
2	3	75	40	61	26	No Impact
B	2	72	35	58	23	No Impact
C	2	72	35	63	28	No Impact
I	2	72	35	67	32	No Impact
4	3	75	40	67	32	No Impact
D	2	72	35	67	32	No Impact
E	2	72	35	62	27	No Impact
G	2	72	35	58	23	No Impact
H	2	72	35	58/68 [4]	23/33 [4]	No Impact
3	3	75	40	58/68 [4]	23/33 [4]	No Impact
DH	Special Building	65	25	53	18	No Impact

Source: Parsons Brinckerhoff, Inc., 2009
Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where quiet is an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches. [2] Impact criteria is for frequent events. [3] Based on more conservative "typical" vibration spectra, [4] with special track work.

5.5.3 Construction Noise and Vibration

Construction-related noise and vibration impacts would be nearly identical under the Fully Underground LRT Alternative – Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2, and the results of the analysis are presented together.

Under these alternatives, the following construction activities would have the most potential for construction-related noise and vibration impacts: cut and cover construction of a tunnel at Flower Street; cut and cover construction of the proposed Flower/5th/4th street station; cut and cover construction of the approach to the proposed 2nd/Hope Street station and the station itself; construction of the proposed 2nd Street /Broadway station; construction of the proposed 2nd Street/Central Avenue station; and, TBM tunneling beneath 2nd Street and the launch site near either 1st and Alameda Streets or the proposed 2nd/Hope Street station. These eight activities have the most potential for noise and vibration impacts due to their duration and their proximity to noise sensitive land uses.

5.5.3.1 Construction Noise

Table 5-12 lists the construction activities, and the construction equipment expected to be used during each construction activity, and the related noise levels anticipated for the Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2.

To insure noise impacts are minimized during construction, all construction activities shall conform to the provisions in Section 41.40(a) of the City of Los Angeles Municipal Code. The code states that engaging in construction, repair, or excavation work, with any construction device, or job-site delivery of construction materials without a Police Commission-issued Variance or Permit would constitute a violation:

- Between the hours of 9:00 p.m. and 7:00 a.m.
- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, or at any time on any Sunday
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

The contractor would also be responsible for complying with the applicable local ordinance as it applies to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the contractor. The Los Angeles Municipal Code section 41.40(a) does not set acceptable noise level limits for either daytime or nighttime construction activities. If a noise variance is required, the noise variance will set the acceptable noise level limits.

Typical types of mitigation measures and Best Management Practices the contractor can use to meet the acceptable limits include, but are not limited to, the following:

- Placement of temporary noise barriers around the construction site;
- Placement of localized barriers around specific items of equipment or smaller areas;
- Use of alternative back-up alarms/warning procedures;
- Higher performance mufflers on equipment used during nighttime hours; and
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators.

Table 5-12. Fully Underground LRT Alternative - Little Tokyo Variations 1 and 2 Construction Activity and Equipment Typical Noise Levels at 50 feet

Activity	Duration (months)	Construction Equipment				
		Concrete Truck	Dozer	Excavator	Crane	Drill Rig
Pre-Construction	4-6	NA	NA	NA	NA	90
Site Preparation	12-18	77	85	82	NA	NA
Flower Street Cut and Cover Tunnel	24-48	77	85	82	81	90
Flower/5th/4th St Cut and Cover Station	24-48	77	85	82	81	90
Cut and Cover Approach to 2nd/Hope Street Station	24-48	77	85	82	81	90
2nd/Hope Street Station (SEM)	24-48	77	85	82	81	NA
2nd/Hope Street Station (Cut and Cover)	24-48	77	85	82	81	90
2nd Street TBM Tunnel	24-48	77	85	82	81	NA
2nd Street Cut and Cover Station (Broadway Option)	24-48	77	85	82	81	NA
2nd Street Cut and Cover Station (Los Angeles Street Option)	24-48	77	85	82	81	90
Portal	12-24	77	85	82	81	90
TBM Launch Site	2-4	77	85	82	81	90
1st and Alameda Junction	24-36	77	85	82	81	NA
Operating Systems Installation	TBD	TBD	TBD	TBD	TBD	TBD

5.5.3.2 Construction Vibration

GBV can cause damage to buildings depending on the building type (i.e., building materials and structural techniques) (see Table 3-4). This analysis calculates a "minimum safe distance" (with respect to vibration level) between construction equipment and buildings under various scenarios (see Table 3-5). Minimum safe working distances would account for the most sensitive buildings under the strongest potential vibration impact scenarios.

Potential noise from TBM operations at the launch site, where bored material would be hauled out, treated and removed, is listed in Table 5-12. Noise levels for the TBM are not listed for the alignment sections between the TBM launch and recovery sites. When it is operating underground, the TBM produces little to no noise that reaches surface land uses. Additionally, the TBM is slow moving and causes very little vibration to the surrounding area.

According to one study, peak particle vibration velocities from tunnel construction (in soft ground) lie in the range from 0.0024 to 0.0394 inches per second PPV at a distance of 33 feet from the vibration source (Verspohl 1995). Another study measured vibration velocities in the range of 0.0157 to 0.0551 inches per second at the same 33 feet distance from the source (New 1990). These PPV vibrations may also be expressed as RMS vibration velocity levels ranging from 56 to 83 VdB. Given this range of potential vibration impacts, and the distance below grade that tunnel boring would occur, vibration produced by a TBM would be well below the FTA threshold for Category IV buildings of 0.12 inches per second PPV.

For the Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2, pre-auguring of soldier piles at cut and cover sections would eliminate the need for impact pile driving. As a result, pile drivers and hoe rams would not be used during construction of this alternative. Equipment such as large bulldozers and drill rigs would be the main construction vibration sources. Large bulldozers and drill rigs would operate intermittently during construction and would not be used every day. Track construction could begin simultaneously at several locations in the project area and would be brought to completion at approximately the same time. Construction activities would not dwell in one location for the entire duration of construction.

A survey of structures within 21 feet of potential vibration-producing construction activity locations would be conducted. The survey would assess the building categories and the potential for GBV to cause damage. The survey would also help to establish baseline, pre-construction conditions for historic or other sensitive buildings. During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the alignment.

During construction of this alternative, building protection measures would be applied. Measures could include underpinning, soil grouting, or other forms of ground improvement, and use of lower vibration equipment or construction techniques. Additionally, a geotechnical

and vibration monitoring program would be used to protect identified historic and sensitive structures.

Mitigation measures identified in Section 6.5 would reduce construction-related vibration impacts to historic and sensitive buildings, located within 21 feet of the anticipated vibration-producing construction activity, to a less than significant level.

Large bulldozer and drill rigs, the main construction vibration sources, could exceed levels specified in FTA annoyance criteria for sensitive receivers (see Table 3-2). However, perceptible vibration from construction equipment would be short-term and intermittent. Therefore, perceptible vibration from these pieces of construction equipment is considered an "infrequent event," occurring less than 30 times a day as defined by FTA. Sensitive receptors located along the alignment are considered Category 2 and Category 3 land uses under the FTA annoyance criteria. Short-term vibration levels during construction could exceed the annoyance impact limits for infrequent events if specific construction activities were within 20 feet of Category 2 land uses or within 16 feet of Category 3 land uses. However, taking into account a 10 dBA reduction in vibration for coupling to building foundation loss (Table 10-1, FTA, 2006), sensitive receivers would not be subject to vibration annoyance impacts. It should be noted, large bulldozers and drill rigs would operate intermittently and would not be used every day of construction. In addition, construction of the alignment would not dwell in one location for the entire duration of construction. Therefore, vibration impacts associated with large bulldozer and drill rigs would be less than significant. Implementation of mitigation measures identified in Section 6.1.3 would further reduce impacts below the level of less than significant.

6.0 MITIGATION MEASURES

The following mitigation measures could be implemented to avoid or minimize potentially impacts identified in Section 5.0.

6.1 No Build Alternative

Noise and vibration impacts are not anticipated for the No Build Alternative; therefore, no mitigation is proposed.

6.2 Transportation Management (TSM) Alternative

Noise and vibration impacts are not anticipated for the TSM Alternative; therefore, no mitigation is proposed.

6.3 At-Grade Emphasis LRT Alternative

LRT vehicle pass-bys associated with operation of the At-Grade Emphasis LRT Alternative would result in moderate noise impacts at the following locations: Site C, the ground floor of the Kawada Hotel; Site I, ground floor of the Higgins Building; and Site D, the ground floor of the New Otani Hotel (see Figure 4-1).

The alignment under this alternative would run in the middle of the street with traffic, so sound walls could not be used to reduce noise levels. However, wheel skirts could be included on LRT vehicles to reduce wayside noise levels by at least 2 dBA. Wheel skirts would reduce noise levels to below a moderate impact at the New Otani Hotel. Wheel skirts would improve noise levels, but not reduce them to below a moderate impact, at the ground floor of the Kawada Hotel and the Higgins Building.

No vibration impacts from operations are anticipated for the At-Grade Emphasis LRT Alternative; therefore, no mitigation is proposed.

Ground-borne noise impacts are predicted at sites C and D. The ground-borne noise levels are both predicted to be 35 dBA, equal to the impact criterion level. These predicted levels do not reflect any adjustment of the vibration levels to account for expected attenuation from the building's foundation coupling loss. Use of High-Resilience rail fasteners in these two area would reduce the ground-borne noise levels to below the 35 dBA criterion. If the At-Grade Emphasis is chosen as the preferred alternative, a more detailed study of the geologic conditions should be done to confirm the ground-borne noise levels.

If a noise variance from Section 41.40(a) of the Los Angeles Municipal Code is required, the variance will specify acceptable noise level limits. The contractor could use the following measures to meet relevant construction-related noise limits:

- Place of temporary noise barriers around the construction site.
- Placement of localized barriers around specific items of equipment or smaller areas
- Use of alternative back-up alarms/warning procedures
- Higher performance mufflers on equipment used during nighttime hours
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators

During the construction phase of this alternative, sensitive or historic buildings within 21 feet of construction may be susceptible to vibration damage. A survey of structures within 21 feet of anticipated vibration-producing construction activity would be conducted. The survey would classify buildings by category of sensitivity and note the potential for GBV to cause damage to buildings.

The survey would be used to establish baseline, pre-construction conditions for historic or other sensitive buildings. If the survey of relevant structures finds buildings susceptible to vibration damage, a monitoring plan would be developed. This plan would ensure that construction-induced vibration would not damage historic buildings.

Mitigation measures would further reduce annoyance to sensitive receptors caused by GBV. All or a combination of the following measures may be used to mitigate adverse noise and vibration impacts:

- When feasible, maintain distances greater than those provided in Table 5-2 to avoid potential construction-related vibration damage.
- When feasible, use construction equipment or less vibration intensive techniques near vibration sensitive locations.
- When feasible, route heavily laden vehicles away from vibration-sensitive locations.
- Operate earthmoving equipment as far as possible from vibration-sensitive locations by site layout considerations.
- Sequence construction activities that produce vibration such as demolition, excavation, earthmoving, and ground impacting so that the vibration sources do not operate simultaneously.
- When feasible, avoid nighttime construction activities that produce noticeable vibration.

- Use as small an impact device (i.e. hoe ram, pile driver) as possible to accomplish necessary tasks.
- When feasible, select non-impact demolition and construction methods such as saw or torch cutting and removal for off-site demolition, and use chemical splitting, or hydraulic jack splitting, instead of high impact methods.
- Use building protection measures such as underpinning, soil grouting, or other forms of ground improvement.
- Avoid using pavement breakers and vibratory rollers and packers near sensitive uses.

6.4 Underground Emphasis LRT Alternative

Under this alternative, a moderate noise impact from operation was predicted at the Savoy Condominiums on Alameda and 1st Streets. The noise impact would be due to track switches near the intersection of 1st and Alameda Streets. However, a spring-rail or movable frog switch could be used at this location to reduce potential noise by covering the gap in the central part of the switch. Using this measure would reduce switch noise to a FTA criteria level of no impact.

No vibration or ground-borne noise impacts from operations are anticipated for the Underground Emphasis LRT Alternative; therefore, no mitigation is proposed.

If a noise variance from Section 41.40(a) of the Los Angeles Municipal Code is required, the variance will specify acceptable noise level limits. The contractor could use the following measures to meet relevant construction-related noise limits:

- Placement of temporary noise barriers around the construction site
- Placement of localized barriers around specific items of equipment or smaller areas
- Use of alternative back-up alarms/warning procedures
- Higher performance mufflers on equipment used during nighttime hours
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators

During the construction phase of this alternative, sensitive or historic buildings within 21 feet of construction may be susceptible to vibration damage. A survey of structures within 21 feet of anticipated vibration-producing construction activity would be conducted. The survey would classify buildings by category of sensitivity and note the potential for GBV to cause damage to buildings.

The survey would be used to establish baseline, pre-construction conditions for historic or other sensitive buildings. If the survey of relevant structures finds buildings susceptible to vibration damage, a monitoring plan would be developed. This plan would ensure that construction-induced vibration would not damage historic buildings.

Mitigation measures would further reduce annoyance to sensitive receptors caused by GBV. All or a combination of the following measures may be used to mitigate adverse noise and vibration impacts:

- When feasible, maintain distances greater than those provided in Table 5-2 to avoid potential construction-related vibration damage.
- When feasible, use construction equipment or less vibration intensive techniques near vibration sensitive locations.
- Use as small an impact device (i.e. hoe ram, pile driver) as possible to accomplish necessary tasks.
- When feasible, route heavily laden vehicles away from vibration-sensitive locations.
- Operate earthmoving equipment as far as possible from vibration-sensitive locations by site layout considerations.
- Sequence construction activities that produce vibration such as demolition, excavation, earthmoving, and ground impacting so that the vibration sources do not operate simultaneously.
- When feasible, avoid nighttime construction activities that produce noticeable vibration.
- When feasible, select non-impact demolition and construction methods such as saw or torch cutting and removal for off-site demolition, and use chemical splitting, or hydraulic jack splitting, instead of high impact methods.
- Use building protection measures such as underpinning, soil grouting, or other forms of ground improvement.
- Avoid using pavement breakers and vibratory rollers and packers near sensitive uses.

Table 6-1. At-Grade Emphasis LRT Predicted Noise Levels and Impacts with Wheel Skirts

Site #	Receptor Description	At-Grade LRT Segment	FTA Land Use[1]	Existing Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Predicted Existing + Project Ldn[2] (dBA)/Peak Hour Leq (dBA)	Number of Noise Impacts					
							Moderate			Severe		
							SF	MF	Non- Residential	SF	MF	Non- Residential
1	Park at Central Library	Flower Street – Wilshire to 5th	3	68	Proposed Underground	68	0	0	0	0	0	0
A	Bonaventure Hotel	Flower Street – 5th to 3rd	2	71	61	71	0	0	0	0	0	0
2	Park Area 4th floor deck of Bank of America Building	Flower Street – 5th to 3rd	3	63	52	63	0	0	0	0	0	0
B	Bunker Hill Towers	Flower Street – 3rd to 2nd Street	2	74	58	74	0	0	0	0	0	0
B1	Bunker Hill Towers – Top Floor	Flower Street – 3rd to 2nd Street	2	71	52	71	0	0	0	0	0	0
C	Kawada Hotel	2nd Street – Hill to Los Angeles	2	75	67	75	0	1	0	0	0	0
C1	Kawada Hotel – Top Floor	2nd Street – Hill to Los Angeles	2	70	59	70	0	0	0	0	0	0
I	Higgins Building	2nd Street – Hill to Los Angeles	2	75	67	76	0	1	0	0	0	0
4	Saint Vibiana Little Tokyo Library	2nd Street – Hill to Los Angeles	3	69	59	69	0	0	0	0	0	0
D	New Otani Hotel	Los Angeles Street – 2nd to 1st	2	73	65	74	0	0	0	0	0	0
D1	New Otani Hotel 3rd Floor Garden	Los Angeles Street – 2nd to 1st	3	70	59	70	0	0	0	0	0	0
F1	Temple Street Jail	Los Angeles Street –1st to Temple	2	71	63	71	0	0	0	0	0	0
F2	Temple Street Jail	Temple Street –Los Angeles to Alameda	2	67	59	67	0	0	0	0	0	0

Source: Parsons Brinckerhoff, 2009

Notes: [1] Land use category descriptors: FTA Category 1 = buildings or parks where low noise levels are an essential element of their purpose; FTA Category 2 = residences and other buildings where people sleep, such as hotels, apartments and hospitals; FTA Category 3 = institutional land uses with primarily daytime and evening use, including schools, libraries and churches.

[2] Ldn is used for land uses with nighttime sensitivity to noise and for residential areas where FTA rather than FHWA noise procedures are applicable. Peak-hour Leq is used for commercial, industrial, and other land uses that do not have nighttime noise sensitivity.

6.5 Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2

Under these alternatives, no noise or vibration or ground-borne noise impacts from project operations would require mitigation measures.

If a noise variance is required from Section 41.40(a) of the Los Angeles Municipal Code, the variance will specify acceptable noise level limits. As with other build alternatives, the contractor could use the following measures to meet relevant construction-related noise limits:

- Placement of temporary noise barriers around the construction site
- Placement of localized barriers around specific items of equipment or smaller areas
- Use of alternative back-up alarms/warning procedures
- Higher performance mufflers on equipment used during nighttime hours
- Portable noise sheds for smaller, noisy, equipment, such as air compressors, dewatering pumps, and generators

During the construction phase of this alternative, sensitive or historic buildings within 21 feet of construction may be susceptible to vibration damage. A survey of structures within 21 feet of anticipated vibration-producing construction activity would be conducted. The survey would classify buildings by category of sensitivity and note the potential for GBV to cause damage to buildings.

The survey would be used to establish baseline, pre-construction conditions for historic or other sensitive buildings. If the survey of relevant structures finds buildings susceptible to vibration damage, a monitoring plan would be developed. This plan would ensure that construction-induced vibration would not damage historic buildings.

Mitigation measures would further reduce annoyance to sensitive receptors caused by GBV. All or a combination of the following measures may be used to mitigate adverse noise and vibration impacts:

- When feasible, maintain distances greater than those provided in Table 5-2 to avoid potential construction-related vibration damage.
- When feasible, use construction equipment or less vibration intensive techniques near vibration sensitive locations.

- Use as small an impact device (i.e. hoe ram, pile driver) as possible to accomplish necessary tasks.
- When feasible, route heavily laden vehicles away from vibration-sensitive locations.
- Operate earthmoving equipment as far as possible from vibration-sensitive locations by site layout considerations.
- Sequence construction activities that produce vibration such as demolition, excavation, earthmoving, and ground impacting so that the vibration sources do not operate simultaneously.
- When feasible, avoid nighttime construction activities that produce noticeable vibration.
- When feasible, select non-impact demolition and construction methods such as saw or torch cutting and removal for off-site demolition, and use chemical splitting, or hydraulic jack splitting, instead of high impact methods.
- Use building protection measures such as underpinning, soil grouting, or other forms of ground improvement.
- Avoid using pavement breakers and vibratory rollers and packers near sensitive receptors.

7.0 CONCLUSIONS

7.1 No Build Alternative

Adverse noise and vibration impacts are not anticipated for the No Build Alternative.

7.2 Transportation System Management (TSM) Alternative

Adverse noise and vibration impacts are not anticipated for the TSM Alternative.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Noise impacts in the entire project area associated with LRT vehicle pass-by would be below severe impact levels. Thus, no significant adverse noise impacts would result. Significant adverse vibration impacts from operations are not anticipated for the At-Grade Emphasis Alternative.

LRT vehicle pass-bys associated with operation of the At-Grade Emphasis LRT Alternative would result in moderate noise impacts at three locations and ground-borne noise impacts at two locations. Implementation of mitigation measures would reduce potential noise levels to below a moderate impact at one location. Mitigation measures would improve noise levels at two other locations. Implementation of vibration mitigation measures would reduce potential ground-borne noise levels to no impact. At all locations, potential impacts would be less than the "severe" impact threshold, therefore, there would be no significant adverse impacts from transit operations.

Construction of this alternative would comply with Section 41.40(a) of the Los Angeles Municipal Code. Thus, noise and vibration levels associated with construction of this alternative would not result in a significant adverse impact. Sensitive or historic buildings within 21 feet of construction may be susceptible to vibration damage. Mitigation measures would ensure a less than significant adverse impact to these sensitive land uses.

7.3.2 CEQA Determinations

Three moderate noise impacts from LRT vehicle pass-bys are predicted for the At-Grade Emphasis LRT Alternative. However, moderate noise impacts at these locations would not result in a substantial permanent increase in ambient noise levels. Coupled with mitigation measures, noise impacts would be less than significant. All other noise and vibration impacts from operations would be less than significant.

Mitigation measures would reduce potential noise and vibration impacts from construction to less than significant levels in the entire project area.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Under this alternative, moderate noise impacts from operations are predicted at one location. Since these impacts would fall below the "severe" impact level, no significant adverse effect would result under NEPA. Significant adverse noise or vibration and ground-borne noise impacts from operation of the Underground Emphasis LRT Alternative are not anticipated.

Construction of this alternative would comply with Section 41.40(a) of the Los Angeles Municipal Code. Thus, noise and vibration levels associated with construction of this alternative would not result in a significant adverse impact. Sensitive or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Mitigation measures would ensure a less than significant adverse impact to these sensitive land uses.

7.4.2 CEQA Determinations

Moderate noise impacts are predicted at one location. Under CEQA, such impacts are not considered significant. All other noise and vibration impacts from operation of the Underground Emphasis LRT Alternative would be less than significant.

Mitigation measures would reduce potential noise and vibration impacts from construction to less than significant levels in the entire project area.

7.5 Fully Underground LRT Alternative – Little Tokyo Variations 1 & 2

7.5.1 NEPA Findings

Significant adverse noise or vibration and ground-borne noise impacts from operation of the Fully Underground LRT Alternative - Little Tokyo Variations 1 or 2 are not anticipated.

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 or Little Tokyo Variation 2, would comply with Section 41.40(a) of the Los Angeles Municipal Code. Thus, noise and vibration levels associated with construction of this alternative would not result in a significant adverse impact. Sensitive or historic buildings within 21 feet of the construction may be susceptible to vibration damage. Mitigation measures would ensure a less than significant adverse impact to these sensitive land uses. All other noise and vibration impacts associated with construction would be less than significant.

7.5.2 CEQA Determinations

Potential noise and vibration impacts from operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 or Little Tokyo Variation 2 would be less than significant.

Mitigation measures would reduce potential noise and vibration impacts from construction to less than significant levels in the entire project area.

8.0 REFERENCES

ANSI. American National Standard S12.9-1992/Part 2. Quantities and Procedures for Description and Measurement of Environmental Sound. Part 2: Measurement of Long-term, Wide-Area Sound. Standards Secretariat, Acoustical Society of America, New York, NY.

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ATS Consulting. December 2009. Final Noise and Vibration Technical Background Report for Exposition Corridor Transit Project Phase 2; Metro Gold Line Force Density Spectra measured in the vicinity of historic Cornfield north of Chinatown Station. Los Angeles, CA.

CDM. 2009. Traffic Handling and Construction Staging Report.

Greene, R. 1998. Tanner Creek Stream Diversion Project, Phase 2-- BES Project #5500 Baseline Vibration Study for City of Portland, OR.

U.S. Department of Transportation, Federal Transit Administration (FTA). 2006. FTA-VA-90-1003-06. Transit Noise and Vibration Impact Assessment. Office of Planning and Environment. Washington, DC.

New, B.M. 1990. Ground Vibration Caused by Construction Works. Tunneling and Underground Space Technology, Vol-5, No. 3, pp 179-190.

Verspohl, J. 1995. Vibrations on Buildings Caused by Tunneling. Tunnels & Tunneling, March, pp 21-24.

9.0 APPENDICES

9.1 Field Measurement Data Sheets

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTOR Job #

ID

SITE IDENTIFICATION: 1 OBSERVER(s): KEVIN K
START DATE & TIME: 4-30-09 2:06 END DATE & TIME: 4-30-09 - 2:16
ADDRESS: CENTRAL LIBRARY
GPS coordinates:

Weather

TEMP: 79 °F HUMIDITY: 30 % R.H. WIND: (CALM) LIGHT MODERATE VARIABLE
WINDSPEED: 0 MPH DIR: N NE E SE S SW W NW STEADY GUSTY 0 MPH
SKY: CLEAR (SUNNY) DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: B+K 2238 TYPE: (1) 2 SERIAL #: 2160297
CALIBRATOR: B+K SERIAL #: 3415 1351753
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 94 dBA SPL WINDSCREEN 4
SETTINGS: (A-WEIGHTED) (SLOW) FAST FRONTAL (RANDOM) ANSI OTHER:

Rec #	Start Time / End Time	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
1	2:00 / 2:10	68.6	76.4	61.8	67.5	65.5	69.0	
/	/							
/	/							
/	/							

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: FLOWER STREET

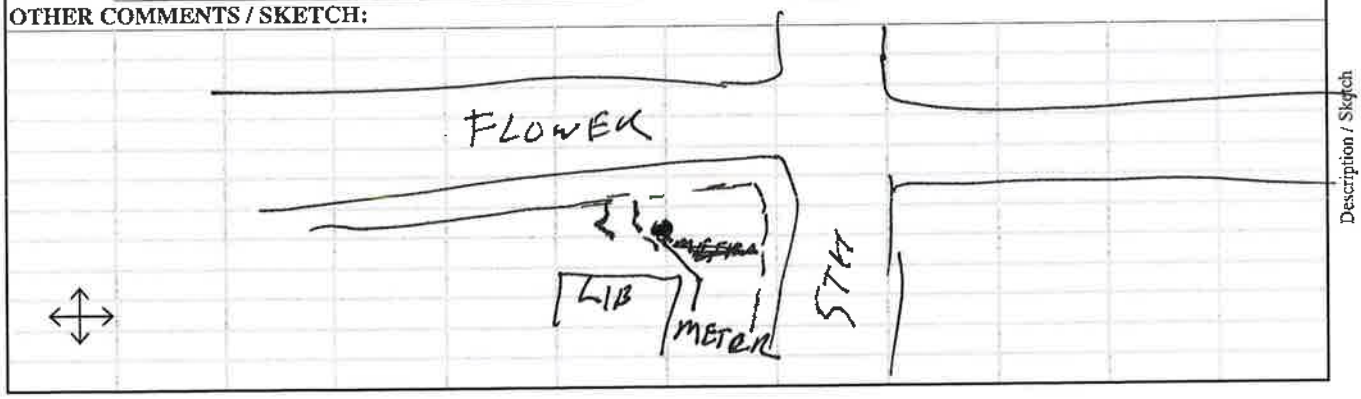
COUNT DURATION: -MINUTE	SPEED (mph) NB / EB / SB / WB	NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	/	/	/	/
MED. TRUCKS:	/	/	/	/
HVY TRUCKS:	/	/	/	/
BUSES:	/	/	/	/
MOTORCYCLES:	/	/	/	/

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

Description / Sketch

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measform.vsx

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTOR Job #

ID

SITE IDENTIFICATION: A OBSERVER(s): KEVIN KELLER
START DATE & TIME: 4-29-09 10:00 END DATE & TIME: 4-30-09 - 10:00
ADDRESS: BONVENTURA HOTEL - POOL DECK
GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:_____

Acoustic Measurements

INSTRUMENT: LD-705 TYPE: 1 (2) SERIAL #: 41098
CALIBRATOR: LD CAL 150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114 dBA SPL POST-TEST 113.9 dBA SPL WINDSCREEN Y
SETTINGS: (A-WEIGHTED) SLOW (FAST) FRONTAL (RANDOM) ANSI OTHER: 24-HOUR

Rec #	Start Time / End Time	
____	10:00 / 10:00	L_{eq} ~~____~~, L_{max} ~~____~~, L_{min} ~~____~~, L_{90} ~~____~~, L_{50} ~~____~~, L_{10} ~~____~~, 24-HOUR
____	____ / ____	L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____
____	____ / ____	L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____
____	____ / ____	L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL (AMBIENT) OTHER
ROADWAY TYPE: FLOWER STREET
COUNT DURATION:_____-MINUTE

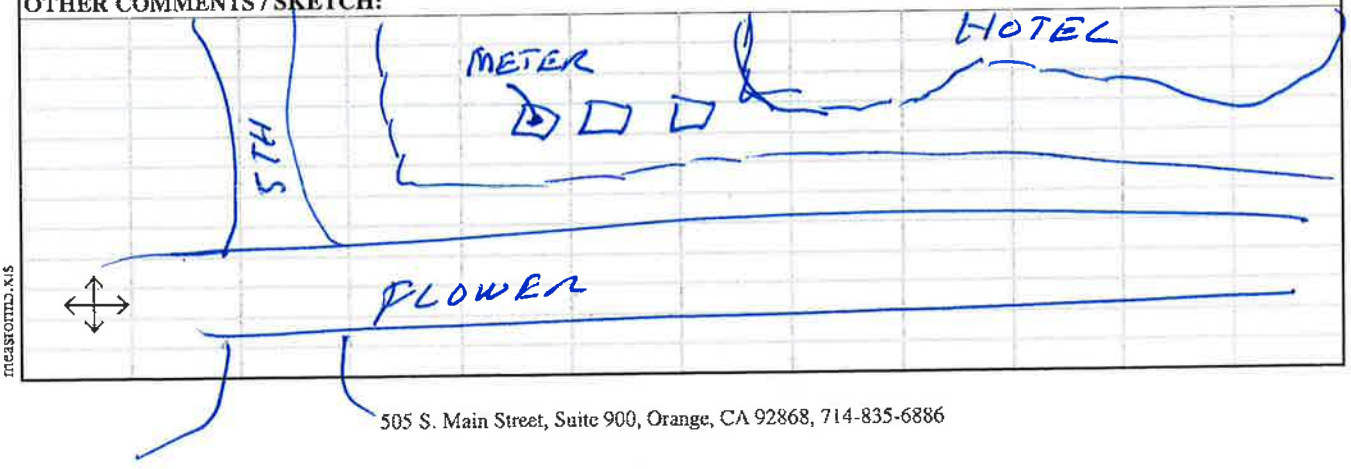
	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	____ / ____	____ / ____	____ / ____
MED. TRUCKS:	____ / ____	____ / ____	____ / ____
HVY TRUCKS:	____ / ____	____ / ____	____ / ____
BUSES:	____ / ____	____ / ____	____ / ____
MOTORCYCLES:	____ / ____	____ / ____	____ / ____

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

Description / Sketch

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measform.xls

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTOR Job #

ID

SITE IDENTIFICATION: 2 OBSERVER(s): KEVIN K
START DATE & TIME: 4-29-09 1100 END DATE & TIME: 4-29-09 1130
ADDRESS: BOFA TOWER
GPS coordinates:

Weather

TEMP: 72 °F HUMIDITY: 20 % R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: ____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other: ____

Acoustic Measurements

INSTRUMENT: BK 2238 TYPE: (1) 2 SERIAL #: 2160297
CALIBRATOR: BK 4226 SERIAL #: 1351753
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 94 dBA SPL WINDSCREEN Y
SETTINGS: (A-WEIGHTED) SLOW FAST FRONTAL (RANDOM) ANSI OTHER: ____

Rec #	Start Time / End Time							
___/	1:15 / 1:30 :	L_{eq} 61.3,	L_{max} 72.5,	L_{min} 58.2,	L_{90} 54.5 64,	L_{50} 60.5,	L_{10} 62.0,	____
___/	____/____ :	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____
___/	____/____ :	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____
___/	____/____ :	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL (AMBIENT) OTHER ____
ROADWAY TYPE: FLOWER STREET

COUNT DURATION: ____-MINUTE

	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	____/____	____/____	____/____
MED. TRUCKS:	____/____	____/____	____/____
HVY TRUCKS:	____/____	____/____	____/____
BUSES:	____/____	____/____	____/____
MOTORCYCLES:	____/____	____/____	____/____

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER: ____

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER: ____
PHOTOS: ____
OTHER COMMENTS / SKETCH:

measforms.xls

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTION Job #

ID

SITE IDENTIFICATION: B OBSERVER(s): KEVIN IS
START DATE & TIME: 4-29 - 10:00 END DATE & TIME: 4-30 10:00
ADDRESS: BUNKER HILL TOWERS - GROUND FLOOR

GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:_____

Acoustic Measurements

INSTRUMENT: LD 706 TYPE: 1 (2) SERIAL #: 17390
CALIBRATOR: LD CAL 150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 114.1 dBA SPL WINDSCREEN ___
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: 24-HOUR

Rec #	Start Time / End Time							
____/	10100 / 10:00 :	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	24-HOUR
____/	____/____:	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____
____/	____/____:	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____
____/	____/____:	L_{eq} ____,	L_{max} ____,	L_{min} ____,	L_{90} ____,	L_{50} ____,	L_{10} ____,	____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: FLOWER - 93RD STREET

COUNT DURATION: (15)-MINUTE

	SPEED (mph) NB / EB / SB / WB		#2 COUNT: NB / EB / SB / WB		SPEED (mph) NB EB / SB WB	
AUTOS:	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____
MED. TRUCKS:	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____
HVY TRUCKS:	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____
BUSES:	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____
MOTORCYCLES:	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____	____ / ____

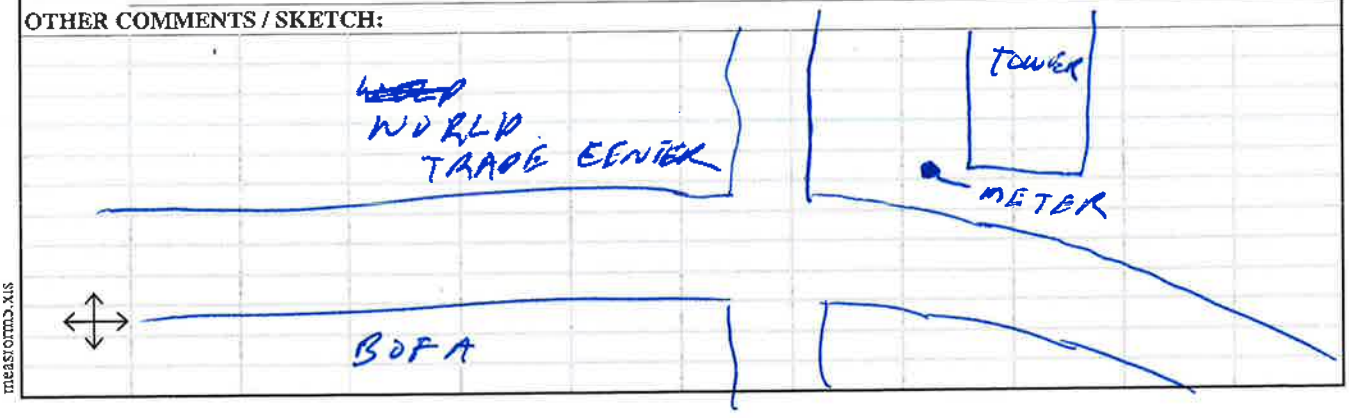
SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS

OTHER:

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



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FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTOR Job #

ID

SITE IDENTIFICATION: C OBSERVER(s): KEVIN K
START DATE & TIME: 4-29-09 10:30 END DATE & TIME: 4-30-09 11:00
ADDRESS: KAWADA HOTEL - 4TH FLOOR

GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: LD 712 TYPE: 1 SERIAL #: 0343
CALIBRATOR: LD CAL 150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 114.0 dBA SPL WINDSCREEN Y
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: 24-HOUR

Rec # Start Time / End Time

____/ 11:00 / 11:00 : L_{eq}____, L_{max}____, L_{min}____, L_{90}____, L_{50}____, L_{10}____, ____ — 24 HOUR
____/ ____/____: L_{eq}____, L_{max}____, L_{min}____, L_{90}____, L_{50}____, L_{10}____, ____
____/ ____/____: L_{eq}____, L_{max}____, L_{min}____, L_{90}____, L_{50}____, L_{10}____, ____
____/ ____/____: L_{eq}____, L_{max}____, L_{min}____, L_{90}____, L_{50}____, L_{10}____, ____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: 2ND STREET - HILL

COUNT DURATION:_____-MINUTE

	SPEED (mph) NB / EB / SB / WB	NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	____ / ____	____ / ____	____ / ____	____ / ____
MED. TRUCKS:	____ / ____	____ / ____	____ / ____	____ / ____
HVY TRUCKS:	____ / ____	____ / ____	____ / ____	____ / ____
BUSES:	____ / ____	____ / ____	____ / ____	____ / ____
MOTORCYCLES:	____ / ____	____ / ____	____ / ____	____ / ____

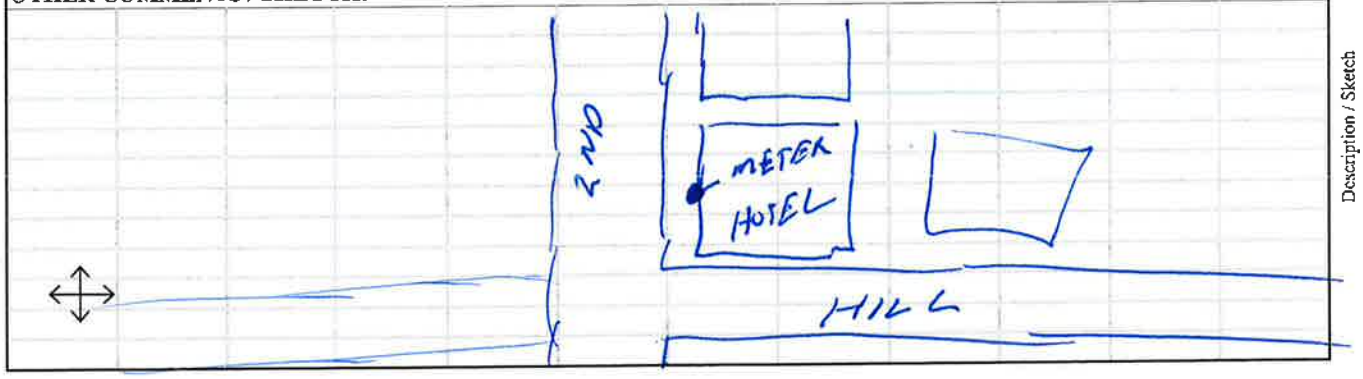
SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS

OTHER:

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measforms.xls

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONN Job #

ID

SITE IDENTIFICATION: D OBSERVER(s): KEVIN K
START DATE & TIME: 4-29-09 11:20 END DATE & TIME: 4-30-09- 11:40
ADDRESS: KYOTO GRAND HOTEL
GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:_____

Acoustic Measurements

INSTRUMENT: LD 720 TYPE: 1 (2) SERIAL #: 0514
CALIBRATOR: LD CAL 150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 113.4 dBA SPL WINDSCREEN (Y)
SETTINGS: (A-WEIGHTED) (SLOW) FAST FRONTAL (RANDOM) ANSI OTHER:_____

24-HOUR

Rec #	Start Time / End Time	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
____	11:30 / 11:30							
____	____ / ____							
____	____ / ____							
____	____ / ____							

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL (AMBIENT) OTHER
ROADWAY TYPE: LOS ANGELES STREET
COUNT DURATION:_____-MINUTE

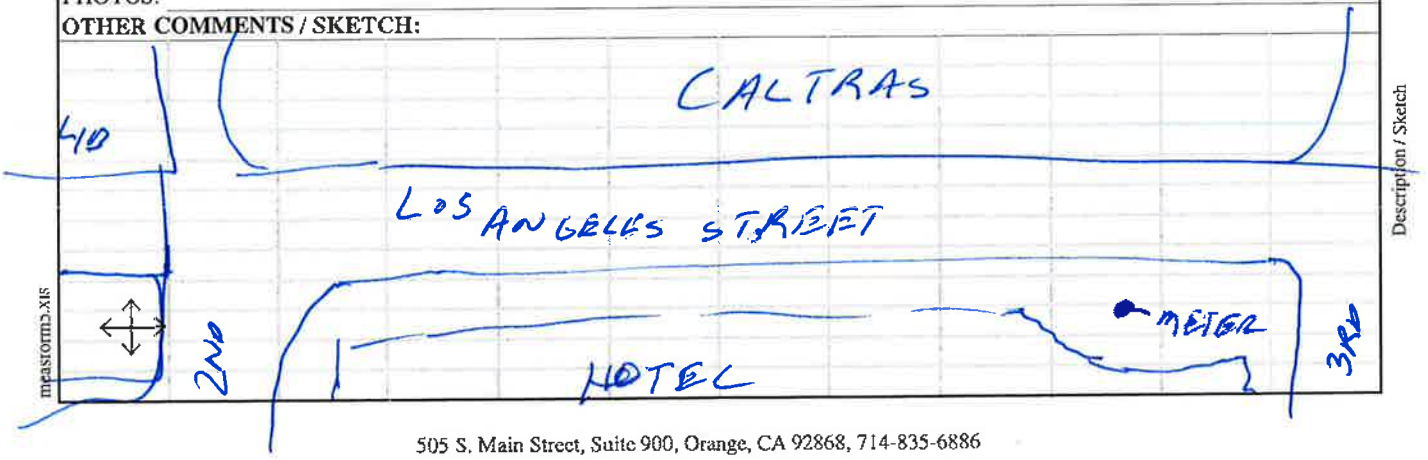
	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	____/____	____/____	____/____
MED. TRUCKS:	____/____	____/____	____/____
HVY TRUCKS:	____/____	____/____	____/____
BUSES:	____/____	____/____	____/____
MOTORCYCLES:	____/____	____/____	____/____

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

Description / Sketch

TERRAIN: (HARD) SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measform2.xls

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNECTOR Job #

ID

SITE IDENTIFICATION: E OBSERVER(s): KEVIN K
START DATE & TIME: 4-29-09 - 1:00 END DATE & TIME: 4-30-09 - 1:00
ADDRESS: HIKARI LOFTS - ROOF 4TH FLOOR
GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: LD 720 TYPE: 1 (2) SERIAL #: 0460
CALIBRATOR: LD CAL150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 114.1 dBA SPL WINDSCREEN 4
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: 24-HOUR

Rec #	Start Time / End Time	
		24-HOUR
___ /	1:00 / 1:00	: L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____
___ / ____ / ____		: L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____
___ / ____ / ____		: L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____
___ / ____ / ____		: L_{eq} ____, L_{max} ____, L_{min} ____, L_{90} ____, L_{50} ____, L_{10} ____, ____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: 2ND AND CENTRAL

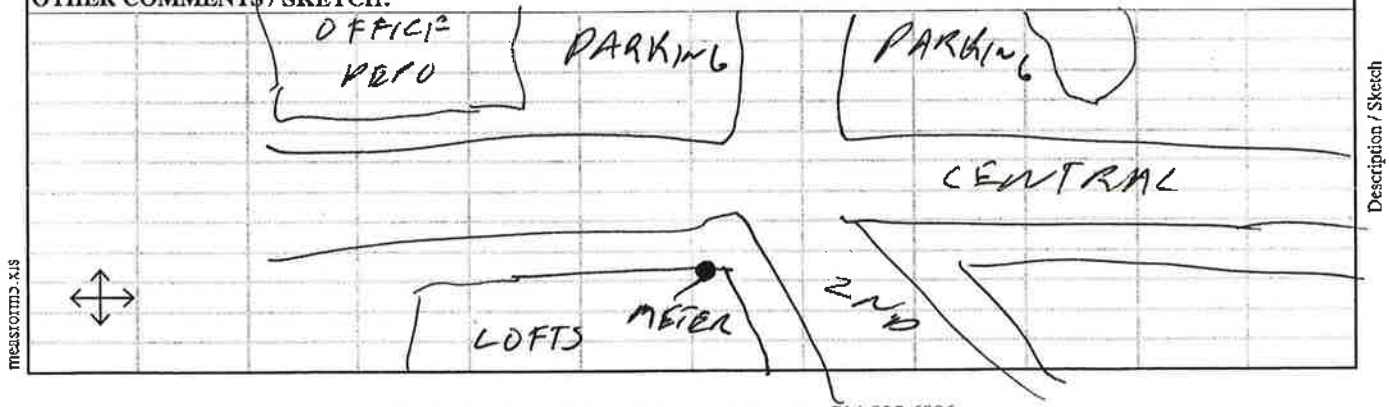
COUNT DURATION:_____-MINUTE	SPEED (mph)	#2 COUNT:	SPEED (mph)
NB / EB / SB / WB	NB EB / SB WB	NB / EB / SB / WB	NB EB / SB WB
AUTOS: ____ / ____	____ / ____	____ / ____	____ / ____
MED. TRUCKS: ____ / ____	____ / ____	____ / ____	____ / ____
HVY TRUCKS: ____ / ____	____ / ____	____ / ____	____ / ____
BUSES: ____ / ____	____ / ____	____ / ____	____ / ____
MOTORCYCLES: ____ / ____	____ / ____	____ / ____	____ / ____

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measstormp.xls

FIELD MEASUREMENT DATA SHEET

Project Name: REGIONAL CONNETOR Job #

ID

SITE IDENTIFICATION: H OBSERVER(s): KEVIN KELLER
START DATE & TIME: 4-29-09 -11:40 END DATE & TIME: 4-30-09 - 12:00
ADDRESS: SAVOY APTS - GROUND FLOOR

GPS coordinates:

Weather

TEMP:_____° F HUMIDITY:_____% R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED:_____MPH DIR: N NE E SE S SW W NW STEADY GUSTY____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: LD 712 TYPE: 1 (2) SERIAL #: 0218
CALIBRATOR: LD CAL 150 SERIAL #: 0337
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 113.9 dBA SPL WINDSCREEN Y
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: 24-HOUR

Rec #	Start Time / End Time							
____/	12:00 / 12:00 :	L_{eq}_____,	L_{max}_____,	L_{min}_____,	L_{90}_____,	L_{50}_____,	L_{10}_____,	_____
____/	_____/_____:	L_{eq}_____,	L_{max}_____,	L_{min}_____,	L_{90}_____,	L_{50}_____,	L_{10}_____,	_____
____/	_____/_____:	L_{eq}_____,	L_{max}_____,	L_{min}_____,	L_{90}_____,	L_{50}_____,	L_{10}_____,	_____
____/	_____/_____:	L_{eq}_____,	L_{max}_____,	L_{min}_____,	L_{90}_____,	L_{50}_____,	L_{10}_____,	_____

COMMENTS:

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: ALAMEDA STREET / 1ST

COUNT DURATION:_____-MINUTE

	SPEED (mph) NB / EB / SB / WB	NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	_____ / _____	____/____	_____ / _____	____/____
MED. TRUCKS:	_____ / _____	____/____	_____ / _____	____/____
HVY TRUCKS:	_____ / _____	____/____	_____ / _____	____/____
BUSES:	_____ / _____	____/____	_____ / _____	____/____
MOTORCYCLES:	_____ / _____	____/____	_____ / _____	____/____

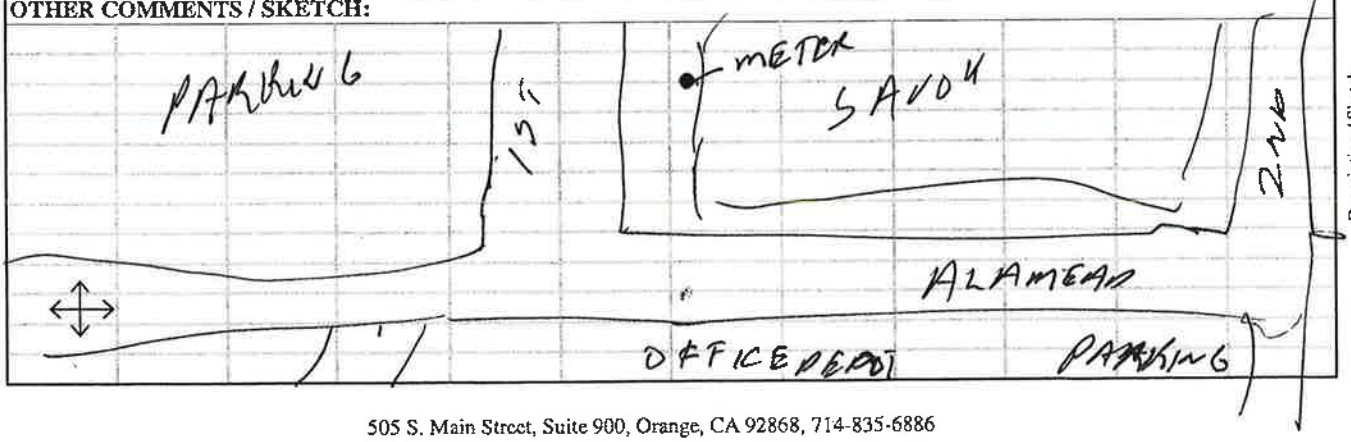
SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS

OTHER:

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



measuring.xls

FIELD MEASUREMENT DATA SHEET

Project Name: RC Job #

ID

SITE IDENTIFICATION: BUSHES ITEM 3 OBSERVER(s): BRIAN SELLER
START DATE & TIME: 1-5-00 1:41 END DATE & TIME:
ADDRESS: 1ST STREET
GPS coordinates:

Weather

TEMP: 54 °F HUMIDITY: 70 % R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0 MPH DIR: N NE E SE S SW W NW STEADY GUSTY 0 MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: B&K 2238 TYPE: 1 2 SERIAL #: 2160291
CALIBRATOR: B&K 4236 SERIAL #: ~~3445~~ 1351753
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 94 dBA SPL WINDSCREEN Y
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

Rec #	Start Time / End Time							
1	1:42 / 1:52	L_{eq} 63.5	L_{max} 79.9	L_{min} 49.3	L_{90} 53.0	L_{50} 58	L_{10} 65.0	
2	2:01 / 2:11	L_{eq} 62.0	L_{max} 77.0	L_{min} 49.5	L_{90} 52.5	L_{50} 57.5	L_{10} 63.5	
3	2:13 / 2:23	L_{eq} 62.4	L_{max} 80.1	L_{min} 50.1	L_{90} 51.0	L_{50} 57.5	L_{10} 64.0	
___ / ___		L_{eq} ___	L_{max} ___	L_{min} ___	L_{90} ___	L_{50} ___	L_{10} ___	

COMMENTS: REC 1 TWO GOOD PASS
REC 2 TWO GOOD PASS
REC 3 TWO GOOD PASS

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: 1ST AVE
COUNT DURATION: ___-MINUTE

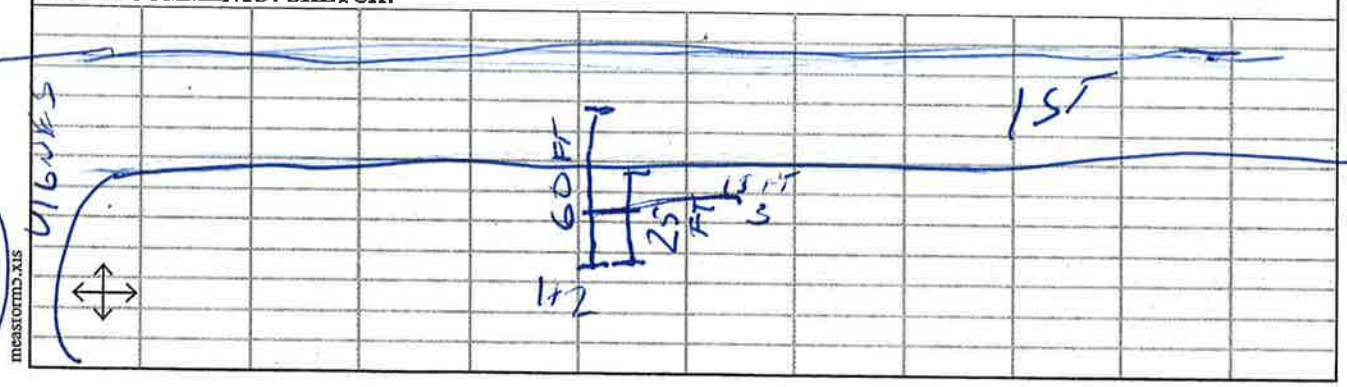
	NB / EB / SB / WB	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	___ / ___	___ / ___	___ / ___	___ / ___
MED. TRUCKS:	___ / ___	___ / ___	___ / ___	___ / ___
HVY TRUCKS:	___ / ___	___ / ___	___ / ___	___ / ___
BUSES:	___ / ___	___ / ___	___ / ___	___ / ___
MOTORCYCLES:	___ / ___	___ / ___	___ / ___	___ / ___

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

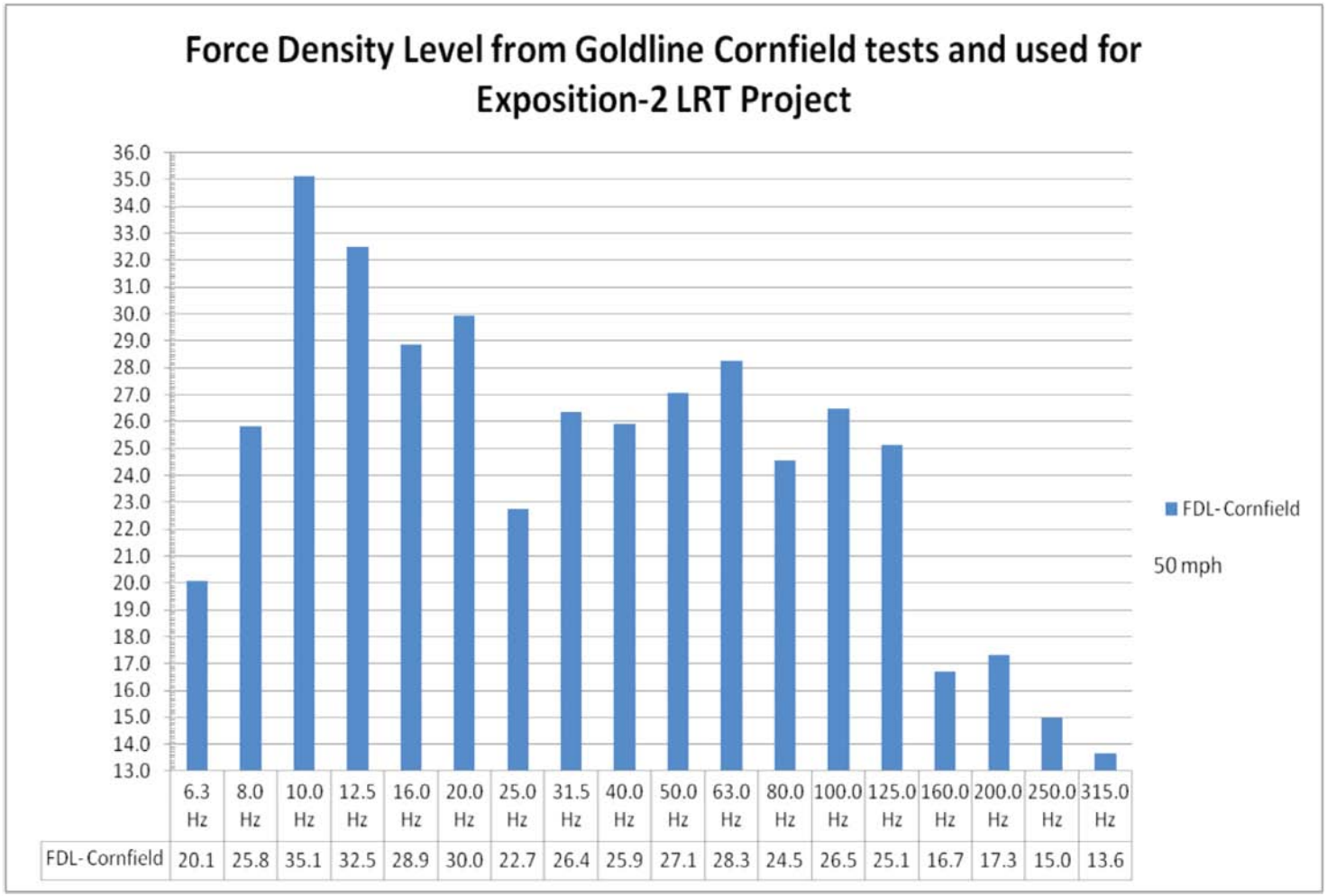
Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



meastorm2.xls

9.2 Gold Line Transit Vehicles Force Density Spectrum



	6.3 Hz	8.0 Hz	10.0 Hz	12.5 Hz	16.0 Hz	20.0 Hz	25.0 Hz	31.5 Hz	40.0 Hz	50.0 Hz	63.0 Hz	80.0 Hz	100.0 Hz	125.0 Hz	160.0 Hz	200.0 Hz	250.0 Hz	315.0 Hz
FDL-Cornfield	20.1	25.8	35.1	32.5	28.9	30.0	22.7	26.4	25.9	27.1	28.3	24.5	26.5	25.1	16.7	17.3	15.0	13.6

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX T

ECOSYSTEMS/BIOLOGICAL RESOURCES

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Ecosystems/Biological Resources
Technical Memorandum

March 9, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

This technical memorandum was prepared by:

CDM
523 West Sixth Street
Suite 400
Los Angeles, CA 90014

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ACRONYMS

CE	California Endangered
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
FE	Federally Endangered
FEC	Fairly Endangered in California
FTA	Federal Transit Administration
LRT	Light Rail Transit
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NVEC	Not very endangered in California
PEC	Presumed Extinct in California
SC	Species of Concern in California
SEC	Seriously Endangered in California
TSM	Transportation Management System
USGS	United States Geological Survey

1.0 SUMMARY

The project area does not support sensitive ecosystems or special-status species because of its heavily urbanized condition. Potential impacts to ecosystems and biological resources are limited to potential disturbance of migratory birds that may nest in large, mature trees along the proposed alignments. Active bird nests are protected from harm under the Migratory Bird Treaty Act.

In addition, certain native tree species located along the proposed alignments are protected under the City of Los Angeles Native Tree Protection Ordinance. Compliance with this ordinance would be required if native trees are to be removed or trimmed.

The proposed build alternatives present a potential impact by removing mature trees that provide nesting habitat. Mitigation measures to address this impact could include nest surveys and creating buffer zones around active nests if construction were to occur during nesting season. Additionally, the City of Los Angeles tree protection ordinance requires removed trees to be replaced at a ratio of 2:1 for protected tree species and 1:1 for non-protected species. The proposed build alternatives would also include the planting of new trees at stations and along the corridor related to urban design improvements and landscaping intrinsic to the project. Implementation of these measures would reduce potential impacts to biological resources to a less than significant level.

2.0 INTRODUCTION

This technical memorandum discusses potential impacts on biological resources from constructing and operating the proposed Regional Connector Transit Corridor project. The potential impact area is within 0.25 mile of either side of the proposed alignments for each alternative.

The proposed Regional Connector Transit Corridor project traverses the highly developed central downtown area. As such, biological resources are limited to landscaped areas where mature trees or other vegetation could support wildlife species that are adapted to the urban environment. In particular, migratory birds (including raptors) may use mature trees within the project area for nesting, and are protected under federal, state, and local laws. In addition, native trees are protected under a local ordinance.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section describes the regulatory framework for protection of ecosystems and biological resources, the standards of significance that are applied to impact evaluations, the area of potential effect, and the methodology used to evaluate potential impacts of each alternative.

3.1 Regulatory Framework

Biological resources within the project area - including within 0.25 mile of each proposed alignment, stations, and maintenance facility sites - are protected by federal, state, and local laws and policies. These are described in the following paragraphs.

3.1.1 Federal

3.1.1.1 Endangered Species Act

The Endangered Species Act and subsequent amendments provide for conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the Endangered Species Act requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. At the federal level, the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration are responsible for administration of the Endangered Species Act.

3.1.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) decrees that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. Nearly all native North American bird species are protected by the act. Under the act, taking, killing, or possessing migratory birds is unlawful. "Take" is defined under the federal and state acts to include: 1) actions that harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed wildlife, or 2) actions that may result in significant habitat modification or degradation, or that significantly impair essential behavioral patterns (including breeding, feeding, or sheltering).

Projects likely to result in taking of birds protected under the Migratory Bird Treaty Act require the issuance of take permits from the U.S. Fish and Wildlife Service. Activities requiring such a permit include destruction of migratory bird nesting habitat during the nesting season, when eggs or young are likely to be present. Under the act, surveys are required to determine if nests will be disturbed. If a nest would be disturbed, a buffer area with a specified radius around the nest would be established to avoid disturbance or intrusion until the young have fledged and left the nest. If not otherwise specified in the permit, the size of the buffer area would vary with species and local conditions (e.g., presence of busy roads), and would be based on the professional judgment of a monitoring biologist.

3.1.2 State

3.1.2.1 California Endangered Species Act

The California Department of Fish and Game is responsible for administration of the California Endangered Species Act. Unlike the federal Endangered Species Act, there are no state agency consultation procedures under the California Endangered Species Act.

For projects that affect both state and federal listed species, compliance with the federal Endangered Species Act will satisfy the California Endangered Species Act if the California Department of Fish and Game determines that the federal incidental take authorization is "consistent" with the California Endangered Species Act. Projects that result in a "take" of a state-only listed wildlife species require a take permit under the California Endangered Species Act. The federal and/or state acts also lend protection to species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, or other essential habitat.

3.1.2.2 California Fish and Game Code, Migratory Bird Protection

Sections 3500 through 3705 of the California Fish and Game Code regulate the taking of migratory birds and their nests. These codes prohibit the taking of nesting birds, their nests, eggs, or any portion thereof during the nesting season. Typically, the breeding/nesting season is from March 1 through August 30. Depending on each year's seasonal factors, the breeding season can start earlier and/or end later.

3.1.3 Local

3.1.3.1 City of Los Angeles General Plan

The City of Los Angeles General Plan Conservation Element sets forth objectives and policies to protect biological resources, including endangered species and habitats (City of Los Angeles 2001). For endangered species, the General Plan states the following objective:

> *Protect and promote the restoration, to the greatest extent practical, of sensitive plant and animal species and their habitats.*

Policies to achieve this objective include:

- Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.

- Continue to administer City-owned and managed properties so as to protect and/or enhance the survival of sensitive plant and animal species to the greatest practical extent.
- Continue to support legislation that encourages and facilitates protection of endangered, threatened, sensitive, and rare species and their habitats and habitat corridors.

For habitats, the General Plan objective is to:

> *Preserve, protect, restore and enhance natural plant and wildlife diversity, habitats, corridors and linkages so as to enable the healthy propagation and survival of native species, especially those species that are endangered, sensitive, threatened or species of special concern.*

Established policies regarding protection of habitats include:

- Continue to identify significant habitat areas, corridors, and buffers and to take measures to protect, enhance, and/or restore them.
- Continue to protect, restore, and/or enhance habitat areas, linkages, and corridor segments, to the greatest extent practical, within City-owned or managed sites.
- Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.
- Continue to support legislation that encourages and facilitates protection of local native plant and animal habitats.

3.1.3.2 City of Los Angeles Native Tree Protection Ordinance

The City of Los Angeles passed a Native Tree Protection Ordinance (Ordinance No. 177,404) to slow the decline of native tree habitat; this ordinance became law on April 23, 2006. The Native Tree Protection Ordinance:

- Protects all native oak tree species (Quercus Spp) (excluding scrub oak), Western Sycamore (Platanus Racemosa), California Bay (Umbellularia Californica), and California Black Walnut (Juglans Californica).
- Applies to protected trees 4 inches or greater in diameter at 4.5 feet above ground (multiple trunk trees are calculated by cumulative diameter).
- Applies to protected trees on private lots.

- Requires that a report showing the location of each protected tree in a project area, whether each tree is to be retained, relocated, or removed, and the proposed replacement measures be submitted by a registered consulting arborist, landscape architect, or pest control advisor who is also a certified arborist.

Protected tree removal requires a removal permit by the Board of Public Works. Any act that may cause the failure or death of a protected tree requires inspection by the City's Urban Forestry Division. Removed trees are to be replaced at a ratio of 2:1 for protected species and 1:1 for non-protected species. Saplings to large box trees can be used for mitigation, depending on what has the best chance of survival for a particular project. Replacement trees are required to be at least 1 inch in diameter, 1 foot above the base, and at least 7 feet in height. The code allows replacement trees to be of different species if protected species are not available; however, a greater number of replacement trees would likely then be required. Although the law does not require a permit for pruning protected trees, the City recommends that a certified arborist be consulted to ensure that the pruning of protected trees is performed properly.

3.2 Standards of Significance

The National Environmental Policy Act (NEPA) requires an evaluation of potential impacts to federally listed endangered species, the ecological importance and distribution of affected species, and the intensity of potential impacts from the project alternatives, including the No Build Alternative. The NEPA process is considered the framework for compliance with federal laws for the protection of endangered species and biological resources, including the Endangered Species Act and Executive Order 11990, Protection of Wetlands.

California Environmental Quality Act (CEQA) thresholds with regard to biological resources are identified in Section C of the *Los Angeles CEQA Thresholds Guide.* The *Los Angeles CEQA Thresholds Guide* (page C-6) states that a project would normally have a significant impact on biological resources if it could:

- Result in the loss of individuals, or reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern, or federally listed critical habitat;
- Result in the loss of individuals, reduction of existing habitat of a locally designated species, or reduction in a locally designated natural habitat or plant community;
- Interfere with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species;
- Result in alteration of an existing wetland habitat; or

- Interfere with habitat such that normal species' behaviors are disturbed (e.g., from introducing noise or light) to a degree that may diminish the chances for long-term survival of a sensitive species.

In addition, Appendix G of the *CEQA Guidelines* indicates that a project would have a significant effect on the environment if it would:

- Fundamentally conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

3.3 Area of Potential Effect

To evaluate potential impacts to ecosystems/biological resources, an area within 0.25 mile of either side of the proposed alignments for each of the project alternatives was evaluated (Figure 3-1). This is a conservative approach for evaluating potential impacts to biological resources such as disturbance of nesting birds. Since the alignments differ among alternatives, the area of potential impact also varies.

3.4 Evaluation Methodology

The evaluation methodology included a review of the California Natural Diversity Database (CNDDB) to identify sensitive plants and animals potentially occurring in the project area. All of the project alternatives are located within the United States Geological Survey (USGS) Los Angeles 7.5-minute quadrangle. A 7.5-minute quadrangle is an area that spans 7.5 minutes of latitude and 7.5 minutes of longitude, which ranges from 64 square miles at latitude 30 degrees north to 49 square miles at latitude 49 degrees north. The Los Angeles 7.5-minute quadrangle is approximately 60 square miles.

A field review of parks and other public open spaces within 0.25 mile of either side of the proposed alignments was also conducted, and included visual observation and photographic documentation of all parks, open space areas, and mature trees within the project area.

Results of this field survey were used to determine whether biological resources (including sensitive ecological areas, wetlands, wildlife migratory corridors, and/or habitat conservation areas) occur within the project area and if those areas could potentially support any of the sensitive species identified by the CNDDB. If the project could potentially impact biological resources, through effects on species or habitat, there could be a potential for adverse impacts.

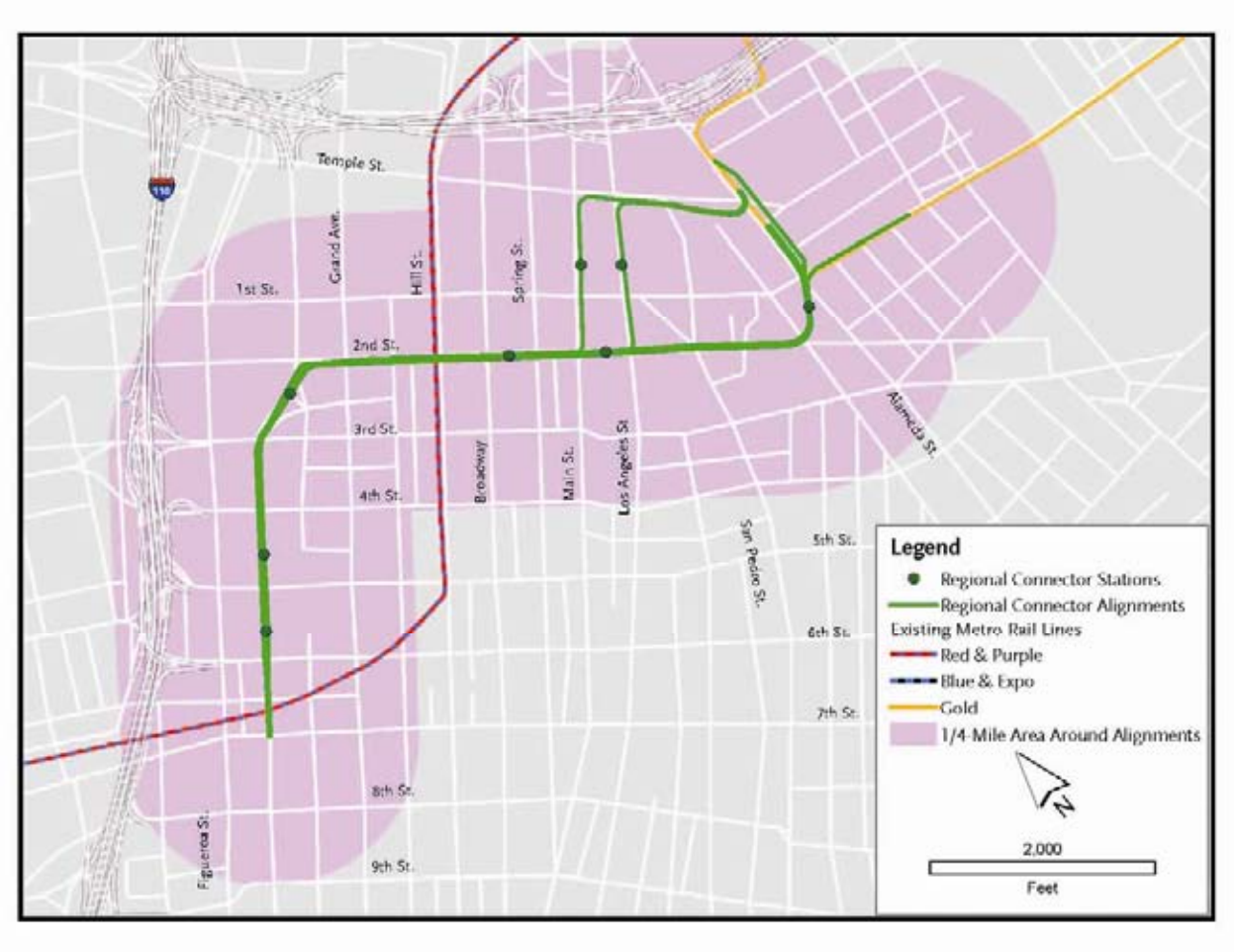

Figure 3-1. Area of Potential Effect

4.0 AFFECTED ENVIRONMENT

4.1 Existing Conditions in the Project Area

Due to its densely developed and urbanized nature, the project area provides little opportunity for wildlife species or other biological resources to exist. There are no Habitat Conservation Plans for this area, and no Significant Ecological Area was located within 0.25 mile of either side of the proposed alignments (City of Los Angeles 2001). There are no wildlife corridors within this area to support movement of wildlife species. There are no wetlands, oak woodlands, or coastal sage scrub habitat within the project area. The Los Angeles River, which is contained within a concrete channel through the downtown area, is located more than 0.25 mile away from the project area.

Table 4-1 presents special-status wildlife and plant species and ecosystems (plant communities) listed on the CNDDB as potentially occurring within the USGS Los Angeles 7.5-minute quadrangle in which the project area is located. The CNDDB search reported all species found somewhere within the approximately 60-square-mile quadrangle. As the project area is only approximately 1.6 square miles, it represents a very small portion of the quadrangle and provides little habitat, as determined during the field survey.

Table 4-1. Ecosystems and Special-Status Wildlife and Plant Species Potentially in the Project Area

Common Name	Scientific Name	Status
Ecosystems (Vegetation Communities)		
Walnut Forest	Walnut Forest	None
Birds		
Burrowing Owl	Athene cunicularia	SC[1]
Southwestern Willow Flycatcher	Empidonax traillii extimus	FE[2], CE[3]
Mammals		
Hoary Bat	Lasiurus cinereus	None
Western Mastiff Bat	Eumops perotis californicus	SC[1]
Big Free-tailed Bat	Nyctinomops macrotis	SC[1]

Table 4-1. Ecosystems and Special-Status Wildlife and Plant Species Potentially in the Project Area

Common Name	Scientific Name	Status
American Badger	Taxidea taxus	SC[1]
Reptiles		
Coast (San Diego) Horned Lizard	Phrynosoma coronatum (blainvillii population)	SC[1]
Plants		
Los Angeles Sunflower	Helianthus nuttallii ssp. parishii	PEC[4]
Greata's Aster	Symphyotrichum greatae	NVEC[5]
Davidson's Saltscale	Atriplex serenana var. davidsonii	FEC[6]
Parish's Gooseberry	Ribes divaricatum var. parishii	PEC[4]
Orcutt's Linanthus	Linanthus orcuttii	NVEC[5]
Prostrate Vernal Pool Navarretia	Navarretia prostrata	SEC[7]
Mesa Horkelia	Horkelia cuneata ssp. puberula	SEC[7]
Plummer's Mariposa-Lily	Calochortus plummerae	FEC[6]

Source: California Natural Diversity Database (CNDDB), May 18, 2009
[1] SC – Species of Concern in California (California Department of Fish and Game).
[2] FE – Federally Endangered (U.S. Fish and Wildlife Service).
[3] CE – California Endangered (California Department of Fish and Game).
[4] PEC – Presumed Extinct in California (California Native Plant Society).
[5] NVEC - Not Very Endangered in California (California Native Plant Society).
[6] FEC - Fairly Endangered in California (California Native Plant Society).
[7] SEC - Seriously Endangered in California (California Native Plant Society).

A field survey of the project area was conducted on May 17, 2009. Based on this survey's observations, there is no evidence of habitat within the project area to support the sensitive species and vegetation community identified by the CNDDB as potentially occurring within the Los Angeles quadrangle.

However, mature trees were observed along the proposed alignments and within roadway medians. Due to their mobility, some migratory bird species may utilize these mature trees

during migration. While unlikely, there is potential for migratory birds, including raptors, to utilize these mature trees for breeding.

Approximately 25 large trees, including palms and pine trees, are located around the Los Angeles Public Library near the corner of 5th and Flower Streets. In addition, three large pine trees are within the center median of Los Angeles Street, and several large fern pines are located along 2nd Street between Main and Los Angeles Streets.

Due to the high level of disturbance in this urban setting, there is only a minimal potential for Red-tailed hawk, Great-horned owl and other raptors to nest in these trees. However, Great horned owls may be more likely to select buildings in urban settings as nest sites. Smaller songbird species, including Lesser goldfinch, House finch, Western scrub jay, Bushtit, Northern mockingbird, and American robin, may also nest in these trees. While native songbirds may nest in these mature trees, the native bird species tend to preferentially select native plant species for nesting substrates when they are available.

Approximately 15 mature palm trees are located on 4th Street across from the Library. Several more palms are located along Main Street near 2nd Street. Large palms also exist in the area in front of City Hall at 201 N. Los Angeles Street. Many resident and migratory bird species in Los Angeles are known to nest in palm trees, including Hooded orioles, Barn owls, and Northern flicker.

California Sycamore, a native tree species protected under the City of Los Angeles Native Tree Protection Ordinance, is found in several locations within the project area:

- Near the corner of 5th and Flower Streets
- Along 2nd Street between Hill Street and Broadway
- Along Main Street between 2nd and 1st Streets

Table 4-2 shows trees that were identified in the project area through the field survey. All of the proposed alignments of the underground alternatives affect the same number of trees in the same locations and are shown only once in Table 4-2. The number of trees that occur along the alignments of the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2 are essentially the same. However, the Underground Emphasis LRT Alternative has the potential to affect a greater number of trees east of Los Angeles Street than either of the Fully Underground LRT Alternatives as shown in Table 4-2. This is because the Underground Emphasis LRT Alternative includes an underpass along Alameda Street and the Los Angeles Street option for a potential station along 2nd Street.

Table 4-2. Trees Potentially Affected by the Build Alternatives

Location	At-Grade Emphasis LRT		Underground Alternatives[9]	
	Native (CA sycamores)	Palms and other mature non-native trees	Native (CA sycamores)	Palms and other mature non-native trees
Los Angeles Library (at Flower and 5th Streets) [1]	10	25	10	15
Flower Street to 2nd Street	0	15	0	0
Flower Street where alignment turns [2]	5	25	5	25
Along 2nd Street to Los Angeles Street[3]	20	35	0	0
Underground station at 2nd Street - Broadway [4]	0	0	10	15
Underground Emphasis LRT station at 2nd Street - Los Angeles Street Option [5]	0	0	10	25
Main Street (At-Grade Emphasis LRT only) [6]	20	40	0	0
Los Angeles Street (At-Grade Emphasis LRT only) [7]	5	35	0	0
Temple Street (At-Grade Emphasis LRT only) [8]	0	15	0	0
2nd Street east of Los Angeles Street (Underground Emphasis LRT only)	0	0	5	35
At-grade tracks along Alameda and underpass (Underground Emphasis LRT only)	0	0	0	15

Table 4-2. Trees Potentially Affected by the Build Alternatives				
Location	**At-Grade Emphasis LRT**		**Underground Alternatives[9]**	
Fully Underground LRT station at 2nd Street and Central Avenue				7[10]
Fully Underground LRT portals east of Alameda Street – Variations 1 and 2	0	0	0	0[11]
Totals				
At-Grade Emphasis LRT Alternative	60	190	N/A	N/A
Underground Emphasis LRT Alternative	N/A	N/A	40	130
Fully Underground LRT Alternatives	N/A	N/A	25	62

[1] The station at this location is underground for the build alternatives, but the potential impact is calculated based on the at-grade construction footprint.
[2] The station footprints are identical for the build alternatives since alignments are located underground.
[3] Alignments are along 2nd Street but impacts are different depending on whether proposed LRT is at-grade or underground.
[4] No station proposed at this location for the At-Grade Emphasis LRT Alternative.
[5] No station proposed at this location for the At-Grade Emphasis LRT Alternative or the Fully Underground LRT Alternatives.
[6] Table lists existing sycamores and mature non-native trees along Main Street.
[7] Large pines located in the center median, other trees located along Los Angeles Street.
[8] Inventory includes large ficus, etc. along Temple Street.
[9] Underground alternatives include the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2.
[10] Includes trees on the west side of Alameda between 1st and 2nd Streets that may be affected and one mature cherry tree on Central Avenue that could be impacted if the building containing the Weyland's Brewery is removed.
[11] There are several small trees along 1st Street that are much less than 4" dbh.

5.0 IMPACTS

5.1 No Build Alternative

5.1.1 Direct Impacts

Since there would be no construction under the No Build Alternative, there would be no direct impacts to ecosystems or biological resources in the project area.

5.1.2 Indirect Impacts

The No Build Alternative would not result in indirect impacts to ecosystems or biological resources.

5.1.3 Cumulative Impacts

Since the No Build Alternative would not result in direct or indirect impacts to ecosystems or biological resources, there would be no cumulative impacts.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Direct Impacts

The two new express shuttle bus lines created under the TSM Alternative would not require construction that would directly impact ecosystems or biological resources in the project area.

5.2.2 Indirect Impacts

There would be no indirect impacts to ecosystems or biological resources from the TSM Alternative.

5.2.3 Cumulative Impacts

Since the TSM Alternative would not result in direct or indirect impacts to ecosystems or biological resources, there would be no cumulative impacts.

5.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

5.3.1 Direct Impacts

During construction of the At-Grade Emphasis LRT Alternative, some mature trees located along the proposed alignment could be removed or disturbed. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removing or disturbing this vegetation during the nesting season could directly impact the habitat and any bird species that are present.

There are currently 250 mature trees in the area that could potentially be affected by construction, and a subset of these trees could be removed or disturbed during construction

of the At-Grade Emphasis LRT Alternative. Of this total, 60 trees are native California sycamore trees, a protected species.

It is unknown at this time exactly how many trees could be affected. As project design progresses and construction plans are finalized, it may be possible to minimize the number of affected trees by avoidance or fencing. Potential mitigation measures are described in Section 6 and include compliance with the Native Tree Protection Ordinance. Compliance with the Native Tree Protection Ordinance, including replacement of this protected species at a 2:1 ratio, would reduce this potential impact to a less than significant level.

Additionally, as an integral part of the project, station landscaping and urban design along the entire alignment would include planting new trees. Street restoration plans would also include planting new trees; the type of trees would be determined in consultation with the City, the community, and designers. Therefore, after mitigation, the build alternatives could result in a net increase in total tree inventory.

5.3.2 Indirect Impacts

Direct impacts to birds and their habitat by removing or disturbing mature trees have the potential to cause indirect impacts elsewhere. If birds are forced to relocate to new areas during the nesting season, increased competition for food and nesting habitat would be a potential indirect impact.

However, because the downtown area provides only low quality habitat for migratory birds, these potential impacts are not considered to be significant because only a small number of birds (if any) could be displaced. Further, mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce potential indirect impacts to a less than significant level.

5.3.3 Cumulative Impacts

The project area is expected to experience growth in the future, and construction activities associated with future projects have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures for any potential impacts to biological resources, particularly migratory birds, as required under either the MBTA or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the At-Grade Emphasis LRT Alternative with respect to biological resources.

5.4 Underground Emphasis LRT Alternative

5.4.1 Direct Impacts

Construction of the Underground Emphasis LRT Alternative could require removal or disturbance of mature trees located along the proposed alignment, although less so than

under the At-Grade Emphasis LRT Alternative. As these mature trees may provide potential nesting and roosting habitat for bird species, including raptors, removing or disturbing this vegetation during the nesting season could directly impact the habitat and any bird species that are present.

There are currently 170 mature trees in the area that could potentially be affected by construction, and a subset of these trees could be removed or disturbed during construction of the Underground Emphasis LRT Alternative. It is unknown at this time exactly how many trees could be affected. As project design progresses and construction plans are finalized, it may be possible to minimize the number of affected trees by avoidance or fencing.

Potential mitigation measures include compliance with the Native Tree Protection Ordinance and are described in Section 6. These mitigation measures would be implemented to ensure that potential impacts from tree disturbance or removal would be reduced to a less than significant level.

An estimated 40 native California sycamore trees occur in the potential area of impact and could be affected by this alternative. As project design progresses, it may be possible to minimize the number of sycamores affected by avoidance or fencing. Potential mitigation measures include compliance with the Native Tree Protection Ordinance and are described in Section 6. Compliance with the Native Tree Protection Ordinance, including replacement of this protected species at a 2:1 ratio, would reduce this potential impact to a less than significant level.

Additionally, as an integral part of the project, station landscaping and urban design along the entire alignment would include planting new trees. Street restoration plans would include planting new trees; the type of trees would be determined in consultation with the City, the community, and designers. Therefore, after mitigation, the build alternatives could result in a net increase in total tree inventory.

5.4.2 Indirect Impacts

Indirect impacts to birds at some distance from the project area could occur if mature trees are removed or disturbed during the nesting season. If birds are forced to relocate to new areas, increased competition for food and nesting habitat would be an indirect impact. This impact would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less than significant level.

5.4.3 Cumulative Impacts

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season.

Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the MBTA or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the Underground Emphasis LRT Alternative with respect to biological resources.

5.5 Fully Underground LRT Alternative- Little Tokyo Variation 1

5.5.1 Direct Impacts

The Fully Underground LRT Alternative- Little Tokyo Variation 1 has the potential to affect fewer trees compared to the Underground Emphasis LRT Alternative. The vehicle underpass along Alameda Street between Temple and 2nd Streets proposed for the Underground Emphasis LRT Alternative has the potential to affect more trees than the Fully Underground LRT Alternative alignment. As no mature trees or other biological resources were observed in the area north and east of 1st and Alameda Streets, there are no additional direct impacts related to the Fully Underground LRT Alternative – Little Tokyo Variation 1. The same mitigation measures described in Section 6 would be required to reduce these potential impacts to a less than significant level.

There are several cherry trees along 1st Street and Central Avenue; most are much less than 4 inches dbh. If the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue is required for construction and additional buildings must be removed, then there is the potential that one additional cherry tree that is slightly larger than 4 inches dbh in the sidewalk on Central Avenue might be removed. This effect would be less than significant.

5.5.2 Indirect Impacts

As with the other build alternatives, indirect impacts to migratory birds from the Fully Underground LRT Alternative- Little Tokyo Variation 1 would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less than significant level.

5.5.3 Cumulative Impacts

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds either under the MBTA or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the Fully Underground LRT Alternative- Little Tokyo Variation 1 with respect to biological resources.

5.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

5.6.1 Direct Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would have the same potential to cause direct impacts by removing or disturbing mature trees as would the Fully Underground LRT Alternative- Little Tokyo Variation 1. Implementing the same mitigation measures described in Section 6 would be required to reduce these potential impacts to a less than significant level.

If the entire block bounded by 1st, 2nd, and Alameda Streets and Central Avenue is required for construction and additional building must be removed, then there is the potential that one additional cherry tree in the sidewalk on Central Avenue might be removed. This effect would be less than significant.

5.6.2 Indirect Impacts

As with the other build alternatives, indirect impacts to migratory birds from the Fully Underground LRT Alternative- Little Tokyo Variation 2 would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less than significant level.

5.6.3 Cumulative Impacts

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the MBTA or the California Fish and Game Code. Therefore, there would be no potential cumulative impacts from the Fully Underground LRT Alternative- Little Tokyo Variation 2 with respect to biological resources.

6.0 POTENTIAL MITIGATION MEASURES

Federal and state migratory bird protection would require mitigation measures to address potential impacts to nesting bird species from the potential disturbance of trees within the proposed build alternative alignments. Trees that could potentially be disturbed include: 1) a portion of the approximately 250 trees located within the proposed alignment and station footprints for the At-Grade Emphasis LRT Alternative, and 2) the approximately 170 trees located within the proposed alignment and station footprints for all of the underground alternatives. The following potential mitigation measures would apply to all of the proposed build alternatives.

The first potential mitigation would be to avoid tree disturbances as much as possible. As project design progresses, it may be possible to reduce the number of trees potentially disturbed by avoidance or fencing. It may also be possible to reduce the scale of disturbance by trimming individual trees instead of removing them completely.

The second potential mitigation would be to time necessary tree removal and trimming activities to seasons outside of the bird breeding season, which can extend from February 1 to August 31.

If it is not feasible to avoid tree removal and trimming related to construction during the breeding bird season from February 1 to August 31, breeding bird surveys would be conducted as recommended by the California Department of Fish and Game. Two biological surveys would be conducted, one 15 days and a second 72 hours prior to construction activities that would remove or disturb suitable nesting habitat. The surveys would be performed by a biologist with experience conducting breeding bird surveys.

The biologist would prepare survey reports documenting the presence or absence of active nests of any protected native bird in the habitat to be removed and any other such habitat within 300 feet of the construction work area (or within 500 feet for raptors). If an active nest is located, construction within 300 feet of the nest (or 500 feet for raptor nests) would be postponed until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting.

If construction of the project requires removing any of the native trees located along the proposed alignment and stations for any of the build alternatives (including the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT, or either of the two Fully Underground LRT Alternative variations), a removal permit would be required from the Los Angeles Board of Public Works in accordance with the City of Los Angeles Native Tree Protection Ordinance. The tree removal permit may require replanting of native trees within the project area or at another location within the City of Los Angeles to mitigate for the removal of these trees. The City's ordinance requires replacement of protected trees at a 2:1

ratio and other trees at a 1:1 ratio. If construction would require pruning of any protected native tree, the pruning would be performed in a manner that does not cause permanent damage or adversely affect the health of the trees.

Additionally, as an integral part of the project, station landscaping and urban design along the entire alignment would include planting new trees. Street restoration plans would include planting new trees; the type of trees would be determined in consultation with the City, the community, and designers. If landscaping and/or street trees planted as part of another Metro transit project are disturbed by this project, they would be replaced to the extent feasible. Therefore, after mitigation, the build alternatives could result in a net increase in total tree inventory.

7.0 CONCLUSIONS

7.1 No Build Alternative

There would be no impact from the No Build Alternative to ecosystems and biological resources.

7.2 TSM Alternative

There would be no significant impact from the TSM Alternative to ecosystems and biological resources.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Implementation of mitigation measures to address potential impacts to migratory birds and compliance with the Native Tree Protection Ordinance would result in no significant adverse impact on ecosystems and biological resources from the At-Grade Emphasis LRT Alternative.

7.3.2 CEQA Determinations

Mitigation measures would reduce potential impacts to ecosystems and biological resources from the At-Grade Emphasis LRT Alternative to a less than significant level.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Implementation of mitigation measures would result in no significant adverse impact to ecosystems and biological resources from the Underground Emphasis LRT Alternative.

7.4.2 CEQA Determinations

With mitigation, potential impacts to ecosystems and biological resources would be less than significant.

7.5 Fully Underground LRT Alternative- Little Tokyo Variation 1

7.5.1 NEPA Findings

Implementation of mitigation measures would result in no significant adverse impact on ecosystems and biological resources from the Fully Underground LRT Alternative- Little Tokyo Variation 1.

7.5.2 CEQA Determinations

Implementation of mitigation measures would reduce potential impacts to ecosystems and biological resources from the Fully Underground LRT Alternative- Little Tokyo Variation 1 to a less than significant level.

7.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

7.6.1 NEPA Findings

By implementing mitigation measures, no significant adverse impact on ecosystems and biological resources would occur from the Fully Underground LRT Alternative- Little Tokyo Variation 2.

7.6.2 CEQA Determinations

Implementation of mitigation measures would reduce potential impacts to ecosystems and biological resources from the Fully Underground LRT Alternative- Little Tokyo Variation 2 to a less than significant level.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX U

GEOTECHNICAL/SUBSURFACE/ SEISMIC/HAZARDOUS MATERIALS

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor Geotechnical/Subsurface/Seismic/ Hazardous Materials Technical Memorandum

April 13, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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ACRONYMS

BEP	Business Emergency Plan
BMPs	Best Management Practices
Cal OSHA	California Occupational Safety and Health Administration
CBC	California Building Code
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CGS	California Geological Survey
CUPA	Certified Unified Program Agencies
DEIR	Draft Environmental Impact Report
DEIS	Draft Environmental Impact Statement
DTSC	California Department of Toxic Substances Control
EDR	Environmental Data Resources
EMF	Electromagnetic Field
EPCRA	Emergency Planning and Community Right-to-Know Act
HMBP	Hazardous Materials Business Plan
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NGA	Next Generation Attenuation

OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated biphenyls
PCE	Tetrachloroethene
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SCAQMD	South Coast Air Quality Management District
TBM	Tunnel boring machine
TPH-g	Total petroleum hydrocarbons - gasoline
TSCA	Toxic Substances Control Act
TSM	Transportation Management System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound

1.0 SUMMARY

This technical memorandum presents an evaluation of the potential impacts related to the geologic conditions of the Regional Connector project area, including the general topography, geologic materials, faults, seismicity, and potential hazardous materials. The regulatory framework and a discussion of potential impacts related to these conditions are presented.

The project alignment is not located within the Alquist-Priolo Earthquake Fault zone. No adverse effects are anticipated related to geotechnical, subsurface, or seismic hazards from the No Build Alternative or the TSM Alternative. However, ground shaking would be expected during a seismic event on one of the nearby faults. There is some potential for adverse impacts related to liquefaction or seismically-induced settlement along portions of all of the build alternatives (the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2), but there would be no potential for adverse impacts related to fault rupture, landslides, flooding, seiches, or tsunamis for any of these alternatives. In addition to the seismic hazards, there would be a potential for ground loss due to tunneling for the Underground Emphasis LRT Alternative, and the Fully Underground LRT Alternative – Little Tokyo Variation 1 and Little Tokyo Variation 2.

A geotechnical investigation would be performed during preliminary design along the preferred alignment to supplement and provide site specific data to facilitate design for maintaining the integrity of existing structures under static and seismic loading and operational demands. Although portions of the alignment would be constructed in potential liquefaction zones, none are expected to result in or exacerbate geologic hazards. The subway tunnels and the stations would be located at depths generally below soils prone to liquefaction, and would be subject to standard design specifications to keep potential risks of damage from liquefaction to an acceptable level.

Potential ground loss due to tunneling and settlement of adjacent structures (including historical buildings)would be mitigated with a number of measures including: a preconstruction survey to establish baseline conditions; ground improvement such as grouting along the alignment and adjacent structures potentially affected by the tunneling work; instrumentation and monitoring during tunneling; requirements on the contractor to use earth pressure balance or slurry shield tunnel boring machine and method of operation based on the anticipated ground conditions; and limiting potential settlement to below an acceptable threshold value established during final design.

While there would be no impacts related to hazardous materials from the No Build Alternative or the TSM Alternative, there is potential for direct, indirect, and cumulative impacts from the build alternatives. These impacts relate primarily to the potential for release of hazardous materials encountered in soil and/or groundwater during construction at properties of

concern along the proposed alignments. These hazardous materials include petroleum gases in the subsurface associated with oil deposits in the project area. Impacts may also occur from release of fibers from asbestos-containing materials or lead-based paint during building demolition, or the accidental release of construction-related hazardous materials such as fuels.

Compliance with applicable laws and regulations as well as implementation of best management practices (BMPs) regarding the use, storage, and transport of hazardous materials and wastes would ensure these potential impacts would be less than significant.

In addition, mitigation would be required to address the potential presence of hazardous subsurface gases along the proposed alignment during both construction and operation. Testing and abatement of asbestos containing materials and lead-based paint would also be implemented. With mitigation, impacts related to hazards and hazardous materials would be less than significant.

2.0 INTRODUCTION

Geology, soils, seismicity, and hazardous materials are factors that determine design criteria for the development of transit improvements, particularly when subsurface or aerial stations or structures are involved. In addition, downtown Los Angeles has a long history of residential, commercial, and industrial land uses which entailed the use, handling, storage, and disposal of hazardous materials. If releases of hazardous materials have occurred at properties located along or near the proposed Regional Connector alignments, there is a potential to encounter contaminated soil and/or groundwater during construction. Naturally-occurring hazardous materials may also be present within the project area from the oil- and/or gas-bearing geologic formations that underlie Los Angeles. These natural hazards include methane and hydrogen sulfide gas. Other hazards include the potential for release of construction-related hazardous materials and the introduction of electromagnetic fields (EMF). This technical memorandum presents an evaluation of potential impacts geology, soils, seismicity, and hazardous materials would have on the project and proposed mitigation measures to address these impacts.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

The following sections present brief discussions of the regulatory framework applicable to the jurisdictions located within the project area.

3.1.1 Federal

3.1.1.1 Geology, Soils, and Seismicity

There are no specific federal regulations related to the geologic hazards of soils and seismicity.

3.1.1.2 Hazardous Materials Resources

The United States Environmental Protection Agency (USEPA) is the lead federal agency responsible for enforcing federal regulations regarding hazardous materials. The primary legislation governing hazardous materials includes the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA).

3.1.1.2.1 RCRA

RCRA regulates the generation, transportation, treatment, storage and disposal of hazardous waste through comprehensive life cycle or "cradle to grave" tracking requirements. These include maintaining inspection logs of hazardous waste storage locations, records of quantities being generated and stored, and manifests of pick-ups and deliveries to licensed treatment/storage/ disposal facilities. RCRA also identifies standards for treatment, storage, and disposal.

3.1.1.2.2 CERCLA

CERCLA, also known as Superfund, created a tax on the chemical and petroleum industries to provide for response and cleanup of hazardous substances that may endanger public health or the environment. CERCLA established requirements for abandoned hazardous waste sites and provided for liability of persons responsible for releases of hazardous waste at these sites.

3.1.1.2.3 SARA

SARA amended CERCLA to increase state involvement and required Superfund actions to consider state environmental laws and regulations. SARA also established a regulatory program for underground storage tanks (USTs) and the Emergency Planning and Community Right-to-Know Act (EPCRA).

3.1.1.2.4 Toxic Substances Control Act (TSCA)

TSCA established the mechanisms by which USEPA tracks, screens, and tests industrial chemicals currently produced or imported into the United States that may pose an environmental or human-health hazard. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

3.1.1.2.5 Federal Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) administers this legislation which requires special training of handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, acquisition from the manufacturer of material safety data sheets which describe the proper use of hazardous materials, and training of employees to remediate any hazardous material accidental releases.

This legislation regulates lead and asbestos as it relates to employee safety through a set of notification and corrective action requirements, warning signs and labels, controlled access, use of protective equipment, demolition/renovation procedures, housekeeping controls, training, and in certain cases, air monitoring and medical surveillance to reduce potential exposure. This legislation also requires contractors conducting lead-based paint and asbestos surveys and removal to be certified by the California Occupational Safety and Health Administration (Cal OSHA).

3.1.2 State

3.1.2.1 Geology, Soils, and Seismicity

The principal state guidance relating to geologic hazards is contained in the Alquist-Priolo Act (P.R.C. 2621 et seq.) and the Seismic Hazards Mapping Act of 1990 (P.R.C. 2690-2699.6). The Alquist-Priolo Act prohibits the location of most types of structures for human occupancy across active traces of faults in earthquake fault zones, shown on maps prepared by the state geologist, and regulates construction in the corridors along active faults (earthquake fault zones). Earthquake Fault Zones are regulatory zones around active faults designated by the State. The zones vary in width, but average about one-quarter mile wide.

The Seismic Hazards Mapping Act of 1990 focuses on hazards related to strong ground shaking, liquefaction, and seismically-induced landslides. Under its provisions, the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards. The maps are to be used by cities and counties in preparing their general plans and adopting land use policies to reduce and mitigate potential hazards to public health and safety.

Pursuant to the Surface Mining and Reclamation Act (P.R.C. 2710 et seq.), the State Mining and Geology Board identifies, in adopted regulations, areas of regional significance that are

known to contain mineral deposits judged to be important in meeting the future needs of the area (P.R.C. 2426 and 2790; Title 14 P.C.R. 3350, et seq.). The State Mining and Geology Board also adopts state policy for the reclamation of mined lands and certifies local ordinances for the approval of reclamation plans as being consistent with state policies (P.R.C. 2755-2764, 2774 et seq.).

3.1.2.2 Hazardous Materials Resources

The California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB) are the state agencies primarily responsible for the regulation of hazardous materials in California. DTSC is responsible for the management of hazardous substances and oversees the investigation and remediation of contaminated sites. The Los Angeles RWQCB is primarily responsible for the protection of groundwater and surface water resources from hazardous materials in the project area.

3.1.2.3 California Hazardous Waste Control Law, California Health and Safety Code, Division 20, Chapter 6.5

This state legislation is the basic hazardous waste statute in California and is administered by DTSC. Similar to but more stringent than RCRA, this law applies to a broader range of hazardous wastes and requires recycling and waste reduction programs.

3.1.2.4 Carpenter-Presley-Tanner Hazardous Substances Account Act, California Health and Safety Code, Division 20, Chapter 6.8

This legislation authorizes DTSC and RWQCB to require, oversee, and recover costs for the remediation of sites where contamination of soil and water present a hazard to human health or the environment.

3.1.2.5 State California Occupational Safety and Health Act

Cal OSHA regulates worker safety similar to federal OSHA but also requires preparation of an Injury and Illness Prevention Program, an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. In addition, Cal OSHA regulations indirectly protect the general public by requiring construction managers to post warnings signs, limit public access to construction areas, and obtain permits for work considered to present a significant risk of injury, such as excavations greater than five feet.

3.1.2.6 Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The California Environmental Protection Agency (Cal EPA) adopted regulations in 1996 to establish a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program and designated local agencies called Certified Unified Program Agencies (CUPAs).

These local agencies have jurisdiction to manage hazardous substances with respect to the following:

- Hazardous waste generators and hazardous waste onsite treatment;
- Underground Storage Tanks ;
- Aboveground storage tanks;
- Hazardous materials release response plans and inventories (business emergency plans), including Unified Fire Code hazardous materials management plans and inventories; and
- Risk management and accidental release prevention programs.

The CUPA with local jurisdiction over the proposed project area is the Los Angeles County Fire Department, Health Hazardous Materials Division.

3.1.2.7 Waters Bill of 1985 (Business Emergency Plan/Hazardous Materials Business Plan)

Administered by the CUPA, this State legislation requires facilities which meet minimum hazardous materials use/storage thresholds to file a Business Emergency Plan (BEP), or a Hazardous Materials Business Plan (HMBP), which includes a complete inventory of the hazardous materials being used and stored on a site. Employee training and emergency response plans and procedures for the accidental release of hazardous materials are also included in a BEP.

3.1.2.8 La Follette Bill of 1986 (Risk Management Plan)

Administered by the CUPA, this State legislation requires preparation of a Risk Management Plan (RMP) for commercial operations which use hazardous materials at defined thresholds. The RMP includes management, engineering and safety studies, and plans for physical improvements to minimize accidental hazardous materials releases. It is implemented via fire inspections, plan checking, BEP/HMBP disclosure requirements, and filing of the RMP (updated every three years).

3.1.2.9 South Coast Air Quality Management District (SCAQMD) Rule 1403

This State legislation regulates asbestos as a toxic material and controls the emission of asbestos from demolition and renovation. Rule 1403 establishes requirements for surveying structures and procedures for the removal, handling, storage, and disposal of asbestos-containing materials.

3.1.3 Local

Local jurisdictions, departments, and documents that regulate and oversee issues related to geology, soils, seismicity, and hazardous materials within the study area are listed below.

Geology, Soils, and Seismicity:

- The 1996 City of Los Angeles General Plan, Safety Element
- The City of Los Angeles Department of Building and Safety
- The 1990 Los Angeles County General Plan, Seismic Safety Element
- The County of Los Angeles Department of Public Works

Hazardous Materials:

- The City of Los Angeles Department of Building and Safety
- The City of Los Angeles Bureau of Sanitation, Industrial Waste Management Division
- The City of Los Angeles Fire Department, Hazardous Materials Divisions
- The City of Los Angeles Fire Department, Underground Storage Tank Division
- Uniform Fire Code
- Los Angeles Municipal Code- Methane and Methane Buffer Zones

3.2 Standards of Significance

Standards of significance provide thresholds for determining whether potential impacts are more than insignificant.

3.2.1 National Environmental Policy Act (NEPA)

NEPA does not have specific requirements related to geologic hazards or soils. NEPA requires an evaluation of potential impacts related to hazardous materials, which may be categorized in two different ways. First, there is potential for hazardous materials associated with previous land use to pose an impact for the proposed project. Second, there is potential for the proposed project to generate hazardous material impacts to the surrounding human and natural environments. Impacts associated with hazardous materials may occur during construction or operation of the project.

3.2.2 California Environmental Quality Act (CEQA)

Potential impacts related to geology, soils, and seismicity are addressed in the *Los Angeles CEQA Threshold Guide* under Section E, Geology. There are four areas of study relative to geology: E.1 geologic hazards, E.2 sedimentation and erosion, E.3 landform alteration, and E.4 mineral resources. The first three areas of study are addressed in this section. Mineral resources are not expected to be considered in the Draft Environmental Impact Statement (DEIS)/Draft Environmental Impact Report (DEIR) as they are not known to be present in the downtown Los Angeles project area. The *Los Angeles CEQA Threshold Guide* (2006, page E.1-4) states that a project would normally have a significant geologic hazard impact if it would:

- Cause or accelerate geologic hazards which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury.

The *Los Angeles CEQA Thresholds Guide* (page E.2-3) states that a project would normally have a significant sedimentation and erosion impact if it would:

- Constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or

- Accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site.

Additionally, the *Los Angeles CEQA Thresholds Guide* (page E.3-2) states that a project would normally have a significant landform alteration impact if:

- One or more distinct and prominent geologic or topographic features would be destroyed, permanently covered or materially and adversely modified. Such features may include, but are not limited to, hilltops, ridges, hill slopes, canyons, ravines, rock outcrops, water bodies, streambeds, and wetlands.

The *Los Angeles CEQA Thresholds Guide* addresses impacts with respect to hazards under Section F, including F.1 Risk of Upset/Emergency Preparedness and F.2 Human Health Hazards. The *Los Angeles CEQA Thresholds Guide* (page F.1-2) states that a project would normally have a significant impact with respect to hazards if it would:

- Create a significant hazard to the public or environment through the routine transport, storage, use, or disposal of hazardous materials;

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, create a significant hazard to the public or the environment; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

3.3 Evaluation Methodology

The method for assessing impacts involved reviewing and examining the project corridor for known geologic hazards and hazardous materials. Documents reviewed included, but were not limited to: the safety elements of the general plans for the City and County of Los Angeles; official Alquist-Priolo Earthquake Fault Zone Maps; official Seismic Hazard Zone Maps, geologic and topographic maps, and other publications by the California Geological Survey (CGS, previously California Division of Mines and Geology (CDMG)), United States Geological Survey, and California Division of Oil and Gas). If proposed stations or structures are located within or adjacent to geologic hazard areas or areas that are impacted by hazardous materials, there would be a potential for impact that would require additional geotechnical studies and may require enhanced design to eliminate or mitigate the potential hazards.

In general, impacts related to hazardous materials associated with current or previous land use are most relevant to the project alternatives that entail property acquisition and/or construction and thus have the potential to encounter hazardous materials, including contaminated soil and/or groundwater that may exist in the area of potential impact. The appropriate significance criteria as listed below were considered to determine the potential for each alternative to generate hazardous materials impacts.

The project build alternatives that entail property acquisition and/or construction (the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2), have the potential to encounter hazardous materials that may exist in soil and/or groundwater. The methodology used to evaluate potential hazardous materials impacts associated with these alternatives entailed gathering information from a variety of sources to identify potential or existing conditions that would present environmental health and safety concerns within 0.25 mile of each side of the proposed alignments. These information sources included:

- Regulatory databases - The regulatory database search included local, state, and federal environmental databases for hazardous waste facilities, underground storage

tank leak sites, former dry cleaners, chemical spill sites, county, state or federally directed waste cleanup sites, and other relevant environmental data.

- Regulatory agency files - For sites where hazardous materials may be a potential concern, supplemental information, such as investigation data, was gathered from regulatory agency files.
- Historical environmental information - This information was obtained from Sanborn fire insurance maps, historical aerial photographs, and historical topographic maps of the area of potential impact.
- Methane zones - Information on known methane zones was based on the City of Los Angeles Methane and Methane Buffer Zones map. This information will be supplemented as needed with field assessments of methane concentrations and pressure from geotechnical borings in the area of potential impact.
- Oil and natural gas - An analysis of potential hazards from known oil fields and oil or gas wells (active or abandoned) was based on California Department of Oil, Gas and Geothermal Resources maps and records reviews.
- Other hazardous materials - Potential impacts due to the presence of lead-based paint, asbestos containing materials, electromagnetic fields, and other hazards were evaluated.

In addition, a site reconnaissance was performed to observe surface conditions along the proposed alignments associated with the build alternatives.

A detailed evaluation of the results of the site reconnaissance and information gathered from the sources listed above is presented in the Hazardous Materials Investigation and Analysis report (CDM 2009). The Hazardous Materials Investigation and Analysis report identifies the sites located along the proposed alignments or on surrounding properties and provides a determination regarding the level of concern associated with environmental contaminants and/or naturally occurring hazardous substances that are known or suspected to exist at each site. Potential impacts from these sites were then evaluated for this section using the significance criteria described in Section 3.2.

4.0 AFFECTED ENVIRONMENT

4.1 Regional Setting

The proposed Regional Connector Transit Corridor project alignment is located in the northern portion of the Los Angeles Basin. This basin is a major elongated northwest-trending structural depression that has been filled with sediments up to 13,000 feet thick since middle Miocene time. On a regional scale, the project area lies within the northernmost portion of the Peninsular Ranges geomorphic provinces near its boundary with the Transverse Ranges geomorphic provinces. The Peninsular Ranges province is characterized by elongated northwest-trending mountain ridges separated by sub-parallel, sediment-filled valleys. This province is bounded by the San Jacinto fault zone to the east, the Pacific Ocean Coastline to the west, and the Transverse Ranges geomorphic province to the north. In contrast, the Transverse Ranges are characterized by east-west trending geologic structures and mountain ranges that include the Santa Ynez, San Gabriel, San Bernardino, and Santa Monica Mountains, and associated valleys. The Transverse Ranges province is a composite structural block bounded by the Big Pine fault on the north, the San Andreas fault zone to the east, the Pacific Ocean to the west, and the Malibu Coast, Santa Monica, Hollywood, Raymond, Sierra Madre, and Cucamonga faults to the south.

4.2 Regional Geology

The proposed project alignments will traverse the southeastern end of the Elysian Park Hills and the ancient floodplain of the Los Angeles River. The Elysian Hills comprise the low-lying hills west of the Los Angeles River and southeast of the eastern end of the Santa Monica Mountains. The Hollywood fault separates the northern end of the Elysian Hills from the Santa Monica Mountains. The Elysian Hills are comprised largely of Miocene age sedimentary rocks with Pliocene-age rocks flanking the southeastern edges of the hills. Previous geologic mapping identified several major geologic structures within the Elysian Hills, including the Elysian Park anticline and northwest trending faults. The southern limb of the anticlinorium contains apparent secondary folds of relatively shorter wavelength and lesser continuity of fold axes. In the vicinity of the proposed project alignments, bedding within the Fernando and Puente formations strike approximately east-west to slightly north of east and dips moderately to steeply to the south. The regional geology in the project vicinity is shown on Figure 4-1.

The geomorphology along the proposed alignments ranges from gently sloping alluvial floodplain surfaces to hillside slopes of moderate relief and grade. The steepest slopes along the alignment surface are between 3rd Street at Flower Street and Olive Street at 2nd Street. A review of the historical United States Geological Survey (USGS) topographic map of the Hollywood and Los Angeles Quadrangles shows a relatively narrow alluvial valley following Flower Street from 6th Street up-gradient to 3rd Street, then diverging to the northwest towards Glendale Boulevard (west of the SR 110 Harbor Freeway). This alluvial valley appears to be a

tributary drainage course to an ancestral course of the Los Angeles River (i.e., prior to channelization of the modern Los Angeles River). The Los Angeles River floodplain covers the broad, gently sloping, alluvial terrain east of the Bunker Hill area. Artificial fill of variable thickness underlies the proposed alignment near the surface. Fill materials consist of mixtures of sand, silt, clay, with variable amounts of construction debris. Deep areas of fill to depths of approximately 25 feet below ground surface are present at abandoned tunnels and storm drain excavations that have been backfilled.

The historical high groundwater in the vicinity of the alignment ranged between 30 to 70 feet below the existing grade based on available historic borehole data presented in the Seismic Hazard Evaluation reports of the Los Angeles and Hollywood 7.5-Minute Quadrangles (CDMG 1998a and b). Additional groundwater information has been presented in the Water Resources Technical Memorandum.

4.3 Faulting and Seismicity

4.3.1 General Setting

The primary seismic considerations are surface rupture of the earth materials along fault traces and damage to structures due to seismically-induced ground shaking. There are numerous faults in Southern California including active, potentially active, and inactive faults. The fault classification system is based on criteria adopted by the CGS for the Alquist-Priolo Earthquake Zoning Program. An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault is a fault that has demonstrated surface displacement of Quaternary age deposits (last 1.6 million years). Inactive faults have not moved in the last 1.6 million years. Active and potentially active faults that are located within ten miles of the alignment are discussed below with respect to their known activity status and location relative to the proposed alignments along Flower Street to 2nd Street.

Based on review of the available data, no known Holocene Active or Latest Pleistocene Active faults trend through the project area. The project area is not located within a currently established Alquist-Priolo earthquake fault zone for surface fault rupture and the proposed alignment does not traverse any known active fault. The location of the project area in relation to known faults is shown in Figure 4-2.

4.3.2 Active Faults

The Holocene active fault with surface expression closest to the project area is the Hollywood fault, located approximately 4.3 miles to the northwest of the proposed alignment. Active blind thrust faults in vicinity of the site are discussed separately below. Holocene Active faults within ten miles of the planned alignment include the Raymond fault (4.9 miles northeast of proposed alignment), the Newport-Inglewood fault zone (7.0 miles west-northwest of

proposed alignment), Verdugo fault (7.1 miles north-northeast of the proposed alignment) and the Santa Monica fault (9.2 miles west of the proposed alignment).

The active Hollywood fault trends east-west along the base of the Santa Monica Mountains from the West Beverly Hills Lineament in the West Hollywood-Beverly Hills area to the Los Feliz area of Los Angeles. The fault is a groundwater barrier within Holocene sediments. Studies by several investigators have indicated that the fault is active based on geomorphic evidence, stratigraphic correlation between exploratory borings, and fault trenching studies. Although the Hollywood fault is considered active by the State Geologist, an Alquist-Priolo Earthquake Fault Zone has not yet been established for the Hollywood fault due to its poorly defined location along its length. For planning purposes, the City of Los Angeles considers the Hollywood fault active, and the CGS includes the fault in its database of seismic sources.

4.3.2.1 Potentially Active Faults

The inferred trace of the MacArthur Park fault is located approximately 0.5 mile southeast of the proposed alignment. The fault has not been definitively proven to exist. It is inferred west of downtown Los Angeles and has been located based on south-facing scarps, truncated drainages, and other geomorphic features. The Eagle Rock fault, a late Pleistocene active fault is located approximately eight miles to the northeast.

4.3.2.2 Blind Thrust Fault Zones

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than three kilometers. These faults do not present a potential surface fault rupture hazard; however, they are considered active and potential sources for future earthquakes. The nearest thrust is the Elysian Park Thrust. Previously defined as the Elysian Park Fold and Thrust Belt, the Elysian Park Thrust was thought to extend northwesterly from the Santa Ana Mountains to the Santa Monica Mountains, extending westerly to parallel the Santa Monica-Hollywood and Malibu Coast faults. The Elysian Park Thrust is now believed to be smaller, only underlying the central Los Angeles Basin.

The Elysian Park Thrust underlies the project area approximately six to nine miles below ground surface. Like other blind thrust faults in the Los Angeles area, the Elysian Park Thrust is not exposed at the surface and does not present a potential surface rupture hazard. However, the Elysian Park Thrust should be considered an active feature capable of generating future earthquakes with associated significant ground shaking and possible deformation of the near surface materials.

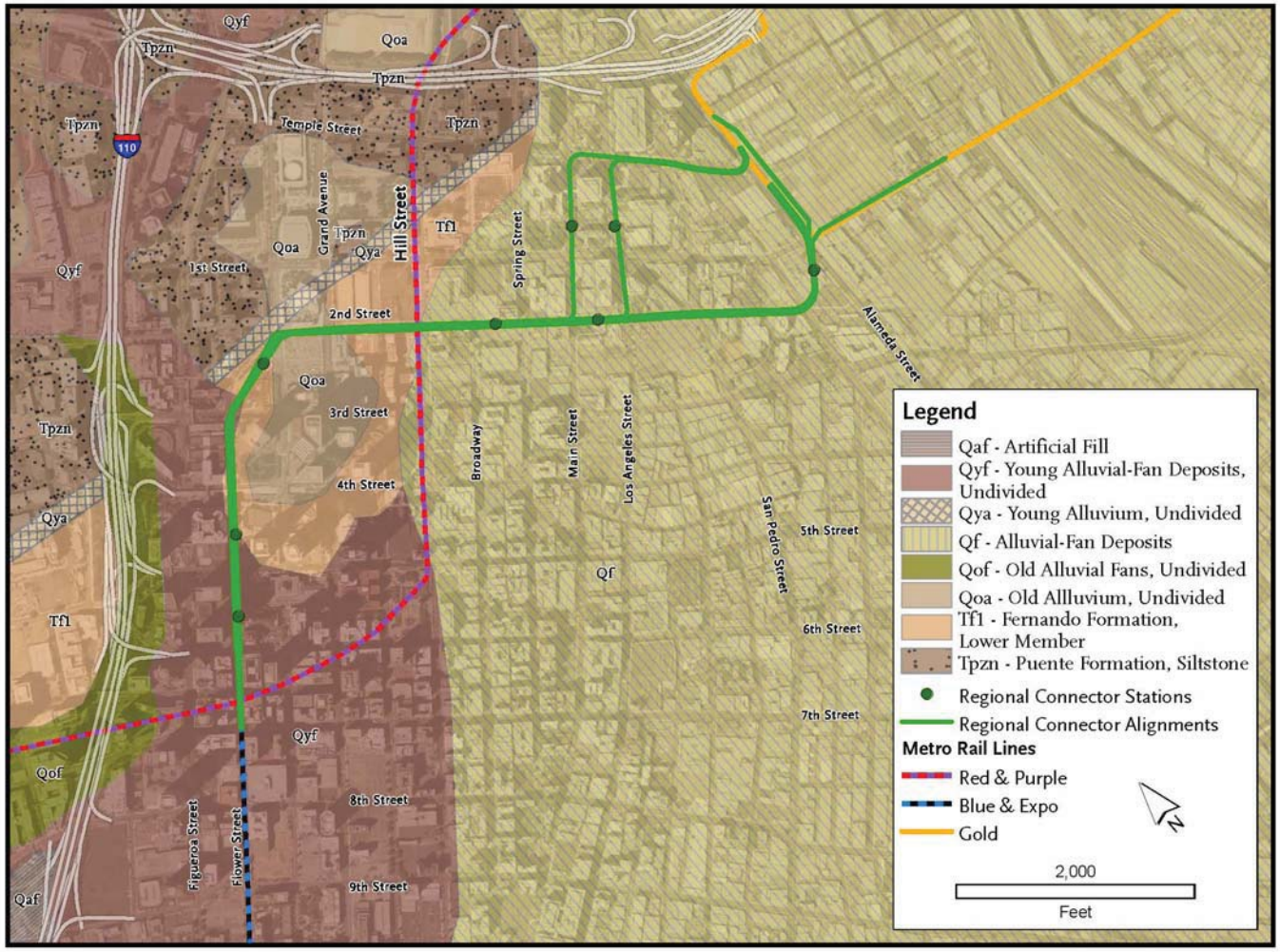

Figure 4-1. Regional Geology

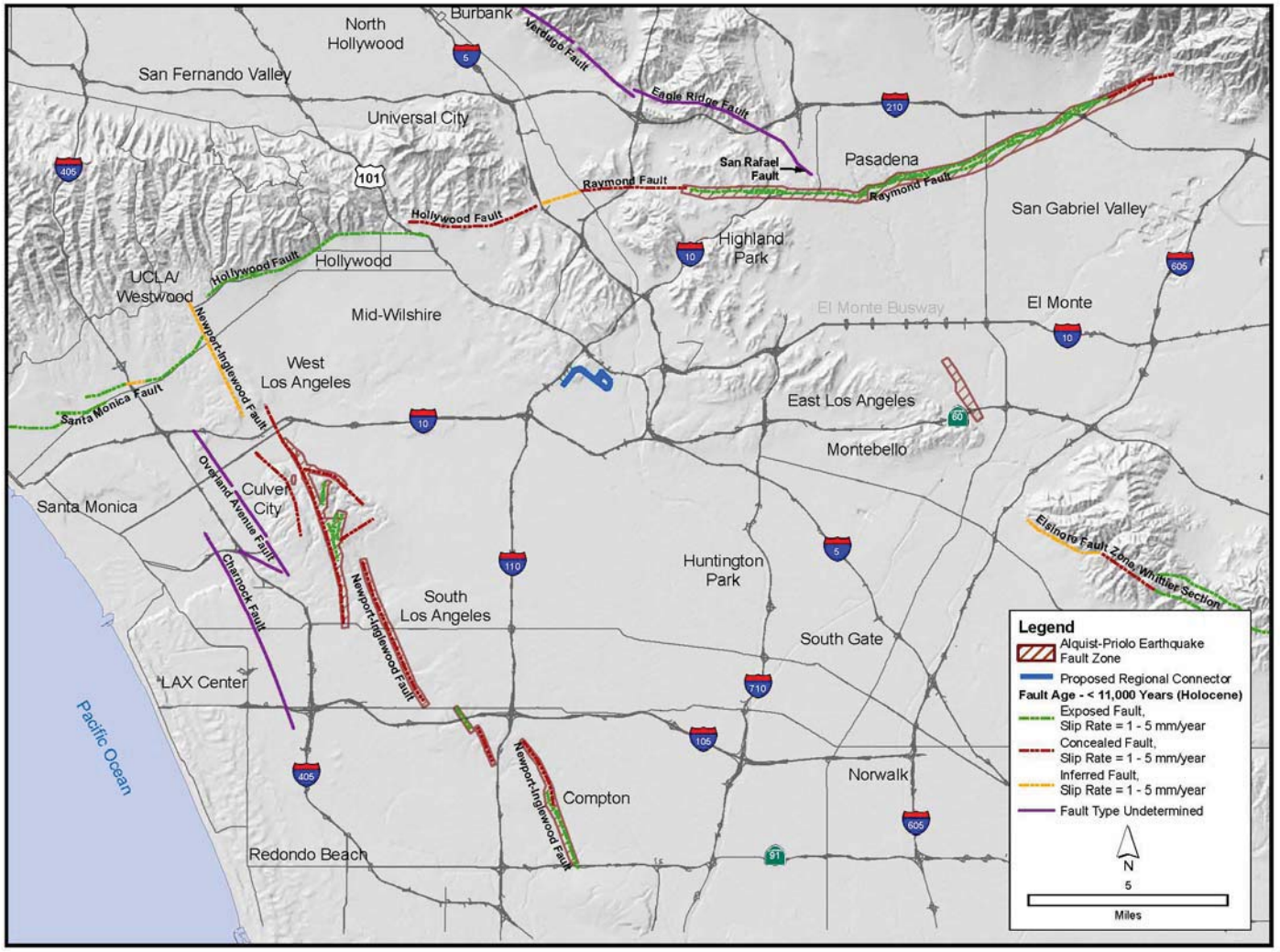

Figure 4-2. Regional Faults and Alquist-Priolo Earthquake Fault Zones

In addition, the Elysian Park fault, a blind thrust fault, is located northeast of and at a shallower depth than the Elysian Park Thrust. The up-dip edge of the blind thrust fault tip is located about 0.6 miles north of downtown Los Angeles. The estimated, average recurrence-interval for events of the Elysian Park fault ranges from 500 to 1,300 years, with an estimated moment magnitude of up to 6.7. Evidence to define the activity of the Elysian Park fault is lacking; however, given the history of seismic events on blind thrust faults in the greater Los Angeles area (i.e. Whittier Narrows and Northridge earthquakes) and proximity to the project area of this newly defined fault, the Elysian Park fault is considered active for planning and design of the project.

4.3.2.3 Coyote Pass Escarpment

The Coyote Pass Escarpment is a gentle south-facing, east-west trending topographic lineament that forms the southern flank of the Repetto Hills, from the Los Angeles River channel eastward to the Monterey Park area. The escarpment is an area of young, near-surface, monoclinal folding believed to be a result of fault rupture on the Elysian Park Thrust and/or the shallower Elysian Park fault. Although the trend of the escarpment beneath the floodplain, west of the Los Angeles River has not been well defined, it has been inferred that the escarpment may align in the subsurface with the MacArthur Park escarpment, located west of SR 110. Recent investigations of the Coyote Pass Escarpment indicate that the Elysian Park fault is active. Future fault rupture at depth along the Elysian Park fault and/or the Elysian Park Thrust could result in near-surface folding of the alluvial sediments and underlying bedrock in the area of the escarpment. Thus, no ground rupture is anticipated along the Coyote Pass Escarpment, but there is a potential for ground deformation (active folding) of the bedrock and the overlying alluvial sediments along the mapped location of the escarpment.

The deterministic ground motions were estimated using the Next Generation Attenuation (NGA) relationships of Abrahamson and Silva (2008), Boore and Atkinson (2008), Campbell and Bozorgnia (2008), and Chiou and Youngs (2008) with the program EZ-Frisk by Risk Engineering (2009). EZ-FRISK uses the relationships developed by Wells and Coppersmith (1994) and others to obtain estimates of earthquake magnitude from rupture size. The fault data used in the analyses were obtained from the United States Geological Survey (USGS, 2002) fault model included with the EZ-Frisk program. The Modified Mercalli Intensities were determined in accordance with Wald, et al. (1999).

Table 4-1 is a summary of the active faults, the approximate distance to the proposed project alignment, the maximum earthquake magnitude, peak ground acceleration (PGA), and the estimated site intensity near the intersection of Flower and 5th Streets. All sources were reviewed for the seismic hazards study and were incorporated for the ground motion study.

Table 4-2 is a summary of the active faults, the approximate distance to the proposed project alignment, the maximum earthquake magnitude, PGA, and the estimated site intensity near the proposed 2nd/Hope Street station under Bunker Hill.

Table 4-3 is a summary of the active faults, the approximate distance to the proposed project alignment, the maximum earthquake magnitude, PGA, and the estimated site intensity near the intersection of 2nd Street and Central Avenue.

Table 4-1. Active Faults Near Flower and 5th Streets

Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Upper Elysian Park	2.5	4.0	6.4	0.559	VIII
Puente Hills Blind Thrust	3.3	5.3	7.1	0.722	IX
Hollywood	4.5	7.2	6.4	0.342	VIII
Raymond	5.2	8.4	6.5	0.325	VIII
Newport - Inglewood	7.0	11.2	7.1	0.324	VII
Verdugo	7.3	11.8	6.9	0.307	VII
Santa Monica	9.2	14.9	6.6	0.229	VII
Sierra Madre	11.7	18.8	7.2	0.249	VII
Whittier	14.4	23.1	6.8	0.178	VII
Sierra Madre - San Fernando	15.8	25.5	6.7	0.161	VI
Malibu Coast	15.9	25.6	6.7	0.160	VI
Palos Verdes	16.9	27.2	7.3	0.193	VII
Clamshell - Sawpit	17.1	27.5	6.5	0.136	VI
Northridge	17.4	28.0	7.0	0.233	VII
San Gabriel	18.5	29.7	7.2	0.173	VI

Table 4-1. Active Faults Near Flower and 5th Streets					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
San Jose	21.4	34.4	6.4	0.103	VI
Santa Susana	23.2	37.4	6.7	0.115	VI
Anacapa - Dume	25.6	41.1	7.5	0.159	VI
Chino - Central Ave	27.6	44.5	6.7	0.099	VI
Holser	29.4	47.3	6.5	0.083	V
Cucamonga	30.2	48.6	6.9	0.102	VI
Simi-Santa Rosa	30.2	48.6	7.0	0.107	VI
San Joaquin Hills Thrust	30.9	49.7	6.6	0.094	VI
San Andreas - 1857 [model 1]	34.6	55.7	7.4	0.115	VI
San Andreas - 1857 [model 2]	34.6	55.7	7.4	0.115	VI
San Andreas - Mojave [model 1]	34.6	55.7	7.4	0.115	VI
San Andreas – Mojave [model 2]	34.6	55.7	7.4	0.115	VI
San Andreas-All southern segments [model 1]	34.6	55.7	7.5	0.122	VI
Oak Ridge - Onshore	34.8	56.0	7.1	0.111	VI
Newport - Inglewood Offshore	37.4	60.1	7.1	0.091	V
Elsinore - Glen-Ivy	38.0	61.2	6.8	0.075	V
San Cayetano	39.3	63.2	7.0	0.083	V

Table 4-1. Active Faults Near Flower and 5th Streets					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
San Jacinto - San Bernardino	44.8	72.1	6.7	0.059	V
San Andreas - San Bernardino [model 1]	46.3	74.6	7.5	0.095	VI
San Andreas - Southern 2 Segments [model 1]	46.3	74.6	7.5	0.095	VI
San Andreas - Southern 2 Segments [model 2]	46.3	74.6	7.5	0.095	VI
San Andreas - Carrizo [model 1]	47.0	75.6	7.4	0.088	V
Cleghorn	48.7	78.4	6.5	0.046	IV
Santa Ynez - East Segment	51.8	83.3	7.1	0.066	V
Ventura - Pitas Point	54.5	87.7	6.9	0.061	V

Source: EZ-Frisk by Risk Engineering (2009)

Table 4-2. Active Faults Near Bunker Hill					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Upper Elysian Park	2.3	3.7	6.4	0.587	VIII
Puente Hills Blind Thrust	3.4	5.5	7.1	0.749	IX
Hollywood	4.3	6.9	6.4	0.340	VIII

Table 4-2. Active Faults Near Bunker Hill					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Raymond	4.9	8.0	6.5	0.324	VII
Verdugo	7.1	11.4	6.9	0.302	VII
Newport - Inglewood	7.2	11.6	7.1	0.306	VII
Santa Monica	9.4	15.1	6.6	0.214	VII
Sierra Madre	11.4	18.3	7.2	0.240	VII
Whittier	14.3	23.0	6.8	0.167	VI
Sierra Madre - San Fernando	15.6	25.1	6.7	0.151	VI
Malibu Coast	16.1	25.9	6.7	0.147	VI
Clamshell - Sawpit	16.8	27.1	6.5	0.127	VI
Palos Verdes	17.2	27.6	7.3	0.178	VII
Northridge	17.4	27.9	7.0	0.220	VII
San Gabriel	18.2	29.4	7.2	0.162	VI
San Jose	21.2	34.1	6.4	0.094	VI
Santa Susana	23.2	37.3	6.7	0.106	VI
Anacapa - Dume	25.8	41.5	7.5	0.147	VI
Chino - Central Ave	27.5	44.2	6.7	0.091	V
Holser	29.3	47.2	6.5	0.075	V
Cucamonga	29.9	48.2	6.9	0.094	VI
Simi - Santa Rosa	30.2	48.6	7.0	0.098	VI

Table 4-2. Active Faults Near Bunker Hill					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
San Joaquin Hills Thrust	30.9	49.8	6.6	0.085	V
San Andreas - 1857 [model 1]	34.3	55.3	7.4	0.106	VI
San Andreas - 1857 [model 2]	34.3	55.3	7.4	0.106	VI
San Andreas - Mojave [model 1]	34.3	55.3	7.4	0.106	VI
San Andreas - Mojave [model 2]	34.3	55.3	7.4	0.106	VI
San Andreas - All Southern Segments [model 1]	34.3	55.3	7.5	0.113	VI
Oak Ridge - Onshore	34.8	56.0	7.1	0.101	VI
Newport - Inglewood Offshore	37.5	60.3	7.1	0.082	V
Elsinore - Glen-Ivy	37.9	61.0	6.8	0.068	V
San Cayetano	39.2	63.2	7.0	0.076	V
San Jacinto - San Bernardino	44.6	71.8	6.7	0.054	V
San Andreas - San Bernardino [model 1]	46.1	74.2	7.5	0.087	V
San Andreas - Southern 2 Segments [model 1]	46.1	74.2	7.5	0.087	V
San Andreas - Southern 2 Segments [model 2]	46.1	74.2	7.5	0.087	V
San Andreas - Carrizo [model 1]	46.8	75.3	7.4	0.080	V
Cleghorn	48.5	78.0	6.5	0.042	IV

Table 4-2. Active Faults Near Bunker Hill					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Santa Ynez - East Segment	51.7	83.3	7.1	0.060	V
Ventura - Pitas Point	54.6	87.8	6.9	0.056	V

Source: EZ-Frisk by Risk Engineering (2009)

Table 4-3: Active Faults Near 2nd Street and Central Avenue					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Upper Elysian Park	2.3	3.7	6.4	0.565	VIII
Puente Hills Blind Thrust	3.5	5.6	7.1	0.711	IX
Hollywood	4.8	7.8	6.4	0.328	VIII
Raymond	5.2	8.4	6.5	0.327	VIII
Verdugo	7.4	11.9	6.9	0.308	VII
Newport - Inglewood	7.7	12.4	7.1	0.309	VII
Santa Monica	10.2	16.5	6.6	0.217	VII
Sierra Madre	11.6	18.7	7.2	0.254	VII
Whittier	13.4	21.5	6.8	0.194	VII
Sierra Madre - San Fernando	16.2	26.1	6.7	0.163	VI
Clamshell - Sawpit	16.4	26.4	6.5	0.146	VI

Table 4-3: Active Faults Near 2nd Street and Central Avenue					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Malibu Coast	16.9	27.1	6.7	0.157	VI
Palos Verdes	17.3	27.8	7.3	0.195	VII
Northridge	18.2	29.3	7.0	0.226	VII
San Gabriel	18.8	30.3	7.2	0.176	VII
San Jose	20.4	32.9	6.4	0.112	VI
Santa Susana	24.1	38.7	6.7	0.116	VI
Anacapa - Dume	26.5	42.6	7.5	0.160	VI
Chino - Central Ave	26.7	42.9	6.7	0.107	VI
Cucamonga	29.3	47.2	6.9	0.109	VI
San Joaquin Hills Thrust	30.1	48.4	6.6	0.100	VI
Holser	30.2	48.6	6.5	0.084	V
Simi - Santa Rosa	31.1	50.1	7.0	0.109	VI
San Andreas - 1857 [model 1]	34.4	55.4	7.4	0.121	VI
San Andreas - 1857 [model 2]	34.4	55.4	7.4	0.121	VI
San Andreas - Mojave [model 1]	34.4	55.4	7.4	0.121	VI
San Andreas - Mojave [model 2]	34.4	55.4	7.4	0.121	VI
San Andreas - All Southern Segments [model 1]	34.4	55.4	7.5	0.127	VI

Table 4-3: Active Faults Near 2nd Street and Central Avenue					
Abbreviated Fault Name	Approximate Distance from Alignment		Maximum Earthquake Magnitude	Peak Site Ground Acceleration	Estimated Site Intensity
	(mi)	(km)	(Mw)	(g)	MMI
Oak Ridge - Onshore	35.7	57.5	7.1	0.112	VI
Newport - Inglewood Offshore	36.6	59.0	7.1	0.097	VI
Elsinore - Glen-Ivy	37.0	59.6	6.8	0.081	V
San Cayetano	40.2	64.6	7.0	0.086	V
San Jacinto - San Bernardino	44.0	70.8	6.7	0.063	V
San Andreas - San Bernardino [model 1]	45.5	73.3	7.5	0.101	VI
San Andreas - Southern 2 Segments [model 1]	45.5	73.3	7.5	0.101	VI
San Andreas - Southern 2 Segments [model 2]	45.5	73.3	7.5	0.101	VI
San Andreas - Carrizo [model 1]	47.5	76.5	7.4	0.091	V
Cleghorn	47.9	77.1	6.5	0.050	V
Santa Ynez - East Segment	52.6	84.7	7.1	0.068	V
Ventura - Pitas Point	55.5	89.3	6.9	0.063	V
Coronado Bank	56.7	91.3	7.6	0.087	V

Source: EZ-Frisk by Risk Engineering (2009)

4.3.2.4 Ground Shaking

Seismic hazards that could affect the project alignment include ground shaking from an earthquake along one of the several major active faults in the region. The magnitude of ground shaking is generally characterized by using the peak ground acceleration (PGA).

The PGA for several return periods commonly used for subway projects were developed using the average of the ground motions obtained from the Next Generation Attenuation relationships of Abrahamson and Silva (2008), Boore and Atkinson (2008), Campbell and Bozorgnia (2008), and Chiou and Youngs (2008) with the program EZ-Frisk. The average shear wave velocities over the upper 30 meters were determined from previous reviews of the local geology and previous shear wave velocity measurements taken at the site. For the depth to rock with a shear wave velocity of 1,000 meters per second 1 kilometer was used and 3 kilometers was used for the depth to bedrock with a shear wave velocity of 2,500 meters per second. Each ground motion attenuation relationship was integrated to three standard deviations beyond the median. EZ-FRISK uses the relationships developed by Wells and Coppersmith (1994) and others to obtain estimates of earthquake magnitude from rupture size. The average results are presented in Table 4-4.

Table 4-4. Potential Ground Motion Along Project Alignment

Event	Ground Acceleration (g)		
	Flower/5th	Bunker Hill	2nd/Central
Most Probable Event	0.181	0.168	0.187
Operable Design Earthquake	0.308	0.296	0.311
Design Basis Earthquake	0.452	0.446	0.452
Upper Bound Earthquake	0.582	0.586	0.578
Maximum Design Earthquake	0.737	0.755	0.730
Maximum Considered Earthquake	0.789	0.813	0.780

Source: EZ-Frisk by Risk Engineering (2009).

The results of the analysis indicate the PGA with a 10 percent probability of exceedance in 50 years (recurrence interval of 475 years) is approximately 0.45g. This level of ground motion is considered the Design Basis Earthquake. The PGA with a 10 percent probability of exceedance in 100 years (recurrence interval of 949 years) is approximately 0.58g, which is considered the Upper Bound Earthquake. The design criteria used by the Los Angeles County Metropolitan Transportation Authority (Rail and Transit Design Criteria and Standards, 1996) requires that for important structures such as those comprising this project, special earthquake protection criteria be followed: "The guiding philosophy of earthquake design for the Metro Rail projects is to provide a high level of assurance that the overall system will continue to operate during and after an Operating Design Earthquake." Operating

procedures assume safe shut down and inspection before returning to operation. "Further, the system design will provide a high level of assurance that public safety will be maintained during and after a Maximum Design Earthquake." The Operating Design Earthquake is defined as the earthquake event with a 40 percent probability of exceedance in 100 years (recurrence interval of 200 years). Such event can reasonably be expected to occur during the 100-years design life of the project. The Maximum Design Earthquake is defined as the earthquake event with a 5 percent probability of exceedance in 100 years, which corresponds to an average recurrence interval of 2,000 years.

Other criteria for the seismic design of the project are the Most Probable Event and the Maximum Considered Earthquake. The Most Probable Event is defined as the earthquake event with a 50 percent probability of exceedance in 50 years (recurrence interval of 75 years). The Maximum Considered Earthquake is defined as the earthquake event with a 2 percent probability of exceedance in 50 years which corresponds to an average recurrence interval of 2,500 years. The 2007 California Building Code (CBC) uses the Maximum Considered Earthquake as the basis for seismic design requirements. In general, the PGA is lower for an event with a higher probability of occurrence under the same return period.

4.3.2.5 Liquefaction

Liquefaction-induced ground failure has historically been a major cause of earthquake damage in Southern California. Significant damage to roads, utilities, pipelines, and buildings during the 1971 San Fernando and 1994 Northridge earthquakes was caused by liquefaction-induced ground displacement. Localities most susceptible to liquefaction-induced ground displacement are underlain by loose, water-saturated, granular sediment within 50 feet of the ground surface. Liquefaction susceptibility generally decreases as the percentage of clay size particles in the soil increases and/or the coarse sand and gravel content increases. In portions of the project area, sediments susceptible to liquefaction comprise the young (Holocene to late Holocene age) alluvial fan deposits and young (Holocene) alluvial floodplain sediments. The older alluvial deposits are generally medium dense to dense and are considered by the CGS (California Geological Survey, previously California Division of Mines and Geology 1998a, 1998b) to have a low liquefaction susceptibility. The CGS has prepared seismic hazard maps for the Los Angeles Basin. The maps delineate liquefaction zones which have been defined by the CGS as areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacement such that mitigation would be required.

The CGS uses criteria developed by the Seismic Hazard Mapping Act Advisory Committee in delineating liquefaction zones on the seismic hazard maps. In areas of limited or no geotechnical data, susceptibility zones are evaluated using a combination of geologic considerations. The CGS has rated the liquefaction susceptibility for the Holocene age sediments in the project area as high, if saturated within 40 feet of the ground surface and, if not saturated, the susceptibility is rated as low. In contrast, the liquefaction susceptibility of

older alluvial sediments (terrace deposits) is rated as low or not likely irrespective of ground-water levels.

In this framework, the CGS has identified a portion of the proposed alignment with Holocene sediments along Flower St. between Wilshire Boulevard and 2nd Street to be within a potential liquefaction zone. Likewise, the CGS has identified Holocene sediments along 2nd Street between Hill and San Pedro Streets to be within a potential liquefaction zone, as depicted in Figure 4-3. Young (Holocene age) deposits along the alignment, where present, are on the order of five to 35 feet thick. Preliminary proposed alignment profiles indicate that tunnel crown elevations would be below the young alluvial deposits that are rated as highly susceptible to liquefaction. For proposed station locations with shallow groundwater and younger alluvial deposits, station walls may have to be designed for greater than usual lateral earth pressures to account for liquefaction potential. The risk of settlement beneath the planned stations due to liquefaction is considered remote due to the depth of the Fernando formation beneath the Holocene alluvium at proposed station depths.

4.3.2.6 Settlement

Seismically-induced settlement consists of compression of the dry soils above groundwater and liquefaction-induced settlement of the liquefiable soils below groundwater. These settlements occur primarily within the loose to moderately dense sandy soils due to volume reduction during or shortly after an earthquake event.

Most of the artificial fill along the proposed project alignment is expected to be undocumented. In addition, a portion of the alluvial soils along the alignment are anticipated to be loose to medium dense. Accordingly, the portions of the proposed alignment mapped within the liquefiable zone and underlain by undocumented fill have the potential to experience seismically-induced settlement.

In addition to seismically-induced settlement, the upper soils along the proposed project alignment consist of predominately alluvial soils with some undocumented fill and have the potential to settle due to ground loss during tunnel construction. The majority of the tunnel would be constructed within the bedrock of the Fernando/Puente Formation and below groundwater with an Earth Pressure Balance (EPB) or a slurry Tunnel Boring Machine (TBM). The potential to cause ground loss and associated ground settlement with such machines are less likely. If such settlement occurred, it could adversely affect the overlying roadway and structures located over the distressed areas.

4.3.2.7 Landslides

Landslides and slope failures were significant contributing factors that lead to Los Angeles becoming one of the first municipalities in the nation to adopt hillside-grading ordinances. Rapid uplift of the mountainous areas of Los Angeles from past and ongoing tectonic movements gives rise to a geologic setting conducive to mass wasting. The variable nature of

sediments and rocks exposed throughout Los Angeles and the slope conditions created by uncontrolled grading have led to frequent landslides of a variety of types. The hillside areas of Los Angeles, especially the central and eastern Santa Monica Mountains, have geologic and topographic conditions that are conducive to the development of surficial and gross landslides. The City of Los Angeles Department of Building and Safety regulates construction and development in hillside areas of Los Angeles. As part of the City of Los Angeles Building Code and review process, the City has established a Hillside Ordinance, which specifies that a geologic report is required for proposed construction within hillside areas.

The proposed project alignment is not located within the earthquake-induced landslide zone according to the State of California Seismic Hazard Zones for the Hollywood and Los Angeles Quadrangles. However, the northwest portion of the project area in the vicinity of the proposed 2nd/Hope Street station (the area east of the US 101/SR 110 interchange) is within the Hillside Ordinance area according to the City of Los Angeles Seismic Safety Element (1996). The construction of the proposed station should address temporary slope stability as appropriate and the shoring system should be designed to address such sloping condition and any potential for instability. Given that the proposed station would be below grade and located predominately in bedrock, the risk for such a hazard to affect the site is considered low.

4.3.2.8 Flooding

According to the City of Los Angeles Seismic Safety Element (1996), a limited portion of the eastern edge of the proposed alignment near the intersection of Alameda and 1st Streets is within the mapped Inundation Hazard Area. However, the majority of the build alternatives' alignments (At Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, Fully Underground LRT Alternative – Little Tokyo Variation 1, and Fully Underground LRT Alternative – Little Tokyo Variation 2) are not located in areas mapped with the potential to be susceptible to flooding. The proposed alignment is located in an urbanized area composed mainly of impervious surfaces that include well-developed drainage infrastructure. The proposed project would neither significantly increase impervious surfaces nor increase the risk of flooding.

Earthquake-induced flooding can be caused by failure of dams or other water retaining structures due to an earthquake. Due to the absence of such structures in the vicinity of the alignment, the potential for such hazards to affect the project is considered low.

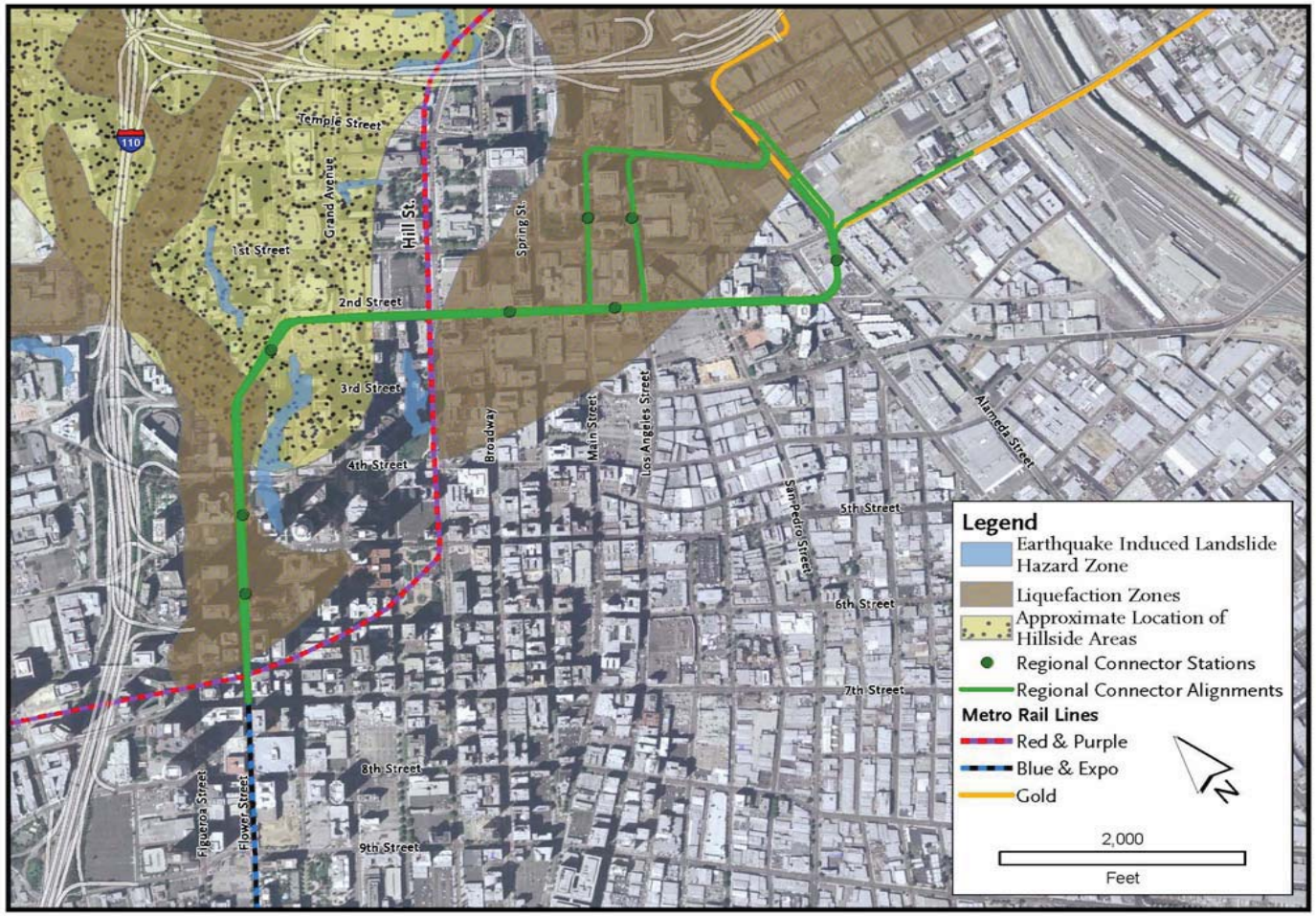

Figure 4-3. Liquefaction and Landslide Hazards

4.3.2.9 Seiches and Tsunamis

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are tidal waves generated in large bodies of water by fault displacement or major ground movement such as submarine landslides.

According to the City of Los Angeles Seismic Safety Element (1996) and the County of Los Angeles Seismic Safety Element (1990), the project area is more than 10 miles from the ocean and is not located within areas potentially impacted by either tsunamis or seiches.

4.4 Mineral Resources

Regarding the loss of mineral resources, the project area traverses areas underlain by geologic materials such as sand and gravel that may be considered mineral resources and could be used as construction aggregates. However, these materials have not been previously mined along the project alignment. Furthermore, mining of these materials in an urbanized environment is not considered economical. However, there is a potential for re-use of excavated material as fill.

4.5 Hazardous Materials

Environmental Data Resources (EDR) conducted a search of regulatory databases, including federal, state, and local environmental records as well as historical mapping. Thirty federal, 11 state and local, and several proprietary and tribal environmental databases were accessed by EDR for the project (EDR 2009). A total of 178 listed sites were identified within the federal records databases, 732 listed sites were present within the state and local databases, and six potential coal gas plant sites were listed in the EDR proprietary Manufactured Gas Plants database for the search area (CDM 2009). Of those, a total of 69 listed sites are located along the proposed alignments for any of the build alternatives, while a total of 136 sites are located within 0.25 mile of the proposed alignments.

The database search results include facilities that handle hazardous materials but have not necessarily had a release to the environment. Additionally, many sites are documented as closed cases where past satisfactory remediation has occurred. These listings do not represent a potential concern for the proposed project and were eliminated from further evaluation.

In some instances, more information was requested from regulatory agencies to determine the current status of a site. In addition, Sanborn fire insurance maps, maps of the Union Station Methane Buffer Zone and Methane Zone and the Los Angeles City Methane Buffer Zone, and oil well construction and abandonment records provided additional information used to determine which sites pose a potential concern with respect to hazardous materials.

The Hazardous Materials Investigation and Analysis (CDM 2009) classifies properties of concern as High, Moderate, or Low based on the following criteria:

- High - sites with known/probable soil, groundwater, or soil gas contamination that have not been remediated, or where remediation is incomplete or undocumented. Other considerations include the type and mobility of any contamination, distance to a project, groundwater impacts, and the location with respect to the inferred or known direction of groundwater flow.

- Moderate – sites with known/potential soil, groundwater, or soil gas contamination and where remediation is in progress, contaminants do not appear to pose a concern for a project, or where construction would occur within mapped Methane Buffer Zones. Sites may also be considered a Moderate level of concern based on the type and intensity of former land use (e.g., chemical manufacturers, machine shops, gas stations, etc.), even though they did not otherwise have an environmental database listing.

- Low – sites that are not likely or are less likely to impact soil and/or groundwater that would be encountered during construction of a project. These may include sites having permitted air toxic emissions or some sites with spills or leaks to the environment that were subsequently remediated and have received case closure.

Table 4-5 lists the properties of high or moderate concern as identified by CDM (2009). Properties are listed in order of their location, beginning at the 7th Street/Metro Center Station and ending at the project terminus near the Metro Gold Line Little Tokyo/Arts District Station. These properties of concern are presented graphically in Figure 4-4.

In addition to hazardous materials that are known or suspected to exist at the properties listed in Table 4-5, other hazardous materials may be present (CDM 2009). Transformers located above and below grade along the alignments may contain PCBs. Lead may also be present in surface soil from historic emissions of leaded fuel from vehicles on adjacent roadways. Since most soil along the proposed alignment is covered by asphalt or concrete, exposure to these hazardous materials is unlikely. However, buildings along the proposed alignments that were constructed prior to 1979 may contain asbestos and buildings constructed prior to 1978 may contain lead-based paint that could be released during demolition. These hazardous materials would present a concern for the proposed project, as exposure to these materials at certain levels may cause adverse health effects to workers and the general public.

Standards have been established to address the presence of asbestos-containing materials and lead-based paint in buildings to protect public health from exposure during building demolition or renovation. The National Emission Standards for Hazardous Air Pollutants

(NESHAP) for Asbestos, under Section 112 of the Clean Air Act, establishes work practices to minimize the release of asbestos fibers in compliance with federal regulations in 40 CFR Part 61, Subpart M. Likewise, federal regulations under section 403 of the TSCA, as amended by the Residential Lead-Based Paint Hazard Reduction Act of 1992, established standards for lead-based paint in pre-1978 housing in 40 CFR Part 745. Properties constructed before 1978 would be of particular concern for the possible presence of lead based paints and those constructed before 1979 for asbestos containing materials. In compliance with these regulations, lead and asbestos surveys would be conducted prior to demolition and construction, when the locally preferred alternative (LPA) is known.

Table 4-5. Properties of High/Moderate Concern

Address	Name	Description/Level of Concern
404 S. Figueroa Street	Westin Bonaventure Hotel	Tetrachloroethene (PCE) leaked into soil and shallow groundwater. Investigation and monitoring is ongoing. Groundwater plume may be controlled by building acting as a barrier. HIGH
715 W. 3rd Street	Central Plants, Inc.	No identified leaks or spills; however, the facility is actively conducting water treatment for commercial heating and cooling water, has four fuel USTs, and stressed vegetation was observed near Flower Street. MODERATE
1031 W. 2nd Street	76 Service Station No. 250122	Former service station located about 1,350 feet west and up-gradient of the project with total petroleum hydrocarbons-gasoline (TPH-g), benzene, and other contaminants in groundwater. A remediation program for soil and groundwater has been completed; however, work is still being conducted to delineate the south-southwestern extent of the plume. MODERATE
108 N. Fremont Street	Fire Station No. 3	TPH-g and other contaminants in soil and groundwater generally up-gradient of the project. Although the site is 1,450 feet from the project, the case is currently listed as open and in the process of referral for further remediation. MODERATE

Table 4-5. Properties of High/Moderate Concern		
Address	**Name**	**Description/Level of Concern**
111 N. Hope Street	Los Angeles Department of Water and Power (LADWP)	The site is located approximately 650 feet up-gradient of the project, and volatile organic compounds (VOCs) were previously detected in a groundwater monitoring well installed near the down-gradient edge of the plume beneath the proposed project alignment. Subsequent monitoring did not detect contaminants; however, the project will pass through a portion of the plume that may not have been fully characterized. More information is needed to determine concentration and extent of VOCs. MODERATE
Methane Buffer Zone between the World Trade Center and Disney Hall	Los Angeles City Oil Field	Project crosses through the Methane Buffer Zone where toxic or potentially explosive gasses may be encountered. MODERATE
111 E. 1st Street	Los Angeles City Hall South	Records revealed three historical UST leaks, however, their status is undocumented. Site currently has six USTs. MODERATE
151 Judge John Aiso Street	Parker Center Los Angeles Police Department (LAPD)	Records report the discovery of a diesel leak into soil in 1990, followed by a site assessment. A citation was issued in 2008 for non-submittal of data regarding the leak to the State in electronic format. Although it may have been mitigated, the status of the remediation is unknown. MODERATE
120 S. San Pedro Street	Union Bank of California	Open site assessment for a diesel leak into soil reported in 2005. HIGH
300 block of E. 2nd Street	Various	Historical (1950s and 1960s) activities included two chemical manufacturers, a gas station, gas and oil tanks, an autobody shop, sheet metal shops and a machine shop. MODERATE

Table 4-5. Properties of High/Moderate Concern		
Address	**Name**	**Description/Level of Concern**
401 E. 2nd Street	Unknown	Disposed of 30 tons of contaminated soil. Regulatory status unknown. MODERATE
Methane Zone, Oil Field near eastern terminus of project	Union Station Oil Field and Methane Zone	Project enters the oil field and associated Methane Zone. Hydrogen sulfide gas was reported in groundwater and as gas north of 1st Street and west of the Los Angeles River. MODERATE

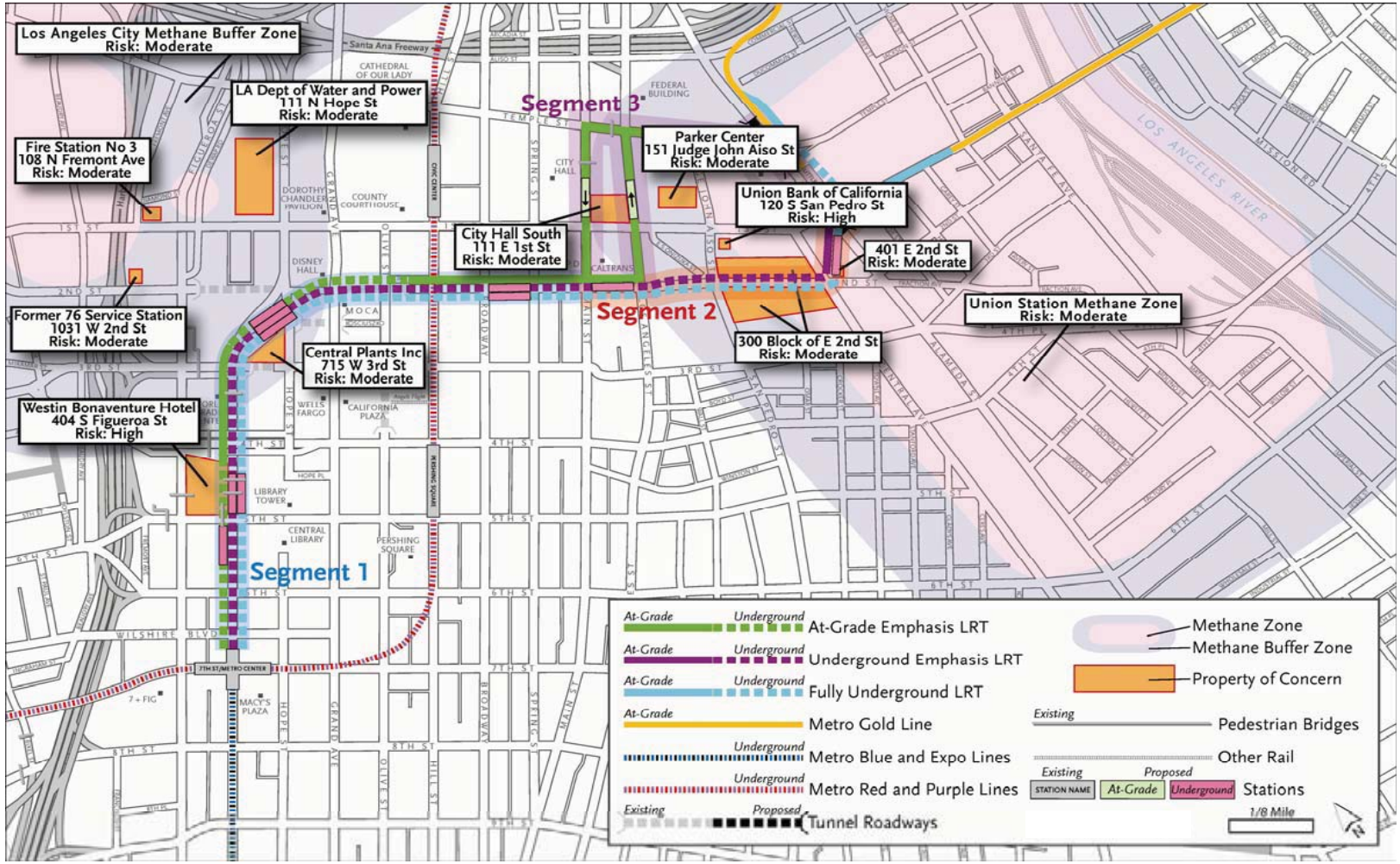

Figure 4-4. Known or Suspected Hazardous Materials in Soil and/or Groundwater within 0.25 Miles of Proposed Alignments

5.0 IMPACTS

5.1 No Build Alternative

5.1.1 Geotechnical, Subsurface, and Seismic Hazards

The No Build Alternative would not include any activities that would result in the potential for risk of fault rupture, liquefaction, seismically-induced settlement, landslides, flooding, seiches or tsunamis. Therefore, the No Build Alternative would not result in adverse effects related to geotechnical, subsurface, or seismic hazards.

5.1.2 Hazardous Materials

5.1.2.1 Direct Impacts

Under the No Build Alternative, there would be no construction and therefore no potential to encounter hazardous materials in soil and/or groundwater in the project area. There would be no construction-related hazardous materials usage, storage, or transport, and no potential for impacts to human health or the environment from the accidental release of hazardous materials. In addition, current operations with respect to hazardous materials would not change, and there would be no impairment of adopted emergency response plans or emergency evacuation plans. Therefore, there would be no direct impacts associated with hazardous materials from the No Build Alternative.

5.1.2.2 Indirect Impacts

The No Build Alternative would not result in indirect impacts with respect to hazardous materials, as there would be no construction or change in existing operations.

5.1.2.3 Cumulative Impacts

Since there would be no direct or indirect impacts from the No Build Alternative, there would also be no cumulative impacts.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Geotechnical, Subsurface, and Seismic Hazards

The TSM Alternative would not include any activities that would result in the potential for risk of fault rupture, liquefaction, seismically-induced settlement, landslides, flooding, seiches or tsunamis. Therefore, no adverse effects related to geotechnical, subsurface or seismic hazards would occur.

5.2.2 Hazardous Materials

5.2.2.1 Direct Impacts

The TSM Alternative would not require construction that could encounter hazardous materials in soil and/or groundwater or release hazardous materials to the environment. Changes in operation under the TSM Alternative would not change the existing types of hazardous materials used, stored, or transported. Operation of the TSM Alternative would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, and would not impair adopted emergency response plans and emergency evacuation plans. Therefore, there would be no direct impacts associated with hazardous materials from the TSM Alternative.

5.2.2.2 Indirect Impacts

Under the TSM Alternative, there would be no indirect impacts with respect to hazardous materials, as there would be no potential to encounter hazardous materials in soil and/or groundwater, and no change in the types, usage, storage, or transport of hazardous materials during operation.

5.2.2.3 Cumulative Impacts

Since there would be no direct or indirect impacts from the TSM Alternative, there would also be no cumulative impacts.

5.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

Due to the nature of earth impacts, all impacts in this report pertain primarily to construction activities. Only earthquakes (seismic hazards) concern operations. It should be noted that approximately 45 percent of the At-Grade Emphasis LRT Alternative would be underground primarily along Flower Street.

5.3.1 Geotechnical, Subsurface, and Seismic Hazards

The At-Grade Emphasis LRT Alternative does not cross any known fault. However, the At-Grade Emphasis LRT Alternative is potentially susceptible to liquefaction in portions of the proposed alignment along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. The portions of the alignment within the mapped liquefiable zone and underlain by undocumented fill may be susceptible to seismically-induced settlement. In addition, the northwest portion of the project area at the proposed 2nd/Hope Street station (in the area east of the US 101/SR 110 interchange) is within the Hillside Ordinance area. The proposed station would be below grade and located predominately in bedrock, therefore, the potential for a landslide hazard to affect the site is low. However, temporary slope stability during station construction would be evaluated and shoring would be designed to incorporate such slope conditions as appropriate.

The majority of the At-Grade Emphasis LRT Alternative is not located in an area mapped with the potential to be susceptible to flooding. The alignment is located in an urbanized area covered with impervious surfaces and includes a well-developed drainage infrastructure. The proposed project would not increase the risk of flooding. There is also no potential for seiches and tsunamis, as the alignment is more than 10 miles from the Pacific Ocean and there are no reservoirs nearby.

Therefore, there is limited potential for adverse effects related to liquefaction and seismically-induced settlement for portions of the At-Grade Emphasis LRT Alternative, but no potential for adverse impacts related to active or potentially active faults, landslides, flooding, seiches, or tsunamis.

The proposed construction would have the potential for adverse impacts related to ground settlement and differential settlement on adjacent structures including historical buildings. Further evaluation and survey would be performed during design to establish building types, existing conditions, and to develop criteria to limit potential movement to acceptable threshold values. Protection of buildings could involve design of adequately rigid excavation support systems, underpinnings, and/or ground improvements to minimize settlement to tolerable limits. In addition, a preconstruction survey of the adjacent structures and all historical buildings in the vicinity would be conducted to establish a baseline to measure potential construction-induced damage against. Construction monitoring would be required during construction to ascertain that movement does not exceed the threshold values.

With mitigation, potential effects related to geologic, subsurface, or seismic hazards would be reduced to a less than significant level.

5.3.2 Hazardous Materials

5.3.2.1 Direct Impacts

5.3.2.1.1 Hazardous Materials Encountered in Soil and/or Groundwater During Construction

During construction of the At-Grade Emphasis LRT Alternative, there is the potential to encounter hazardous materials along the proposed alignment (Figure 4-4). For both the at-grade and underground sections of this alternative, construction would entail the disturbance of soil and/or shallow groundwater. Construction of the at-grade portions of the alignment would entail clearing and grading of shallow soil, during which shallow groundwater could also be encountered. The underground portions of the At-Grade Emphasis LRT Alternative along Flower Street (approximately 45 percent) would require trenching or tunneling, and as a result would encounter deeper soils and groundwater. See Appendix A for a description of proposed construction activities.

Known and/or suspected soil and/or groundwater contamination exists at properties directly within and near to the proposed alignment, as listed in Table 4-5 above. As recommended by CDM (2009), additional data gathering and/or site specific soil, groundwater, and/or soil gas investigation activities (e.g., Phase II ESA testing), may be necessary at these properties to further delineate potential areas of contamination and guide construction activities.

Along with the concerns presented in Table 4-5, lead may be present in surface soils along the proposed alignment from historical vehicle emissions, and PCBs may exist in surface or subsurface soils from leaking transformers located above or below grade. During construction, release of these hazardous materials in contaminated soil and/or groundwater could result in exposure to workers, the public, and sensitive receptors, such as schools within 0.25 mile. This could occur through the release of dust or vapors from exposed soil and/or groundwater. Until further study is conducted, the actual levels of hazardous materials that could be encountered in soil and/or groundwater during construction are unknown.

Compliance with the federal, state, and local laws and regulations regarding hazardous materials described in Section 3.1 would be required during construction of the At-Grade Emphasis LRT Alternative. Since 45 percent of the alternative would be located underground, dewatering may be necessary during the construction process. Groundwater encountered during construction dewatering would require testing and either on-site treatment and discharge in accordance with applicable standards or transport to a treatment and/or disposal facility. Additional details about dewatering are provided in the Water Resources Technical Memorandum. A Contaminated Soil/Groundwater Management Plan would be implemented during construction to establish procedures for sampling, analysis, and proper handling, storage, transport, and disposal of contaminated materials in coordination with the appropriate regulatory agency. This mitigation measure is described further in Section 6.0.

In addition, mitigation would be required to reduce potential impacts to construction workers from encountering contamination during construction. As described in Section 6.0, a Worker Health and Safety Plan would be implemented prior to the start of construction to establish procedures to be followed if contamination is encountered. This would include required training prior to start of work, personal protective equipment, and emergency procedures.

5.3.2.1.2 Accidental Release of Construction-Related Hazardous Materials

There is the potential for hazardous materials, such as fuels and hydraulic oil used for construction equipment, to be accidentally released during construction. Further, construction of the At-Grade Emphasis LRT Alternative would involve the use, storage, and transport of hazardous materials, such as fuels, paints, lubricating fluids, and solvents for maintenance. As such, there is the potential for direct impacts from an accidental release.

To reduce potential impacts from accidental release of construction-related hazardous materials, the construction contractor would be required to implement best management practices (BMPs) for handling hazardous materials in compliance with existing regulations. These BMPs would include the following:

- Requirements for proper use, storage, and disposal of chemical products and hazardous materials used in construction;
- Spill control and countermeasures, including employee spill prevention/response training;
- Vehicle fueling procedures to avoid overtopping construction equipment fuel tanks;
- Procedures for routine maintenance of construction equipment, including the proper containment and removal of grease and oils; and
- Procedures for the proper disposal of discarded containers of fuels and other chemicals.

The implementation of these BMPs would ensure that potential direct impacts from the accidental release of hazardous materials and/or wastes used or generated during construction are less than significant.

5.3.2.1.3 Accidental Release of Hazardous Materials During Operation

Compliance with hazardous materials laws and regulations would be required during operation as well, including hazardous materials inventory and emergency response planning, risk planning and accident prevention, employee hazard communication, public notification of potential exposure to specific chemicals, and storage of hazardous materials. Adherence to existing laws and regulations would reduce the potential for these direct impacts to a less than significant level. Further, if long-term operation of the underground portions of the alignment requires groundwater to be collected and discharged, compliance with discharge permit standards would be required.

5.3.2.1.4 Hazards Associated with Subsurface Oilfield Gases

The proposed alignment would traverse methane zones and methane buffer zones associated with oil deposits in the vicinity, as shown in Figure 4-4. Excavation within these zones may encounter naturally occurring hydrocarbon gases, including hydrogen sulfide and methane. Hydrogen sulfide is highly toxic and could result in human health effects to individuals who are exposed, particularly construction workers. Methane is explosive if allowed to accumulate and could cause harm to workers and the public if an explosion occurred during construction or operation. Mitigation, as described in Section 6.0, would be required to reduce these impacts to a less than significant level.

5.3.2.1.5 Release of Asbestos Fibers and/or Lead-Based Paint Particles

If construction of the At-Grade Emphasis LRT Alternative requires building demolition, release of hazardous materials including asbestos fibers and lead-based paint particles could occur. Mitigation, as described in Section 6.0, would be required to reduce this potential direct impact.

5.3.2.1.6 Hazards Associated with Electromagnetic Fields (EMFs)

Operation of the At-Grade Emphasis LRT Alternative would introduce new sources of low level EMFs associated with the overhead catenary lines and traction power substations. Compared to overhead power lines which use 400 kV, the LRT would use 0.6 kV and produce very weak EMFs. Therefore, potential impacts from exposure to EMFs would not be anticipated. However, mitigation, as described in Section 6.0, would ensure that impacts would be less than significant.

5.3.2.2 Indirect Impacts

During long-term operation of the At-Grade Emphasis LRT Alternative, there is the potential for the below-grade portions of the alignment to act as a preferential pathway for existing groundwater contamination to move to areas distant from the project. Mitigation measures incorporated into the engineering design would include the use of impermeable grout where necessary to fill the gap between the tunnel and the surrounding earth and ensure the tunnel does not contribute to the spread of contaminated groundwater.

In addition, construction could involve the transport of soil or other media contaminated with hazardous materials to a disposal facility located away from the project area. As such, there is potential for indirect impacts from the accidental release of these hazardous materials. Compliance with existing laws and regulations regarding transport and disposal of hazardous materials would reduce this impact to a less than significant level.

5.3.2.3 Cumulative Impacts

There is the potential for cumulative impacts associated with hazards and hazardous materials from the At-Grade Emphasis LRT Alternative. A number of related construction projects have been identified and some of those projects could involve ground-disturbing construction where there is potential to encounter hazardous materials in soil and/or groundwater. In addition, other construction activities in the project area may entail building demolition, with the potential for release of asbestos fibers from asbestos containing materials and lead particles from lead-based paint. The additive effect of on-going and future activities could result in cumulative impacts to human health or the environment through release of hazardous materials. While these construction activities would require compliance with applicable hazardous waste laws and regulations, mitigation would also be required to ensure cumulative impacts would be less than significant.

5.4 Underground Emphasis LRT Alternative

Due to the nature of earth impacts, all impacts in this report pertain primarily to construction activities. Only earthquakes (seismic hazards) concern operations.

5.4.1 Geotechnical, Subsurface, and Seismic Hazards

The Underground Emphasis LRT Alternative does not cross any known fault; however, there is the potential for liquefaction in portions of the proposed alignment along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. In the portions of the proposed alignment within a mapped liquefiable zone and underlain by undocumented fill, there would be limited potential for adverse effects from liquefaction and seismically-induced settlement. In addition, the northwest portion of the project area (east of the US 101/SR 110 interchange) is within the Hillside Ordinance area, where there is a potential for landslides. As discussed in Section 5.3.1, the potential for landslide hazards to affect the site is considered low because the proposed 2nd/Hope Street station would be embedded below grade and located predominately in bedrock. However, temporary slope stability during station construction would be evaluated and the shoring would be designed to incorporate slope conditions as appropriate.

A limited portion at the eastern edge of the alignment near the intersection of 1st and Alameda Streets is within the mapped Inundation Hazard Area. However, the majority of the Underground Emphasis LRT Alternative is not located in an area mapped with the potential to be susceptible to flooding. The alignment is located in an urbanized area covered with impervious surfaces and includes a well-developed drainage infrastructure. The proposed project would not increase the risk of flooding. There is also no potential for seiches and tsunamis, as the alignment is more than 10 miles from the Pacific Ocean and there are no reservoirs nearby.

The Underground Emphasis LRT Alternative alignment is overlain by alluvial soils and undocumented fill that are potentially susceptible to ground loss associated with tunnel construction (see discussion in Section 4.3.2.5). Therefore, there is the potential for adverse effects related to liquefaction, seismically-induced settlement, ground loss due to tunnel construction, and landslides for portions of the Underground Emphasis LRT Alternative, but no potential for adverse impacts related to active or potentially active faults, flooding, seiches, or tsunamis.

The proposed tunneling would have the potential for adverse impacts related to ground settlement and differential settlement immediately above the alignment as well as adjacent structures including the historical buildings. In general, settlement is greatest at the ground surface directly above the alignment and decreases away from the centerline. Further evaluation and site-specific survey would be performed on the affected adjacent buildings located within the influence zone during design to establish criteria to limit potential

movement to acceptable threshold values. Potential mitigation methods are discussed in Section 6 of this document. Ground improvement would be required in advance of tunneling to provide adequate support and to minimize settlement. In addition, a preconstruction survey of adjacent structures and all historical buildings in the vicinity would be conducted to establish a baseline against which to measure potential construction-induced damage. Construction monitoring would be required during construction to ascertain the criteria are met.

With mitigation, potential effects related to geologic, subsurface, or seismic hazards would be reduced to a less than significant level.

5.4.2 Hazardous Materials

5.4.2.1 Direct Impacts

5.4.2.1.1 Hazardous Materials Encountered in Soil and/or Groundwater During Construction

As with the At-Grade Emphasis LRT Alternative, there is the potential to encounter hazardous materials along the proposed alignment for the Underground Emphasis LRT Alternative (Figure 4-4). Construction of the Underground Emphasis LRT Alternative would entail trenching or tunneling along most of the proposed alignment, during which contaminated soil and/or groundwater could be encountered. See Appendix A for a description of proposed construction activities. As listed in Table 4-5, known and/or suspected soil and/or groundwater contamination exists at properties directly within and near to the proposed alignment for the Underground Emphasis LRT Alternative. In addition, lead may be present in surface soils from historical vehicle emissions, and PCBs may exist in surface or subsurface soils from leaking transformers located above or below grade. If released, there is potential for impacts to human health and the environment from these hazardous materials. Until further study is conducted, the actual levels of hazardous materials that could be encountered in soil and/or groundwater during construction are unknown.

Compliance with the federal, state, and local laws and regulations regarding hazardous materials described in Section 4.1 would be required during construction of the Underground Emphasis LRT Alternative. Groundwater encountered during construction dewatering would require testing and either on-site treatment and discharge in accordance with applicable standards or transport to a treatment and/or disposal facility. Additional details about dewatering are provided in the Water Resources Technical Memorandum. A Contaminated Soil/Groundwater Management Plan would be implemented during construction to establish procedures for sampling, analysis, and proper handling, storage, transport, and disposal of contaminated materials in coordination with the appropriate regulatory agency. This mitigation measure is described further in Section 6.0.

In addition, mitigation would be required to reduce the potential impacts to construction workers from encountering contamination during construction. As described in Section 6.0, a Worker Health and Safety Plan would be implemented prior to the start of construction activities to establish procedures to follow if contamination is encountered. This would include required training prior to start of work, personal protective equipment, and emergency procedures.

5.4.2.1.2 Accidental Release of Construction-Related Hazardous Materials

There is also the potential for hazardous materials, such as fuels and hydraulic fluids used for construction equipment, to be accidentally released during construction. Since construction of the Underground Emphasis LRT Alternative would involve the use, storage, and transport of hazardous materials, such as fuels, paints, lubricating fluids, and solvents for maintenance, there is the potential for direct impacts from an accidental release.

To reduce potential impacts from the accidental release of construction-related hazardous materials, the construction contractor would be required to implement BMPs for handling hazardous materials in compliance with existing regulations. These BMPs would include the following:

- Requirements for proper use, storage, and disposal of chemical products and hazardous materials used in construction;
- Spill control and countermeasures, including employee spill prevention/response training;
- Vehicle fueling procedures to avoid overtopping construction equipment fuel tanks;
- Procedures for routine maintenance of construction equipment, including the proper containment and removal of grease and oils; and
- Procedures for the proper disposal of discarded containers of fuels and other chemicals.

The implementation of these BMPs would ensure that potential direct impacts from the accidental release of hazardous materials and/or wastes used or generated during construction and are less than significant.

5.4.2.1.3 Accidental Release of Hazardous Materials During Operation

During operation, adherence to hazardous materials laws and regulations would require proper inventory and storage of hazardous materials, accident prevention and emergency response planning, employee training and public health hazard notification. If long-term operation of the underground portions of the alignment requires groundwater to be collected

and discharged, compliance with discharge permit standards would be required. Compliance with existing laws and regulations would reduce the potential for these direct impacts to a less than significant level.

5.4.2.1.4 Hazards Associated with Subsurface Oilfield Gases

The Underground Emphasis LRT Alternative would be located within methane zones and methane buffer zones associated with oil deposits, as shown in Figure 4-4. Excavation within these zones may encounter naturally occurring hydrogen sulfide and/or methane, which could result in the potential for harm to workers and the public. Mitigation measures, as described in Section 6.0, would be required to reduce these potential impacts to a less than significant level.

5.4.2.1.5 Release of Asbestos Fibers and/or Lead-Based Paint Particles

Since construction of the Underground Emphasis LRT Alternative would require building demolition, release of hazardous materials including asbestos fibers and lead-based paint particles could occur. Mitigation, as described in Section 6.0, would be required to reduce this potential direct impact to a less than significant level.

5.4.2.1.6 Hazards Associated with Electromagnetic Fields (EMF)

Operation of the Underground Emphasis LRT Alternative would introduce new sources of low level EMFs associated with the overhead catenary lines and traction power substations. The LRT would use only 0.6 kV compared to overhead power lines which use 400 kV. As a result, EMFs produced by the LRT would be very weak, and potential impacts from exposure to EMFs are not anticipated. In addition, most of the alignment would be underground further limiting potential exposure to adjacent land uses. Mitigation, as described in Section 6.0, would ensure impacts would be less than significant.

5.4.2.2 Indirect Impacts

During operation of the Underground Emphasis LRT Alternative, gaps between the tunnel and the surrounding earth could serve as preferential pathways for the migration of groundwater contamination. This would be mitigated to a less than significant level during the engineering process. For example, specifications for impermeable grouting materials to fill the gap between the tunnel and the surrounding earth could be designed to reduce this potential impact.

If, during construction, soil or other media contaminated with hazardous materials is transported to a disposal facility located away from the project area, there would be the potential for indirect impacts from the accidental release of these hazardous materials. Compliance with existing laws and regulations regarding transport and disposal of hazardous materials would reduce this impact to a less than significant level.

5.4.2.3 Cumulative Impacts

There is the potential for cumulative impacts associated with hazards and hazardous materials from the Underground Emphasis LRT Alternative. Construction associated with on-going and future projects in the project area could result in cumulative impacts to human health or the environment through release of hazardous materials encountered in soil and/or groundwater, or released during building demolition. Compliance with applicable hazardous waste laws and regulations, along with the mitigation measures described in Section 6.0, would ensure these potential cumulative impacts would be less than significant.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

Due to the nature of earth impacts, all impacts in this report pertain primarily to construction activities. Only earthquakes (seismic hazards) concern operations.

5.5.1 Geotechnical, Subsurface, and Seismic Hazards

Similar to the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 does not cross any known fault; however, there is the potential for liquefaction in portions of the proposed alignment along Flower Street between Wilshire Boulevard and 2nd Street, and along 2nd Street between Hill and San Pedro Streets. In the portions of the proposed alignment within a mapped liquefiable zone and underlain by undocumented fill, there would be limited potential for adverse effects from liquefaction and seismically-induced settlement (See discussion in Section 4.3.2.5). In addition, the northwest portion of the project area (east of the US 101/SR 110 interchange) is within the Hillside Ordinance area, where there is a potential for landslides. As discussed in Section 5.3.1, the potential for landslide hazards to affect the site is considered low because the proposed 2nd/Hope Street station would be embedded below grade and located predominately in bedrock. However, temporary slope stability during station construction would be evaluated and shoring would be designed to incorporate slope conditions as appropriate.

A limited portion at the eastern edge of the alignment near the intersection of 1st and Alameda Streets is within the mapped Inundation Hazard Area. However, the majority of the Fully Underground LRT Alternative – Little Tokyo Variation 1 is not located in an area mapped with the potential to be susceptible to flooding. The alignment is located in an urbanized area covered with impervious surfaces and includes a well-developed drainage infrastructure. The proposed project would not increase the risk of flooding. There is also no potential for seiches and tsunamis, as the alignment is more than 10 miles from the Pacific Ocean and there are no reservoirs nearby.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment is overlain by alluvial soils and undocumented fill that are potentially susceptible to ground loss associated with tunnel construction.

Therefore, there is the potential for adverse effects related to liquefaction, seismically-induced settlement, ground loss due to tunnel construction, and landslides for portions of the alignment, but no potential for adverse impacts related to active or potentially active faults, flooding, seiches, or tsunamis.

The proposed tunneling would have the potential for adverse impacts related to ground settlement and differential settlement immediately above the alignment as well as adjacent structures including the historical buildings. In general, settlement is greatest at the ground surface directly above the alignment and decreases away from the centerline. Further evaluation and site-specific survey would be performed on the affected adjacent buildings located within the influence zone during design to establish criteria to limit potential movement to acceptable threshold values. Potential mitigation methods are discussed in Section 6 of this document. Ground improvement would be required in advance of tunneling to provide adequate support and to minimize settlement. In addition, a preconstruction survey of adjacent structures and all historical buildings in the vicinity would be conducted to establish baseline against construction-induced damage. Construction monitoring would be required during construction to ascertain the criteria are met.

With mitigation, potential effects related to geologic, subsurface, or seismic hazards would be reduced to a less than significant level.

5.5.2 Hazardous Materials

5.5.2.1 Direct Impacts

5.5.2.1.1 Hazardous Materials Encountered in Soil and/or Groundwater During Construction

During construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1, there is potential to encounter hazardous materials along the proposed alignment. This potential would be similar to that discussed above for the Underground Emphasis LRT Alternative, except that the Fully Underground LRT Alternatives would extend north and east of 1st and Alameda Streets (Figure 4-4), and thus would entail a slightly longer alignment along which trenching or tunneling would occur.

Since the same properties where there is known and/or suspected soil and/or groundwater contamination would be affected by the Fully Underground LRT Alternative – Little Tokyo Variation 1 as by the Underground Emphasis LRT Alternative, impacts associated with encountering this contamination during construction would be the same. Further, there would be the same potential for lead and PCBs to be present in soils along the proposed alignment. Additional investigation would be needed to determine the actual levels of hazardous materials that could be encountered in soil and/or groundwater during construction.

Compliance with the federal, state, and local laws and regulations regarding hazardous materials described in Section 3.1 would be required during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1. A Contaminated Soil/Groundwater Management Plan and a Worker Health and Safety Plan would be put in place prior to the start of construction activities to establish procedures to follow if contamination is encountered. These mitigation measures are described further in Section 6.0.

5.5.2.1.2 Accidental Release of Construction-Related Hazardous Materials

As with the other alternatives, there is the potential for construction-related hazardous materials, such as fuels and hydraulic fluids, to be accidentally released during construction. The construction contractor would be required to implement BMPs to reduce these potential impacts by handling hazardous materials in compliance with existing regulations.

5.5.2.1.3 Accidental Release of Hazardous Materials During Operation

During operation, there could be direct impacts from the accidental release of hazardous materials. To reduce the potential for these impacts, compliance with hazardous materials laws and regulations would be required. If groundwater would be collected and discharged under this alternative, compliance with discharge permit standards would be required.

5.5.2.1.4 Hazards Associated with Subsurface Oilfield Gases

As shown on Figure 4-4, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be partially located within methane zones and methane buffer zones, which could result in the potential for harm to workers and the public. Mitigation measures, as described in Section 6.0, would be required to reduce these potential impacts to a less than significant level.

5.5.2.1.5 Release of Asbestos Fibers and/or Lead-Based Paint Particles

During construction, there would be potential for release of hazardous materials including asbestos fibers and lead based paint particles. Mitigation, as described in Section 6.0, would be required to reduce this potential direct impact to a less than significant level.

5.5.2.1.6 Hazards Associated with Electromagnetic Fields (EMF)

As with the other alternatives, operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would introduce new low level sources of EMFs. As the alternative would be located entirely underground and the new EMFs would be very weak, potential impacts from exposure to EMFs are not anticipated. Mitigation, as described in Section 6.0, would ensure potential impacts would be less than significant.

5.5.2.2 Indirect Impacts

Indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 could occur if preferential pathways for the migration of contaminated groundwater were created during construction. As with the other alternatives, this potential impact would be mitigated

through proper engineering practices. Compliance with existing laws and regulations regarding transport and disposal of hazardous materials would reduce potential impacts from the accidental release of hazardous materials during transport to a less than significant level.

5.5.2.3 Cumulative Impacts

Cumulative impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 could occur if there were a release of hazardous materials during on-going and future projects in the project area that result in cumulative impacts to human health or the environment. Compliance with applicable hazardous waste laws and regulations, along with the mitigation measures described in Section 6.0, would ensure these potential cumulative impacts would be less than significant.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The alignment for the Fully Underground LRT Alternative – Little Tokyo Variation 2 is essentially the same as that for the Fully Underground LRT Alternative – Little Tokyo Variation 1. The alignment for this alternative is about a block longer along 1st Street. The design differences between the two alternatives in the vicinity of Alameda and First Streets would not result in different potential impacts with respect to geotechnical, subsurface, and seismic hazards or hazardous materials.

As described in Section 5.5.1, with mitigation, potential effects related to geotechnical, subsurface, or seismic hazards would be less than significant.

As described in Section 5.5.2, there would be some potential for direct, indirect, and cumulative effects related to hazardous materials. The potential impacts would be the same as described in Section 5.5.2 and with mitigation these potential impacts would be less than significant.

6.0 POTENTIAL MITIGATION MEASURES

6.1 Potential Construction Mitigation Measures

A geotechnical investigation would be performed during design for the proposed at-grade and below-grade structures and improvements. The investigation would supplement and provide site specific data to facilitate final design for maintaining the integrity of existing structures under static and seismic loading and operational demands. Although portions of the alignment would be constructed in potential liquefaction zones, none are expected to result in or exacerbate geologic hazards. The proposed subway tunnels and stations would be located at depths below soils prone to liquefaction, and be subject to standard design specifications. Higher design earth pressures would be applied to below grade structures within liquefaction zones during the construction process to keep potential risks of damage from liquefaction and seismically-induced settlement to an acceptable level.

For the any of the build alternatives, the potential for ground movement associated with cut and cover construction and potential ground loss due to tunneling could be mitigated by the following mitigation measures:

- Design criteria would be established during project design that requires the construction contractor to limit movement to less than an acceptable threshold value as a performance standard. This acceptable threshold standard would be a function of several factors including but not limited to the type of structure and its existing condition. Additional data and survey information would be gathered during preliminary engineering for each building to enable assessment of the tolerance of the subject structures. In addition, standard threshold criteria and guidelines published by agencies and for similar type of structures would be reviewed. Additional geotechnical studies would be performed to define the nature of the soils and to refine the means of achieving the performance specification.

- Require ground improvement such as grouting or other methods to fill voids where appropriate and offset potential settlement when excess material has been removed during excavation. The criteria for requiring grouting or ground improvement would be based on the additional data collection and reviews as noted above and the acceptable threshold value.

- Grout tunnel alignment in advance to provide adequate soil support and minimize settlement as geotechnical conditions require.

- Monitor settlement along project alignment using a series of measuring devices above the route of the alignment. Leveling surveys would be conducted prior to tunneling, to monitor for possible ground movements.

- Conduct a preconstruction survey of buildings to establish a baseline to measure potential construction-induced damage against.

- Describe and define tunnel construction monitoring requirements. In addition, provisions could be included to use the Earth Pressure Balance or Slurry TBM for tunnel construction to minimize ground loss. During tunnel construction, the soils encountered will be monitored relative to anticipated soil conditions as described in a Geotechnical Baseline Report.

For the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, and the Fully Underground LRT Alternative – Little Tokyo Variation 2, a Contaminated Soil/Groundwater Management Plan would be implemented during construction to establish procedures to follow if contamination is encountered. The Plan would be prepared during the Final Design phase of the project, and the construction contractor would be held to the level of performance specified in the Plan. The Plan would include the following:

- Notification procedures and contact information for appropriate regulatory agencies;

- Procedures for sampling and analysis of soil and/or groundwater known or suspected to be impacted by hazardous materials;

- Procedures for the proper handling, storage, transport, and disposal of contaminated soil and/or groundwater, in consultation with regulatory agencies;

- Dust control measures (e.g., soil wetting, wind screens, etc.) for contaminated soil;

- Groundwater collection, treatment and discharge procedures and applicable standards.

In addition, a Worker Health and Safety Plan would be implemented prior to the start of construction activities. All workers would be required to review, receive training if necessary, and sign the plan prior to starting work. The Plan would, at a minimum, identify the following:

- Properties of concern and the nature and extent of contaminants that could be encountered during excavation activities;

- All appropriate worker, public health, and environmental protection equipment and procedures;

- Emergency response procedures, including most direct route to a hospital; and

- Site Safety Officer.

During construction of the underground portions of the build alternatives, mitigation would be required to address the potential for the creation of a preferential pathway and resulting spread of existing groundwater contamination. This could entail the use of impermeable grout where necessary to fill the gap between the tunnel and the surrounding earth along underground portions of the alignment where groundwater contamination exists.

To reduce potential impacts from subsurface gases associated with oilfields in the vicinity of the project area, mitigation measures would be implemented during construction of the underground portions of the build alternatives to address both exposure to toxic gases and the risk of explosion. This would be particularly important in methane zones and methane buffer zones, but testing would be required in all underground segments, as oilfield gases could occur outside of mapped zones. Specific precautions to protect workers and the public from exposure to toxic gases would be required, and specialized excavation methods would be needed to prevent explosion. Prior to building demolition, surveys of asbestos containing materials and lead-based paint would be conducted. If necessary, destructive sampling would be used. All asbestos containing materials and lead-based paint would be removed or otherwise abated prior to demolition. Removal and abatement activities would comply with all applicable laws, regulations, and rules.

6.2 Potential Operational Mitigation Measures

Mitigation would be required to address the potential for intrusion of subsurface gases in the underground portions of any of the build alternatives. Compliance with the Los Angeles City Municipal Code would be necessary for all structures within Methane and/or Buffer zones. The code requires gas concentration/pressure testing on a specified frequency and, based on the results, appropriate mitigation measures or controls to be included in the design. These mitigation measures may include the use of gas-impermeable liners and venting to reduce or eliminate gas intrusion into stations and along the length of the underground segments. The design, construction, and use of this technology have been successfully employed by Metro for various Red Line segments.

Although potential impacts related to the very weak EMFs that would be created by the build alternatives would not be anticipated, additional evaluation of sensitive receptors, including residences, schools, hospitals, day care facilities, and convalescent homes, within 100 feet of the proposed alignments would be warranted. Projected EMF levels produced by the LRT would be compared with International Radiation Protection Association guidelines. If these guidelines are exceeded, mitigation would be implemented to ground or block EMFs or modify the LRT power requirements.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Finding

There would be no adverse impacts from the No Build Alternative with respect to geotechnical, subsurface, seismic hazards or hazardous materials.

7.1.2 CEQA Determination

The No Build Alternative would have no impacts related to geotechnical subsurface, seismic hazards, or hazardous materials.

7.2 TSM Alternative

7.2.1 NEPA Finding

There would be no adverse impacts from the TSM Alternative with respect to geotechnical, subsurface, seismic hazards, or hazardous materials.

7.2.2 CEQA Determination

There would be no impacts related to geotechnical, subsurface, seismic hazards, or hazardous materials from the TSM Alternative.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Finding

There is the potential for adverse impacts with respect to liquefaction, seismically-induced settlement, and hazardous materials for portions of the At-Grade Emphasis LRT Alternative. Mitigation would be required to reduce these impacts to a less than significant level.

7.3.2 CEQA Determination

Potential impacts associated with liquefaction, seismically-induced settlement, landslides, flooding, and hazardous materials could occur during construction and operation of the At-Grade Emphasis LRT Alternative. Compliance with federal, state, and local laws and regulations regarding hazardous materials would reduce many of these impacts to a less than significant level. In addition, implementation of mitigation measures would be required to address specific issues (e.g., liquefaction, settlement, potential presence of subsurface gases, asbestos containing materials and lead based paint) to a less than significant level.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Finding

The Underground Emphasis LRT Alternative would have the potential for adverse impacts with respect to liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials. Mitigation would be required to reduce these impacts to a less than significant level.

7.4.2 CEQA Determination

Potential impacts associated with liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials could occur during construction and operation of the Underground Emphasis LRT Alternative. Many of these impacts would be addressed with adherence to federal, state, and local laws and regulations regarding hazardous materials. However, mitigation would be required to address specific issues, including potential ground loss due to tunnel construction, liquefaction hazard, presence of subsurface gases, asbestos containing materials, and lead based paint. With mitigation, potential impacts would be less than significant.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Finding

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have the potential for adverse impacts with respect to liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials. Mitigation would be required to reduce these impacts to a less than significant level.

7.5.2 CEQA Determination

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have potential impacts associated with liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials during construction and operation. With mitigation, potential impacts would be less than significant.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Finding

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have the potential for adverse impacts with respect to liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials. Mitigation would be required to reduce these impacts to a less than significant level.

7.6.2 CEQA Determination

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have potential impacts associated with liquefaction, seismically-induced settlement, ground loss due to tunneling, and hazardous materials during construction and operation. With mitigation, potential impacts would be less than significant.

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APPENDIX A

DESCRIPTION OF CONSTRUCTION ACTIVITIES FOR BUILD ALTERNATIVES

Table A-1. At-Grade Emphasis LRT Alternative: Construction Activity Summary

Activity	Description	Estimated Duration (Months)	Equipment							Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	Remarks (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional											
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	Earthwork (Cy)	Concrete (Cy)			
Pre-construction Activities	Survey, install geotechnical instrumentation, pothole, photo/ video documentation	4 to 6						x	x	n/a	n/a	5	10 to 20	
Site Preparation	Mobilize equipment, relocate utilities, secure staging areas along Flower Street, Hope Street, Gen. Thaddeus Kosciuszko Way, Main Street, Los Angeles Street, Temple Street, and Alameda Street	6 to 12	x	x	x	x				<1,000	<500	10	20 to 30	Utility relocation requires pavement breaker, jackhammers
Cut and Cover Tunnel Along Flower Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct tunnel structure, break into existing 7th Street/Metro Center Station, backfill	24 to 48	x	x	x	x	x	x	x	70,000	12,000	20 to 30	20 to 30	Flower Street closure until top deck is in place ~ 2 to 4 month closure at 2-block segments
Cut and Cover Station at Flower/ 6th/5th Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct station structure, backfill	24 to 48	x	x	x	x	x	x	x	50,000	9,500	20 to 30	20 to 30	5 - 10 concrete trucks per day during concrete pour, 5 - 10 trucks for material delivery during station construction
U-Portal at Flower between 4th and 3rd Streets	Shore and construct U-section portal at Flower Street	12 to 18	x	x	x	x	x	x	x	20,000	3,500	20 to 30	20 to 30	

Table A-1. At-Grade Emphasis LRT Alternative: Construction Activity Summary

Activity	Description	Estimated Duration (Months)	Equipment							Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	Remarks (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional											
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	Earthwork (Cy)	Concrete (Cy)			
Portal northeast of Flower and 3rd		TBD								10,600	4,000	20 to 30	20 to 30	
Cut and Cover Station at 2nd/Hope Streets	Construct station at Bunker Hill using cut and cover, construct portal and surface tracks west of the station, shore and break into existing 2nd Street tunnel, construct tunnel entry structure	24 to 48	x	x	x	x	x	x	x	55,000	17,500	20 to 30	20 to 30	
Portal into 2nd Street Tunnel		TBD								40,000	11,700	TBD	TBD	
Surface Trackwork	Install tracks and catenary poles in 2nd Street tunnel and at grade along 2nd, Main. Los Angeles, Temple, and Alameda Streets	12 to 18	x	x	x	x	x		x	10,000	8,000	5 to 10	5 to 10	
Improvements at Alameda / Temple Streets	Shore and excavate Alameda Street to create depressed roadway, construct pedestrian bridge, complete surface tracks and tie-in	24 to 36	x	x	x	x	x	x	x	65,000	12,000	15 to 20	20 to 30	
At-Grade Stations	Construct at-grade stations at Main/1st Street and at Los Angeles/1st Street	12 to 18	x	x	x	x	x	x	x	< 1000	1,500	5 to 10	5 to 10	

Table A-1. At-Grade Emphasis LRT Alternative: Construction Activity Summary

Activity	Description	Estimated Duration (Months)	Equipment							Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	Remarks (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional											
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	Earthwork (Cy)	Concrete (Cy)			
Operating Systems Installation	Install power poles and overhead wires along alignment and power substations at the station locations.		x	x	x	x	x	x	x	TBD	TBD	TBD	TBD	

Note: For all concreting operations, there will be occasional large pours of several hundred yards that could require more than 10 trucks. These are typically scheduled at night to ensure adequate concrete supply and to avoid traffic.

Table A-2. Underground Emphasis LRT Alternative: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Pre-construction Activities	Survey, install geotechnical instrumentation, pothole, photo/ video documentation	4 to 6 months						x	x				n/a	n/a	5	10 to 20	
Site Preparation	Mobilize equipment, demolish existing buildings at portal site, clear and grub construction yard, relocate storm drain and other utilities, prepare TBM entry pit, secure staging areas along Flower and 2nd Streets, stabilize critical building foundations if needed	12 to 18 months	x	x	x	x							1,000	1,000	10 to 20	20 to 30	2nd Street closure for entry pit, 2 months
Cut and Cover Tunnel Along Flower Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct tunnel structure, break into existing 7th Street/Metro Center Station, backfill	24 to 48 months	x	x	x	x	x	x	x				280,000	27,750	20 to 30	20 to 30	Flower Street closure until top deck is in place 2 to 3 months per 2 block segment
Cut and Cover Station at Flower/ 5th/4th Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				105,000	26,000	15 to 20	20 to 30	Flower Street closure until top deck is in place ~2 to 3 months 5 to 10 concrete trucks/day during pour

Table A-2. Underground Emphasis LRT Alternative: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Cut and Cover Appurtenances at 2nd/Hope Street Station SEM Option	Construct shafts for mining equipment, complete cut and cover station entrances, construct emergency and ventilation shafts, construct pedestrian bridge	24 to 48 months	x	x	x	x	x	x	x				30,000	5,500	15 to 20	20 to 30	Chiller building underpinning may be needed
SEM Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x				50,000	8,250	10 to 15	20 to 25	
Cut-and-Cover Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x		x	x	147,500	17,250	20 to 30	20 to 30	
TBM Tunnel between Central Ave. and Bunker Hill	Bore tunnels with TBM recovering machine at Bunker Hill or Central Avenue, haul away cuttings, provide grouting if needed, remove TBM machine and backfill entry pit	24 to 48 months	x	x	x	x	x		x	x		x	120,000	Precast Segments	35 to 70	15 to 20	Tunnel boring production estimated 12 to 18 months Grouting may be needed at Higgins Building
Cut and Cover Station at 2nd/ Broadway option	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				200,000	47,250	15 to 20	15 to 20	2nd Street closed until top deck in ~ 2 to 3 mo 5 to 10 concrete trucks/day during pour
Cut and Cover Station at 2nd/ Los Angeles Street option	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				175,000	48,500	15 to 20	15 to 20	2nd Street closed until top deck in ~ 2 to 3 mo 5 to 10 concrete trucks/day during pour

Table A-2. Underground Emphasis LRT Alternative: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Cut and Cover Tunnel and U-Portal at 2nd and Central	Complete cut and cover section at end of TBM, construct U-section portal	12 to 24 months	x	x	x	x	x	x	x				20,000	7,500	5 to 10	15 to 20	2nd Street/ Central Avenue temporarily closed ~ 2mo, then East half of Central Avenue permanently closed
TBM Launch Site		2 to 4 months	x	x	x	x	x	x	x				20,000	n/a	5 to 10	15 to 20	
Improvements at Alameda / 1st Street	Shore and excavate Alameda Street to create depressed roadway, construct pedestrian bridge, complete surface tracks and tie-in	24 to 36 months	x	x	x	x	x		x				65,000	12,000	15 to 20	20 to 30	Alameda and 1st Streets closed until deck is in place and while bridge is erected ~ 12 to 18 mo.
Operating Systems Installation	Install power poles and overhead wires along alignment and power substations at the station locations.		x	x	x	x	x	x	x	TBD	TBD	TBD	TBD				

Notes: Earthwork quantities include bulking factor of 1.3
For underground station construction, Concrete volume and truck trips are tbd; 5 to 10 trucks per day can be assumed during concrete pour periods. 5 to 10 trucks per day during material delivery
For all concreting operations during station construction, there will be occasional large pours of several hundred yards that could require more than 10 trucks. These are typically scheduled at night to ensure adequate concrete supply and to avoid traffic.
Truck trip estimates assume full production; full production would not occur through the entire estimated duration

Table A-3. Fully Underground LRT Alternative – Little Tokyo Variation 1: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Pre-construction Activities	Survey, install geotechnical instrumentation, pothole, photo/ video documentation	4 to 6 months						x	x				n/a	n/a	5	10 to 20	
Site Preparation	Mobilize equipment, demolish existing buildings at portal site, clear and grub construction yard, relocate storm drain and other utilities, prepare TBM entry pit, secure staging areas along Flower and 2nd Streets, stabilize critical building foundations if needed	12 to 18 months	x	x	x	x							1,000	1,000	10 to 20	20 to 30	2nd Street closure for entry pit, 2 months
Cut and Cover Tunnel Along Flower Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct tunnel structure, break into existing 7th Street/Metro Center Station, backfill	24 to 48 months	x	x	x	x	x	x	x				280,000	27,750	20 to 30	20 to 30	Flower Street closure until top deck is in place 2 to 3 months per 2 block segment
Cut and Cover Station at Flower/ 5th/4th Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				105,000	26,000	15 to 20	20 to 30	Flower Street closure until top deck is in place ~2 to 3 months 5 to 10 concrete trucks/day during pour

Table A-3. Fully Underground LRT Alternative – Little Tokyo Variation 1: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Cut and Cover Appurtenances at 2nd/Hope Street Station SEM Option	Construct shafts for mining equipment, complete cut and cover station entrances, construct emergency and ventilation shafts, construct pedestrian bridge	24 to 48 months	x	x	x	x	x	x	x				30,000	5,500	15 to 20	20 to 30	Chiller building underpinning may be needed
SEM Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x				50,000	8,250	10 to 15	20 to 25	
Cut-and-Cover Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x		x	x	147,500	17,250	20 to 30	20 to 30	
TBM Tunnel between Central Ave. and Bunker Hill	Bore tunnels with TBM recovering machine at Bunker Hill or Central Ave., haul away cuttings, provide grouting if needed, remove TBM machine and backfill entry pit	24 to 48 months	x	x	x	x	x		x	x		x	120,000	Precast Segments	35 to 70	15 to 20	Tunnel boring production estimated 12 to 18 months Grouting may be needed at Higgins Building

Table A-3. Fully Underground LRT Alternative – Little Tokyo Variation 1: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Cut and Cover Station at 2nd Street/ Broadway	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				200,000	47,250	15 to 20	15 to 20	2nd Street closed until top deck in ~ 2 to 3 mo 5 to 10 concrete trucks/day during pour
TBM Launch Site		2 to 4 months	x	x	x	x	x	x	x				20,000	n/a	5 to 10	15 to 20	
Cut and Cover Tunnel from TBM to 2nd Street/ Central Avenue Station	Install soldier beam or other suitable wall systems, excavate possibly without top deck, dewater, construct the station structure, backfill. As conditions permit within the vacant lot, construct in open sloped excavation with dewatering and backfill	12 to 24 months	x	x	x	x	x	x	x				20,000	N/A	15 to 20	15 to 20	

Table A-3. Fully Underground LRT Alternative – Little Tokyo Variation 1: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Open Cut Station at 2nd Street/ Central Avenue	Install soldier beam or other suitable wall systems, excavate possibly without top deck, dewater, construct the station structure, backfill. As conditions permit within the vacant lot, construct in open sloped excavation with dewatering and backfill	18 to 36 months	x	x	x	x	x	x	x				55,000	N/A	20 to 30	15 to 20	
Cut and Cover from 2nd Street/ Central Avenue to East Portal	Install soldier beam or other suitable wall systems, excavate to place top deck (or without deck at the portal), excavate, dewater, construct structure, backfill	12 to 24 months	x	x	x	x	x	x	x				45,000	N/A	15 to 20	15 to 20	
Cut and Cover from 2nd Street/ Central Avenue to North Portal	Install soldier beam or other suitable wall systems, excavate to place top deck or without deck at portal, excavate, dewater, construct structure, backfill	12 to 24 months	x	x	x	x	x	x	x				95,000	N/A	15 to 20	15 to 20	
Improvements at Alameda / 1st /Temple Streets	Roadway re-alignment, MSE Wall reconstruction, utility relocation, other associated works	12 to 24 months	x	x	x	x	x		x				TBD	TBD	15 to 20	20 to 30	

Table A-3. Fully Underground LRT Alternative – Little Tokyo Variation 1: Construction Activities Summary

Activity	Description	Estimated Duration	Equipment										Estim. Quantities		Est. Truck Trips/ Day	Est. No. Of Workers/ Day	REMARKS (notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (Cy)	Concrete (Cy)			
Operating Systems Installation	Install power poles and overhead wires along alignment and power substations at the station locations.		x	x	x	x	x	x	x	TBD	TBD	TBD	TBD				

Notes: Earthwork quantities include bulking factor of 1.3
For underground station construction, Concrete volume and truck trips are tbd; 5 to 10 trucks per day can be assumed during concrete pour periods. 5 to 10 trucks per day during material delivery
For all concreting operations during station construction, there will be occasional large pours of several hundred yards that could require more than 10 trucks. These are typically scheduled at night to ensure adequate concrete supply and to avoid traffic.
Truck trip estimates assume full production; full production would not occur through the entire estimated duration

Table A-4. Fully Underground LRT Alternative – Little Tokyo Variation 2: Construction Activities Summary

ACTIVITY	DESCRIPTION	ESTIMATED DURATION	EQUIPMENT										ESTIM. QUANTITIES		Est. Truck Trips/ Day	Est. No. of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (CY)	Concrete (CY)			
Pre-construction Activities	Survey, install geotechnical instrumentation, pothole, photo/ video documentation	4 to 6 months						x	x				n/a	n/a	5	10 to 20	
Site Preparation	Mobilize equipment, demolish existing buildings at portal site, clear and grub construction yard, relocate storm drain and other utilities, prepare TBM entry pit, secure staging areas along Flower and 2nd Streets, stabilize critical building foundations if needed	12 to 18 months	x	x	x	x							1,000	1,000	10 to 20	20 to 30	2nd Street closure for entry pit, 2 months
Cut and Cover Tunnel Along Flower Street	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct tunnel structure, break into existing 7th Street/Metro Center Station, backfill	24 to 48 months	x	x	x	x	x	x	x				280,000	27,750	20 to 30	20 to 30	Flower Street closure until top deck is in place 2 to 3 months per 2 block segment
Cut and Cover Station at Flower/ 5th/4th Streets	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, remove obstructions such as tiebacks, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				105,000	26,000	15 to 20	20 to 30	Flower Street closure until top deck is in place ~2 to 3 months 5 to 10 concrete trucks/day during pour

Table A-4. Fully Underground LRT Alternative – Little Tokyo Variation 2: Construction Activities Summary

ACTIVITY	DESCRIPTION	ESTIMATED DURATION	EQUIPMENT										ESTIM. QUANTITIES		Est. Truck Trips/ Day	Est. No. of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (CY)	Concrete (CY)			
Cut and Cover Appurtenances at 2nd/Hope Street Station SEM Option	Construct shafts for mining equipment, complete cut and cover station entrances, construct emergency and ventilation shafts, construct pedestrian bridge	24 to 48 months	x	x	x	x	x	x	x				30,000	5,500	15 to 20	20 to 30	Chiller building underpinning may be needed
SEM Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x				50,000	8,250	10 to 15	20 to 25	
Cut-and-Cover Station at 2nd/Hope Streets	Mine and stabilize station excavation, construct station, stabilize adjacent building foundations if needed	24 to 48 months	x	x	x	x	x		x		x	x	147,500	17,250	20 to 30	20 to 30	
TBM Tunnel between Central Ave. and Bunker Hill	Bore tunnels with TBM recovering machine at Bunker Hill or Central Ave., haul away cuttings, provide grouting if needed, remove TBM machine and backfill entry pit	24 to 48 months	x	x	x	x	x		x	x		x	120,000	Precast Segments	35 to 70	15 to 20	Tunnel boring production estimated 12 to 18 months Grouting may be needed at Higgins Building
Cut and Cover Station at 2nd Street/ Broadway	Install soldier beam or other suitable wall systems, excavate to place top deck, excavate, dewater, construct station structure, backfill	24 to 48 months	x	x	x	x	x	x	x				200,000	47,250	15 to 20	15 to 20	2nd St. closed until top deck in ~ 2 to 3 mo 5 to 10 concrete trucks/day during pour
TBM Launch Site		2 to 4 months	x	x	x	x	x	x	x				20,000	n/a	5 to 10	15 to 20	

Table A-4. Fully Underground LRT Alternative – Little Tokyo Variation 2: Construction Activities Summary

ACTIVITY	DESCRIPTION	ESTIMATED DURATION	EQUIPMENT										ESTIM. QUANTITIES		Est. Truck Trips/ Day	Est. No. of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling							
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor	Earthwork (CY)	Concrete (CY)			
Cut and Cover Tunnel from TBM to 2nd Street/ Central Avenue Station	Install soldier beam or other suitable wall systems, excavate possibly without top deck, dewater, construct the station structure, backfill. As conditions permit within the vacant lot, construct in open sloped excavation with dewatering and backfill	12 to 24 months	x	x	x	x	x	x	x				25,000	N/A	15 to 20	15 to 20	
Open Cut Station at 2nd Street/ Central Avenue	Install soldier beam or other suitable wall systems, excavate possibly without top deck, dewater, construct the station structure, backfill. As conditions permit within the vacant lot, construct in open sloped excavation with dewatering and backfill	18 to 36 months	x	x	x	x	x	x	x				80,000	N/A	20 to 30	15 to 20	
Cut and Cover from 2nd/ Central Avenue to East Portals	Install soldier beam or other suitable wall systems, excavate to place top deck (or without deck at the portals), excavate, dewater, construct structure, backfill	12 to 24 months	x	x	x	x	x	x	x				90,000	N/A	15 to 20	15 to 20	
Cut and Cover from 2nd/ Central Avenue to North Portal	Install soldier beam or other suitable wall systems, excavate to place top deck or without deck at portal, excavate, dewater, construct structure, backfill	12 to 24 months	x	x	x	x	x	x	x				125,000	N/A	15 to 20	15 to 20	

Table A-4. Fully Underground LRT Alternative – Little Tokyo Variation 2: Construction Activities Summary

ACTIVITY	DESCRIPTION	ESTIMATED DURATION	EQUIPMENT											ESTIM. QUANTITIES		Est. Truck Trips/ Day	Est. No. of Workers/ Day	REMARKS (Notes on type and duration of potential higher impact conditions such as street closures, building operation interruption, etc.)
			Conventional							Tunneling								
			Haul Truck	Concrete Truck	Dozer	Excavator	Crane	Drill Rig	Flatbed	TBM	Roadheader	Conveyor		Earthwork (CY)	Concrete (CY)			
Improvements at Alameda / 1st Street/Temple Street	Roadway re-alignment, MSE Wall reconstruction, utility relocation, other associated works	12 to 24 months	x	x	x	x	x		x					TBD	TBD	15 to 20	20 to 30	
Operating Systems Installation	Install power poles and overhead wires along alignment and power substations at the station locations.		x	x	x	x	x	x	x	TBD	TBD	TBD		TBD				

Notes: Earthwork quantities include bulking factor of 1.3
For underground station construction, Concrete volume and truck trips are tbd; 5 to 10 trucks per day can be assumed during concrete pour periods. 5 to 10 trucks per day during material delivery
For all concreting operations during station construction, there will be occasional large pours of several hundred yards that could require more than 10 trucks. These are typically scheduled at night to ensure adequate concrete supply and to avoid traffic.
Truck trip estimates assume full production; full production would not occur through the entire estimated duration

Regional Connector Transit Corridor
Water Resources
Technical Memorandum

March 5, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

BMPs	Best Management Practices
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
LARWQCB	Los Angeles Regional Water Quality Control Board
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PCE	Perchloroethylene
RWQCB	Regional Water Quality Control Board
SUSMP	Standard Urban Stormwater Management Plan
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
TCE	Trichloroethylene

TMDL	Total Maximum Daily Loads
TSM	Transportation Management System
USEPA	United States Environmental Protection Agency
VMT	Vehicle Miles Traveled
VOC	Volatile organic compounds
WMA	Watershed Management Area
WRD	Water Replenishment District of Southern California

1.0 SUMMARY

This section discusses the Regional Connector Transit Corridor project in relation to surface and groundwater resources, the local drainage system, potential flooding and safety issues, and water quality. Existing conditions for these resources are described as well as the current applicable regulatory setting and potential impacts and mitigation from construction and operation of the proposed alternatives.

The area of potential impact for water resources differs slightly based on whether surface or groundwater resources are being analyzed. For surface water resources and surface water quality, existing conditions and impacts are considered within the Los Angeles River Watershed and the Los Angeles River Watershed Management Area. Groundwater resources and groundwater quality are evaluated in the context of the Central groundwater sub-basin of the Coastal Plain of Los Angeles which underlies the project area.

The Regional Connector project area is located in the middle of downtown Los Angeles, in an urban setting with mostly impervious land cover. Stormwater runoff is directed to existing drainage infrastructure, some of which runs directly underneath the proposed alignments. This local drainage infrastructure comprises a small part of the city's storm drain and flood protection system. Stormwater runoff in the project area is contaminated with common urban pollutants such as oil, grease, and heavy metals. These pollutants, in turn, have created poor water quality conditions in the main surface water feature near the project area, the Los Angeles River. Additionally, the large amount of impervious land cover in this area greatly reduces the amount of percolation to groundwater that can occur. The Regional Connector project alternatives would not significantly change the amount of impervious cover in the project area, nor would they result in adverse changes to the existing drainage system or the flow of runoff from the project area.

The City of Los Angeles receives its municipal water from a mixture of ground and surface water resources. In dry years, groundwater can account for as much as 30 percent of the city's supply; however, no production wells are located within the project area. The tunneling methods used in construction would not require the use of water and would therefore, not affect groundwater and/or municipal and industrial water supplies.

The No Build and Transportation System Management (TSM) Alternatives would result in no direct or indirect impacts to water resources in the project area. In addition, these alternatives would not result in any cumulative impacts to water resources in the Los Angeles River Watershed or to groundwater resources in the sub-basin.

Construction and operation of any of the build alternatives would potentially result in impacts to water resources. Construction activities including the excavation of tunnels have the potential to result in the generation of contaminated groundwater that requires disposal as

well as the release of construction-related contaminants to groundwater. In order to assess the potential risks and impacts associated with tunnel construction, subsurface (geotechnical) investigations would be undertaken to evaluate soil, groundwater, seismic, and environmental conditions along the proposed alignment. Based on the findings from these investigations, design and construction methods would be developed to reduce potential impacts to a less than significant level. More detail about these potential impacts and best management practices that would be employed to reduce their significance is discussed in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum. If encountered during construction or operations of the proposed project, contaminated groundwater would be treated and disposed of in coordination with local regulatory agencies and all applicable water quality regulations. Potential impacts and mitigation measures related to subsidence from groundwater dewatering are addressed in further detail in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum.

Overall, implementation of the build alternatives would not result in significant impacts to surface or groundwater resources, water quality, and/or flooding and water-related safety issues. During both construction and operation, compliance with applicable local, state, and federal guidelines and regulations would ensure the maintenance of water quality standards. Additionally, implementation of best management practices (BMPs) including soil stabilization and erosion control measures; storage of materials and equipment in a manner that reduces the potential for spills or leaks to enter the storm drain system; and, the development and implementation of a spill prevention and cleanup plan, would further ensure that potential impacts to water resources are reduced to a less than significant level.

2.0 INTRODUCTION

Surface and groundwater quality can be potentially affected by construction activities such as grading and excavation which can lead to increased sedimentation. Construction staging areas can also generate increased stormwater runoff, which, if not properly dealt with, can lead to increases in erosion. Additionally, construction projects that result in increases in impervious surface area can lead to larger quantities and velocities of stormwater runoff, which in turn can result in detrimental impacts to water quality as well as drainage infrastructure. When analyzing project impacts, it is also necessary to consider impacts to flood plains, flood control facilities, and public safety in relation to the construction of publicly used structures in floodplain areas.

This section analyzes potential impacts to water resources and hydrology in the project area for each of the four alternatives as well as cumulative impacts potentially arising from other development and transportation projects in the general project vicinity. Mitigation measures for any identified significant impacts are proposed.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Federal Regulatory Framework

3.1.1 Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the U.S. and gives the U.S. Environmental Protection Agency (USEPA) the authority to implement pollution control programs such as setting wastewater standards for industries. In certain states such as California, the USEPA has delegated authority to state agencies.

All point sources that discharge into waters of the United States must obtain a NPDES permit under provisions of Section 402 of the CWA. In California, the State Water Resources Control Board (SWRCB) and RWQCBs are responsible for the implementation of the NPDES permitting process at the state and regional levels, respectively.

The NPDES permit process provides a regulatory mechanism for the control of point source discharges – a municipal or industrial discharge at a specific location or pipe – to surface waters of the U.S. Two exceptions that are regulated under the NPDES program are: 1) diffuse source discharges caused by general construction activities of over one acre, and 2) stormwater discharges in municipal stormwater systems as a separate system in which runoff is carried through a developed conveyance system to specific discharge locations. The NPDES program regulates pollution generated by runoff from construction activities, industrial activities, and urban land uses, including runoff from streets. Federal stormwater regulations require municipalities to obtain NPDES permits for stormwater discharges from municipal storm drains to surface waters. In 1990, the USEPA established final regulations for stormwater discharges through the implementation of Section 402(p) of the CWA. The two permits that enforce Section 402(p), the General Industrial Permit and the General Construction Permit, are a major attempt to control non-point source pollutants in urban runoff that discharge to a local storm drain system and then into receiving waters. Applicable permits are discussed in further detail in the discussion in Section 3.3.

Projects involving construction activities (e.g., clearing, grading, or excavation) involving land disturbance greater than one acre must file a Notice of Intent (NOI) with the LARWQCB (Region 4) to indicate their intent to comply with the State General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit). The Construction General Permit establishes conditions to minimize sediment and pollutant loading and requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) prior to construction. The SWPPP is intended to help identify the sources of sediment and other pollutants, and to establish BMPs for stormwater and non-stormwater source control and pollutant control.

Section 303(d) of the 1972 CWA requires states, territories, and authorized tribes to develop a list of water quality-impaired segments of waterways. The 303(d) list includes water bodies that do not meet water quality standards for the specified beneficial uses of that waterway, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for water bodies on their 303(d) lists and implement a process, called Total Maximum Daily Loads (TMDLs), to meet water quality standards (USEPA 2002).

The TMDL process is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the maximum allowable loadings of a pollutant that can be assimilated by a water body while still meeting applicable water quality standards. The TMDL provides the basis for the establishment of water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL's allocation calculation for each water body must include a margin of safety to ensure that the water body can be utilized for its State-designated uses. Additionally, the calculation also must account for seasonal variation in water quality (USEPA 2002).

TMDLs are intended to address all significant stressors which cause or threaten to cause impairments to beneficial uses, including point sources (e.g., sewage treatment plant discharges), nonpoint sources (e.g., runoff from fields, streets, range, or forest land), and naturally occurring sources (e.g., runoff from undisturbed lands). TMDLs may be based on readily available information and studies. In some cases, complex studies or models are needed to understand how stressors are causing water body impairment. In many cases, simple analytical efforts provide an adequate basis for stressor assessment and implementation planning. TMDLs are developed to provide an analytical basis for planning and implementing pollution controls, land management practices, and restoration projects needed to protect water quality. States are required to include approved TMDLs and associated implementation measures in State water quality management plans. Within California, TMDL implementation is through regional Basin Plans.

TMDL Implementation Plans provide a schedule for responsible jurisdictions to implement BMPs to comply with pollutant reduction schedules.

3.1.2 National Flood Insurance Program (NFIP)

In order to determine the necessity to comply with the Federal Emergency Management Agency's (FEMA) NFIP regulations, FEMA issues countywide Flood Insurance Rate Maps (FIRMs) delineating the limits of FEMA-defined flood zones throughout the county. Flood zones are defined as follows:

- Moderate to Low Risk Areas: Zones B, C, and X are defined as areas outside the one percent annual chance floodplain and no Base Flood Elevations or depths are shown within this zone;

- High Risk Areas:

    - Zone A is defined as areas with a one percent annual chance of flooding; however, detailed analyses are not performed for these areas and no depths or base flood elevations are shown on FIRMs;

    - Zones AE and A1-A30 are defined as areas with a one percent chance of flooding where base flood elevations are derived from detailed analyses and shown at selected intervals on FIRMs;

    - Zone AH is defined as areas with a one percent chance of shallow flooding, usually in the form of a pond with an average depth of one to three feet. Base flood elevations are derived from detailed analyses and shown at selected intervals on FIRMs; and,

    - Zone AO is defined as river or stream flood hazard areas and areas with a one percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth of one to three feet. Average flood depths are derived from detailed analyses and shown within these zones.

Volume 44 of the Code of Federal Regulations (CFR) Sections 59-65 sets the minimum basic NFIP floodplain management building requirements. These include:

- Ensure that proposed building sites will be reasonably safe from flooding, and that all new construction and substantial improvements in flood prone areas be properly designed and adequately anchored; constructed with materials resistant to flood damage; and, constructed with equipment and other service facilities that are designed or located to prevent water from entering components during flood conditions;

- All buildings constructed within a riverine floodplain (FEMA Flood Zones: A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective FIRM;

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials. A

hydrologic and hydraulic analysis must be performed prior to the start of development and must demonstrate that the development would not cause any rise in base flood levels;

- All buildings constructed within a coastal high hazard area, (any of the "v" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structure (excluding the pilings and columns) is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components; and,

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision.

3.2 State Regulatory Framework

3.2.1 Porter-Cologne Water Quality Control Act

The *Porter-Cologne Water Quality Control Act* of 1969 (Act) established the principal California program for water quality control. The Act authorizes the SWRCB to adopt, review, and revise all policies for all waters of the U.S. (including both surface and groundwater); regulates discharges to surface and groundwater; and directs the RWQCB to develop regional Basin Plans. Section 13170 of the *California Water Code* also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Act also divides the State of California into nine Regional Water Quality Control Board (RWQCB) areas. Each RWQCB implements and enforces provisions of the CWA subject to policy guidance and review by the SWRCB. The project area is located in the LARWQCB Regional 4, the Los Angeles Region.

A key tool to preserving and enhancing the water quality of surface and groundwater resources throughout the state is the development of *Basin Plans* by the RWQCBs. Basin Plans: 1) designate beneficial uses for surface and ground waters, 2) set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and 3) describe implementation programs to protect all waters in the region (LARWQCB 1995). Basin plans and the triennial review of these plans by the SWRCB is necessary for compliance with CWA Section 303 (40 CFR 131); however, none of the basin plans contain a comprehensive list of priority toxic pollutant criteria to satisfy CWA section 303.

3.2.2 State Antidegradation Policy

In accordance with the federal Antidegradation Policy, the state policy was adopted by the SWRCB to maintain high quality waters in California. This state policy establishes ambient water quality criteria for priority toxic pollutants. Implemented by the RWQCBs, the policy is necessary to achieve the federal CWA's goals and objectives. In addition, the policy protects bodies of water where the existing water quality is higher than necessary for the protection of present and anticipated beneficial uses. Toxic pollutants regulated under the policy can be attributed to, among other sources, industrial and municipal discharges. The numeric criteria are important in deriving water quality based effluent limits in National Pollutant Discharge Elimination System (NPDES) permits as well as wasteload allocations for total maximum daily loads (TMDLs) (40 CFR 131).

3.2.3 National Pollutant Discharge Elimination System (NPDES)

In accordance with CWA Section 402(p), which regulates municipal and industrial stormwater discharges under the NPDES program, the State Water Resources Control Board (SWRCB) adopted a Construction General Permit applicable to all stormwater discharges associated with construction activity. The Construction General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit, Order No. 99-08-DQW) applies to stormwater discharges from construction sites that disturb land equal to or greater than one acre. The Los Angeles RWQCB (LARWQCB) adopted a new Construction General Permit on September 2, 2009 (Construction General Permit Order 2009-0009-DWQ). The new permit goes into effect on July 1, 2010 and all discharges will be required to obtain coverage under it. The new Order has similar requirements to the current permit, but it specifies more minimum BMPs that were previously only required as elements of the SWPPP or suggested by guidance.

Construction activity subject to this permit includes clearing, grading, and ground disturbances such as stockpiling or excavation. The Construction General Permit requires dischargers to:

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes plans for minimizing, mitigating and monitoring possible impacts from construction-related contamination of surface waters. In addition, the SWPPP must list BMPs that will be used to limit impacts from stormwater runoff and the placement of BMPs.
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States.
- Perform inspections of all BMPs

In order to obtain coverage under the Construction General Permit, the permit applicant must submit a Notice of Intent (NOI) to the SWRCB and prepare and implement a SWPPP. Since construction of the Regional Connector would disturb more than one acre, it would be subject to these permit requirements.

3.3 Regional/Local Regulatory Framework

3.3.1 Los Angeles Regional Water Quality Control Board (LARWQCB)

3.3.1.1 NPDES Permits

The LARWQCB is responsible for issuing the Los Angeles County Municipal Stormwater Permit (Order No. 01-182, NPDES No. CAS0041, amended by Regional Order R4-2007-0042 on August 9, 2007). The existing permit covers the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los County Flood Control District. The permit covers the permittees for contributions to discharges of stormwater and urban runoff from municipal separate storm sewer systems (MS4s), also called storm drain systems. The discharges flow to water courses within the Los Angeles County Flood Control District and into receiving waters of the Los Angeles Region. Discharges are covered under countywide waste discharge requirements (WDRs) contained in Order No. 96-054 adopted by the LARWQCB in 1996. These WDRs also serve as the NPDES permit for discharge of municipal stormwater.

The MS4 permit requires permittees to implement a Standard Urban Stormwater Management Plan (SUSMP) that designates BMPs that must be used in specified categories of development to treat stormwater runoff, control peak flow discharges, and reduce post-project discharge of pollutants from stormwater conveyance systems.

In addition to the Municipal NPDES Permit issued by the LARWQCB, General NPDES Permit CAG994004 Discharges of Groundwater from Construction Dewatering to Surface Waters, allows for the discharge of treated or untreated groundwater generated from dewatering activities when such discharges will not cause state or federal water quality objectives to be exceeded. This permit would apply to the proposed alternatives with the potential for dewatering.

WDRs for General Waste Discharge Requirements for Specified Discharges to Groundwater in Santa Clara and Los Angeles River Basins (Order No. 93-010)

This WDR allows for the discharge of water resulting from the following activities that may occur as part of the proposed project: construction dewatering, dust control application, and subterranean seepage dewatering.

The WDR requires that wastewater be analyzed prior to being discharged in order to determine if it contains pollutants in excess of the applicable Basin Plan Water Quality

Objectives. Additionally, any wastewater that might be encountered and subsequently discharged to groundwater would need to comply with applicable water quality standards.

Due to the potential for construction dewatering activities and potential subterranean seepage dewatering during operation, this WDR could apply to some of the proposed alternatives.

WDRs for Discharge of Non-Hazardous Contaminated Soils and Other Wastes in Los Angeles River and Santa Clara River Basins (Order No. 91-93)

The purpose of this WDR is to protect waters of the State from contamination due to disposal of soils contaminated with moderate concentrations of petroleum hydrocarbons, heavy metals and other wastes. The permit allows the disposal of up to 100,000 cubic yards of nonhazardous contaminated soils and other wastes for a maximum period of 90 days. This WDR requires that waste used as soil backfill shall not contain any substance in concentrations toxic to human, animal, plant, or aquatic life. The Construction General Permit allows for temporary stockpiling of nonhazardous, contaminated soils until they can be appropriately disposed of or reused, per permit conditions. Due to the project area's long history of commercial and industrial uses, there is significant potential for subsurface hazardous materials to be found in the project area.

3.3.1.2 Basin Plan

The Basin Plan that applies to the project area is the *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (LARWQCB 1995). This plan sets forth the regulatory water quality standards for surface waters and groundwater within the region. The water quality standards address both the designated beneficial uses for each water body and the water quality objectives to meet them. Where multiple designated beneficial uses exist, water quality standards are written to protect the most sensitive use.

3.3.1.3 Total Maximum Daily Loads (TMDLs)

In accordance with the federal CWA and the state Porter-Cologne Water Quality Control Act, TMDLs have been developed and incorporated into the Basin Plan for some pollutants identified on the 303(d) list as causing contamination in the Los Angeles River Watershed. The Los Angeles River has TMDLs for metals, trash, and nutrients (Resolution Numbers 2007-014, 2007-012, and 2003-016).

3.3.1.4 Standard Urban Stormwater Mitigation Plan (SUSMP)

As part of the Los Angeles County Municipal NPDES Permit, the permittees implemented a stormwater quality management program. The goal of this program is to accomplish the requirements of the NPDES permit and reduce the amount of pollutants in stormwater and urban runoff. The SUSMP is one specific requirement of the stormwater quality management program. The SUSMP outlines the necessary BMPs which must be incorporated into design

plans for projects and/or development related activities that include vehicle or equipment maintenance areas (Los Angeles County DPW 2002).

3.3.2 County and City of Los Angeles

3.3.2.1 Los Angeles County General Plan

The Los Angeles County General Plan (1986) contains the following policies related to water resources, water quality, and flood hazards:

- Restrict urban development in flood prone areas;
- Conserve the available supply of water and protect water quality;
- Full compliance with all NPDES permits;
- Full compliance with all approved TMDL implementation and compliance plans for impaired water bodies;
- Protect groundwater recharge and watershed areas; and,
- Encourage the maintenance, management, and improvement of groundwater supplies.

3.3.2.2 Los Angeles County Code

Los Angeles County's Stormwater Ordinance regulates discharges to the storm drain system, runoff management requirements, and violations of the ordinance (Chapter 12.80, Parts 3-5). Applicable sections include:

- Prior to construction activity, all stormwater and runoff pollution mitigation measures must be implemented as required by applicable permits (Section 450); and,
- All BMPs required by applicable construction activity permits must be in effect during the term of the project (Section 510).

3.3.2.3 City of Los Angeles General Plan

Water resources and flood hazard goals and policies are addressed in the city's Infrastructure Systems and Safety Elements of the General Plan (City of Los Angeles 1996). Policies are generally geared towards the protection of water quality, risk reduction in relation to flooding hazards, and compliance with all applicable state and federal regulations.

3.3.2.4 City of Los Angeles Specific Plan for the Management of Flood Hazards (Ordinance No. 172081)

The City of Los Angeles has more stringent floodplain management building requirements than those required by the federal government. Ordinance number 172081 defines Special Flood Hazard Areas as those designated as A, AO, AE, AH, AI-30, A-99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, V, VE and VI-30 Zones on the Los Angeles Flood Hazard Map. The proposed alternative alignments of the Regional Connector project are not located within any of these zones.

3.3.2.5 Los Angeles Department of Water and Power (LADWP)

As the water supply authority for the project area, LADWP prepared an Urban Water Management Plan to promote effective management of its water resources. The plan outlines the strategies that will be used to meet the City's current and future water needs, within the following categories that may apply to the proposed project:

- Protect existing water supplies from contamination and clean up groundwater supplies; and,
- Maintain the structural integrity of the Los Angeles Aqueduct and in-City water distribution systems.

3.4 Standards of Significance

3.4.1 NEPA Guidance

The Federal Transit Administration (FTA) NEPA guidance acknowledges that mass transportation projects have the potential to impact water quality by increasing runoff or altering surface or sub-surface drainage patterns (FTA 2009). In order to address potential impacts, this environmental document discusses:

- Activities that could generate wastewater and the provisions for containing these possible pollutants; and
- The project's potential for increasing runoff, and measures that will be used to reduce runoff or prevent pollutants from entering stormwater systems.

3.4.2 CEQA Guidance

The following significance criteria were developed based on guidance from Appendix G of the state CEQA Guidelines (2009) and the City of Los Angeles CEQA Thresholds Guide (2006). The proposed project alternatives would be determined to result in a significant impact to hydrology and water quality if they would:

- Violate any applicable water quality standards or waste discharge requirements, including those defined in Section 13050 of the California Water Code (CWC);
- Affect the rate or change the direction of movement of existing groundwater contaminants, or expand the area affected by contaminants;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table;
- Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding; or
- Cause inundation by dam failure, seiche, tsunami, or mudflow.

3.4.3 City of Los Angeles Bureau of Engineering

Drainage and flood control structures and improvements in the City of Los Angeles are subject to review and approval by the City of Los Angeles Bureau of Engineering. The City uses a 50-year design storm for flood control design purposes, which is a predicted storm event that is considered to be conservative. A potential impact from the project alternatives would be considered to be significant if flooding during the 50-year design storm event would have the potential to harm people or damage property or sensitive biological resources.

3.5 Evaluation Methodology

In order to determine alternative-specific impacts to hydrology and water quality, existing data on hydrology, drainage patterns, water quality, and flooding hazards was evaluated. Existing water quality conditions and identified beneficial uses in the watershed were assessed. Other issues considered include impacts to aquifer recharge, and possible groundwater contamination resulting from operation of the proposed alternatives.

Construction and operation phases of the proposed project were analyzed for compliance with applicable regulations that function to maintain and improve current water quality conditions. Construction and operation activities were also assessed in order to determine their possible impact on existing drainage patterns and the exposure of people and/or property to water-related hazards.

To determine potential environmental impacts, regulatory requirements and laws were reviewed at the federal, state, and local level. The Clean Water Act (CWA), regulated through the United States Environmental Protection Agency (USEPA), provides the legal framework for several water quality regulations that are important in this analysis. In California, the USEPA has delegated responsibility of the primary regulations to the state. Applicable regulations would include:

- The National Flood Insurance Act through examination of the most current FEMA issued Flood Insurance Rate Maps (FIRMs);
- The National Pollutant Discharge Elimination System (NPDES) General Construction Permit (issued by the State Water Resources Control Board (SWRCB));
- The Los Angeles County Municipal Stormwater Discharge Permit issued by the Los Angeles Regional Water Quality Control Board (LARWQCB), and the Standard Urban Stormwater Management Plan (SUSMP);
- The LARWQCB Basin Plan, the California Toxics Rule, the California Nonpoint Source Pollution Control Plan, and the State Antidegradation Policy.

Two NPDES permits that pertain to proposed project alternatives are the NPDES General Industrial Permit and the General Construction Permit. Each of the alternatives was analyzed for potential construction-related surface water sedimentation generated by erosion and runoff from proposed staging areas and for potential increases in impervious surface area and associated potential increases in post-construction stormwater runoff volumes.

In the case that a potentially significant impact would be anticipated, proposed mitigation measures were developed consistent with NPDES permit regulations.

Hydrology and water quality impacts are analyzed for direct, indirect, and cumulative impacts. Cumulative impacts refer to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts. Cumulative effects include both direct and indirect effects as well as past and reasonably foreseeable future actions in combination with the actions of other projects. Potential cumulative impacts to water resources are discussed in terms of their potential severity as well as the likelihood of their occurrence. Based in part on guidance from the Council on Environmental Quality

(CEQ) for the analysis of the significance of cumulative impacts, the same standards used to measure direct and indirect impacts will apply to the analysis of cumulative impacts.

In addition, the City of Los Angeles CEQA Guide (2006) describes appropriate considerations for cumulative impact analysis methodology for water resources. The city's guidelines rely on the same impact assessment methodology and standards of significance as those that are used to measure potential direct and indirect impacts to water resources. The guide states that related projects located in the same defined resource area should be analyzed for any potential combined effect. The specific standards that were used to measure the significance of a potential impact are described in Section 3.4.

4.0 AFFECTED ENVIRONMENT

The proposed alternatives are located in the Los Angeles River Watershed Management Area (WMA). The Los Angeles River Watershed covers an area of over 834 square miles from the eastern portions of the Santa Monica Mountains, Simi Hills, and the Santa Susana Mountains in the west to the San Gabriel Mountains in the east. While the upper portion of the watershed is covered by forest and open space, approximately 474 square miles of the watershed is highly developed with commercial, industrial, and residential uses.

4.1 Municipal Water Supply

The Los Angeles Department of Water and Power (LADWP) is responsible for supplying, treating, and distributing water for domestic and industrial uses in the project area. The City of Los Angeles obtains its water supply from local wells in the Los Angeles ground water basin, the Los Angeles aqueducts, and by purchasing water from the Metropolitan Water District (MWD) (City of Los Angeles Planning Department 1995). Water distributed by the MWD comes from the Colorado River and from the State Water Project. In addition to these sources, some wastewater within the LADWP service area is reclaimed for reuse for irrigation, industrial use, and groundwater recharge (Los Angeles Grand Avenue Authority 2006).

Groundwater is a major component of the water supply in the Los Angeles metropolitan area. Local groundwater resources provide about 15 percent of the total water supply. In drought years this number can be as large as 30 percent (City of Los Angeles 2005a). The city owns water rights in the Upper Los Angeles River Area groundwater basin in addition to the supply that comes from the Central and West Coast sub-basins of the Coastal Plain of Los Angeles Groundwater Basin (City of Los Angeles and USACE 2007). On average, about 86 percent of the groundwater supply comes from the Upper Los Angeles River Area groundwater basin (City of Los Angeles 2005a).

4.2 Surface Water Hydrology

4.2.1 Regional Surface Water Setting and Conditions

The Los Angeles River originates at the western end of the San Fernando Valley at the confluence of Arroyo Calabasas and Bell Creek. The six major tributaries along the river include Tujunga Wash, Burbank Western Storm Drain, Verdugo Wash, Arroyo Secco, Rio Hondo, and Compton Creek. The Rio Hondo is hydraulically connected to the San Gabriel River Watershed because flows from the San Gabriel River are routed to Whittier Narrows Reservoir and through the Rio Hondo during larger flood events (City of Los Angeles 2005a). The project area is considered to be located in the middle reach of the Los Angeles River basin (the reach between U.S. Highway 101 and the confluence with the Rio Hondo River). Figure 4-1 depicts a regional view of the project area in the Los Angeles River watershed.

The climate of the project area is mild with an average annual temperature of 74.9 degrees Fahrenheit and an average annual rainfall is 14.5 inches. However, rainfall amounts can vary significantly, sometimes exceeding 30 inches in an extreme wet year (City of Los Angeles 2005a). Nearly all precipitation occurs from December to March. Precipitation during the summer months is infrequent, and periods of no rain for several months are common (City of Los Angeles Bureau of Engineering 2001). Topography throughout the coastal plain area is generally defined by gradually sloping land from the foothills of the San Gabriel Mountains to the Pacific Ocean. Ground elevations range from 10,000 feet in the San Gabriel Mountains, to 330 feet near the Los Angeles River's confluence with the Arroyo Secco, to mean sea level at the mouth of the Los Angeles River.

The proposed project alternatives are located in the Los Angeles-San Gabriel Hydrologic Unit and more specifically within the Los Angeles River Watershed Management Area (Figure 4-1). Encompassing a total of 824 square miles, the Los Angeles River watershed is one of the largest watersheds in the region and one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by open space or forest areas including the area near the headwaters in the Santa Monica, Santa Susana, and San Gabriel Mountains. The remainder of the watershed is highly developed (LARWQCB 2007). Table 4-1 summarizes major land use patterns in the Los Angeles River Watershed and Figure 4-2 shows this information graphically. In addition to the Los Angeles River in the vicinity of the proposed project, other surface water bodies consist of two small lakes located more than a mile from the vicinity of the proposed alignments.

4.2.2 Local Surface Water Setting and Conditions

The proposed project alignment encompasses an area of approximately 1,200 acres in the central downtown area of Los Angeles. No surface water bodies are located directly in the project area. The closest surface water feature is the Los Angeles River which runs approximately 0.5 miles east of Alameda Street, which is near the project area's eastern boundary. Land use along this part of the river is comprised of industrial, residential, and commercial, including major refineries and petroleum products storage facilities, major freeways, and rail lines (LARWQCB 2007). Due to the impervious surfaces related to development in the project area, surface water runoff and peak runoff rates have increased. Another reason for the increase in peak runoff rates in the coastal plain areas stems from the elimination of natural ponding areas and improved hydraulic efficiency of water carriers such as streets and storm drains systems.

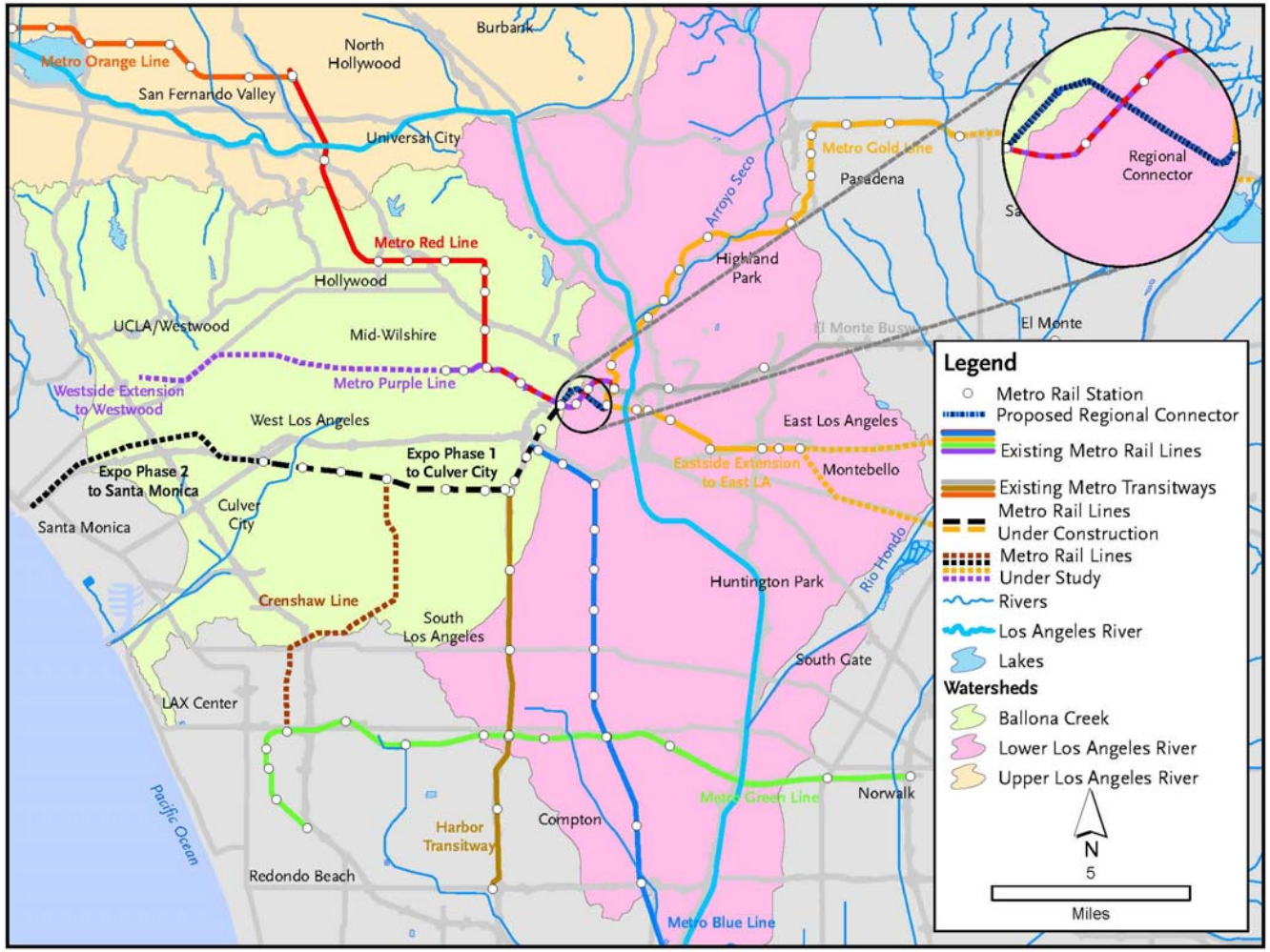

Figure 4-1. Regional View of the Los Angeles River Watershed

Table 4-1. Land Use Summary in the Los Angeles River Watershed Management Area (WMA)	
Land Use Type	**Land Use Areas (acres)**
Commercial	18,500
Industrial	12,500
Multifamily Housing	13,750
Single-Family (high, mid, and low-density	83,530
Transportation/Utilities/Mixed	14,800
Water	400
Open Space/Agriculture	41,500
Other	20
Total (in acres)	**185,000**

Source: City of Los Angeles 2005b

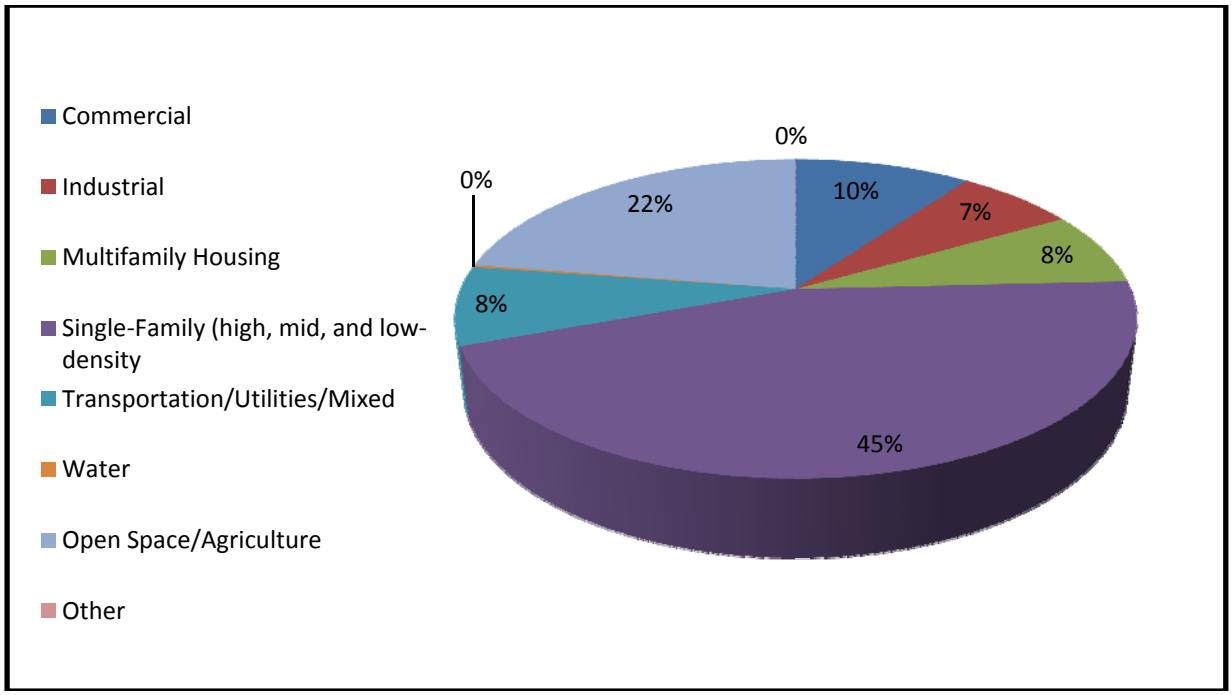

Figure 4-2. Land Use in the Los Angeles River Watershed Management Area

4.3 Groundwater

The Los Angeles Coastal Plain Groundwater Basins underlie the project area. These groundwater basins are incorporated into the Coastal Plain Hydrographic Subunit. The Coastal Plain Hydrographic Subunit contains the Central, West Coast, Santa Monica, and Hollywood Basins. The Central Sub-basin, one of the most important basins in the hydrographic subunit, directly underlies the project area (City of Los Angeles Planning Department 1995). The Central Basin extends over much of the Coastal Plain and holds most of its groundwater. The basin underlies the service areas of the Metropolitan Water District member agencies, the Central Basin Municipal Water District (Central Basin MWD), West Basin Municipal Water District (West Basin MWD), the City of Compton, the City of Los Angeles, and the City of Long Beach (MWD of Southern California 2007). Total water storage in the basin is 13.8 million acre feet and the natural safe yield is 125,805 acre feet per year. The depth of the Central Basin is between 1,600 and 2,200 feet (MWD of Southern California 2007). The Central Basin is further divided into the Los Angeles Forebay, the Montebello Forebay, and the Whittier and Central Basin Pressure Areas. The proposed project is located within the Los Angeles Forebay Area.

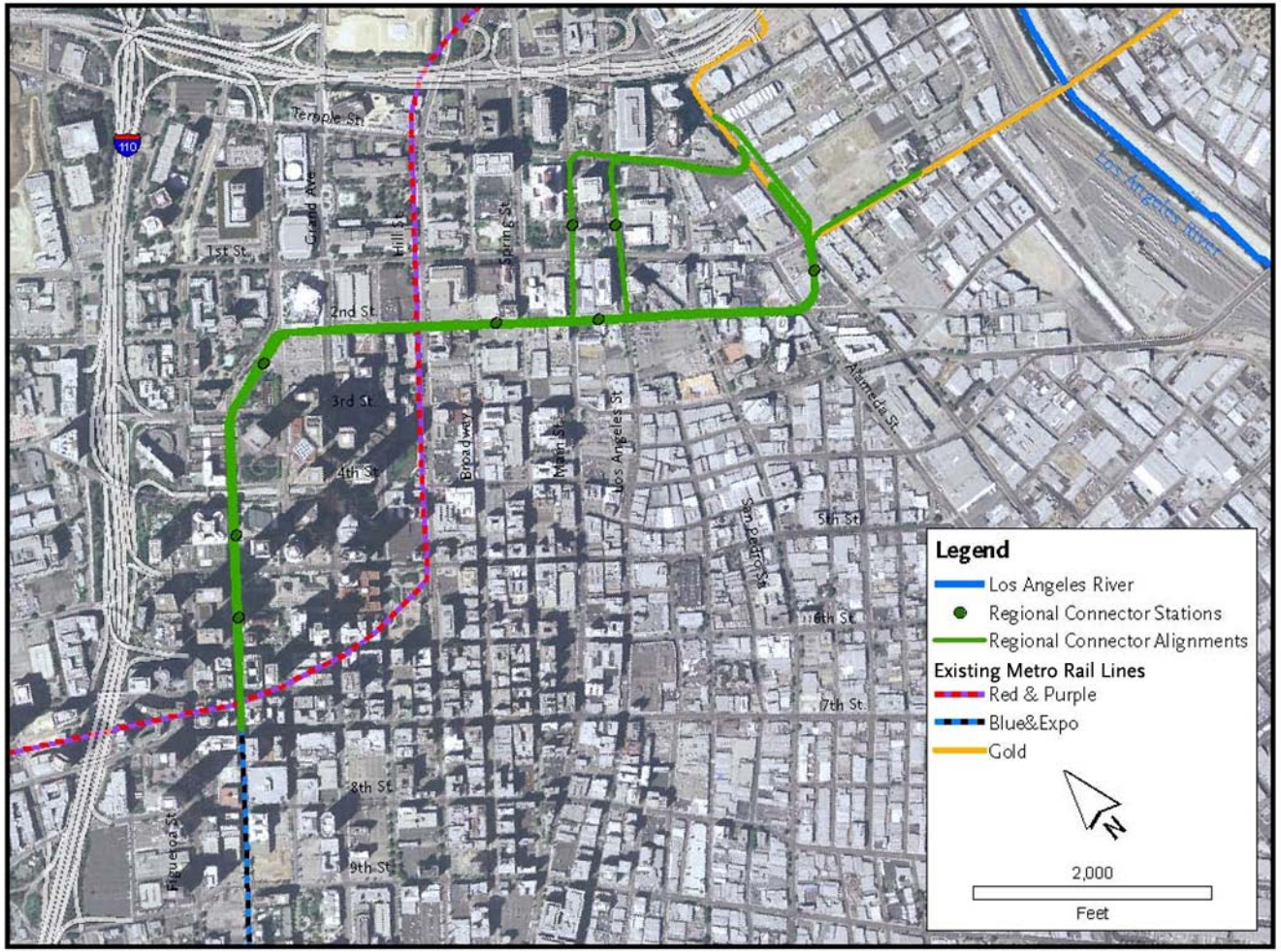

Figure 4-3. Location of the Los Angeles River Relative to the Project Location

Groundwater resources are replenished in the Central Basin through surface and subsurface flow and by direct percolation of precipitation, stream flow, and applied water in the forebay areas (DWR 2004). Natural replenishment of groundwater happens in the forebay areas where permeable sediment is exposed at ground surface (DWR 2004). For the Central Sub-basin, this takes place largely in the Whittier Narrows area near the Rio Hondo, east of the project area by approximately 10 miles. Percolation and groundwater replenishment in the Los Angeles Forebay is limited due to the large amount of paving and urban development throughout the City of Los Angeles (DWR 2004).

The Los Angeles Forebay Area extends generally in a fan pattern around the Los Angeles River. The project area is underlain by the more shallow aquifers of the Lakewood Formation (including the Semiperched, the Gaspur, the Exposition, the Gardena, and the Gage aquifers). The main source of potable groundwater in the Central Basin is from the deeper aquifers of the San Pedro Formation (including the Lynwood, Silverado and Sunnyside Aquifers). The shallower aquifers locally produce smaller volumes of potable water. With water bearing units ranging in thickness from up to 180 feet (Semiperched and Gaspur aquifers) to up to 280 feet (Lakewood Formation), these shallow aquifers extend to depths of 100 feet above mean sea level (msl) to almost 600 feet below msl (800 feet below ground surface). The deeper water bearing units of the San Pedro Formation are up to 800 feet thick and extend up to 2,200 feet below msl. In the Forebay Area, many of the aquifers merge and allow for direct recharge into the deeper aquifers (MWD of Southern California 2007). As described above, land use in the vicinity of the proposed project is highly impervious; therefore, recharge to groundwater in this area is minimal. Historically, Central Basin water levels ranged from a high of about 160 feet above msl in the northeast portion of the basin to a low of about 90 feet below msl in the Long Beach area.

Exploratory borings in the vicinity of the proposed alternatives have discovered groundwater along Flower Street between 7th and 2nd Streets at depths ranging from approximately 15 to 35 feet below ground surface. Other borings made adjacent to Flower Street between 2nd and 5th Streets discovered groundwater at depths between approximately 18 to 27 feet below the ground surface. In the area of Hill and Alameda Streets, borings reported groundwater seepage at depths between approximately 14 to 36 feet (Metro 2008). From these preliminary borings, it appears that groundwater is perched on the underlying San Fernando formation bedrock. Perched groundwater is groundwater that is separated from the water table and is often formed in response to water that collects during rain events or is in the process of being recharged by percolation from nearby surface water or other perched water zones.

In addition to setting beneficial uses for inland surface water resources such as the Los Angeles River, the LARWQCB sets beneficial uses for groundwater in the Central Basin. Designated beneficial uses consist of both municipal and domestic supplies as well as agricultural and industrial uses (LARWQCB 1995). Contamination in the Central Basin limits

the uses of groundwater from the basin (City of Los Angeles Planning Department 1995). Groundwater quality in the project area is described in more detail in Section 4.7.2.

4.4 Drainage

The project area is part of the Los Angeles River Basin, which includes the coastal areas of Los Angeles County south of the divide of the San Gabriel Mountains and Santa Susana Mountains, plus a small part of the coastal portion of Ventura County south of the divide of the Santa Monica Mountains (City of Los Angeles Planning Department 1995).

For planning purposes, the City of Los Angeles divides the Los Angeles River Basin into three drainage areas: the Upper Los Angeles River Area, the Santa Monica Bay area, and the Central area. The three major rivers that drain the basin include the Los Angeles River, the Rio Hondo, and the San Gabriel River. The Los Angeles River is the closest surface water feature to the project area. This river drains the San Fernando Valley, flowing southward through the Coastal Plain where it is joined by the Rio Hondo 12 miles upstream from the Pacific Ocean (City of Los Angeles Planning Department 1995). Figure 4-4 shows the drainage pattern of these surface water resources in the proximity of the project area.

Drainage in the immediate project area generally flows southeast towards the Los Angeles River. Storm drain pipes along the backbone of the project area range in size from 12 to 84 inches in diameter (CDM 2009). Along Alameda Street, pipes are generally 72 to 84 inches in diameter and flow south to Traction Avenue before turning east to the discharge point into the Los Angeles River. Storm drain pipes along Temple, North Main, and Los Angeles Streets are generally smaller ranging in size from 12 to 36 inches in diameter (CDM 2009). Drainage along 2nd Street flows directly southeast through a large box culvert to the intersection of Traction and Alameda. From the intersections of 2nd and Flower Streets and 4th and Flower Streets, drainage converges at the intersection of 3rd and Flower Streets before heading east to the Los Angeles River. From the intersection of 4th and Flower Streets, drainage flows south before discharging into the Los Angeles River east of the proposed project site.

Runoff rates and volumes have increased in the City of Los Angeles, and more specifically in the project area due to urbanization and increased impervious cover associated with large areas of asphalt, concrete, buildings, and other land uses which concentrate storm runoff. Due to previous flood control projects, almost all local streams and rivers (including the Los Angeles River) have been channelized and/or culverted in the urban areas and they now serve primarily as storm runoff channels.

Storm drains within the city are constructed and maintained by both the City and the Los Angeles County Flood Control District. The Los Angeles County Flood Control District constructs the major storm drains and open flood control channels, and the City constructs

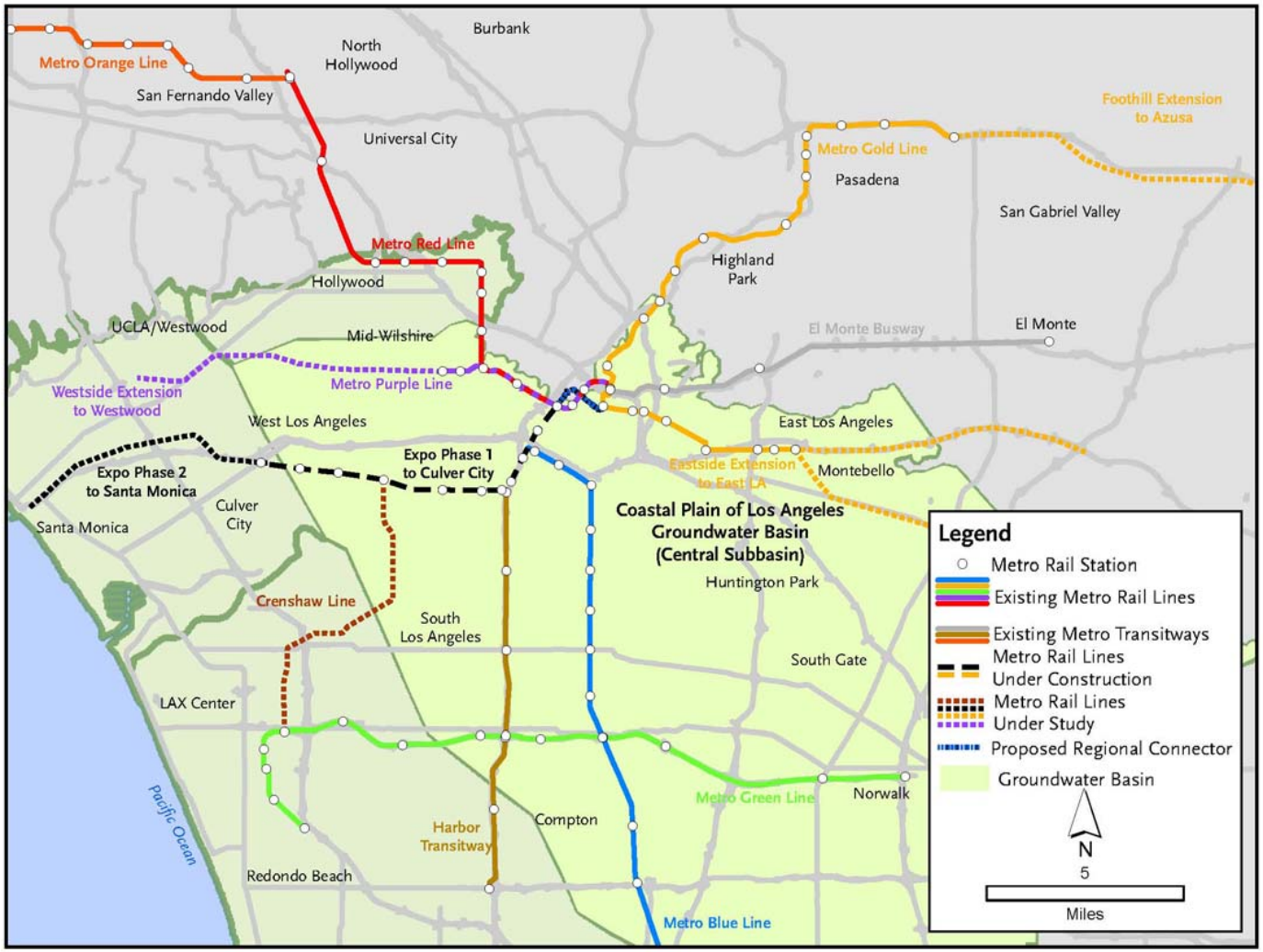

Figure 4-4. Groundwater Basin Boundaries Relative to the Project Area

local interconnecting tributary drains. The City's system is designed to convey storm flows from a ten-year storm event, while the County system is designed for a 50 year storm event.

4.5 Flooding

Historical flooding in the Los Angeles River basin has caused extensive property damage and loss of lives. Major storms include January 1914, 1934, 1943, and 1956, February 1978 and 1980, and March 1938 and 1983. As described above, the basin the project area is located in is considered the middle reach of the Los Angeles River. The channel capacity of the middle reach can safely convey the 100-year flow within the channel banks. In comparison, the upper reach of the river (located immediately upstream of the project area) is not certified to adequately handle the 100-year flood. However, as identified on current FEMA floodplain mapping, the 100-year flow in the river is fully contained in the river channel (see Figure 4-5).

The project area is outside of the 100-year and 500-year flood zones and thus would not be susceptible to these storm events as defined by FEMA (100-year and 500-year storms are defined as having a one percent and 0.2 percent chance, respectively, of occurring in any given year). The closest 100-year floodplain area is along the Los Angeles River between Broadway and Mission Road approximately 0.5 to 0.7 miles from the project area (City of Los Angeles 1996). The 100-year flood zone is used as the benchmark in administering the National Flood Insurance Program (NFIP), a voluntary program managed by FEMA through which communities enforce floodplain management ordinances in return for federally backed flood insurance (City of Los Angeles Planning Department 1995).

Flooding impacts are generated when development is placed in floodplain areas. Figure 4-5 shows the location of the proposed Regional Connector alignments located in flood zone X, where there is no flood hazard. Since the project area is not in a floodplain, potential floodplain impacts do not apply to the analysis of the alternatives.

4.6 Inundation

Inundation is defined as flooding related to earthquake-induced failure of up-gradient dams, flood control facilities, or other water retaining structures. Multiple flood control facilities are located in the San Fernando Valley portion of the Los Angeles River watershed. Failure of these flood control mechanisms would potentially cause inundation in the vicinity of the proposed alternatives. A limited portion of the eastern section of the proposed build alternatives is at the edge of a potential inundation area (near the intersection of Alameda Street with both Temple and 1st Streets) (City of Los Angeles 1996). However, the majority of the length of the build alternatives is not located in an area mapped to have the potential to be susceptible to this type of flooding.

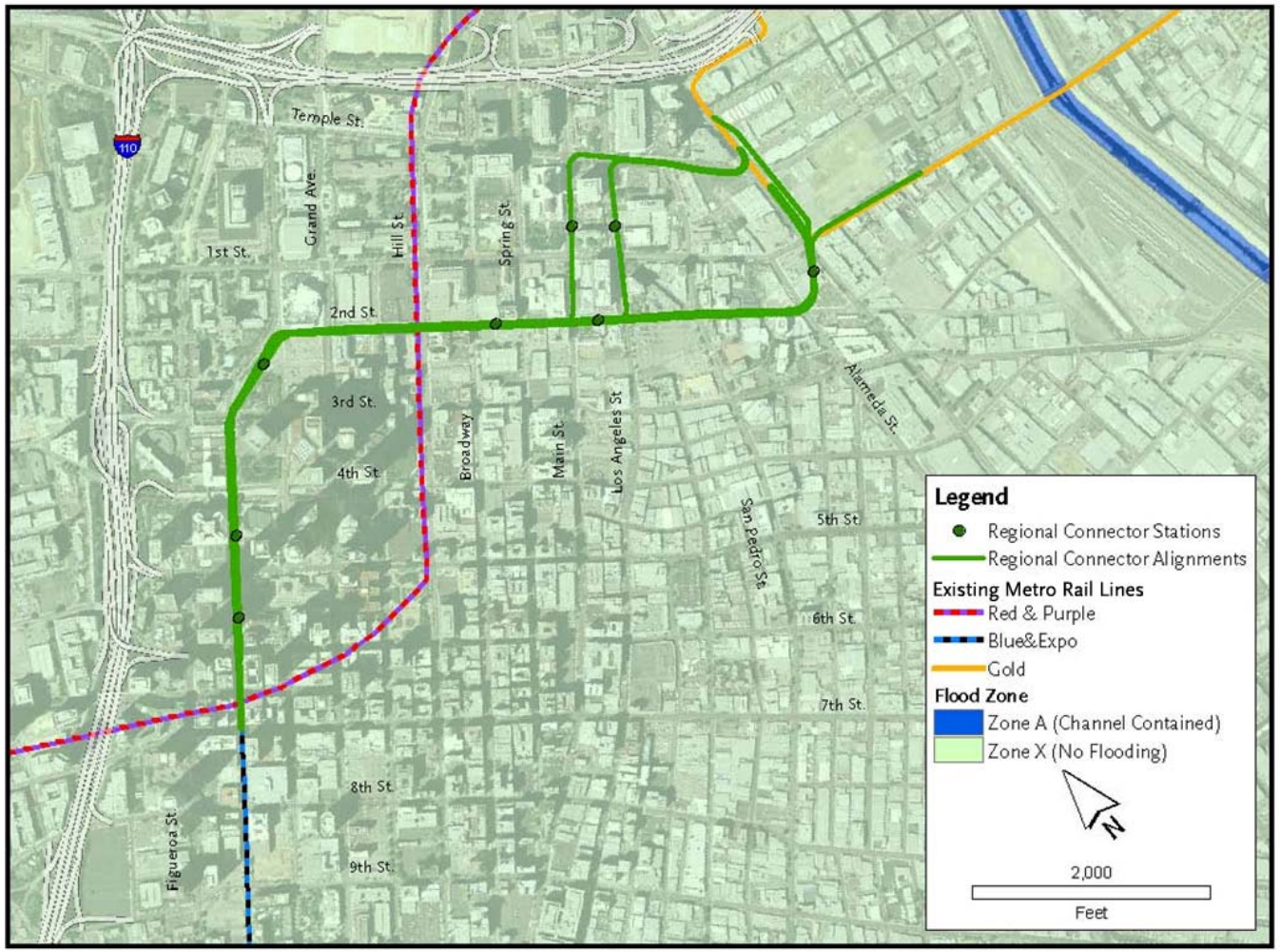

Figure 4-5.The 100-year Flood Zone Near the Proposed Project

Earthquake activity can also cause large waves to form in enclosed bodies of water. Known as seiches, these waves have the potential to cause inundation. Along the same lines, tsunamis are tidal waves generated in large bodies of water by fault displacement or major ground movement. The proposed project alignments are located over a mile from the nearest enclosed water bodies and more than 10 miles from the ocean. Therefore, the alternatives are not located within areas potentially impacted by seiches or tsunamis. The Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum also addresses potential impacts from seiche and tsunami-related flooding.

4.7 Water Quality

4.7.1 Surface Water

Daily urban runoff from the project area has negative impacts to surface water quality. Runoff washes residues from the land, including deposits from vehicles, pet waste, pesticides, and street litter into the storm drain system. The Basin Plan for the Los Angeles River watershed lists the following beneficial uses for the river (LARWQCB 1995):

- Groundwater Recharge: Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
- Water Contact Recreation (REC-1 and REC-2): Uses of water for recreational activities involving both body contact with water (REC-1) and no body contact with water (REC-2). These uses include, but are not limited to, swimming, wading, and boating.
- Warm Freshwater Habitat: Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Water bodies not meeting the beneficial uses of state water quality standards are placed on the 303(d) List of Water Quality Limited Segments and states are required to develop TMDLs for the pollutants causing the impairment.

The Los Angeles River in the project area is listed on the LARWQCB's 2008 CWA Section 303(d) list of impaired water bodies. Total Maximum Daily Loads (TMDLs) have been developed for trash, metals, and nitrogen compounds. In addition to the impact trash has on aesthetics, its presence inhibits plant growth and it can be ingested by or entangle wildlife (City of Los Angeles and USACE 2007).

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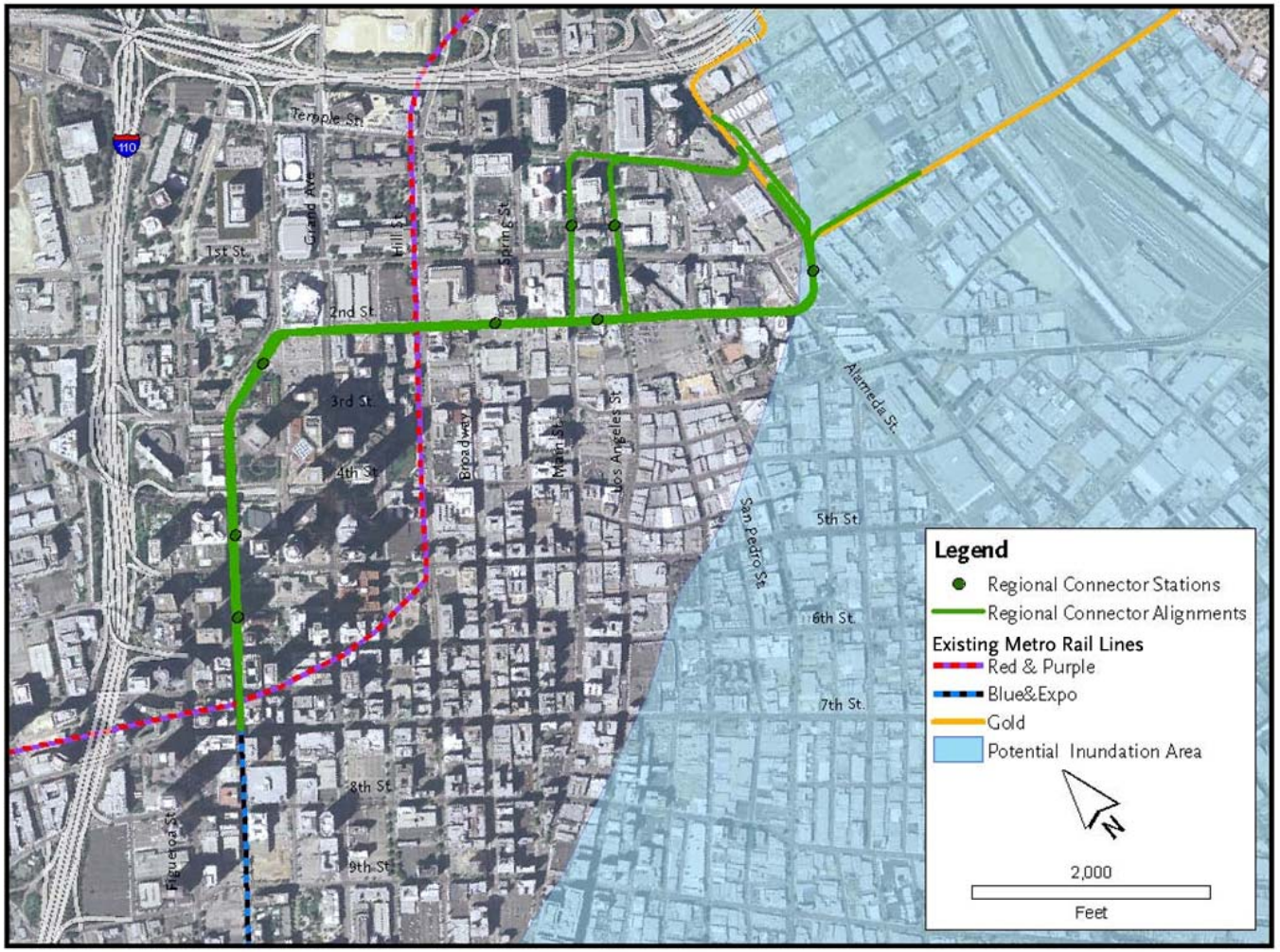

Figure 4-6. Potential Inundation Areas Relative to the Project Area

Table 4-2 summarizes the pollutants causing impairment in the reach of the Los Angeles River through the project area, the TMDL requirement status, and the associated TMDL completion and approval dates.

Table 4-2. 303(d) List of Pollutants Requiring TMDLs, Los Angeles River Reach 3, Downtown Los Angeles

Pollutant	TMDL Requirement Status	Date USEPA Approved TMDL
Ammonia	B[1]	3/18/2004
Copper	B	12/22/2005
Lead	B	12/22/2005
Nutrients (Algae)	B	3/18/2004
Trash	B	7/24/2008

Source: LARWQCB 2008
Notes: [1] B = Pollutant being addressed by USEPA approved TMDL.

Water quality monitoring along the urbanized section of the Los Angeles River is conducted by the Los Angeles County Department of Public Works (LACDPW) and reported in their annual Stormwater Monitoring Reports. As described in the 2007-2008 report, the County monitors water quality in the river at the existing stream gage station located in the City of Long Beach (LACDPW 2008).

Findings from the County's most recent water quality report describe that the total runoff volume and pollutant loading at the Los Angeles River monitoring station was usually higher than at other monitoring stations in the county (LACDPW 2008). However, this is likely due to the fact that the Los Angeles River has approximately two to twenty-five times the surface area of other watersheds, thus creating more potential for surface runoff pollution.

4.7.2 Groundwater

Due to the long history of commercial and industrial activity in the project area, groundwater contaminants include sulfate, total dissolved solids, iron, chloride, and other types of industrial wastes (City of Los Angeles Planning Department 1995). Wells are sampled by the LACDPW on an annual basis for major minerals, total dissolved solids, electrical conductivity, pH, phosphate, iron, manganese, fluoride, and boron (City of Los Angeles Planning Department 1995). In addition, the Water Replenishment District (WRD) of Southern California and the U.S. Geological Survey (USGS) conduct regional groundwater quality

monitoring in the Central Sub-basin. The WRD's monitoring for Water Year 2006-2007 found that groundwater in the main producing aquifers of the basin is of good quality; however volatile organic compounds (VOCs) (primarily perchloroethylene (PCE) and trichloroethylene (TCE)) are present in the Central Basin and have impacted many production wells (WRD 2008). The VOCs are at low concentrations and are below enforceable regulatory levels.

The Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum describes specific local causes and sources of groundwater contamination within 0.25 mile of the proposed alignments as well as some that are located directly along the alignments for the build alternatives.

Table 4-3 summarizes water quality in public supply wells in the Coastal Plain of Los Angeles Central Sub-basin as monitored by the WRD of Southern California.

Table 4-3. Constituents of Concern in the Central Basin

Constituent	Units	Range Detected in Sampling
Total Dissolved Solids	mg/L	170 to 2,770 Average: 500
Volatile Organic Compounds (TCE and PCE[1])	µg/L	Not detected to 32 for TCE Not detected to 8.3 for PCE
Perchlorate	µg/L	Less than 6
Nitrate	mg/L	Not detected to 12
Iron and manganese	mg/L	Not detected to 8.4 for iron Not detected to 1.3 for manganese
Chromium	µg/L	Not Available

Source: WRD 2008
Notes: TCE = trichloroethylene; PCE = perchloroethylene

5.0 IMPACTS

The proposed project is located in downtown Los Angeles, which is an urban environment, served by existing drainage infrastructure and comprised predominantly of impervious surfaces. This section addresses potential impacts to ground and surface water resources, drainage, flooding, and public safety issues that could stem from construction and operation of the proposed alternatives.

5.1 No Build Alternative

Under the No Build Alternative, there would be no transportation improvements beyond those listed in Metro's Long Range Transportation Plan (LRTP). By the projection year 2035, it is expected that the Metro Expo Line to Santa Monica, the Metro Gold Line to Azusa, the Metro Gold Line to I-605, the Metro Purple Line to Westwood, and the Metro Crenshaw Line would be operational. While it is anticipated that bus service in the project area would predominantly remain the same, there may be some service adjustments in order to provide connections to the Metro Expo Line and Metro Gold Line service areas. The No Build Alternative would not involve any new construction of rail lines or other transportation improvements within the Regional Connector corridor.

5.1.1 Construction

Since there would be no new construction under the No Build Alternative, no impacts would be expected in relation to erosion, increased runoff, or construction dewatering and disposal of contaminated groundwater.

There would be no construction of new tracks or stations under the No Build Alternative, and therefore, there would not be any new structures placed in the 100-year flood hazard area. The proposed bus improvements under the No Build Alternative would not affect flood flows. Therefore, the No Build Alternative would result in no impact associated with flooding hazards.

5.1.2 Operation

The existing project area is urbanized and is mostly covered by impervious surfaces. The No Build Alternative would not change these conditions and would not impact groundwater resources or recharge. While there would be some service adjustments under the No Build Alternative, these would result in negligible increases in the buildup of typical runoff contaminants that collect on streets (i.e., oil, grease, and metals). There would be no increase in pollutant loadings that would percolate to groundwater. Overall, the No Build Alternative would not increase groundwater supply withdrawals, would not alter groundwater recharge, would not affect groundwater quality, and would not increase flood flows. Operation of the No Build Alternative would result in no direct impacts to water quality or

hydrology. However, there would be less potential for the transit system to replace automobile trips and associated potential reduction in roadway pollutants.

5.1.3 Cumulative

There would be no cumulative impacts from the No Build Alternative.

5.2 Transportation System Management (TSM) Alternative

Similar to the No Build Alternative, this alternative is focused on enhancements to and/or restructuring of the existing transit service in the project area. In addition to the provisions in Metro's LRTP, two new shuttle bus routes would operate to link the 7th Street/Metro Center Station to Union Station. The TSM Alternative would involve no construction of additional tracks or stations outside of the projects already approved in the LRTP. The creation of peak hour bus-only lanes would not require any new construction since this would potentially be accomplished by restricting parking on streets that do not already have dedicated all-day bus lanes.

5.2.1 Construction

There may be some rebuilding of existing drainage structures at some bus shelter locations where reconstruction of the bus shelter and bus landing might be required. This is particularly likely to occur where a new concrete landing the length of the bus would be constructed. The minor physical modifications associated with the TSM Alternative would result in no impact to the existing drainage infrastructure or the direction of drainage through the project area.

There would be no construction-related erosion or stormwater runoff and there would be no need to dispose of contaminated groundwater potentially encountered during dewatering activities. The TSM Alternative would result in no impacts to water quality, hydrology, and/or drainage.

5.2.2 Operations

Proposed transportation improvements under the TSM Alternative would be accomplished through minor physical modifications such as upgraded bus stops and new shuttle bus routes. Therefore, operation of the TSM Alternative would result in negligible increases in the buildup of typical runoff contaminants that collect on streets (i.e., oil, grease, and metals). There would be no increase in pollutant loadings that would percolate to groundwater. The TSM Alternative would not increase groundwater supply withdrawals, would not alter groundwater recharge or contribute to groundwater contamination, would not significantly change the local storm sewer drainage pattern, and would not increase flood flows. Operation of the TSM Alternative would result in no impact to water quality or hydrology.

The proposed express shuttle bus lines and new bus stops would not affect flood flows; therefore, the TSM Alternative would result in no impact associated with flooding hazards.

5.2.3 Cumulative

Since there would be no direct or indirect impacts to water resources and hydrology, there would be no cumulative impacts under the TSM Alternative.

5.3 At-Grade Emphasis LRT Alternative

This alternative includes both underground and at-grade configurations with approximately 46 percent of the route located underground. Under the At-Grade Emphasis LRT Alternative, there would be a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple Street. This alternative would involve the construction of at least three new stations.

5.3.1 Construction

5.3.1.1 Groundwater Impacts

The existing project area consists predominantly of impervious surfaces. Therefore, the project area does not currently allow for direct percolation within the Central Los Angeles Basin and there would be no direct or indirect impacts on groundwater levels for water supplies used for consumption by municipal, industrial and irrigation purposes.

While approximately half of the At-Grade Emphasis LRT Alternative would be constructed above ground and would not require as much excavation and tunneling as the underground alternatives (analyzed below), there would still be a potential need for dewatering if groundwater is encountered during construction activities. Stations and tunneling would occur between 50 and 80 feet below ground. As described in Section 4.3, recent borings showed groundwater depths of 15 to 35 feet below ground along Flower Street in the vicinity of the proposed At-Grade Emphasis LRT Alternative alignment. Due to the presence of relatively shallow groundwater, it is likely that groundwater would be encountered during tunneling and excavation activities.

Additionally, as described in Section 4.7.2, groundwater in the Central Basin as well as locally in the vicinity of the proposed alignment is contaminated with pollutants common to urban industrial and commercial activities; therefore, groundwater encountered during construction could be contaminated. Given the likelihood of encountering contaminated groundwater, compliance with federal, state, and local laws and regulations (as described in the Geotechnical/Subsurface/ Seismic/ Hazardous Materials Technical Memorandum) would be required during construction activities. A dewatering permit from the LARWQCB would be necessary and any contaminated groundwater would be properly treated prior to being discharged. Uncontaminated groundwater that is collected during construction dewatering

can be treated and pumped back into the groundwater table, pumped to the sewer or storm drain system, or used onsite for dust control purposes. Additional data gathering and site specific groundwater investigation may be necessary to further determine the extent and location of groundwater contaminants as well as potential impacts (CDM 2009).

Excavation activities also have the potential to create a preferential pathway for the spreading of contaminated groundwater in the groundwater basin. This impact could be mitigated by the use of impermeable concrete grouting materials which would reduce contaminant migration. Further mitigation measures to protect against potential environmental and social impacts from encountering contaminated groundwater are also described in the Geotechnical/Subsurface/ Seismic/ Hazardous Materials Technical Memorandum. Potential impacts on groundwater quality would be less than significant with mitigation.

In general, construction-related tunnel excavation dewatering impacts have the potential to result in over-withdrawal of groundwater resources. However, as previously described, groundwater encountered along the project alignment is perched (e.g., separated from the aquifers of the San Fernando Formation); therefore, potential dewatering would not impact groundwater levels in the aquifers used for municipal and industrial water uses.

5.3.1.2 Drainage Impacts

Under the At-Grade Emphasis LRT Alternative, there is a potential for conflicts with the existing drainage system along 2nd Street between Grand Avenue and Olive Street where the alignment would be constructed through the 2nd Street Tunnel. Along the intersection of 2nd Street and Grand Avenue, it is anticipated that there would be minimal potential conflicts with the current location of the drainage system. The existing storm drain system would also potentially conflict with the proposed construction of the proposed station at Flower/4th/5th Streets. Overall however, construction of the At-Grade Emphasis LRT Alternative would be expected to result in minimal impacts and need for relocation of the current drainage system. In the case where construction activities would result in the need to relocate certain drainage infrastructure, temporary lines would be installed during the construction period. Construction of the At-Grade Emphasis LRT Alternative would have no significant impact on the overall drainage pattern in the project area.

5.3.1.3 Flooding Impacts

The proposed alignment is outside of the 100-year flood hazard area; therefore, construction and operation of the At-Grade Emphasis LRT Alternative would not alter any existing flood zones. No fill would be placed in and no encroachment would be made to an existing floodplain. As described in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum, the majority of the At-Grade Emphasis LRT Alternative alignment is not located in an Inundation Hazard Area. There is also no potential for seiches and tsunamis as there are no lakes or reservoirs in the vicinity and the ocean is over 10 miles from

the proposed alignment. The alternative is located in an urbanized area comprised mainly of impervious surfaces and has an existing extensive drainage infrastructure. Construction of the At-Grade Emphasis LRT Alternative would not increase the risk of flooding.

There would be no significant impacts from construction on the natural and beneficial floodplain values in the vicinity of the proposed project. In addition, the at-grade alignment would be consistent with local and regional land use and transportation planning and, therefore, would not result in incompatible floodplain development. Overall, implementation of the At-Grade Emphasis LRT Alternative would not result in flooding impacts.

5.3.1.4 Water Quality Impacts

Water quality impacts could potentially result from construction of the At-Grade Emphasis LRT Alternative. Construction activities have the potential to increase erosion and sedimentation around proposed construction and staging areas. Grading activities associated with construction could potentially result in a temporary increase in the amount of suspended solids running off construction sites. In the case of a storm event, construction site runoff could result in sheet erosion of exposed soil. If not adequately controlled, contaminated water runoff from these areas has the potential to degrade surface water quality. While the introduction of new impervious surfaces resulting from the construction of the At-Grade Emphasis LRT Alternative has the potential to increase the concentration and accumulation of pollutants associated with transit projects (e.g. oil and grease), the project area is already highly urbanized. Proposed construction would take place on already impervious land and therefore would not significantly increase the amount or peak flow of runoff entering the storm drain system.

In order to reduce any potential impacts related to stormwater runoff, a Notice of Intent (NOI) and a SWPPP would be prepared in order to comply with the SWRCB's NPDES Construction General Permit. Implementation of the SWPPP would ensure that the applicable provisions of Sections 301 and 402 of the CWA and Chapter 6 Article 4.4, Stormwater and Urban Runoff Pollution Control from the Los Angeles Municipal Code, would be met and pollutant discharges would be properly controlled. Additionally, a SUSMP would be prepared and implemented in accordance with the Los Angeles Municipal Code, to ensure that stormwater runoff is managed for water quality concerns through implementation of appropriate BMPs. Prior to issuance of any grading or building permits, the County and/or Stormwater Division of the Bureau of Sanitation must approve the SUSMP. Applicable BMPs include;

- Oil/water separators;
- Catch basin inserts;
- Storm drain inserts;

- Media filtration; and/or
- Catch basin screens.

Construction Stormwater Management Controls: These controls would function to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, solvents) with stormwater. The SWPPP would specify properly designed, centralized storage areas that would keep these materials out of the rain. Spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) would be kept at the work site when handling materials. It is important that site supervisors and workers have knowledge of the SWPPP. Therefore, site supervisors would conduct regular meetings to discuss pollution prevention. The frequency of such meetings and the personnel required to attend would be specified in the SWPPP.

The SWPPP would also specify a monitoring program to be implemented by the construction site supervisor, and would include both dry and wet weather inspections. City personnel would also conduct regular inspections to ensure compliance with the SWPPP.

Erosion and Sediment Control: BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, water for dust control, perimeter silt fences, placement of straw wattles, and sediment basins. The potential for erosion is generally increased in the case that grading is performed during the rainy season, as disturbed soil can be exposed to rainfall and storm runoff. If grading activities must take place during the rainy season, the BMPs selected would focus on erosion control and keeping sediment in place. End-of-pipe sediment control measures (e.g., basins and traps) would be used as secondary measures. Entry and egress from construction sites would be carefully controlled to minimize off-site tracking of sediment. Additional sources of information regarding BMPs include the California Stormwater Municipal and Construction Activity BMP Handbooks.

The effect on water quality would be minor since the project area is already highly urbanized. Additionally, the amount of impervious surfaces and any potential added runoff would be small compared to the region as a whole. In order to ensure that surface water runoff would not have significant impacts on water quality, human health, or safety, appropriate measures would be taken to control runoff. Some examples of these include establishing an erosion control plan, ensuring the proper storage and handling of hazardous materials, and the periodic monitoring of the water quality of runoff leaving the site.

5.3.1.5 Groundwater Quality Impacts

Due to the predominance of impervious surfaces throughout the project area, there is minimal percolation to the underlying groundwater basins. Therefore, any potential increases in contaminated surface water runoff would have no significant impact on groundwater quality.

Tunneling during construction could potentially create a preferential pathway for any contaminated groundwater that is potentially encountered. This could cause the contamination to spread at higher rates than would normally occur without disruption by construction activity. This has the potential to result in an impact that would be managed to a less than significant level with the potential mitigation techniques described in Section 6.0.

5.3.2 Operation

5.3.2.1 Groundwater Impacts

Upon implementation of the At-Grade Emphasis LRT Alternative, conditions in the project area would be comparable to existing conditions, that is, the project area would continue to be developed largely with impervious surfaces. Although unlikely during the operation phase of the At-Grade Emphasis LRT Alternative, groundwater dewatering and subsequent discharge may occur. The tunnel and underground stations would be constructed to preclude gas leakage or groundwater intrusion into the tunnel using a technique similar to that used for the Metro Gold Line tunnels in Boyle Heights. This technique consists of installing a pre-cast concrete lining with rubber gaskets between the tunnel segments to prevent water and gas leakage into the tunnel. This method will avoid the leakage of water into the tunnels and stations. During operation, in the unlikely event that any water accumulates in the tunnel portions of the alignment, it would be pumped out by sump pumps and treated in accordance with applicable discharge permits before being discharged into the drainage system. Therefore, potential impacts to groundwater would be less than significant.

5.3.2.2 Water Quality Impacts

Operation of the At-Grade Emphasis LRT Alternative would likely decrease Vehicle Miles Traveled (VMT) of personal automobiles through the project area. An overall reduction in VMT could decrease the primary pollutants associated with all types of transportation operations such as heavy metals, solvents, and petroleum hydrocarbons. This would be a beneficial impact to surface water quality in the project area.

Indirect water quality impacts would stem from operation, over time, of the At-Grade Emphasis LRT Alternative. Indirect impacts potentially resulting from long-term operation of the At-Grade Emphasis LRT Alternative would be similar to direct impacts, but would occur later in time. Potential indirect impacts could be related to groundwater leaking into the tunnels and potential impacts to surface and groundwater quality. Indirect water quality impacts stemming from operation of the At-Grade Emphasis LRT Alternative would be less than significant.

Overall, water quality impacts associated with operation of the At-Grade Emphasis LRT Alternative would be less than significant or slightly beneficial.

5.3.3 Cumulative

Development of the At-Grade Emphasis LRT Alternative in combination with related renovation, new construction, and transportation projects identified in the vicinity of the proposed project could result in cumulative impacts to water quality. However, each of the concurrent projects would be subject to applicable water quality regulations and, thus, would be required to prepare a SWPPP for construction activities and to incorporate BMPs to control pollutant discharges. In addition, all the related projects would be required to operate in compliance with Chapter 13.29, Stormwater and Urban Runoff Pollution Prevention Control and SUSMP of the Los Angeles Municipal Code and to submit and implement a SUSMP. The SUSMP would contain design features and appropriate BMPs to reduce post-construction pollutants in stormwater discharges.

As described under existing conditions (Section 4), the project area within the Los Angeles River Watershed is covered by urban uses. The existing drainage system in the watershed consists of engineered storm channels and, therefore, would be expected to change little due to potential cumulative increases in stormwater runoff. It is not expected that any of the cumulative projects would result in a substantial change to the amount of impervious land cover in the project area, or a substantial alteration of the drainage systems. Since the amount of runoff generated in the project area would not be expected to significantly increase due to development of surrounding projects, substantial increases in erosion, siltation, flooding, or exceedance of the stormwater drainage system would not be expected.

Overall, construction and operation of the At-Grade Emphasis LRT Alternative would not contribute to significant cumulative water quality, hydrology, and/or drainage impacts.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would be underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets. Newly constructed light rail right of way would consist of a combination of underground double tracks running beneath Flower and 2nd Streets and at-grade double tracks at the northeast corner of the project area. Additionally, three new stations are proposed under this alternative.

5.4.1 Construction

5.4.1.1 Groundwater Impacts

The components for construction of the Underground Emphasis LRT Alternative are generally the same in relation to their potential impacts on groundwater as those described for the At-Grade Emphasis LRT Alternative. Given the existing impervious nature of the project area, there is minimal infiltration to groundwater under existing conditions. Implementation of the Underground Emphasis LRT Alternative would not significantly impact groundwater recharge.

Additionally, potential dewatering activities would not be expected to impact the quantity of groundwater used for consumption by municipal, industrial, or irrigation purposes.

As with the At-Grade Emphasis LRT Alternative, trenching and tunneling activities could lead to exposure of contaminated groundwater and the need to dewater and dispose of contaminated groundwater. The Geotechnical/Subsurface/Seismic/ Hazardous Materials Technical Memorandum analyzes potential impacts from encountering contaminated groundwater as well as mitigation measures that would be employed in order to ensure proper handling of contaminated materials. Compliance with federal, state, and local laws and regulations (as described in the Geotechnical/Subsurface/ Seismic/ Hazardous Materials Technical Memorandum) would be required during construction activities. A dewatering permit from the LARWQCB would be necessary and any contaminated groundwater would be properly treated prior to being discharged. Uncontaminated groundwater that is collected during construction dewatering can be treated and pumped back into the groundwater table, pumped to the sewer or storm drain system, or used onsite for dust control purposes.

Excavation activities also have the potential to create a preferential pathway for the spreading of contaminated groundwater in the groundwater basin. This impact could be mitigated by the use of impermeable concrete grouting materials which would reduce contaminant migration. Further mitigation measures to protect against potential environmental and social impacts from encountering contaminated groundwater are also described in the Geotechnical/Subsurface/ Seismic/ Hazardous Materials Technical Memorandum. Potential impacts on groundwater quality would be less than significant with mitigation.

In general, construction-related tunnel excavation dewatering impacts have the potential to result in over-withdrawal of groundwater resources. However, as previously described, groundwater encountered along the project alignment is perched (e.g., separated from the aquifers of the San Fernando Formation); therefore, potential dewatering would not impact groundwater levels in the aquifers used for municipal and industrial water uses.

5.4.1.2 Drainage Impacts

As described in the analysis of storm drain impacts under the At-Grade Emphasis LRT Alternative, there could be conflicts with the existing storm drain infrastructure along the proposed alignment. Similar impacts would be expected under the Underground Emphasis LRT Alternative. The main conflicts could occur along the pipe backbone along Flower and 2nd Streets. However, design measures would be implemented in order to address potential conflicts and there would be no significant impact to the capacity of the existing system or the overall direction of storm flows through the drainage infrastructure in the project area.

5.4.1.3 Flooding Impacts

Construction of the Underground Emphasis LRT Alternative would not occur in the 100- or 500-year floodplain areas as delineated by FEMA. Additionally, construction of this alternative would not impact any flood control structures in the Los Angeles River watershed. As described above in Section 4.6, the proposed alternatives are not located in an Inundation Hazard Area, or in an area with potential to be flooded by a seiche or tsunami. Overall, the proposed project area is urbanized and covered by impervious surfaces. Construction of the Underground Emphasis LRT Alternative would not increase the risk of flooding. Flooding and floodplain impacts would be less than significant.

5.4.1.4 Water Quality Impacts

Construction-related impacts from the Underground Emphasis LRT Alternative would be similar to those described for the At-Grade Emphasis LRT Alternative; the main difference would be the amount and intensity of construction activity that would take place. Construction-related activities including grading and excavation have the potential to result in water quality impacts due to increased erosion and sedimentation. Runoff during construction would be routed to the existing underground storm drain systems and/or lined channels, mitigating offsite erosion. In addition, applicable municipal NPDES permits and waste discharge requirements would be complied with in order to minimize potential impacts to water quality.

As described above in Section 5.3, the At-Grade Emphasis LRT Alternative, in order to comply with the Los Angeles Municipal NPDES permit and the SUSMP, a Stormwater Pollution Prevention Plan (SWPPP) including BMPs would be prepared which would reduce potential adverse effects to surface water quality from sedimentation during construction. The SWPPP would include specific measures to ensure that runoff from construction sites do not further impair the water quality of the Los Angeles River. These measures would be the same as those described in Section 5.3.

5.4.2 Operation

5.4.2.1 Groundwater Impacts

The tunnel and underground stations would be constructed to preclude gas leakage or groundwater intrusion into the tunnel using a technique similar to that used for the Metro Gold Line tunnels in Boyle Heights. This technique consists of installing a pre-cast concrete lining with rubber gaskets between the tunnel segments to prevent water and gas leakage into the tunnel and stations. In the unlikely event that groundwater accumulates in tunnels during operation, the water would be pumped out and treated to meet municipal standards before being discharged to the city's sewer system. Impacts to groundwater under the Underground Emphasis LRT Alternative would be less than significant.

5.4.2.2 Water Quality Impacts

Similar to the At-Grade Emphasis LRT Alternative, it is anticipated that the amount of impervious surfaces in the project area would remain equivalent to existing conditions. Therefore, operation of the Underground Emphasis LRT Alternative would not contribute to a substantial increase in stormwater runoff or degradation of existing water quality.

Implementation of the Underground Emphasis LRT Alternative would be expected to result in more daily transit trips than the No Build, TSM or At-Grade Emphasis LRT Alternatives, thereby reducing annual VMT of automobiles through the project area. Therefore, there would be less buildup of pollutant loads associated with automobile use such as oil, grease, and metals. Overall, water quality impacts associated with operation of the Underground Emphasis LRT Alternative would be less than significant or slightly beneficial.

5.4.3 Cumulative

Neither the proposed project nor any of the projects considered for cumulative impacts would be developed in active recharge areas; therefore, cumulative impacts to groundwater quality and quantity would be less than significant.

Increases in pollutant loading resulting from construction of the Underground Emphasis LRT Alternative, combined with potential impacts from the construction activity of renovation and new development projects in the vicinity of the project area could result in cumulative increases in the amount of polluted stormwater runoff as well as cumulative impacts to water quality. Related projects that do not require the construction of new facilities would not have a direct physical effect on water resources in the project area. Proposed transportation projects in the area that would be expected to reduce traffic congestion or reduce VMT would be beneficial to water quality in the region since reductions in air emissions and accident-related roadway surface pollutants would reduce the level of water-borne pollutants that are able to migrate to surface and groundwater. Projects requiring the construction of new or expanded facilities would potentially have the greatest impact on water quality. Increases in surface parking areas and clearing and grading activities could increase surface water pollutants such as those related to increased automobile traffic and operation as well as construction-related erosion and sedimentation.

As described in Section 5.3.3, existing programs, procedures, and permits administered by the LARWQCB would be required and adhered to for the Regional Connector project as well as any of the other related projects. Therefore, potential cumulative construction and operation-related impacts associated with water quality would be less than significant. Potential cumulative impacts to pollutant loads and resulting water quality would be expected to be less under the Underground Emphasis LRT Alternative than under the No Build Alternative since the operation of light-rail vehicles would not be expected to cause or

contribute to pollutants commonly associated with non-light rail transportation such as oil, grease, and metals.

To the extent that the proposed project and projects considered for cumulative impacts would be built within already urbanized areas, there would be minimal increases in impervious surfaces and cumulative impacts to water quality would be less than significant. Additionally, potential impacts would be minimized by the same measures as described under Section 5.3.3 (described in further detail in Section 6.0).

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be identical to the Underground Emphasis LRT Alternative with the Broadway Station Option described above in Section 5.4 for all areas west of 2nd Street and Central Avenue. East of Central Avenue, this alternative includes an underground station just southwest of the intersection of 1st and Alameda Streets. In addition to this station, this alternative includes a new underground three-way junction. One set of tracks extend north from the junction and would continue underground under Temple Street and surface in the LADWP yard. The other set of tracks leaving the three-way junction would rise to street level to the east within East 1st Street in order to accommodate a new portal and connect to the existing Metro Gold Line tracks.

5.5.1 Construction

Potential impacts from construction to groundwater resources, floodplains, and water quality would be the same as those described for the Underground Emphasis LRT Alternative (Sections 5.4.1 and 5.4.2).

Potential impacts to stormwater drainage facilities could result from construction of this alternative. However, as described above in Section 5.4.1.2, design measures would address these potential conflicts. Overall, with appropriate mitigation there would be no significant impact to the capacity of the existing system or the overall direction of storm flows through the drainage infrastructure in the project area.

Construction of the underground station at 2nd Street and Central Avenue and new portions of track connecting to the underground three-way junction near the intersection of 1st and Alameda Streets at the connection point with the Metro Gold Line would be located in the potential inundation area (Figure 4-6). Construction would not affect flood control structures in the vicinity of the project area. Given the fact that this area near Alameda Street is currently fully urbanized and highly impervious, construction-related inundation impacts would be less than significant. Additionally, construction would comply with the City of Los Angeles' policies and regulations related to inundation hazards.

5.5.2 Operation

Potential impacts from operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same as those described above in Section 5.4.2.

5.5.3 Cumulative

Potential cumulative impacts would be the same as those described in Section 5.4.3.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

Similar to the Fully Underground LRT Alternative - Little Tokyo Variation 1, Little Tokyo Variation 2 would be identical to the Underground Emphasis LRT Alternative with the Broadway Station Option for all areas west of 2nd Street and Central Avenue. This alternative also includes a new underground station near 2nd Street and Central Avenue; however, under this alternative, the new station would have two underground levels, each with a single-track platform. This alternative would have a similar underground junction as that described for the Little Tokyo Variation 1; the main difference would be that the junction would have two underground levels.

5.6.1 Construction

Potential construction impacts would be the same as those described in Section 5.5.1.

In addition to construction of the proposed two-level underground 2nd Street/Central Avenue station, the Fully Underground LRT Alternative - Little Tokyo Variation 2 includes construction of a two-level underground junction to the northeast of the intersection of 1st and Alameda Streets. Potential construction-related impacts to inundation and stormwater drainage facilities would be the same as those described for the Little Tokyo Variation 1 (Section 5.5.1).

5.6.2 Operation

Potential impacts from operation would be the same as those described in Section 5.4.3.

5.6.3 Cumulative

Given that potential construction and operation impacts would be the same as those described in the analysis for the Underground Emphasis LRT Alternative (Section 5.4), potential cumulative impacts would also be the same.

6.0 POTENTIAL MITIGATION MEASURES

In the case that contaminated groundwater is encountered and it is determined that there is potential for the contamination to spread, this would be mitigated during the design and engineering process. For example, it could be specified that impermeable concrete-based grouting materials be used to fill the gap between the tunnel and the surrounding earth. The permeability of grouting materials is lower than surrounding soil types and this would reduce the possibility that the tunnel could serve as a preferential pathway for contaminant migration. Additional BMPs that would address potential impacts from encountering contaminated groundwater and groundwater dewatering activities are proposed in the Geotechnical/Subsurface/Seismic/Hazardous Materials Technical Memorandum.

Additional potential construction mitigation measures could include:

- Establish an erosion control plan prior to the initiation of construction activities. The erosion control plan would include:
    - Use of natural drainage, detention ponds, sediment ponds, or infiltration pits to allow runoff to collect and reduce or prevent erosion;
    - Use of barriers to direct and slow the rate of runoff and to filter out large-sized sediments;
    - Use of down-drains or chutes to carry runoff from the top of a slope to the bottom; and,
    - Control the use of water for irrigation and dust control so as to avoid off-site runoff.

Potentially significant impacts to water quality stemming from both construction and operation of the Regional Connector project could be mitigated with the following measures as appropriate;

- Project design could include properly designed and maintained biological oil and grease removal systems in new storm drain systems to treat water before it leaves project sites;
- Proper storage of hazardous materials to prevent contact with precipitation and runoff;
- Development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials;

- Placement of equipment to be repaired or maintained in covered areas on a pad of absorbent material to contain leaks, spills, or small discharges;
- Periodic and consistent removal of landscape and construction debris;
- The removal of any significant chemical residue on the project sites through appropriate methods;
- The use of non-toxic alternatives for any necessary applications of herbicides or fertilizers;
- Installation of detention basins to remove suspended solids by settlement; and/or,
- Periodic monitoring of the water quality of runoff before discharge from the site and into the storm drainage system.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

There would be no adverse impacts from the No Build Alternative with respect to surface or groundwater resources, the stormwater drainage system, water quality, or flooding and safety issues.

7.1.2 CEQA Determinations

The No Build Alternative would have no impact on surface or groundwater resources, the stormwater drainage system, water quality, or flooding and safety issues.

7.2 Transportation System Management (TSM) Alternative

7.2.1 NEPA Findings

There would be no adverse impacts from the TSM Alternative with respect to surface or groundwater resources, the stormwater drainage system, water quality, or flooding and safety issues.

7.2.2 CEQA Determinations

The TSM Alternative would not be expected to result in significant impacts to existing conditions in relation to surface water and groundwater resources, drainage, inundation and flooding, or water quality. Additionally, this alternative would not be expected to result in significant impacts related to erosion, increased runoff, or construction dewatering and disposal of contaminated groundwater.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

There is the potential for adverse impacts with respect to polluted stormwater runoff affecting water quality during construction of the At-Grade Emphasis LRT Alternative. There is also a possibility of encountering contaminated groundwater during excavation activities. Compliance with applicable regulations as well as implementation of mitigation measures would reduce these potential impacts to a less than significant level.

7.3.2 CEQA Determinations

The At-Grade Emphasis LRT Alternative could result in impacts associated with polluted stormwater runoff and degradation of surface and groundwater quality. Compliance with federal, state, and local laws would reduce many of these potential impacts to a less than significant level. In addition, implementation of specific mitigation measures would reduce

specific issues (such as runoff contamination from hazardous construction materials) to a less than significant level.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

There is the potential for adverse impacts with respect to polluted stormwater runoff affecting water quality during construction of the Underground Emphasis LRT Alternative. There is also a possibility of encountering contaminated groundwater during excavation activities. Compliance with applicable regulations as well as implementation of mitigation measures would reduce these potential impacts to a less than significant level.

7.4.2 CEQA Determinations

As with the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative could result in potential impacts associated with polluted stormwater runoff and degradation of surface and groundwater quality. Compliance with federal, state, and local laws would reduce many of these potential impacts to a less than significant level. In some instances, implementation of specific mitigation measures would be necessary to reduce potential impacts to a less than significant level.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1NEPA Findings

NEPA findings for this alternative would be the same as those for the Underground Emphasis Alternative (Section 7.4.1).

7.5.2 CEQA Determinations

Similar to the CEQA determinations described in Sections 7.3.2 and 7.4.2, the Fully Underground LRT Alternative – Little Tokyo Variation 1 could result in impacts to surface water and groundwater quality. Compliance with federal, state, and local laws and regulations, as well as the implementation of specific mitigation measures and BMPs would reduce potential impacts to a less than significant level.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

NEPA findings would be the same as those described for the Fully Underground LRT Alternative – Little Tokyo Variation 1.

7.6.2 CEQA Determinations

CEQA determinations would be the same as those described above in Section 7.5.2.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX W

ENERGY RESOURCES

State Clearinghouse Number: 2009031043

Regional Connector Transit Corridor
Energy Resources
Technical Memorandum

April 2, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

BTU	British Thermal Units
CALTRANS	California Department of Transportation
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CNG	Compressed Natural Gas
DOE	Department of Energy
LADWP	Los Angeles Department of Water and Power
Muni	San Francisco Municipal Railway
NEPA	National Environmental Policy Act
OCS	Overhead Catenary System
SAFTEA-LU	Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCoAB	South Coast Air Basin
SIP	State Implementation Plans
VMT	Vehicle Miles Traveled

1.0 SUMMARY

Provision of new rail services is anticipated to result in decreased highway vehicle miles traveled (VMT) and a corresponding decrease in the consumption of fossil fuels throughout the project area. While construction of the proposed alternatives would require energy expenditures, projected horizon year (2035) decreases in VMT and corresponding energy savings outweigh the one-time energy costs required for construction.

The following section describes existing energy supplies as well as existing and forecasted demand for energy resources in the project area. Estimated energy requirements for each of the proposed alternatives were compared to baseline conditions (year 2009) to analyze impacts under the California Environmental Quality Act (CEQA) and to horizon year conditions (year 2035) to analyze impacts under the National Environmental Policy Act (NEPA). Potential energy impacts for each alternative were broken down into construction energy use and operational energy use.

For operational energy impacts, the analysis looked at changes in regional VMT, added bus routes, added light rail lines, and added light rail stations. In order to compare impacts for CEQA and NEPA analysis, energy use is expressed in British Thermal Units (BTUs) and equivalent barrels of oil. Since other units of energy can all be converted into equivalent BTU units (Table 3-1) the BTU is used as the basis for comparing energy consumption associated with different resources.

Construction and operational energy usage was compared to CEQA and NEPA significance thresholds in Section 3.1 to determine the significance of potential impacts for each of the proposed alternatives. Predicted energy usage for each alternative is greater than energy usage in 2009 because of a forecasted increase in regional VMT. Increased VMT, and a corresponding increase in energy use, would result predominantly from projected regional population growth and other factors unrelated to the proposed project. Reasons for this increase are further described in the *Climate Change Impacts Technical Memorandum* written for this project.

Compared to the No Build Alternative, operational energy use under the TSM and build alternatives would decrease. Thus, the project would have a beneficial impact on energy resources and fossil fuel consumption in the project area. As described previously, each of the build alternatives would result in a one-time, non-recoverable expenditure of energy during the construction phase.

Energy needed for construction would be supplied by the Los Angeles Department of Water and Power (LADWP) and would not result in the need for new off-site energy supply facilities. Operation of the Transit System Management Alternative and the build alternatives would reduce automobile VMT throughout the project area by more than 100 million vehicle miles

annually. Additionally, operational energy use under the build alternatives would result in a decrease in total annual BTUs in the region of 0.054 to 0.063 percent compared to the No Build Alternative.

2.0 INTRODUCTION

This section characterizes energy resources, usage associated with the proposed Regional Connector Project alternatives, and the net energy demand associated with changes to the regional transportation network under each of the proposed alternatives. Energy resources and the consumption of energy are integral considerations for this project. Construction activities would consume differing amounts of energy, and it is necessary to analyze the impacts these energy needs could have on the current generation capacity of the Los Angeles Department of Water and Power (LADWP) as well as petroleum resources. The operation of each alternative would consume energy in two main ways:

- Operational energy needs of new Metro stations, light rail trains, and buses; and
- Changes in regional automobile VMT and corresponding changes in regional fuel use

Overall energy demand in Los Angeles County for transportation and non-transportation uses will continue to increase as the County's population grows. Congestion on freeways in the County and region, combined with long commuting distances of the region's workforce, results in proportionally higher transportation-related energy use compared to the rest of the state (Los Angeles County 2008).

The following sections describe existing conditions for energy use at the regional and local level. Section 5 analyzes potential energy impacts for both the construction and operation stages of the project alternatives. The increment between a proposed future alternative (2035) and existing conditions (2009) was determined to evaluate project significance under CEQA, whereas the increment between a proposed future alternative (2035) and the No Build Alternative (2035) was used to evaluate project significance under NEPA.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework

3.1.1 Federal

The Energy Policy and Conservation Act of 1975 calls for energy conservation, when feasible. The Alternative Fuels Act of 1988 amends a portion of the Energy Policy and Conservation Act to encourage the use of alternative fuels including electricity. The Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA-LU), passed in 2005, focuses on reducing traffic congestion, increasing intermodal connectivity, and protecting the environment. SAFETEA-LU gives state and local transportation decision makers more flexibility for solving transportation problems in their communities (Federal Highway Administration 2005).

3.1.2 State

3.1.2.1 California Energy Commission

The California Energy Commission is responsible for, among other things, forecasting future energy needs for the state. Senate Bill 1389 (Chapter 568, Statutes of 2002) requires the commission to prepare a biennial integrated energy policy report assessing major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors. The report also provides policy recommendations to conserve resources, protect the environment, and ensure reliable, secure, and diverse energy supplies (California Energy Commission 2009). The most recent report was issued in December 2009.

3.1.2.2 Executive Order S-3-05

Executive Order S-3-05 was enacted in June 2005. The order sets specific greenhouse gas emission reduction targets for the state and gives the Transportation and Housing Agency responsibility to help meet the targets. The executive order sets 2050 greenhouse gas reduction targets at 80 percent below 1990 levels (California Energy Commission 2009). The order envisions reduced VMT and increased vehicle fuel efficiency as major factors in achieving greenhouse gas reductions.

3.1.2.3 Southern California Association of Governments (SCAG)

The SCAG is required by state and federal mandates to prepare a regional transportation plan (RTP) every 3 years. The 2008 RTP provides a long-range vision for regional transportation goals and policies and predicts transportation challenges and the region's future transportation strategy.

The SCAG region is the second-most populated metropolitan area in the United States. Population estimates from 2007 were approximately 19 million for the region with an expected increase to 24 million by 2035. Growth in population is expected to result in greater demands

on the region's transportation system (SCAG 2008). The proposed project is located in the South Coast Air Basin (SCoAB), a sub-region of the South Coast Air Quality Management District (SCAQMD).

The SCAG 2008 report describes energy production and consumption throughout the SCoAB and provides VMT by county. VMT data indicates the extent of vehicle usage throughout the region and is a valuable factor in calculating the amount of energy consumed by transportation.

The RTP establishes the following goals relevant to the proposed project:

- Preserve and ensure a sustainable transportation system
- Protect the environment, improve air quality, and promote energy efficiency

These goals are implemented through the five policies established by SCAG in the RTP. Policies include balancing safety, maintenance, and efficiency of the existing transportation system with the need for system expansion (SCAG 2008).

3.1.3 Regional

3.1.3.1 Air Quality Management Districts

As described in the Air Quality Technical Memorandum, the SCAQMD has the primary responsibility for developing the plans and regulations that will improve air quality in the SCoAB. The SCAQMD has set daily and quarterly emission thresholds for construction and operational sources. In addition, the SCAQMD is responsible for contributing to the development of State Implementation Plans (SIPs) in compliance with federal and state Clean Air Act regulations to reduce unhealthy levels of air pollutants. The SCoAB contributes to the SIPs by indicating how air quality standards will be met through the development of air quality management plans. Among other strategies, these plans promote reductions in VMT through the development of transportation alternatives (Los Angeles County 2008).

3.1.3.2 Metro Energy and Sustainability Policy

Metro adopted an Energy and Sustainability Policy in June 2007 to aid in controlling energy consumption and encouraging energy efficiency, conservation, and sustainability. Metro's long-term objectives include:

- Reducing the use of fossil fuels through the use of ambient and renewable energy sources
- Using fuels and electricity as efficiently as possible
- Reducing the amount of carbon dioxide emissions caused by Metro's consumption

3.1.3.3 Los Angeles County General Plan

The Mineral and Energy Resources Section of the County's General Plan addresses the use and management of valuable energy and mineral resources in Los Angeles County. (Los Angeles County 2008). The County recognizes that there is a high demand for energy resources and projected growth in the region will continue to strain these supplies. The General Plan seeks to promote efficient and sustainable use of energy resources and combat the stress placed on finite energy resources by patterns of low-density, automobile-dependent communities.

The County's policies promote the development of rail and bus transportation alternatives. Policy C/OS 9.1, *Expand the Production and Use of Alternative Energy Resources*, would relate specifically to construction of the proposed alternatives since there would be the potential to decrease petroleum use and increase electricity-powered rail lines.

The Mobility Element of the General Plan includes policy guidance and strategies to reach the County's long-term transportation goals. Specific policies include the following:

- Policy M1.1: Expand the availability of transportation options throughout the County.
- Policy M1.2: Encourage a range of transportation services at both the regional and local levels, especially for transit dependent populations.
- Policy M1.7: Maintain, upgrade, and create new transit facilities.
- Policy M2.2: Expand transportation options throughout the County that reduce automobile dependence.
- Policy M2.3: Reduce Vehicle Miles Traveled (VMT) and vehicle trips through the use of alternative modes of transportation.

SCAG reported a 6 percent (44 million boardings) increase in transit use in the region from July 2005 to July 2006. Such increases align with the County's General Plan goals and have potentially significant implications for countywide energy savings. Policies in the Mobility Element of the General Plan are consistent with and supportive of policy directives of the SCAG, Metro, and other agencies charged with transportation planning in Los Angeles County.

3.1.3.4 City of Los Angeles General Plan

The purpose of the City's Transportation Element (City of Los Angeles 1999) is to guide the future development of a citywide transportation system. Primary emphasis is placed on maximized efficiency and reducing vehicle trips.

The following policy in the Transportation Element relates to the proposed alternatives:

- Policy 2.2: Promote the development of transportation facilities and services that encourage transit ridership such as enhanced transit services and improved transit safety

3.2 Standards of Significance

3.2.1 NEPA Guidance

The Council on Environmental Quality (CEQ) dictates requirements for reporting environmental consequences under NEPA. While there are no specific NEPA criteria for analyzing impacts to energy resources, 40 CFR § 1502.16(e) directs that EISs include a discussion of the "energy requirements and conservation potential of various alternatives," "natural or depletable resource requirements and conservation potential of various alternatives," and potential mitigation measures.

3.2.2 CEQA Guidance

The following significance criteria are based on Appendix G of the state CEQA Guidelines (CERES 2005) and the *City of Los Angeles CEQA Thresholds Guide* (2006). The proposed project alternatives would result in a significant impact to energy resources if they would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- Require new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities;
- Conflict with adopted energy conservation plans;
- Use non-renewable resources in a wasteful and inefficient manner; or
- Result in a need for new systems or substantial alterations to power or natural gas.

It is possible to determine whether the alternatives would have a significant effect on energy supplies by comparing the energy demands of the alternatives to current and anticipated energy supplies.

Appendix F, Energy Conservation, of the state CEQA Guidelines describes the specific requirements for EIRs to include a discussion of potential energy impacts for proposed projects. CEQA energy conservation goals include decreasing overall per capita energy consumption and decreasing reliance on natural gas and oil. Particular emphasis is given to

reducing inefficient, wasteful and unnecessary consumption of energy, and alternatives should be compared based on these criteria.

In addition to the above significance thresholds, the City of Los Angeles CEQA Guide (2006) describes appropriate considerations for cumulative impact analysis to energy resources. These guidelines state that cumulative projects relying on the same energy distribution infrastructure as the proposed project should be analyzed for their cumulative impact on energy supply and distribution. In addition, it should be determined whether new energy supply and distribution infrastructure would be required as a result of the cumulative effect of all relevant projects.

3.3 Evaluation Methodology

Analysis of potential energy resource impacts included consideration of the following elements:

- Construction-related energy
- Energy operating costs
- Direct energy consumption (measured in British thermal units (BTU) per vehicle mile for cars, trucks, buses, and light rail operating in the project area)
- Net project operating energy savings or costs

The area of potential impact for energy resources is defined by the LADWP's service area for short-term construction and station operation energy demands. Changes in regional VMT were assessed using data generated in the Transportation/Traffic technical report; therefore, the area of potential impact used to compare changes in VMT and corresponding energy use between alternatives aligns with that used in the Transportation technical report.

Detailed explanations of how each of the above was determined are given in the following section.

3.3.1 Construction and Operations Energy Analysis

3.3.1.1 Construction

Energy consumption during construction was determined by analyzing the energy requirements of construction equipment and construction processes. Energy requirements would differ for the construction phase of at-grade alternatives versus underground alternatives. The use of earthmoving equipment for excavating tunnels would be the primary source of additional energy consumption during construction of underground alternatives.

Construction-related impacts were estimated by applying a highway construction energy factor to the total estimated construction cost of the Regional Connector project. The California Department of Transportation (CALTRANS) derived energy consumption for different light rail transit facilities in *Energy and Transportation Systems,* and these factors are still widely used in the industry today (CALTRANS 1983).

Consumption factors are reported in BTUs per dollar of construction spending. Given the date of this data source, the energy consumption factors were adjusted to account for the change in construction costs. The California Construction Cost Index was used to adjust the factors to 2009 dollars.

The following energy consumption factors were used to estimate the energy consumed during project construction:

- Track elements: 6,012 BTU/2009$
- Site work and special conditions: 6,012 BTU/2009$
- Systems (including signaling and power supply and distribution): 9,240 BTU/2009$
- Stations, stops, terminals: 6,012 BTU/2009$
- Maintenance facilities: 7,394 BTU/2009$

Only direct construction costs related to this project were used to calculate energy consumption during construction. Professional engineering and right-of-way costs were not considered in the analysis.

3.3.1.2 Operations

Operational energy requirements would differ between at-grade and underground alternatives due to the need for escalators, elevators, and heating, cooling, and ventilation systems in underground stations. Each alternative would require the installation of an overhead catenary system (OCS) above the track-way to supply electricity to the trains.

Analysis of the operational energy impact of proposed stations for the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1 and Little Tokyo Variation 2 was determined following the same methodology used in the Climate Change Technical Memorandum, following Chester and Horvath's electricity usage factors used for the San Francisco Municipal Railway (Muni) in San Francisco (Chester and Horvath 2008).

3.3.2 VMT and Fuel Consumption Energy Analysis

The project area in downtown Los Angeles has a relatively low population density compared to its employment base. This disparity results in heavy commuter traffic in the morning and afternoon peak hours. The project area has the highest levels of mass transit ridership in the four-county region (Los Angeles, Orange, Riverside, and San Bernardino), and the transit system alleviates traffic congestion on freeways and arterial streets in the vicinity of downtown Los Angeles. Potential energy impacts related to VMT and vehicle fuel consumption are described and analyzed for a four-county region since the Regional Connector is intended to affect commuters and ridership from surrounding counties.

Energy needs for the proposed alternatives are measured in BTUs and equivalent barrels of oil. A BTU is defined as the quantity of heat required to raise the temperature of water one degree Fahrenheit at sea level. Table 3-1 compares various types of energy and their equivalent BTU units.

Table 3-1. Energy Comparisons

Energy Type	Energy Unit	Equivalent BTU Units
Electrical	Kilowatt-Hour (kWh)	3,412
Natural Gas	Cubic Foot	1,034
Crude Oil	Barrel (42 Gallons)	5,800,000
Gasoline	Gallon	125,000

Source: California Energy Commission 2007.

The United States Department of Energy's (DOE) *Transportation Data Book* was used to identify BTUs for each vehicle type in the project area and determine energy consumption factors for different modes of transportation. Table 3-2 summarizes these energy consumption factors. For transit buses, the DOE provides only one level of energy intensity regardless of fuel type (e.g., compressed natural gas or diesel). Light rail transit mode energy intensity accounts for electric use. Change in VMT was calculated based on the BTU per vehicle-mile rate shown in Table 3-2. Passenger miles for each alternative were obtained from the transportation model.

Table 3-2. Energy Consumption Factors	
Mode	**Factor (BTU/Vehicle Mile)**
Cars/Light Trucks[1]	6,213
Buses[2]	6,255
Light Rail[2]	77,327

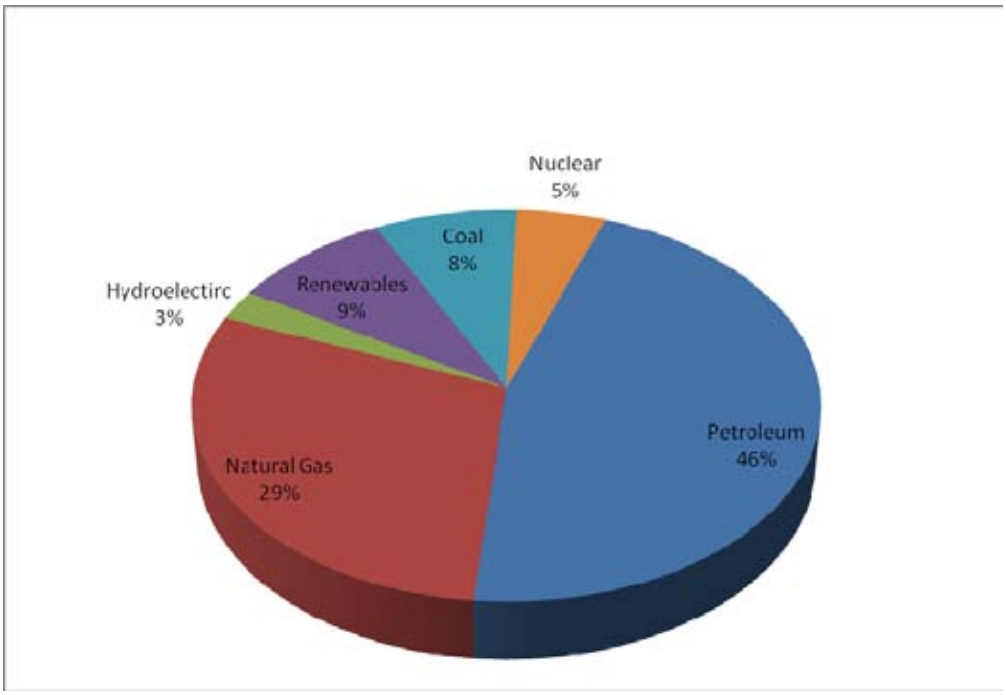
Sources: [1] RY2007 Database: http://www.ntdprogram.gov/ntdprogram/data.htm; [2] DOE 2008;

4.0 AFFECTED ENVIRONMENT

4. 1 California's Energy

Existing conditions of the state's energy and electricity supply and demand were developed from the two most recent California Energy Commission (CEC) Integrated Energy Policy Reports (2007 and 2009).

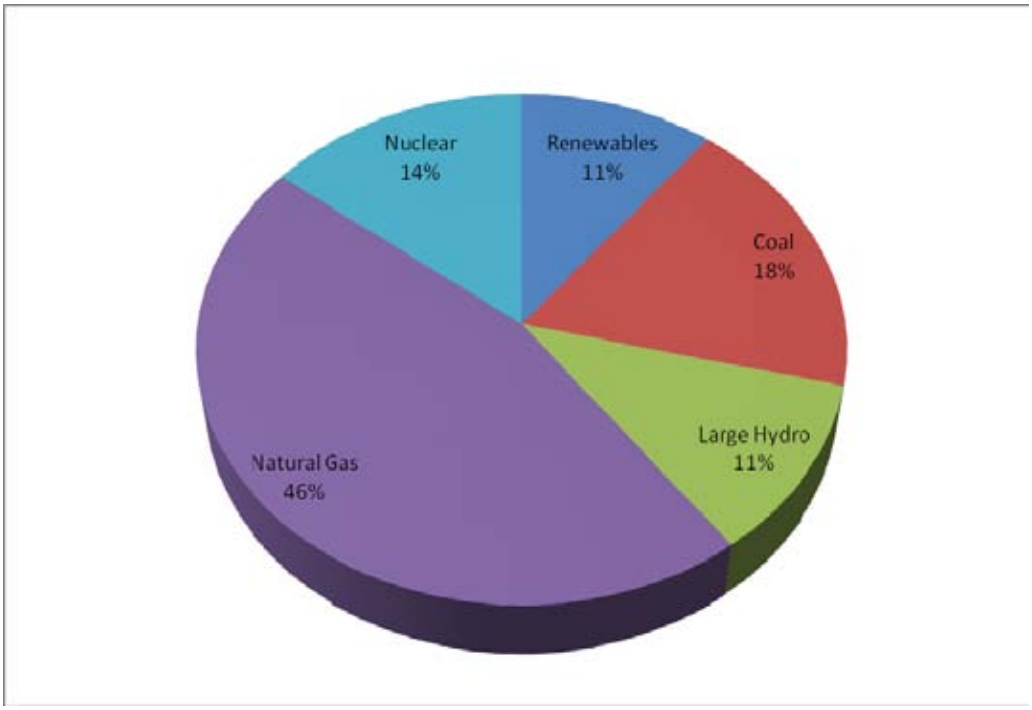
Currently, the state's energy infrastructure is over-burdened. Population growth is expected to increase demand for energy throughout the state (CEC 2009). Figure 4-1 depicts the makeup of California's energy sources in 2006.



Source: California Energy Commission 2007a.

Figure 4-1. California's Energy Sources - 2006

Electricity and transportation are the major energy use sectors analyzed by the CEC. Federal and state policies and regulations are gradually transforming electricity generation to cleaner sources and away from reliance on petroleum sources (CEC 2007a). Figure 4-2 depicts the state's electricity generation supply mix in 2008 (CEC 2009).



Source: CEC 2009.

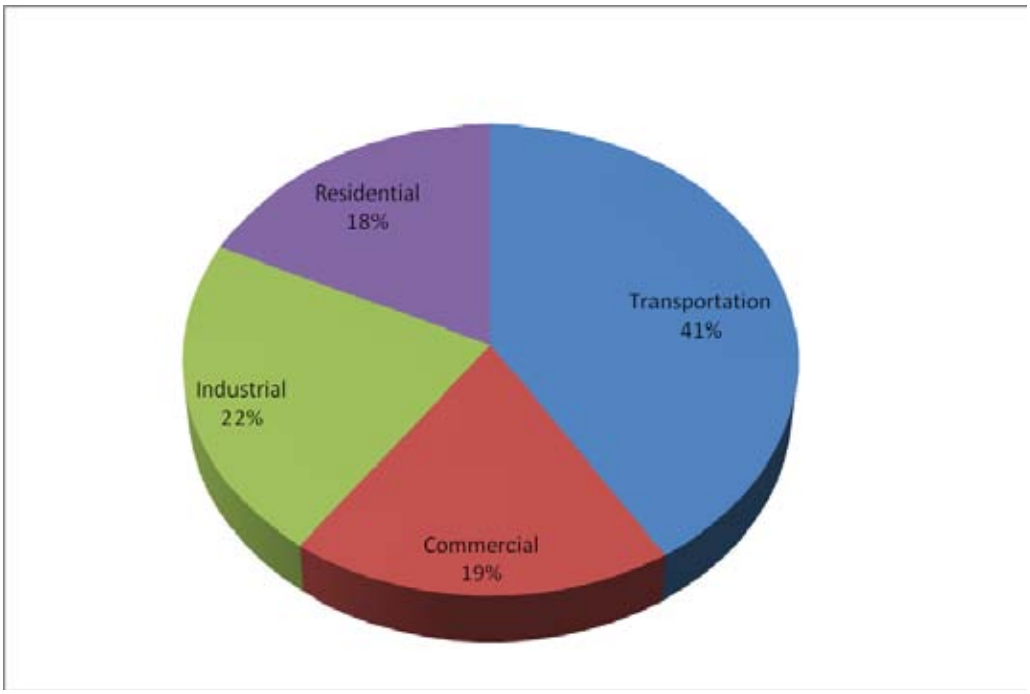
Figure 4-2. California's Electricity Generation Mix – 2008

4.2.2 Energy and the Transportation Sector

As shown in Figure 4-3, the transportation sector in California consumes a relatively large amount of energy. There has been a dramatic increase in the number of vehicles operated and the number of vehicle miles traveled in the state since the early 1970s. The California Energy Commission reports that Californians consumed approximately 20 billion gallons of gasoline and diesel fuel due to transportation in 2007. This amount represents an increase of nearly 50 percent over the last 20 years.

Registered vehicles operating in the state produce about 40 percent of the state's greenhouse gas emissions (CEC 2007b). Current projected growth rates from the Department of Finance and Moody's Economy.com indicate that population and real personal income will continue to increase between 2009 and 2030. Based on these projections, travel demand in California would likely increase during the same period (CEC 2009).

In 2006, the state's nearly 26 million vehicles consumed almost 16 billion gallons of gasoline and 4 billion gallons of diesel. California is the third largest consumer of gasoline in the world, behind the rest of United States and China (CEC 2007a). Figure 4-3 shows how over 40 percent of all energy consumed in the state is used for transportation.



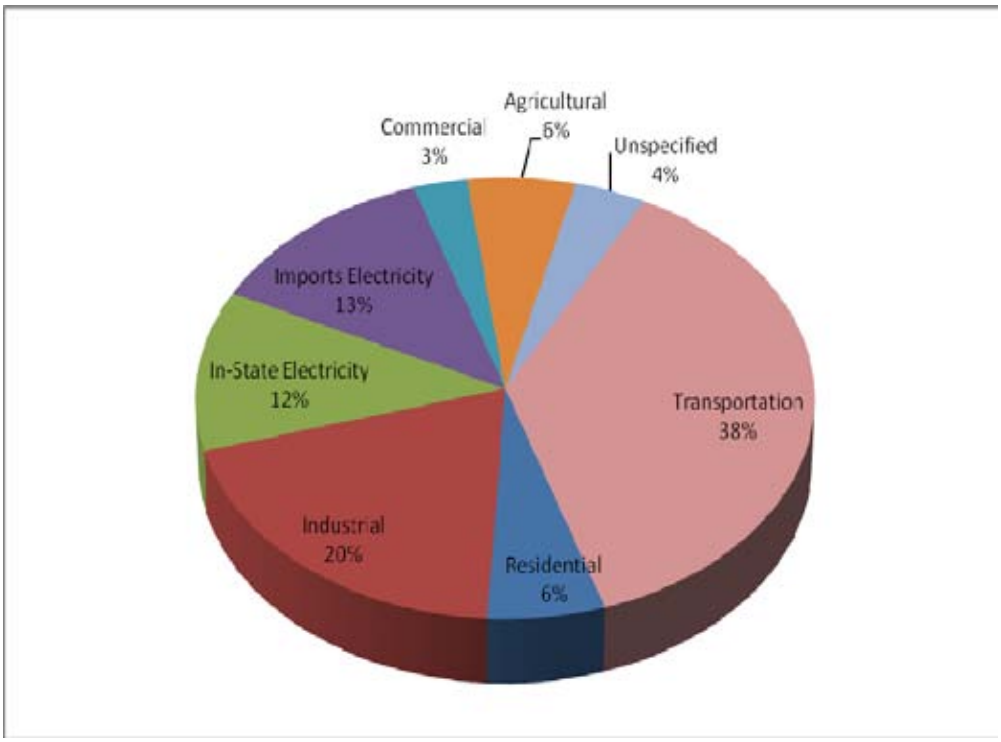
Source: California Energy Commission 2007a.

Figure 4-3. California Energy Use by Sector – 2006

The CEC's 2009 *Integrated Energy Policy Report* presents gasoline and diesel demand forecasts for both a low petroleum price case (high demand) scenario and a high petroleum price case (low demand) scenario. The high-demand scenario projects peak gasoline demand to be 16.4 billion gallons in 2014 and 14.32 billion gallons in 2030 (4 percent below 2008 levels). The low-demand scenario projects a peak demand of 15.69 billion gallons in 2014 and 13.57 billion gallons in 2030 (a decrease of 9 percent below 2008 levels).

The low demand scenario projects that total diesel demand will increase to 5.14 billion gallons, an increase in 49.8 percent between 2008 and 2030. Under the high-demand scenario, diesel demand would increase 57.4 percent to 5.4 billion gallons.

Transportation in Los Angeles County continues to be dominated by single-occupancy automobiles. In 2005, 74.7 percent of all people in the Southern California region drove alone to work (Los Angeles County 2008). High percentages of single-occupancy vehicles result in higher VMT throughout the state. In turn, high VMT translate into high energy use and increased air quality pollutants in the SCAG region. The CEC's *Integrated Energy Policy Report* concludes that the transportation sector is the largest polluter of greenhouse gases in the state (CEC 2007a). Figure 4-4 shows the role the transportation sector plays in greenhouse gas emissions.



Source: California Air Resources Board 2007, as cited in CEC 2007a.

Figure 4-4. Sources of Greenhouse Gas Emissions – 2004

The most recent available data for Metro bus and light rail energy consumption in the project region are from 2007. In that year, light rail and buses consumed approximately 900 billion BTUs, the equivalent of approximately 160,000 barrels of oil. The most recent data for annual automobile energy consumption in the region comes from the transportation model. Automobiles in the region consumed approximately 700,000 billion BTUs in 2009, the equivalent of over 118 million barrels of oil. Table 4-1 summarizes baseline (2009) annual energy usage in the region.

Metro Fuel Consumption

Metro's 2009 *Baseline Sustainability Report* describes that Metro ridership outpaced population growth by 14 percent between 1997 and 2008. While ridership grew by approximately 23 percent, the County's population grew by only nine percent (LACMTA 2009a). The report notes the role that increasing ridership can play in reducing regional VMT.

Table 4-1. Regional Annual Transportation Energy Usage, Existing Conditions [a]				
Vehicle Class	**Consumption Factors1. 2 (BTU/mi)**	**Miles Travelled (Annual)**	**Total BTU Consumption (Billions)**	**Total Barrels of Oil**
Light Rail[2]	77,327	3,925,583	304	52,400
Bus[2]	6,255	101,930,386	638	110,000
Automobiles[3]	6,213	111,037,526,000	689,876	118,944,100
Annual Total	N/A	111,143,381,969	690,818	119,106,600

Source: [1] DOE, 2008;
[2] RY2007 (Database: http://www.ntdprogram.gov/ntdprogram/data.htm);
[3] CDM, 2009.
Notes: [a] Existing conditions are reported from data sources dated 2007 and 2009. The 2007 data are the most recent available data from the National Transportation Data Program for Metro-reported light rail and bus miles travelled annually.

Metro uses two types of fuel to power its bus fleet, compressed natural gas (CNG) and diesel. With a total fleet of 2,635 buses, Metro currently operates 129 diesel-powered buses, 2,506 CNG buses. In addition, 173 buses are leased to independent contractors who provide service on Metro routes (LACMTA 2009a). Contract-operated buses currently run on a mix CNG, propane, and other fuels; however, Metro is moving towards transitioning all buses to run on CNG. Petroleum fuels are currently purchased through a variety of commercial sources. CNG is purchased through the Southern California Gas Company. Since 2002, Metro's fuel use has increased 3 percent annually, but it continues to work to reduce the use of diesel and gasoline in favor of cheaper and cleaner CNG.

As of June 2009, Metro operates six fixed guideways (rail and transitways) that run on electricity and CNG (LACMTA 2009a). Metro's electricity use is split between powering the rail system and transit facilities (LACMTA 2009b). For both rail and facility electricity requirements, Metro buys power from LADWP, Southern California Edison (SCE), and Pasadena Water and Power (LACMTA 2009b).

Electricity usage for both facilities and rail operations increased between 2005 and 2008. In 2008, Metro rail consumed 175 million kWh of electricity (approximately 597 billion BTUs) and Metro facilities consumed 69 million kWh (approximately 235 thousand BTUs) (LACMTA 2009b). In addition, Metro is currently electrifying all of the CNG facilities at the various divisions. Metro's *2009 Baseline Sustainability Report* presents goals and recommendations

for tracking and improving performance measures. Metro would purchase additional electricity from its current providers to operate the proposed project.

4.2.3 Los Angeles Department of Water and Power

The LADWP provides electricity to the project area. The LADWP's *2007 Integrated Resource Plan* and the CEC staff revised forecast, *California Energy Demand 2008-2018*, were used to determine current total electricity generation and consumption in the LADWP planning area (California Energy Commission 2007c; LADWP 2007. The most recent data used came from 2006, and current production and consumption were projected for 2009.

Total electricity generation in 2006 was 29 billion kilowatt hours (KWh) (LADWP 2007). Total electricty consumption was 25.6 billion KWh (87,300 billion BTUs). The 2007 LADWP *Integrated Resource Plan* forecasts loads from 2007 to 2027. The base case load forecast for 2009 is 49.6 billion KWh (169,000 billion BTUs). The CEC's demand forecast report predicts total consumption in the LADWP service area for 2009 equal to 26.1 billion KWh (89,100 billion BTUs).

5.0 IMPACTS

Located in downtown Los Angeles, the proposed project would be served by the LADWP. As discussed in Section 4.0, the transportation sector consumes much of the energy produced in California and is one of the largest contributors of greenhouse gases. However, public transit contributes to VMT reduction resulting in overall reductions in greenhouse gas emissions. The following sections address potential impacts to energy resources and energy usage from the proposed project alternatives.

Table 5-1 summarizes annual changes in energy consumption for each of the action alternatives compared to the No Build Alternative. Calculations were based on data from the transportation model that projected changes in daily VMT throughout the region. Table 5-2 summarizes total operational energy demands under all of the proposed alternatives. Table 5-2 compares BTUs and barrels of oil under each alternative as well as the percent change in BTUs between each build alternative and the No Build Alternative.

Table 5-1. Estimated Regional Highway VMT and Energy Consumption Comparisons

Scenario	Annual Change in Automobile VMT	Annual Change in Energy Consumption (BTU in billions)	Annual Change in Barrels of Oil
TSM Alternative vs. No Build Alternative	(100,083,000)	(622)	(107,200)
At-Grade Emphasis LRT Alternative vs. No Build Alternative	(110,157,000)	(684)	(118,000)
Underground Emphasis LRT Alternative vs. No Build Alternative	(113,989,500)	(708)	(122,100)
Fully Underground LRT Alternative – Little Tokyo Variation 1 vs. No Build Alternative	(117,384,000)	(729)	(125,700)
Fully Underground LRT Alternative – Little Tokyo Variation 2 vs. No Build Alternative	(117,384,000)	(729)	(125,700)

Note: Parentheses indicate a reduction compared to the No Build Alternative.

Table 5-2. Estimated Annual Operational Energy Consumption for Each Alternative					
VMT1 (billions)	BTU2 (billions)	Barrels of Oil	Total BTU (billions)	Percent Change in BTU from No Build	Total Barrels of Oil
Baseline (2009)					
Highway – 111.04	689,876	118,944,100	689,876	--	118,944,100
No Build (2035)					
Highway – 184.19	1,144,378	197,306,600	1,144,378	--	197,306,600
TSM					
Highway – 184.09	1,143,751	197,198,400	1,143,757	(0.054)	197,199,500
Bus – .000994	6.2	1,100			
At-Grade Emphasis LRT					
Highway – 184.08	1,143,698	197,189,300	1,143,731	(0.057)	197,195,000
Light Rail – .000383	29.7	5,100			
Stations – --	3.1	500			
Underground Emphasis LRT					
Highway – 184.08	1,143,698	197,189,300	1,143,731	(0.057)	197,195,000

Table 5-2. Estimated Annual Operational Energy Consumption for Each Alternative					
VMT1 (billions)	BTU2 (billions)	Barrels of Oil	Total BTU (billions)	Percent Change in BTU from No Build	Total Barrels of Oil
Light Rail – .000380	29.4	5,000			
Stations – --	3.4	600			
Fully Underground LRT – Little Tokyo Variation 1					
Highway – 184.07	1,143,626	197,176,900	1,143,659	(0.063)	197,182,500
Light Rail – .000362	28.0	4,800			
Stations – --	4.5	800			
Fully Underground LRT – Little Tokyo Variation 2					
Highway – 184.07	1,143,626	197,176,900	1,143,659	(0.063)	197,182,500
Light Rail – .000362	28.0	4,800			
Stations – --	4.5	800			

Notes: [1] – Calculation of VMT describes changes in highway VMT within the project area projected by the transportation model for the 2035 horizon year under each alternative. Added bus VMT are included in the TSM Alternative and added light rail VMT are included in the four LRT build alternatives. Operations of buses and light rail outside of the proposed alternatives are assumed to remain unchanged.
[2] – Operational BTUs include the energy required to operate additional stations under the LRT build alternatives.
[3] – This percentage represents percent change in operational BTUs and does not include construction.

Potential energy impacts from construction and operation of the alternatives, as well as the significance of these impacts, are described in further detail in the following sections.

5.1 No Build Alternative

Under the No Build Alternative, no transportation improvements would be made beyond those listed in Metro's Long Range Transportation Plan (LRTP). By the projection year 2035 it is expected that the Metro Expo Line to Santa Monica, the Metro Gold Line to Azusa, the Metro Gold Line to the San Gabriel Valley, the Metro Purple Line to Westwood, and the Metro Crenshaw Line would be operational. While it is anticipated that bus service in the project area would predominantly remain the same, there may be some service adjustments in order to provide connections to the Metro Expo and Gold Lines service areas. The No Build Alternative would not involve new construction of rail lines or other transportation improvements.

5.1.1 Construction

The No Build Alternative would not include any construction of new light rail lines in the project area. The No Build Alternative would not result in construction-related impacts to energy use or resources in the project area or region.

5.1.2 Operations

Under the No Build Alternative, no energy consumption would be associated with the operation of new light rail lines or stations. Increased energy consumption that would occur under the No Build Alternative represents predicted increases in VMT unrelated to the proposed project. Annual highway VMT in the region would increase from 111,037,526,000 (2009) to 184,190,899,000 (2035). Correspondingly, energy consumption throughout the region would increase by approximately 500,000 billion BTUs (Table 5-2). Since the No Build Alternative assumes that the Regional Connector Transit Corridor project would not be built, this increase in BTUs is a result of projected growth in traffic that is expected to occur in the region without the project. There would be no direct impact to energy resources as a result of this alternative.

5.1.3 Cumulative

There would be no construction-related impacts under the No Build Alternative. Consequently, this alternative would not result in energy-related impacts when considered cumulatively with renovation, new construction, and transportation projects in the region.

Development of the Regional Connector Transit Corridor would not occur under the No Build Alternative. As a result, there would be no project-level changes in energy consumption associated with the No Build Alternative. Increases in energy consumption would result from regional traffic growth and projects already approved under Metro's LRTP. Therefore, the No

Build Alternative would not contribute to cumulative impacts with respect to energy resources.

5.2 Transportation System Management (TSM) Alternative

The TSM Alternative focuses on enhancements to and restructuring of the existing transit service in the project area. In addition to provisions in Metro's LRTP, two new shuttle bus routes would link the 7th Street/Metro Center Station to Union Station. The TSM Alternative would not involve construction of additional tracks or stations outside of projects already approved in the LRTP. Creation of peak hour bus-only lanes would not require new construction. Rather, the lanes could be created by restricting parking on streets that do not already have dedicated all-day bus lanes.

5.2.1 Construction

The TSM Alternative would have no construction impact on energy resources or energy use in the project area or region because there would be no construction outside of that previously approved in Metro's LRTP.

5.2.2 Operations

To determine operational energy use of the TSM Alternative, the analysis evaluated energy use of the potential new bus lines and regional traffic.

5.2.2.1 Light Rail Operations

LRT facilities are not proposed under the TSM Alternative. Light rail operations energy use is assumed to remain unchanged from the No Build Alternative and is not estimated in this section.

5.2.2.2 Regional Traffic

Compared to the No Build Alternative, operation of the TSM Alternative would reduce highway VMT in the project area by over 100 million vehicle miles per year. Correspondingly, automobile energy consumption would decrease by over 620 billion BTUs (over 107,000 barrels of oil) (Table 5-1). These potential impacts would be beneficial to energy and vehicle fuel resources in the project area.

5.2.2.3 Bus Operation

Under the TSM Alternative, two additional bus lines would travel a total of approximately 994,000 vehicle miles annually. The new buses would consume energy totaling 6 billion BTUs annually (approximately 1,000 barrels of oil).

5.2.2.4 Total Operational Energy Consumption

Total operational energy use under the TSM Alternative would equal approximately 1,143,757 billion BTUs. This figure is compared to current total energy usage of 689,876 (2009) to determine significance under CEQA. Total energy use is compared to the No Build Alternative (2035) to determine significance under NEPA.

Total operational energy under the TSM Alternative is greater than existing (2009) consumption. However, this increase is largely due to an increase in VMT in the region unrelated to the project. Compared to year 2035 under the No Build Alternative, VMT in the region would decrease by over 100 million, and energy consumption would decline by 622 billion BTUs. Given the reduction in BTUs associated with reduction in highway VMT, total net savings from operations of the TSM Alternative would be greater than 600 billion BTUs annually. Therefore, operations of the TSM Alternative would result in potential beneficial impacts.

5.2.3 Cumulative

There would be no construction-related impacts under the TSM Alternative. Considered cumulatively with relevant identified renovation, new construction, and transportation projects, this alternative would not have significant adverse energy impacts. Operation of two added bus routes under the TSM Alternative would result in a less than significant impact to energy use and energy resources.

Projects considered for cumulative impact would comply with federal, state, and local regulations to conserve and reduce energy usage. Additionally, the TSM Alternative would result in a reduction in automobile VMT and BTUs compared to No Build Alternative. This would result in a potential beneficial impact.

5.3 At-Grade Emphasis LRT Alternative

The At-Grade Emphasis LRT Alternative includes both underground and at-grade configurations. Depending on the final configuration, approximately 38 to 46 percent of the route would run underground. A direct connection would link the 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets. This Alternative would involve the construction of three new stations (two underground and a one-way couplet at street level).

5.3.1 Construction

To determine construction-related energy consumption, the analysis used capital cost data per the methodology described in Section 3.3. Construction energy impacts are summarized in Table 5-3.

Table 5-3. Estimated Energy Consumption from Construction – At-Grade Emphasis LRT Alternative			
Project Component	**Base Year Dollars (thousands)**	**Energy Consumption Factor (BTU/2009$)**	**Total BTU Consumption (billions)**
Track Elements	105,506	6,012	634
Stations, Stops, Terminals	230,850	6,012	1,388
Maintenance Facilities	8,625	7,394	63
Site work	165,378	6,012	994
Systems	40,950	9,240	378
Total	**551,308**	**N/A**	**3,457**

Construction of the At-Grade Emphasis LRT Alternative would result in a temporary energy demand of 3,457 billion BTUs. This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative, potential construction-related impacts would be less-than-significant.

5.3.2 Operations

Operational energy use for the At-Grade Emphasis LRT Alternative includes the energy use of new light rail vehicles, new stations and regional traffic.

5.3.2.1 Light Rail and Station Operations

Annual operations of light rail under this alternative would consume approximately 30 billion BTUs (approximately 5,000 barrels of oil) (Table 5-2). Stations would consume 3.1 billion BTUs annually.

5.3.2.2 Regional Traffic

Operation of the At-Grade Emphasis LRT Alternative would result in an annual decrease of highway VMT within the region by over 110 million vehicle miles when compared to the No

Build Alternative. This decrease would result in annual reductions of 684 billion BTUs (118,000 barrels of oil). Reduction in vehicle energy consumption would result in a beneficial potential impact to energy resources in the region.

5.3.2.3 Bus Operations

Since additional bus routes are not part of this alternative, changes in energy use related to bus operations would not occur.

5.3.2.4 Total Operational Energy Consumption

Total annual BTU consumption associated with the At-Grade Emphasis LRT alternative would be approximately 1,143,731 billion BTUs. This figure is compared to current total energy usage (2009) to determine significance under CEQA. Total energy use is compared to the No Build Alternative (2035) to determine significance under NEPA.

Total operational energy consumption under the At-Grade Emphasis LRT Alternative would be greater than baseline 2009 levels. However, this increase would be largely due to an increase in VMT in the region unrelated to the project. This alternative would reduce VMT and result in an annual 684 billion BTU decrease (118,000 barrels of oil) in energy consumption compared to the No Build Alternative. Total annual net savings from operations under this alternative would be greater than 600 billion BTUs (113,000 barrels of oil). Since this alternative would result in reduced energy consumption (compared to the 2035 No Build Alternative), the potential impact to energy resources in the region would be beneficial.

5.3.3 Cumulative

Construction of the At-Grade Emphasis LRT Alternative would result in less-than-significant impacts to energy resources. The proposed project, as well as renovation, new construction, and transportation projects in the vicinity of the proposed project, would comply with federal, state, and local regulations to conserve and reduce energy usage. Construction would require energy from both transportation fuels and LADWP's electricity supply.

The LADWP is working to develop new renewable energy and energy efficient resources. This project alternative, and other potential projects in the area, would comply with applicable energy efficiency guidance set by the LADWP. Potential cumulative impacts related to construction would be less-than-significant.

LADWP predicts increases in electricity demand over the next decade. LADWP has increased its ability to serve the area by adding new facilities and increasing and diversifying its energy supplies. Given that operation of the At-Grade Emphasis LRT Alternative would result in a beneficial energy impact, potential cumulative impacts related to operation would be less-than-significant.

5.4 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would run underground except for a single, at-grade crossing at the intersection of 1st and Alameda Streets. Newly constructed light rail right of way would consist of at-grade double tracks near 1st and Alameda Streets and underground double tracks running beneath Flower and 2nd Streets. Additionally, three new underground stations are proposed under this alternative.

5.4.1 Construction

The analysis used capital cost data per the methodology described in Section 3 to determine construction-related energy consumption. Construction energy impacts are summarized in Table 5-4.

Table 5-4. Estimated Energy Consumption from Construction – Underground Emphasis LRT Alternative

Project Component	Base Year Dollars (thousands)	Energy Consumption Factor (BTU/2009$)	Total BTU Consumption (billions)
Track Elements	161,921	6,012	973
Stations, Stops, Terminals	388,140	6,012	2,333
Maintenance Facilities	8,625	7,394	63
Site work	201,937	6,012	1,214
Systems	40,285	9,240	372
Total	**800,908**	**N/A**	**4,957**

Construction of the Underground Emphasis LRT Alternative would consume a one-time amount of approximately 5,000 billion BTUs. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. The one-time energy use required to construct this alternative would be offset by the project's long-term, beneficial operational impacts. Given the long-term, beneficial decreases in energy use, potential construction-related impacts would be less than significant.

5.4.2 Operations

Operational energy use for the Underground Emphasis LRT Alternative includes the energy use of new light rail vehicles, new stations, and regional traffic.

5.4.2.1 Light Rail Operations

Annual operations of the light rail under this alternative would consume approximately 30 billion BTUs (approximately 5,000 barrels of oil). Stations would consume 3.4 billion BTUs annually (Table 5-2).

5.4.2.2 Regional Traffic

Operation of the Underground Emphasis LRT Alternative would result in an annual decrease of approximately 114 million vehicle miles when compared to the No Build Alternative (Table 5-1). This decrease would result in annual reductions of 700 billion BTUs (122,000 equivalent barrels of oil). Reduction in vehicle energy consumption would result in a potential beneficial impact to energy resources in the region.

5.4.2.3 Bus Operations

Since bus operations are not part of this alternative, changes in energy usage would not occur.

5.4.2.4 Total Operational Energy Consumption

Annual operation of this alternative would require approximately 1,143,698 billion BTUs (Table 5-2). This figure is compared to current total energy usage (2009) to determine significance under CEQA. Total energy use is compared to the No Build Alternative (2035) to determine significance under NEPA.

Total operational energy consumption related to this alternative is greater than baseline 2009 conditions. This increase would result from increases in regional VMT unrelated to the project. This alternative would reduce VMT and result in an annual 700 billion BTU decrease (equivalent to approximately 122,000 barrels of oil) in energy consumption compared to the No Build Alternative. Total annual net savings from operations under this alternative would be greater than 650 billion BTUs (equivalent to 115,000 barrels of oil). Since this alternative would result in reduced energy consumption (compared to the 2035 No Build Alternative), the potential impact to energy resources in the region would be beneficial.

5.4.3 Cumulative

Construction of the Underground Emphasis LRT Alternative would result in less than significant impacts to energy resources. The proposed project, as well as renovation, new construction, and transportation projects in the vicinity of the proposed project would comply

with federal, state, and local regulations to conserve and reduce energy usage. Construction would require energy from both transportation fuels and LADWP's electricity supply.

The LADWP is working to develop new renewable energy and energy efficient resources. This project alternative, and other potential projects in the area, would comply with applicable energy efficiency guidance set by the LADWP. Potential cumulative impacts related to construction would be less than significant.

LADWP predicts increases in electricity demand over the next decade and has increased its ability to serve the area by adding new facilities and increasing and diversifying its energy supplies. Given that operation of the Underground Emphasis LRT Alternative would result in a beneficial energy impact, potential cumulative impacts related to operation would be less than significant.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would be identical to the Underground Emphasis LRT Alternative 2nd Street station – Broadway Option for all areas west of 2nd Street and Central Avenue. East of Central Avenue, this alternative would include an underground station just southwest of the intersection of 1st and Alameda Streets. In addition to this station, this alternative would include a new, underground, three-way junction.

From the junction, one set of tracks would continue north, travel under Temple Street, and surface in the LADWP maintenance yard just east of and adjacent to Alameda Street. The other set of tracks would rise to street level to the east within 1st Street in order to accommodate a new portal and connect to the existing Metro Gold line tracks. This alternative would include construction of four new underground stations.

5.5.1 Construction

To determine construction-related energy consumption, the analysis used capital cost data per the methodology described in Section 3.1. Construction energy impacts are summarized in Table 5-5.

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a temporary energy demand of approximately 6,000 billion BTUs. This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative; potential construction-related impacts would be less than significant.

Table 5-5. Estimated Energy Consumption from Construction – Fully Underground LRT Alternative – Little Tokyo Variation 1			
Project Component	**Base Year Dollars (thousands)**	**Energy Consumption Factor (BTU/2009$)**	**Total BTU Consumption (billions)**
Track Elements	229,148	6,012	1,377
Stations, Stops, Terminals	457,640	6,012	2,759
Maintenance Facilities	8,825	7,394	65
Site work	188,060	6,012	1,130
Systems	49,124	9,240	453
Total	**932,797**	**N/A**	**5,886**

5.5.2 Operations

Operational energy use for the Fully Underground Alternative – Little Tokyo Variation 1 includes the energy use of new light rail vehicles, new stations, and regional traffic.

5.5.2.1 Light Rail Operations

Annual operations of light rail under this alternative would consume approximately 28 billion BTUs (approximately 4,800 barrels of oil) (Table 5-2). Stations would consume 4.5 billion BTUs annually.

5.5.2.2 Regional Traffic

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in an annual decrease of 117 million vehicle miles when compared to the No Build Alternative. This decrease would result in annual reductions of 730 billion BTUs (125,000 barrels of oil). Reduction in vehicle energy consumption would result in a beneficial potential impact to energy resources in the region.

5.5.2.3 Bus Operations

Since bus operations are not part of this alternative, changes in energy usage would not occur.

5.5.2.4 Total Operational Energy Consumption

Total annual BTU consumption associated with the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be approximately 1,143,659 billion BTUs (Table 5-2). This figure is compared to current total energy usage (2009) to determine significance under CEQA. Total energy use is compared to the No Build Alternative (2035) to determine significance under NEPA.

Total operational energy consumption under the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be greater than baseline 2009 levels. However, this increase would be largely due to an increase in VMT in the region unrelated to the project. This alternative would reduce VMT and result in an annual 730 billion BTU decrease (equivalent to 125, 000 barrels of oil) in energy consumption compared to the No Build Alternative. Total annual net savings from operations under this alternative would be greater than 700 billion BTUs (120,000 barrels of oil). Since this alternative would result in reduced energy consumption (compared to the 2035 No Build Alternative), the potential impact to energy resources in the region would be beneficial.

5.5.3 Cumulative

Cumulative impacts would be similar to those described for the Underground Emphasis LRT Alternative; thus, potential cumulative impacts from construction and operations of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be less than significant.

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would be identical to the Underground Emphasis LRT Alternative 2nd Street station – Broadway Option for all areas west of 2nd Street and Central Avenue. This alternative would include a new underground station on the block bounded by 2nd, 1st, and Alameda Streets, Central Avenue. This proposed station would have two underground levels, each with a single-track platform.

This alternative would create an underground junction similar to that described for the Fully Underground LRT Alternative - Little Tokyo Variation 1. Under this alternative, however, the junction would have two underground levels. In addition, 1st Street would contain two portals instead of one as described for the Fully Underground LRT Alternative - Little Tokyo Variation 1. This alternative would also require construction of four new underground stations.

5.6.1 Construction

The analysis used capital cost data per the methodology to determine construction-related energy consumption. Construction energy impacts are summarized in Table 5-6.

Construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in a temporary energy demand of approximately 6,300 billion BTUs. This impact would be temporary, and the project would result in long-term, beneficial decreases in energy use in the region. LADWP is committed to increasing electricity generation from renewable energy sources and ensuring a reliable flow of electricity to users in its service area. Given the long-term, beneficial decreases in energy use associated with this alternative; potential construction-related impacts would not be significant.

Table 5-6. Estimated Energy Consumption from Construction – Fully Underground LRT Alternative – Little Tokyo Variation 2

Project Component	Base Year Dollars (thousands)	Energy Consumption Factor (BTU/2009$)	Total BTU Consumption (billions)
Track Elements	230,895	6,012	1,388
Stations, Stops, Terminals	538,830	6,012	3,239
Maintenance Facilities	8,625	7,394	64
Site work	192,128	6,012	1,155
Systems	48,154	9,240	445
Total	**1,018,632**	**N/A**	**6,291**

5.6.2 Operations

Operational energy use for Fully Underground Alternative – Little Tokyo Variation 2 includes the energy use of new light rail vehicles, new stations, and regional traffic.

5.6.2.1 Light Rail Operations

Annual operations of light rail under this alternative would consume approximately 28 billion BTUs (approximately 4,800 barrels of oil) (Table 5-2). Stations would consume 4.5 billion BTUs annually.

5.6.2.2 Regional Traffic

Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would result in an annual decrease of 117 million vehicle miles when compared to the No Build Alternative. This decrease would result in annual reductions of 730 billion BTUs (125,000 barrels of oil).

Reduction in vehicle energy consumption would result in a beneficial potential impact to energy resources in the region.

5.6.2.3 Bus Operations

Since bus operations are not part of this alternative, changes in energy usage would not occur.

5.6.2.4 Total Operational Energy Consumption

Total operational energy consumption under this alternative would mirror that of the Fully Underground LRT Alternative – Little Tokyo Variation 1, described in Section 5.5.2.4. Since this alternative would result in reduced energy consumption (compared to the 2035 No Build Alternative), the potential impact to energy resources in the region would be beneficial.

5.6.3 Cumulative

Cumulative impacts from construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be the same as those described for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Thus, potential cumulative impacts from construction and operation of this alternative would be less than significant.

6.0 POTENTIAL MITIGATION MEASURES

No mitigation measures would be required because potential impacts to energy resources under the TSM and build alternatives would be beneficial.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

There would be no adverse impacts from the No Build Alternative with respect to energy resources in the region.

7.1.2 CEQA Determinations

The No Build Alternative would have no impact on energy resource availability or energy use in the region.

7.2 Transportation System Management (TSM) Alternative

7.2.1 NEPA Findings

There would be no adverse impacts from the TSM Alternative with respect to energy resources.

7.2.2 CEQA Determinations

The TSM Alternative would not result in significant impacts to the availability of energy resources in the region. The TSM Alternative would not require new offsite energy supplies or conflict with regional energy conservation plans. Additionally, the TSM Alternative would not result in an inefficient or wasteful use of resources or the need for new systems for power or natural gas. Thus, potential impacts to energy resources would be less than significant.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Construction of the At-Grade Emphasis LRT Alternative would result in a one-time, non-recoverable energy use in the project area. However, operations would result in net energy resource savings of approximately 600 billion BTUs (113,000 equivalent barrels of oil) in the region. Given long-term, beneficial decreases in energy use under this alternative, construction-related impacts would be less than significant. The At-Grade Emphasis LRT Alternative would result in a long-term, beneficial impact to energy resources in the region when compared to the No Build Alternative.

7.3.2 CEQA Determinations

Total operational energy consumption under the At-Grade Emphasis LRT Alternative would be greater than that of existing conditions. However, this increase results from increased regional traffic unrelated to this alternative. Operation of this alternative would result in a net decrease in energy consumption. Thus, this alternative would have a beneficial potential

impact to energy resources and would offset the one-time, non-recoverable energy use associated with construction. Construction and operation of the At-Grade Emphasis Alternative would not exceed CEQA significance thresholds.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Construction impacts from the Underground Emphasis LRT Alternative would result in a one-time, non-recoverable energy use in the project area. However, operation of the Underground Emphasis LRT Alternative would result in a decrease in energy consumption in the project area. Given the long-term beneficial decreases in energy use under this alternative, potential construction-related impacts would be less than significant. The Underground Emphasis LRT Alternative would result in a long-term beneficial impact to energy resources in the region when compared to the No Build Alternative.

7.4.2 CEQA Determinations

Total operational energy consumption under the Underground Emphasis LRT Alternative would be greater than that of existing conditions. However, this increase results from increased regional traffic unrelated to this alternative. Operation of this alternative would result in a net decrease in energy consumption. Thus, this alternative would have a beneficial potential impact to energy resources and would offset the one-time, non-recoverable energy use associated with construction. Construction and operation of the Underground Emphasis LRT Alternative would not exceed CEQA significance thresholds.

7.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

7.5.1 NEPA Findings

Construction impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a one-time, non-recoverable energy use in the project area. However, operation of this alternative would result in a decrease in energy consumption in the project area. Given the long-term beneficial decreases in energy use under this alternative, potential construction-related impacts would be less than significant. The Fully Underground LRT Alternative – Little Tokyo Variation 1 would result in a long-term beneficial impact to energy resources in the region when compared to the No Build Alternative.

7.5.2 CEQA Determinations

Total operational energy consumption under the Fully Underground Emphasis LRT Alternative – Little Tokyo Variation 1 would be greater than that of existing conditions. However, this increase results from increased regional traffic unrelated to this alternative. Operation of this alternative would result in a net decrease in energy consumption. Thus, this alternative would have a beneficial potential impact to energy resources and would offset the one-time, non-

recoverable energy use associated with construction. Construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would not exceed CEQA significance thresholds.

7.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

7.6.1 NEPA Findings

NEPA findings mirror those described for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would reduce energy consumption in the project area, and would have a beneficial impact to energy resources.

7.6.2 CEQA Determinations

Construction and operational impacts associated with this alternative would mirror those described for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Construction and operation of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would not exceed CEQA significance thresholds. Long-term potential impacts from operation of this alternative would be beneficial to regional energy resources.

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Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX X

CULTURAL RESOURCES - BUILT ENVIRONMENT (UPDATED)

State Clearinghouse Number: 2009031043

California State Office of Historic Preservation Coordination

The Cultural Resources – Built Environment Technical Memorandum for the Regional Connector Transit Corridor project contained in this appendix was submitted to the California State Office of Historic Preservation. The State Historic Preservation Officer (SHPO) reviewed the technical memorandum including the determinations of eligibility for all potentially eligible properties within the Area of Potential Effect (APE). On June 1, 2010, the SHPO concurred with the determinations of eligibility and with the findings of effect from project alternatives. That concurrence letter is included in the following pages.

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1 June 2010

Reply To: FTA090409B

Dolores Roybal Saltarelli
Project Manager, LACMTA
One Gateway Plaza
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Re: Determinations of Eligibility and Finding of Effect for the Regional Connector Transit Corridor Project, Los Angeles, Los Angeles County, CA

Dear Ms. Saltarelli:

Thank you for your letter of 19 April 2010 continuing consultation on behalf of the Federal Transit Authority (FTA) for the above referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation at 36 CFR Part 800. You are requesting that I review the determinations of eligibility and assessment of effects for the Regional Connector Transit Corridor Project.

After reviewing the enclosed cultural resources report, I am able to concur with FTA's determinations of eligibility. 289 properties were identified in the APE for the project. Of those 289, 118 were of sufficient age to be considered for inclusion in the National Register of Historic Places (NRHP). Fifteen properties were previously listed in the NRHP and 33 were determined eligible by FTA. FTA has determined the following properties are eligible for inclusion in the NRHP:

1. Barker Brothers, 818 West 7th Street
2. Fine Arts Building, Global Marine House, 811 West 7th Street
3. 811 Wilshire Building, Tishman 615 Building, Wilflower Building, 811 Wilshire Boulevard
4. The California Club, 528 South Flower Street
5. 2nd Street Tunnel, Bridge# 53C 1318
6. Los Angeles Civic Center Historic District
7. Los Angeles Department of Water and Power Building, John Ferraro Office Building, 111 North Hope Street
8. Ahmanson Theater, 135 North Grand Avenue
9. Mark Taper Forum, 135 North Grand Avenue
10. Dorothy Chandler Pavilion, 135 North Grand Avenue
11. Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration, 500 West Temple Street, 222 North Grand Avenue
12. El Paseo de los Pobladores de Los Angeles, 224 North Grand Avenue
13. Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse, 111 North Hill Street
14. County of Los Angeles Central Heating and Refrigeration Plant, 301 North Broadway
15. Los Angeles County Hall of Records, 320 West Temple Street
16. Court of Historic American Flags, 224 North Hill Street, 100 block Hill Street
17. Los Angeles County Law Library, Mildred L. Lillie Building, 301 West 1st Street
18. Hall of Justice, Los Angeles County Jail, 211 West Temple Street

19. Clara Shortridge Foltz Criminal Justice Center, 210 West Temple Street
20. Los Angeles City Hall, 200 North Spring Street
21. City Health Building, City Hall South, 111 East 1st Street
22. Federal Building, North Los Angeles Field Office, 300 North Los Angeles Street
23. The Police Facilities Building, Parker Center, Motor Transportation Division, 150 North Los Angeles Street and 151 North Judge John Aiso Street
24. Mark Kuwata Real Estate, 301 East 1st Street, 104-106 North San Pedro Street, 104-106 Judge John Aiso Street
25. Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple, 342 East 1st Street
26. John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated, 216 South Alameda Street,
27. Los Angeles Times Building, 202 West 1st Street
28. The Mirror Building (Site of Butterfield Stage Station), Los Angeles Times-Mirror Annex, Times Building South, Mirror-News Building, 145 South Spring Street
29. Cathedral of Saint Vibiana, 214 South Main Street
30. Cathedral of Saint Vibiana, Rectory, 114 East 2nd Street
31. J.R. Newberry Company Building, 900 East 1st Street
32. 1st Street Viaduct, 1st Street between Vignes Street and Mission Road
33. Walt Disney Concert Hall, 111 South Grand Avenue

I concur with the NRHP determinations but will not comment on those properties identified solely for CRHR determination. The remaining resources in the APE are not eligible for inclusion in the NRHP.

Only one historic property, the 2nd Street Tunnel will be adversely affected by the project. I concur with the FTA's determination of adverse effect. Once FTA has submitted a draft MOA for the consultation I can comment on the mitigation measures for the undertaking.

Thank your for considering historic properties in your planning process. If you have any questions, please contact Amanda Blosser of my staff at (916) 654-7372 or e-mail at ablosser@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD:ab

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Regional Connector Transit Corridor
Cultural Resources – Built Environment
Technical Memorandum
Updated

April 5, 2011

Prepared for

Los Angeles County Metropolitan Transportation Authority

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State Clearinghouse Number: 2009031043

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ACRONYMS

ACHP	Advisory Council on Historic Preservation
AGELRT	American Meteorological Society / EPA Regulatory Model
APE	Area of Potential Effects
California Register	California Register of Historical Resources
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CRA	Community Redevelopment Agency
CRHR	California Register of Historic Resources (California Register)
DPR	Department of Parks and Recreation
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
FULRT	Fully Underground LRT Alternative – Little Tokyo Variations 1 & 2
GBV	Ground Borne Vibration
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power

LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LTS	Less Than Significant Impact
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NAHC	California Native American Heritage Commission
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places (National Register)
OHP	Office of Historic Preservation
POC	Pedestrian Overcrossing
PPV	Peak particle velocity
PRC	Public Resources Code
PUC	Pedestrian Undercrossing
SCCIC	South Central Coastal Information Center
SI	Significant Impact that can be mitigated to less than significant
SHPO	State Historic Preservation Officer
SU	Significant and Unavoidable Impact
TBM	Tunnel Boring Machine
TPSS	Traction power substations
TSM	Transportation Management System

UELRT	Underground Emphasis LRT Alternative
USDOT	US Department of Transportation

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1.0 SUMMARY

1.1 Purpose and Scope

SWCA Environmental Consultants (SWCA) conducted a cultural resources inventory of the built environment that may be affected by the proposed Regional Connector Transit Corridor project (the project). Cardno ENTRIX, Inc. reviewed and revised the Inventory and prepared this Technical Memorandum. Cardno ENTRIX prepared revisions to the Technical Memorandum to address refinements to the Locally Preferred Alternative (LPA).

The Metro Board of Directors has designated the Fully Underground LRT Alternative as the LPA. Based on input received during the Draft EIS/EIR review period, refinements to the LPA were made to reduce impacts. Revisions (excluding minor edits for consistency and correction of minor typographical errors) are indicated by a vertical line in the margin. No changes to the NEPA impact findings or CEQA impact determinations were identified as a result of refinements to the LPA, responses to comments, or other developments since publication of the Draft EIS/EIR.

The project is approximately 1.9 miles in length and is located in the City of Los Angeles, in Los Angeles County, California. The purpose of this project is to improve the region's public transit service and mobility within the corridor by connecting the light rail service of the Metro Gold Line to Claremont and the Eastside with the Metro Blue Line to Long Beach and the Metro Expo Line to Santa Monica. This link would serve communities across the region, allowing greater accessibility while serving expected population and employment growth in downtown Los Angeles.

This Technical Memorandum was prepared to comply with federal and state cultural resource compliance regulations and guidelines. The National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) of 1966 regulations require the identification of historic properties and evaluation of project-related effects on those properties. Section 106 of the NHPA defines "historic properties" as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (National Register) (36 CFR Section 800.16 (l) (1).

The California Environmental Quality Act (CEQA) and CEQA Guidelines also require lead agencies to evaluate proposed projects for the potential to cause significant impacts on "historical resources." This Technical Memorandum was completed under provisions of CEQA (Section 15064.5) and CEQA Guidelines (Title 14, California Code of Regulations or CCR, Chapter 3, Article 5) for determining "significance of impacts to archeological and historical resources."

1.2 Architectural Field Survey Findings

Cardno ENTRIX concluded that there are a total of 55 architectural historical properties that are listed in or eligible for listing in the National and/or California Registers within a 0.25 mile radius of the area of potential effect (APE). The State Historic Preservation Officer (SHPO) confirmed the definition of the APE in a letter dated February 10, 2010.

SWCA architectural historians conducted reconnaissance-level built environment surveys of the 1.8-mile-long APE in April 2009. In December 2009 a new alternative was added to the proposed project, requiring subsequent field surveys, bringing the total project length to approximately 1.9 miles. Each parcel in the direct and indirect APE containing improvements completed in or before 1968 was digitally photographed and researched, using data from the Los Angeles County Office of the Assessor and other sources. All properties in the APE were field-checked to verify whether or not their construction may have occurred more than 50 years prior to the anticipated project opening date.

In April and May 2009 and again in December 2009, SWCA conducted intensive-level surveys of properties containing improvements completed in or before 1968 within the APE that required evaluation or re-evaluation for historical significance. SWCA reviewed those properties in the field, photographed, and performed subsequent building permit and other research on properties that appeared to retain sufficient integrity to warrant evaluation for National Register and/or California Register eligibility.

The architectural field survey identified a total of 289 properties in the Project APE. ENTRIX concluded that of the 289 historical resources, 118 buildings, structures or objects were found to have been constructed 50 years or more before the assumed project construction date of 2018. California Department of Parks and Recreation (DPR) series 523 forms were prepared for each property containing improvements completed in or before 1968 that were not previously listed in or determined eligible for the National and California Registers. The DPR series 523 forms are used to evaluate eligibility for listing on the National and/or California Registers. Of the 118 resources evaluated within the APE, 49 were found to be eligible for both the National and California Registers; six were found to be only eligible for the California Register; while 63 of the resources were found to be ineligible for either list.

In June 2010 the SHPO reviewed the draft Technical Memorandum and Inventory. SHPO concurred on the initial determinations of eligibility and effects for NRHP eligible properties. SHPO did not comment on California Register eligible properties or effects.

The draft Technical Memorandum was included with the draft Environmental Impact Statement (DEIS) that was released for public comment on September 3, 2010. Two variations of the Fully Underground LRT Alternative (Little Tokyo Variation 1 and Little Tokyo Variation 2) are analyzed in this report. Little Tokyo Variation 2 was subsequently dropped

from consideration, and Little Tokyo Variation 1 became the sole alignment for the Fully Underground LRT Alternative. Both variations are described in this report, and the LPA (as refined) is described separately.

On October 28th, 2010, Metro's Board of Directors approved staff's recommendation to select the Fully Underground Alternative described in the publicly reviewed Draft EIS/EIR for the Regional Connector Transit Corridor as the Locally Preferred Alternative (LPA). The LPA would provide a direct connection from 7th Street/Metro Center Station to the Metro Gold Line at 1st and Alameda Streets. The Metro Gold, Blue and Expo light rail lines would be connected allowing trains to operate between Azusa and Long Beach, and from Culver City and the Eastside. In the action for approval, the Board also directed staff to remove the property located on the southeast corner of 2nd and Spring Streets from the list of potential acquisitions as well as eliminated the station at 5th and Flower Station due to its close proximity to the existing 7th St. Metro Center station and to reduce cost. The approved LPA thus includes three new stations instead of the original four described in the Draft EIS/EIR and northern entrances to the existing 7th St. Metro Center station are to be studied.

On January 4th, 2011, the Federal Transit Administration (FTA) authorized Metro to initiate Preliminary Engineering as part of FTA New Starts funding program. In its authorization, FTA requested that Metro among other items pursue the identification of appropriate mitigations and realize potential cost savings. Consistent with FTA's authorization, refinements to the Locally Preferred Alternative have been identified and are to be analyzed as part of the development of the Final EIS/EIR. The refined Locally Preferred Alternative is described in Section 2.4 Project Description.

This document was updated to describe the effects on historic properties and impacts on historical resources from the project refinements.

1.3 Project Effect/Impact Conclusions

Under NEPA for the No Build Alternative and the Transportation System Management (TSM) Alternative, project construction and operations would not result in any adverse construction or implementation-related effects on historic properties in the Project APE. Under CEQA, construction and operation of the No Build and TSM Alternatives would not result in any direct or indirect significant impacts on historical resources, and would not be expected to result in cumulative effects to historical resources under CEQA. The TSM and No Build alternatives would not result in any Section 4(f) effects.

Under NEPA, for the At-Grade Emphasis Light Rail Transit (LRT) Alternative, project construction and operations would result in an adverse effect to the NRHP/CRHR eligible 2nd Street Tunnel. Under CEQA, the project would result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures

would reduce the adverse impacts to a less than significant level. Under Section 4(f), this alternative would require the partial acquisition and use of five NRHP eligible properties.

Under NEPA, for the Underground Emphasis LRT Alternative, the project is not expected to result in any direct or indirect adverse effects to historic properties. Under CEQA, project construction would result in one significant impact and 14 indirect impacts to historical resources. Implementation of mitigation measures would reduce impacts to a less than significant level. Under section 4(f), the Underground Emphasis LRT Alternative would require the acquisition of a subsurface easement situated on one NRHP-eligible property.

Under NEPA, for the Fully Underground LRT Alternative - Little Tokyo Variation 1 and the Fully Underground LRT Alternative – Little Tokyo Variation 2, the project is not expected to result in any direct or indirect adverse effects to historic properties. Under CEQA, there would be one direct significant impact and 14 indirect significant impacts to historical resources. With implementation of mitigation measures, these impacts would be reduced to a less than significant level. Under Section 4(f), the project would require the acquisition of a subsurface easement situated on one NRHP-eligible property, but there would be no adverse effects as a result of the easement.

Under NEPA, for the LPA, the project is not expected to result in any direct or indirect adverse effects to historic properties. Under CEQA, there would be one direct significant impact and 14 indirect significant impacts to historical resources. With implementation of mitigation measures, these impacts would be reduced to a less than significant level. Under Section 4(f), the project would require the acquisition of a subsurface easement situated on one NRHP-eligible property, but there would be no adverse effects as a result of the easement.

1.4 Summary of Findings

There are 55 resources listed in, determined eligible for listing in, or eligible for listing in the National Register and the California Register of Historical Resources (California Register) in the project APE. The Federal Transit Administration (FTA), in coordination with the Los Angeles County Metropolitan Transportation Authority (Metro) with concurrence from the SHPO, established the APE that limits the scope of study to those parcels expected to be affected by the proposed project alternatives. Of the 55 resources, 49 are historic properties that are either listed in, determined eligible for listing in, or recommended as eligible for listing in the National Register, while six are only historical resources listed in, determined eligible for listing in, or recommended as eligible for listing in the California Register (See Table 4-6 and Figure 4-4 in Section 4).

1.5 Potential Impacts

Under the No Build Alternative, there would be no cumulative or potential impacts to historical resources other than impacts resulting from continued escalated automobile traffic

due to the lack of additional mass transit options. Under the TSM Alternative, the project would result in no potential impacts on historical resources. Under the At-Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, Fully Underground LRT Alternative Little Tokyo Variations 1 and 2, and the LPA, any potential direct or indirect impacts to historical resources would be reduced to a less than significant level through the implementation of mitigation measures. Project operations are not expected to cause any potential impacts.

1.6 Mitigation Recommendations

For Section 4(f) under the No Build and TSM Alternatives, there would be no mitigation measures to consider as there would be a lack of potential effects to historic properties or impacts to historical resources. Under the At-Grade Emphasis LRT Alternative, Underground Emphasis LRT Alternative, Fully Underground LRT Alternative Little Tokyo Variations 1 and 2, and the LPA, the implementation of mitigation measures MM-BE-1 through MM-BE-5 for CEQA would reduce any potential direct or indirect impacts to historical resources to a less than significant level. For NEPA, the implementation of MM-BE-1 and MM-BE-5 would be required to mitigate potential adverse effects to historic properties. The other alternatives would not require mitigation as there would be no adverse effects to historic properties. For Section 4(f), the implementation of mitigation measures MM-BE-2, MM-BE-3, and, when applicable, MM-BE-4, would greatly reduce the likelihood of a constructive use determination.

1.7 Disposition of Data

This report will be filed with the FTA, Metro, the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton, SWCA, and Entrix. All field notes and records related to the project will remain on file at the South Pasadena office of SWCA.

2.0 INTRODUCTION

NEPA guidelines include compliance with related federal laws that require identification of historic properties and consideration of project-related effects on those properties. This Technical Memorandum was prepared to comply with Section 106 of NHPA, as amended, and with regulations contained in 36 Code of Federal Regulations (CFR) Part 800. These regulations require federal agencies to consider the effects of proposed projects and undertakings on historic properties as part of the environmental assessment process and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those undertakings. Effects under Section 106 of the NHPA are defined in the "Criteria of Adverse Effect" (36 CFR Section 800.5(1).

Properties that are identified as historical resources within the identified project APE were evaluated for eligibility for listing in the National Register according to criteria set forth in 36 CFR Part 60.4. The age criterion for inclusion in the National Register is 50 years and older, except in cases of exceptional significance (Criteria Consideration G).

This Technical Memorandum was also prepared to comply with requirements of CEQA and the CEQA Guidelines (CERES 2009) as they apply to cultural resources. Under CEQA, it is necessary for a lead agency to evaluate proposed projects for the potential to cause significant impacts on "historical resources." A historical resource is defined as "a resource listed in, or determined eligible for listing in, the California Register of Historical Resources" in California Public Resources Code (PRC) Section 21084.1. A proposed project that may affect historical resources is submitted to the California State Historic Preservation Officer (SHPO) for review and comment prior to project approval by the lead agency and before any project-related clearance, demolition, or construction activities are commenced.

If a proposed project could be expected to cause substantial adverse change to a historical resource, environmental clearance for the project would require evaluating alternatives and/or implementing mitigation measures to reduce or avoid potential impacts. If a project is expected to result in an impact on historical resources, CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most the basic objectives of the project and avoid or substantially lessen any significant potential impacts on the historical resource.

Properties were also considered for California Register of Historical Resources (California Register) eligibility; although there is no established age threshold for the California Register, the same 50-year cutoff was used for this project. Under PRC Section 5024.1, the California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources.

If a proposed project and its related potential impacts would adversely affect the values of an archaeological or built environment site that is either listed in or determined eligible for inclusion in the National or California Register, such potential effects and/or impacts would be considered adverse.

2.1 Report Format

This report meets the Secretary of the Interior's Standards and Guidelines and follows contemporary professional standards for the preparation of historical resources reports.

2.2 Project Personnel

SWCA conducted the cultural resources inventory of the built environment for this project. The results of the inventory were included in a draft Technical Memorandum that was prepared by SWCA Senior Architectural Historian Francesca Smith, who meets the Secretary of the Interior's Professional Qualifications Standards in history and architectural history. SWCA architectural historians Jim Steely, Shannon Carmack, Kathy Corbett, Samantha Murray, and Sonnier Francisco provided technical input.

Cardno Entrix reviewed and revised the draft Technical Memorandum and prepared the submittal of the final Technical Memorandum. The Entrix project staff included Kimberly Demuth as Project Manager and Reviewer, Kirk Ranzetta as Senior Architectural Historian, David Harvey as Senior Project Historian and Reviewer, Jennifer Flathman as Project Architectural Historian, Don Craig as Project Historian, and Joe Rubin as Project Coordinator and Reviewer.

2.3 Project Description

The proposed project would extend approximately 1.9 miles through downtown Los Angeles (Figure 2-1) and provide enhanced Metro service throughout four distinct travel corridors that span over 50 miles across Los Angeles County. The proposed new dual-tracks would provide a direct link between the Metro Gold, Blue, and Expo Lines by bridging the gap in the regional light rail network between 7th Street/Metro Center Station at 7th and Flower Streets and the Little Tokyo/Arts District area near 1st and Alameda Streets. This would allow trains to travel directly from the Eastside to Santa Monica and from Long Beach to Claremont. The project also includes construction of new stations in downtown that would allow all passengers on the Metro Gold, Blue, and Expo Lines to reach multiple destinations in the central business district without transferring.

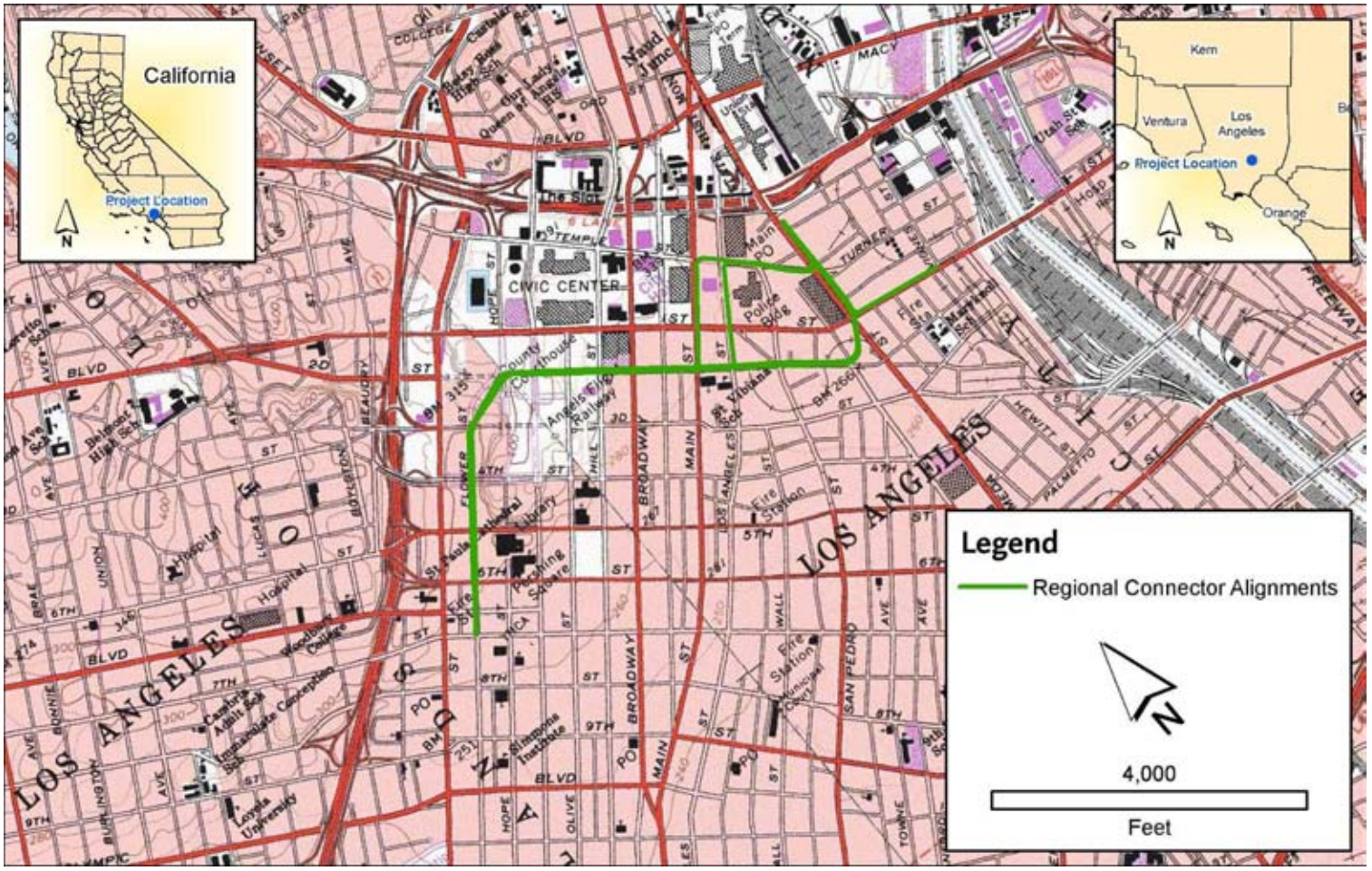

Figure 2-1. Project Location

The following alternatives are evaluated in this Technical Memorandum:

- No Build Alternative
- Transportation System Management (TSM) Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT Alternative- Little Tokyo Variation 1
- Fully Underground LRT Alternative- Little Tokyo Variation 2
- Locally Preferred Alternative (LPA)

2.3.1 No Build Alternative

Transit service under the No Build Alternative would be focused on preservation of existing services and projects. The No Build Alternative would not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line and the Metro Gold Line to the San Gabriel Valley would be open, and a number of bus routes may be reorganized and expanded to provide connections with these new rail lines. All bus and rail lines would operate using a fleet of vehicles similar to those currently in service or identified for purchase in the LRTP. The transit network within the project area should otherwise be largely the same as it is now.

2.3.2 Transportation System Management (TSM) Alternative

The TSM Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center and Union Stations. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. Rail service would remain the same as described for the No Build Alternative.

The two routes are described below and illustrated on Figure 2-2.

- Upper Grand Route – From the 7th Street/Metro Center Station, buses would proceed east on 7th Street, north on Olive Street, west on 5th Street, north on Grand Avenue, east on Temple Street, and then north on Los Angeles Street to Union Station. As a variation, buses could use Alameda Street between Temple Street and Union Station

to allow a stop at Temple and Alameda Streets, near the Little Tokyo/Arts District Station. The alignment is assumed to follow the same route as part of the existing Los Angeles Department of Transportation (LADOT) DASH Route B service, proceeding from the 7th Street/Metro Center Station to Union Station using Grand Avenue, Temple Street, and Los Angeles Street. Shuttle buses would run less than eight minutes apart and provide coverage of the Bunker Hill and Civic Center areas.

- Lower Grand Route – This route would use the existing northbound bus-only lanes on Figueroa Street and mixed flow lanes on 2nd and 3rd Streets, which are lightly used by other bus lines. From the 7th Street/Metro Center Station, buses would proceed north on Figueroa Street, west on 2nd Street, and north on Alameda Street to Union Station. To return to 7th Street/Metro Center Station, buses would travel south on Alameda Street, west on 3rd Street, and south on Flower Street. The alignment passes by both the Little Tokyo/Arts District Station and Union Station, and would provide good coverage of Little Tokyo and the southern edge of the Civic Center.

2.3.2.1 Operating Characteristics

The shuttle routes would be operated by Metro, and could use vehicles ranging from 30-foot shuttle buses to standard 40-foot buses. Buses would run every few minutes during peak periods, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. Similar to the Metro Rapid Bus lines, a transit priority system that allows longer green lights to oncoming transit vehicles would be used where possible to increase bus speed and efficiency.

2.3.3 At-Grade Emphasis LRT Alternative

2.3.3.1 Overview

The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets. Three new stations would be added, one would be a split station with single-direction platforms one block apart. This alignment includes a combination of underground and at-grade segments, with 46 percent of the route underground. New stations would serve the Civic Center, Grand Avenue, and the Financial District. Conversion of 2nd Street to a pedestrian-friendly transit mall is assumed.

To implement this alternative, the number of traffic lanes and on-street parking spaces on 2nd Street would be reduced. As a result, traffic is likely to divert to adjacent parallel streets such as 1st and 3rd Streets, but the roadway capacity along these streets would remain unchanged, as with the No Build Alternative. Traffic congestion along these streets would likely increase. Figure 2-3 illustrates the At-Grade Emphasis LRT Alternative.

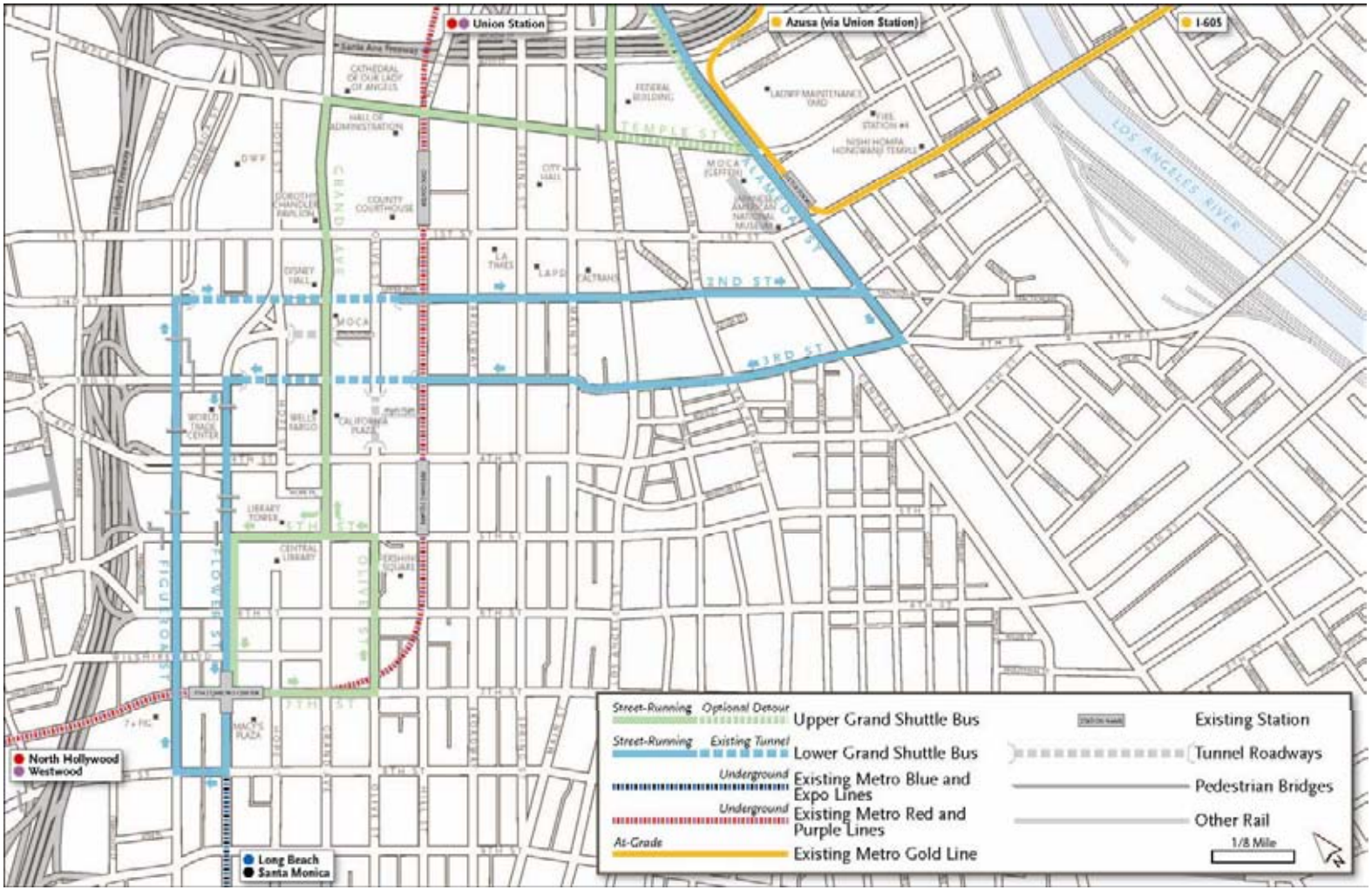

Figure 2-2. Transportation System Management (TSM) Alternative

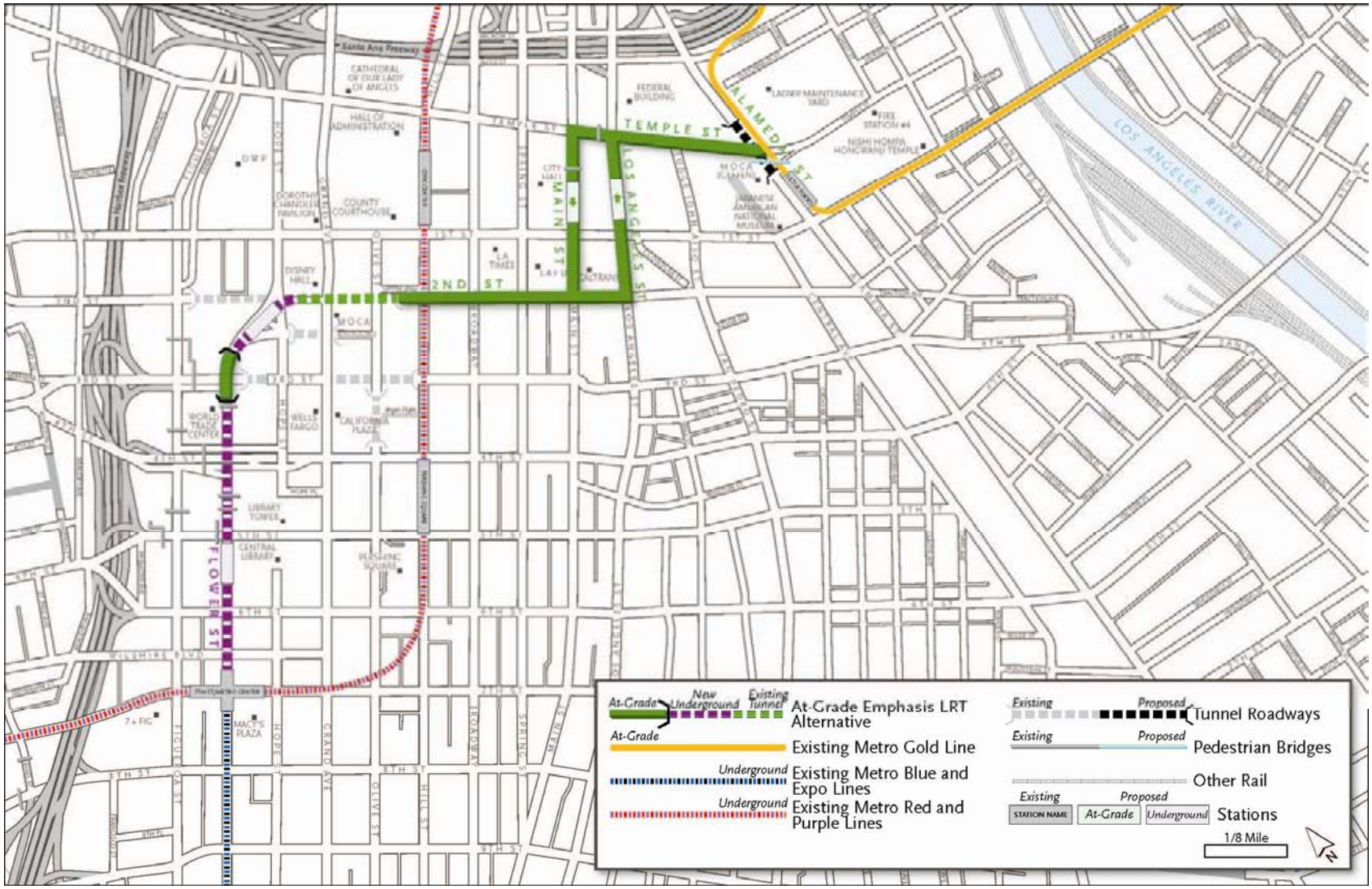

Figure 2-3. At-Grade Emphasis Light Rail Transit (LRT) Alternative

2.3.3.2 Route Configuration

From the existing platform at the 7th Street/Metro Center Station, the tracks would extend north underneath Flower Street to a new underground station just south of 5th Street. The tracks would then continue north, surface just south of 3rd Street, cross 3rd Street at-grade, and veer northeast through a portal in the hillside to an underground station at 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The tracks would continue northeast, "punch" through the wall of the existing 2nd Street Tunnel, and then travel east in the 2nd Street Tunnel toward Hill Street.

This alignment would reduce the 2nd Street Tunnel from four lanes to one (potentially two lanes, pending further detailed engineering). Trains would proceed east on 2nd Street to Main Street. Second (2nd) Street would be transit-dedicated, with its current two travel lanes and two parking lanes reduced to a single travel lane primarily for access to parking lots and loading zones. This type of configuration would extend from Hill Street to Los Angeles Street.

At Main Street, the alignment would split into two single-track alignments. One track (for northbound trains) would continue east to Los Angeles Street and then north to Temple Street. The other track (for southbound trains) would travel north on Main Street and then west on Temple Street. The at-grade station just north of 1st Street would be a split couplet with one-way stops at Main/1st Street and Los Angeles/1st Street.

At Temple and Los Angeles Streets, the two tracks would rejoin and proceed west on Temple Street to Alameda Street, where the tracks would join the Metro Gold Line to East Los Angeles in a three-way junction. Before reaching Alameda Street, the tracks would shift to the south side of Temple Street to provide an adequate turning radius for trains turning north onto the Metro Gold Line's existing ramp leading to the bridge over the US 101 freeway to Union Station. The ramp would need to be reconfigured to a steeper slope to facilitate turning movements in the three-way junction area. The intersection of Temple and Alameda Streets would also have a vehicular underpass for through-traffic on Alameda Street and a proposed pedestrian bridge to reduce potential conflicts between pedestrians, trains, and automobiles. The pedestrian bridge could potentially have endpoints located on each of the intersection's four corners.

At-grade crossovers could be located on 2nd Street between Hill Street and Broadway, and on 2nd Street between Broadway and Spring Street. Crossovers are mechanical track installations along the double-track alignment that allow trains traveling in either direction on either track to move to the other track and continue traveling in the same direction without stopping. Trains may also pass through a crossover without switching tracks. A wider right-of-way may be required in the vicinity of at-grade crossovers, thus potentially increasing the amount of roadway space needed for LRT facilities.

In summary, the At-Grade Emphasis LRT Alternative would connect the Metro Blue and Expo Line tracks at the 7th Street/Metro Center Station to the Metro Gold Line tracks at a new junction north of the Little Tokyo/Arts District Station. This would be accomplished using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated into two routes.

This memorandum also analyzes maximum potential effects for each station. Therefore, the actual effects may be smaller in magnitude than the potential impacts discussed in this analysis. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.3.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would use existing tracks to the 7th Street/Metro Center Station and then continue along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The service would then continue east along the Metro Gold Line tracks to East Los Angeles.

- North-South Route – Trains on the Metro Blue Line tracks would travel from the 7th Street/Metro Center Station north along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The service would then continue north along the existing Metro Gold Line tracks to Pasadena and the future Metro Gold Line extension to Azusa.

Vehicle and Pedestrian Circulation

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot-wide surface right-of-way bordered by mountable curbs. It is expected that this width would increase to 39 feet at center-platform station locations.

Vehicular and pedestrian crossings would be limited to traffic signal-controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted.

Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities. Left-turn parking access and egress is presently allowed at many downtown sites. However, the at-grade LRT facilities would prohibit uncontrolled mid-block left turns, thus modifying existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT Alternative alignment would travel at-grade along 2nd Street. It is assumed that this street would be dedicated as a transit-only roadway between the tunnel and Los Angeles Street. This segment of 2nd Street may be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties. As a result of this proposed change in street circulation, through traffic currently using 2nd Street would be diverted to parallel roadways such as 1st and 3rd Streets. East of Los Angeles Street 2nd Street would maintain its current physical features and operating characteristics.

The one-way transit couplet near City Hall along Main and Los Angeles Streets between 2nd and Temple Streets would consist of a single LRT track along each roadway. Both Main and Los Angeles Streets are wide enough to accommodate a single track and maintain acceptable vehicular operations. The curb-to-curb width of Temple Street, between Main and Alameda Streets, is 62 to 71 feet, which would leave one lane of traffic in each direction with potentially mountable curbs for use by emergency vehicles. Traffic operations along this segment of Temple Street would be affected by the lane reduction.

To minimize potential conflicts between rail, vehicular, and pedestrian traffic and minimize delays at the intersection of Temple and Alameda Streets, a vehicular underpass and a proposed pedestrian overpass would be proposed along Alameda Street to route the through traffic beneath the rail tracks and Temple Street traffic. Temple Street and the rail tracks would remain at-grade and the existing at-grade segment of Alameda Street would be lowered to pass under Temple Street.

Through traffic traveling north and south on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. Through traffic traveling east and west on Temple Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation. In addition, a one-lane southbound at-grade frontage road would be provided along Alameda Street to maintain access to businesses and properties on the west side of the street.

2.3.4 Underground Emphasis LRT Alternative

2.3.4.1 Overview

The Underground Emphasis LRT Alternative would provide a direct connection from 7th Street/Metro Center Station to the Gold Line tracks at the Little Tokyo/Arts District Station, and would include three new station locations. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street Tunnel and 2nd Street to a new portal on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue.

It is expected that a portion of this property would need to be acquired to construct the portal and stage construction of the tunnels beneath 2nd Street. The tracks would then connect to the Gold Line tracks across Alameda Street.

The Underground Emphasis LRT Alternative would be located entirely underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets in the same type of three-way junction proposed for the At-Grade Emphasis LRT Alternative. Figure 2-4 illustrates this alternative.

2.3.4.2 Route Configuration

The Underground Emphasis LRT Alternative alignment would extend north from the existing platform at the 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station. There are two options for a station on 2nd Street. The Broadway station option would place an underground station on 2nd Street between Broadway and Spring Street, and the Los Angeles Street station option would include an underground station between Main and Los Angeles Streets.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast and surface in the lot bounded by 1st, Alameda, and 2nd Streets, and Central Avenue. The tracks would then enter an at-grade three-way junction in the intersection of 1st and Alameda Streets.

A new underpass would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction, and a proposed overhead pedestrian bridge structure would reduce most potential conflicts between pedestrians and trains. The pedestrian overpass could potentially have endpoints at each of the four corners of the intersection.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station on 2nd Street (whether it is between Broadway and Spring Street or between Main and Los Angeles Streets). Crossovers may not be needed at all of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel-boring machines cannot be used to construct underground crossovers.

In summary, the Underground Emphasis LRT Alternative would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction just south of the Little Tokyo/Arts District Station at 1st and Alameda Streets. This would be accomplished using new light-rail right-of-way and new stations, enabling the consolidation of the Metro Gold, Blue, and Expo Line services into two routes.

This Memorandum analyzes maximum potential impacts for each station. Ultimate potential impacts may therefore be less in magnitude than the potential impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.4.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would run on tracks to the 7th Street/Metro Center Station and then continue north along the new Regional Connector tracks to the new three-way junction at the intersection of 1st and Alameda Streets. Trains would then turn east on 1st Street, bypassing the Little Tokyo/Arts District Station, and continue along the Metro Gold Line tracks to East Los Angeles.

- North-South Route – From the 7th Street/Metro Center Station, trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction at 1st and Alameda Streets. The trains would then turn north on 1st Street and stop at the existing Little Tokyo/Arts District Station before continuing along the Metro Gold Line route to Pasadena and Azusa.

Vehicle and Pedestrian Circulation

The Underground Emphasis LRT Alternative alignment would not permanently affect surface traffic or pedestrian circulation except at the intersection of 1st and Alameda Streets, where the LRT alignment would operate in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns.

The future roadway levels of service for this alternative would be similar to the No Build Alternative except at the intersection of 1st and Alameda Streets, where a vehicular underpass and pedestrian overpass are proposed to separate the heavy traffic volumes along Alameda Street from rail traffic to minimize delays. The proposed underpass would result in uninterrupted flow along Alameda Street in the north and south directions between 2nd and Temple Streets. Through traffic traveling east and west on 1st Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation.

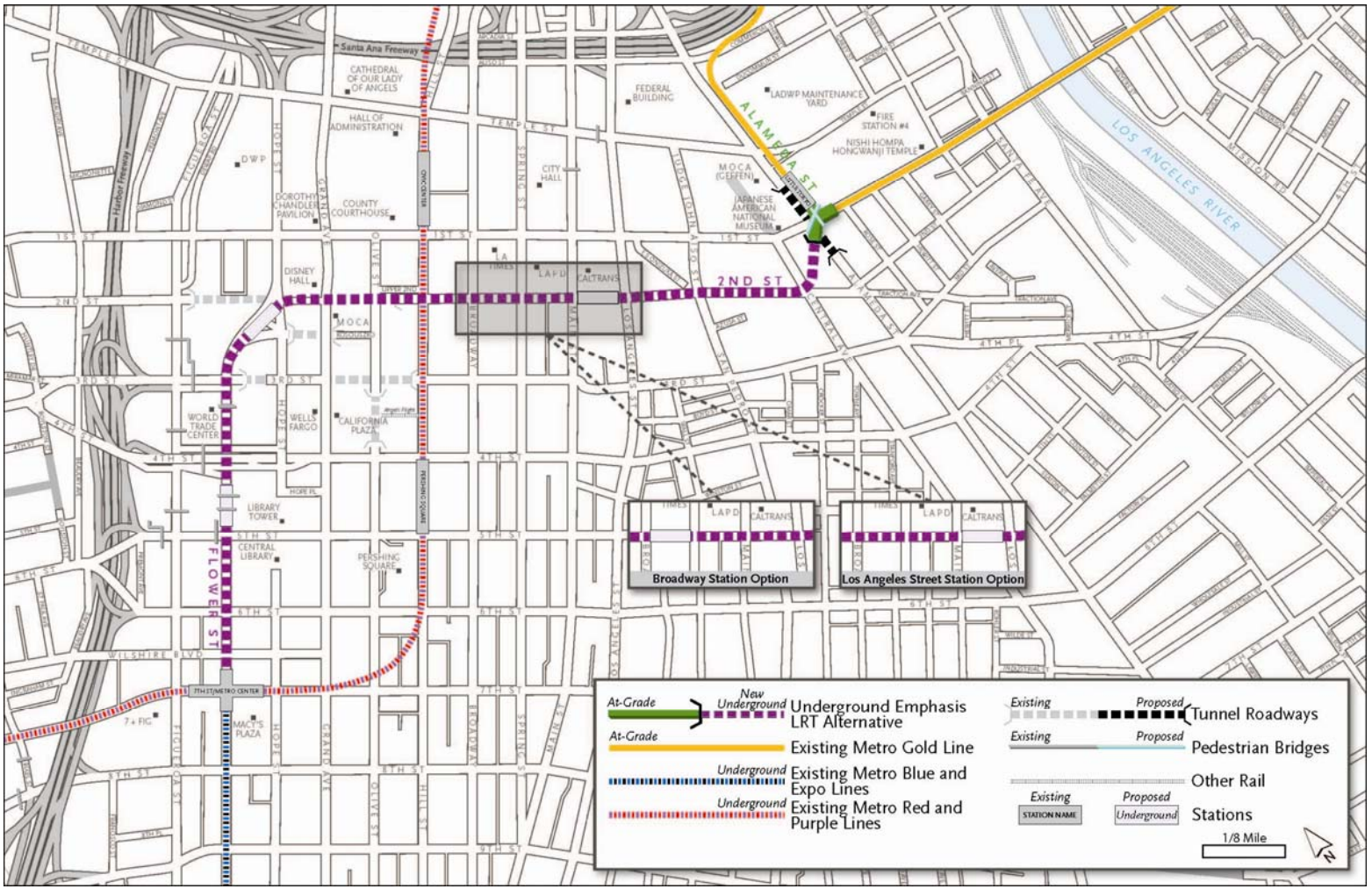

Figure 2-4. Underground Emphasis LRT Alternative

To maintain access to adjacent businesses and properties, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection and on the southbound side of the street north of the intersection. A full northbound frontage road crossing 1st Street is not feasible because of the location of the tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street.

2.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

2.3.5.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street Tunnel and 2nd Street to Central Avenue.

At 2nd and Central, the tracks would continue underground heading northeast under 1st and Alameda Streets. A three-way junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect to the Metro Gold Line heading north to Azusa and east to the San Gabriel Valley. One portal would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the City of Los Angeles Department of Water and Power (LADWP) Maintenance Yard and connect to the existing LRT Bridge over the US-101 freeway, allowing a connection to the Metro Gold Line to Azusa. The portal would be connected to the 1st and Alameda junction by a new tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the Little Tokyo/Arts District Station and tracks.

The second portal would be located within 1st Street between Alameda and Vignes Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. To accommodate the portal, 1st Street would be widened to the north. Street widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street to join the existing 1st Street LRT tracks about one and half blocks west of the 1st Street Bridge.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 1 would be located entirely underground from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.3.5.2 Route Configuration

The Fully Underground LRT Alternative- Little Tokyo Variation 1 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street. The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station, which would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

The tracks would continue from the station under the 1st and Alameda intersection into a new underground three-way junction. One set of tracks would separate from this junction, continuing underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which would eventually extend to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

The other set of tracks leaving the three-way junction would rise to the east within 1st Street to accommodate a new portal as well as existing Metro Gold line tracks. To accommodate the portal, the north portion of 1st Street would be widened. Street widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street to join the existing 1st Street LRT tracks, about one and half blocks west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold Line to East Los Angeles, which should eventually extend to I-605 per Metro's Long Range Transportation Plan.

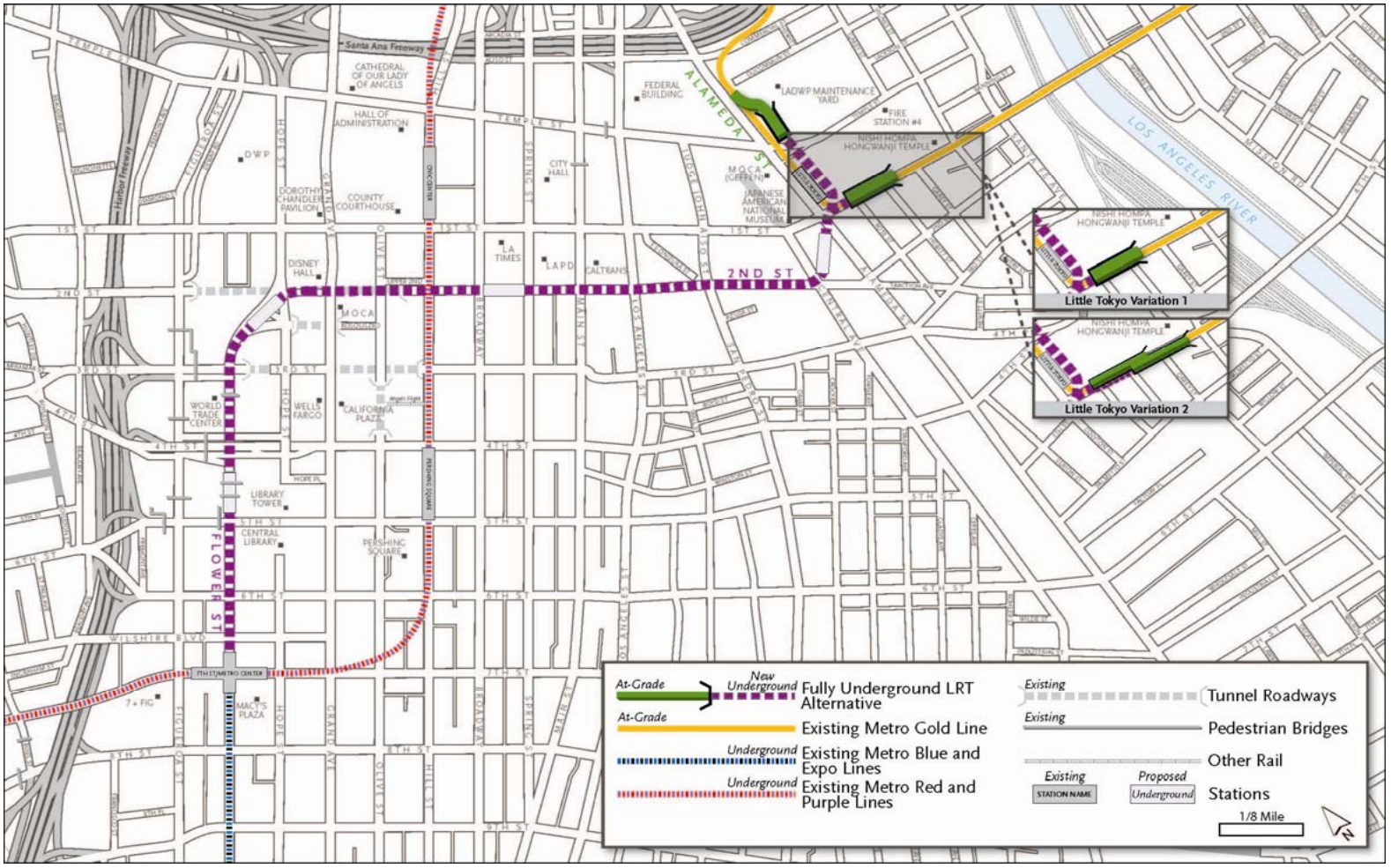

Figure 2-5. Fully Underground Emphasis LRT Alternative Alignment and Configuration, Little Tokyo Variations 1 and 2

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted. Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only.

The existing Metro Gold Line and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction, with only intermittent disruptions related to construction activities. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations, and may ultimately be placed in locations that are not adjacent to stations.

Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction under 1st and Alameda Streets. This would be accomplished using new light rail right-of-way and four new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate potential impacts may therefore be smaller in magnitude than the potential impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.5.3 Operating Characteristics

Two consolidated routes:

The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

- East-West Route - Metro Expo Line trains from Santa Monica would continue north from the existing 7th Street/Metro Center Station along new Regional Connector tracks

to a new three-way junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portal on 1st Street, and continue along the Metro Gold Line tracks toward I-605.

- North-South Route - After stopping at 7th Street/Metro Center Station, trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction beneath 1st and Alameda Streets. Trains would then travel to the new portal on the LADWP site, and continue along the existing Metro Gold Line alignment to Azusa.

The east-west and north-south routes would each operate with 5 minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector corridor.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment would not permanently affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street Bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th/4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. At the proposed Flower/5th/4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

2.3.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

2.3.6.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1 from the 7th Street/Metro Center Station to 2nd Street and Central Avenue.

A new two-level underground junction would be constructed beneath the 1st and Alameda Streets intersection. Trains traveling north toward Azusa and east toward I-605 would use the lower level of the junction, and trains travelling south toward Long Beach and west toward Santa Monica would use the upper level. To the north and east of the junction, trains would rise to the surface through new portals to connect to the Metro Gold Line heading north to Azusa and east towards I-605.

One portal containing the northbound and southbound tracks would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the LADWP Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line tracks.

This portal would be connected to the 1st and Alameda junction by a new cut-and-cover tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), and would run immediately east of the existing Little Tokyo/Arts District station and tracks. The new tunnel would feed southbound trains from the portal into the upper level of the junction, and carry northbound trains away from the lower level of the junction toward the portal.

Two portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

The northern portion of 1st Street would be widened to accommodate the westbound portal. The widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street. There, the new tracks would feed into the existing 1st Street LRT tracks, about a block west of the 1st Street Bridge. Also, 1st Street would be widened to the south between Hewitt and Vignes Streets to accommodate the eastbound track portal. The widening would taper down as it approaches Vignes Street. No modification to the 1st Street Bridge would be necessary.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property.

The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.3.6.2 Route Configuration

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

From 2nd and Hope Streets, the tracks would head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station that would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

As the tunnels turn northeast from 2nd Street, the northbound tunnel would descend and the southbound tunnel would rise so that the southbound tunnel would be stacked on top of the northbound tunnel. The new underground station near 2nd Street and Central Avenue would have two underground levels, each with a single-track platform. The northbound track with trains headed north and east would be on the lower level, and the southbound track with trains headed south and west would be on the upper level.

The tracks would continue from the station under the 1st and Alameda intersection into a new two-level underground junction. Separating from the junction, one track from the lower level (northbound) and one track from the upper level (southbound) would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station.

These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT Bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which should extend to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

A second track (westbound) leaving the upper level of the junction would rise to the east within 1st Street between Alameda and Hewitt Streets and link to the existing Metro Gold Line

track. Another track (eastbound) leaving the lower level of the junction would rise to the east within 1st Street between Hewitt and Vignes Streets, adjacent to the westbound track, and link to the existing Metro Gold Line track.

To accommodate the portal and temporary tracks to maintain Metro Gold Line service during construction, 1st Street would be widened to the north and south. Widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street and again at Vignes Street, where tracks would join the existing 1st Street LRT tracks, just west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold Line to East Los Angeles, which would eventually extend toward I-605 per Metro's Long Range Transportation Plan.

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted.

Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only. The existing Metro Gold Line and Little Tokyo/Arts District Station and surface tracks would be maintained for continued service during construction, with intermittent disruptions related to construction activities.

One lane of 1st Street would need to be temporarily closed during construction between Alameda and Vignes Streets to maintain these surface tracks. The surface tracks would not remain in place beyond construction. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line tracks. The link would be provided by a new two-level junction under 1st and Alameda Streets using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate potential impacts may therefore be smaller in magnitude than the potential impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.6.3 Operating Characteristics

Two consolidated routes:

- The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes: East-West Route - Metro trains from Santa Monica would run on existing tracks from the 7th Street/Metro Center Station north along the new Regional Connector tracks to a new two-level junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portals on 1st Street, and continue along the Metro Gold Line tracks towards I-605.

- North-South Route - After stopping at 7th Street/Metro Center Station, trains from Long Beach would continue north along the new Regional Connector tracks to the new two-level junction beneath 1st and Alameda Streets. The trains would then travel to the new portal on the LADWP site, and continue along the Metro Gold Line tracks to Azusa.

The east-west and north-south routes would each operate with 5-minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would not permanently affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street Bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th/4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be

possible via the remaining connector roadways. At the proposed Flower/5th/4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

2.3.7 Locally Preferred Alternative

On October 28th, 2010, the Metro Board of Directors concurred with staff's recommendation to designate the Fully Underground LRT Alternative as the LPA. The LPA is essentially the same configuration as the Fully Underground LRT Alternative – Little Tokyo Variation 1, except that this alternative does not include the Flower/5th/4th Street station. It travels under the Japanese Village Plaza in Little Tokyo instead of continuing underneath 2nd Street to Central Avenue, and it then connects to the Metro Gold Line within 1st Street and north of Temple Street.

The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. Tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to just west of Central Avenue. At 2nd Street and the pedestrian signal to the JVP, the tracks would continue underground heading northeast under the JVP and 1st and Alameda Streets.

An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Unlike the Underground Emphasis LRT Alternative, two portals would be needed to facilitate the connection between the underground Regional Connector and the at-grade Metro Gold Line branches to Pasadena/Claremont and the Eastside. The new portals would be located to the north and east of the junction, where trains would rise to the surface to connect to the Metro Gold Line heading north to Claremont and east to the Eastside.

One portal would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line tracks. This portal would rise to the north within the maintenance yard of the City of Los Angeles Department of Water and Power (LADWP) and connect to the existing LRT bridge over US 101, allowing a connection to the Metro Gold Line to Claremont. Tracks would run from the junction under 1st and Alameda Streets through a new tunnel crossing beneath Temple Street and the Mangrove property (the parcel on the northeast corner of 1st and Alameda Streets) to the new portal. This new tunnel would run immediately east of the existing Little Tokyo/Arts District Station and Metro Gold Line tracks.

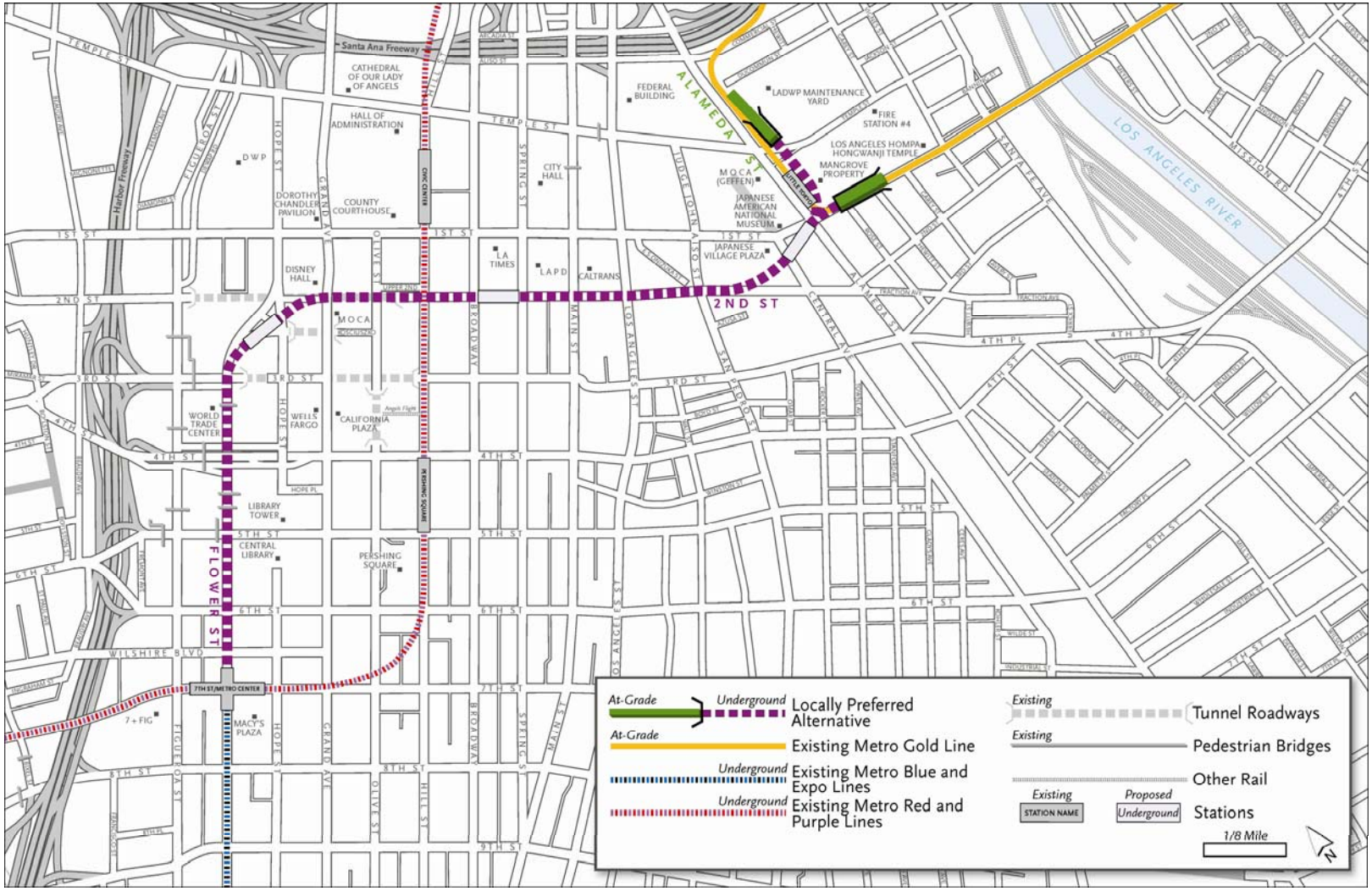

Figure 2-6 –Locally Preferred Alternative

The second portal would be located within 1st Street between Alameda and Garey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. The widening would start at Alameda Street and continue east, significantly tapering down as it crosses Hewitt Street, returning to the existing condition prior to the Los Angeles Hompa Hongwanji Buddhist Temple, to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

Property northeast of 1st and Alameda Streets, the Mangrove property, would need to be acquired for insertion of the TBM, to stage construction of both portals, to connect to the Metro Gold Line LRT bridge, and to construct the tunnels beneath Temple Street and the Mangrove property. During construction, tracks would be installed in this area at-grade to allow service to proceed on the Metro Gold Line while construction activities occur within the project area.

2.3.7.1 Route and Configuration

The LPA alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station and would run underneath Flower Street. An enhanced pedestrian walkway would be provided along Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets, which would improve the pedestrian connection between the Financial District and the 7th Street/Metro Center Station. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets. A new underground station would be located just southwest of the intersection of 2nd and Hope Streets.

At 2nd and Hope Streets, a pedestrian connection to Upper Grand Avenue would be provided. A pedestrian plaza above General Thaddeus Kosciuszko Way connecting to Upper Grand Avenue is planned as part of the Broad Collection museum. Metro would construct an elevator from the station entrance to the plaza if one is not already provided, If the plaza is not built, Metro would construct a pedestrian bridge from the elevator to Upper Grand Avenue. Tracks would then head east underneath 2nd Street to the next proposed underground station between Broadway and Spring Street (2nd Street/Broadway station).

The tracks would continue east underneath 2nd Street to just west of Central Avenue at approximately the pedestrian signal to the JVP, where the alignment would then veer northeast under privately held property and Central Avenue to a newly proposed Little Tokyo/Arts District underground station (1st/Central Avenue station). The proposed underground station would be partially located within Central Avenue and the northern half of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking would

need to be acquired for construction of this station. However, the remaining businesses on that block would remain, including the Office Depot and associated parking.

The tracks would leave the station and cross under the intersection of 1st Street and Alameda Street into a new underground rail junction. Separating from the junction, one set of tracks would continue underground beneath the Mangrove property (located on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station.

The tracks would then travel under Temple Street before surfacing through a portal in the southwest corner of the LADWP maintenance yard and rise to connect to the existing Metro Gold Line LRT bridge over US 101. This would allow trains to continue along the Metro Gold Line to Pasadena, which would be extended to Claremont. Traffic lanes on Alameda Street would be temporarily reconfigured during construction.

The other set of tracks leaving the underground junction would rise to the east within 1st Street to accommodate a new portal and the existing Metro Gold Line tracks. 1st Street would be widened on its northern side to accommodate the portal. The widening would initiate at Alameda Street and continue east, significantly tapering down as the alignment crosses Hewitt Street, returning to the existing condition prior to the Los Angeles Hompa Hongwanji Buddhist Temple, to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold Line to East Los Angeles, which would be eventually extended to I-605 per Metro's LRTP. The signals would be removed at the intersection of 1st and Hewitt Streets. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns would be prohibited at the intersection of 1st and Hewitt Streets. Right turns would continue to be permitted to and from Hewitt Street. Automobile access to the Mangrove property would continue to be available from Temple and 1st Streets. However, automobile access to the parcel along 1st Street would be restricted to right turns only.

The existing Metro Gold Line Eastside Extension and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction with intermittent disruptions related to construction activities. Once construction is complete, operation of the current Metro Gold Line between Pasadena and the Eastside and the existing, at-grade Little Tokyo/Arts District Station would terminate. In its place, Metro would initiate operations on two routes:

- Between Claremont and Long Beach
- Between the Eastside and Santa Monica

Crossovers could be located just east of the proposed station at 2nd and Broadway Streets, underground beneath 1st Street just east of the intersection of 1st and Alameda Streets, and

underground beneath the Mangrove property, north of the rail junction. In addition, a pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. The crossovers and pocket track may not be needed at these locations and may ultimately be placed in other locations. Tunnel boring machines cannot be used for construction of crossovers since underground crossover locations require cut and cover construction. More information on these construction methods is provided in the Description of Construction, Appendix K.

In summary, the LPA would link the Metro Blue Line and Metro Expo Line at the 7th Street/Metro Center Station to the Metro Gold Line at a new junction under 1st and Alameda Streets using new light rail rights-of-way and new stations. This would enable the Metro Gold Line, Metro Blue Line, and Metro Expo Line services to be consolidated. Key features of the LPA are described below.

Proposed LRT alignments that would be constructed as part of the LPA are:

Underground double track beneath Flower Street from the existing platform at the 7th Street/Metro Center Station to 3rd Street

- Underground double track curving northeast from the intersection of 3rd and Flower Streets toward 2nd and Hope Streets
- Underground double track beneath the 2nd Street tunnel and 2nd Street from Hope Street to just west of Central Avenue, at approximately the pedestrian signal to the JVP, then northeast to 1st and Alameda Streets
- Underground rail junction beneath the intersection of 1st and Alameda Streets
- Underground double track from the rail junction to the portal located within a widened 1st Street between Alameda and Garey Streets, prior to the Los Angeles Hompa Hongwanji Buddhist Temple; then at-grade double track connecting to the existing Metro Gold Line Eastside Extension tracks toward I-605
- Underground double track from the rail junction running north beneath the Mangrove property and Temple Street, just east of the existing Little Tokyo/Arts District Station, to the new portal in the LADWP maintenance yard site; then at-grade double track rising from the portal on a new ramp structure to connect to the existing Metro Gold Line bridge over the US 101

Proposed stations that would be constructed as part of the LPA are:

- Underground station just southwest of the intersection of 2nd and Hope Streets (2nd/Hope Street station)
- Underground station on 2nd Street between Broadway and Spring Streets (2nd/Broadway station)
- Underground station just southeast of the intersection at 1st Street and Central Avenue (1st/Central Avenue station). This station may include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed

The proposed crossovers and pocket track could be located at the following preliminary locations:

- Pocket track, which could also serve as a crossover, underground along Flower Street between 5th and 6th Streets , which would allow for a possible future station at this location constructed as a separate project
- Crossover underground just east of 2nd/Broadway station
- Crossover underground beneath 1st Street just east of the intersection of 1st and Alameda Streets
- Crossover underground beneath the Mangrove property, north of the rail junction

Proposed TPSS facilities would be placed at the following locations:

- Along Flower Street between 5th and 4th Streets
- Underground in the 2nd/Broadway station

2.4.7.2 Operating Characteristics

The LPA consolidates the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

East-West Route (Santa Monica to the Eastside via the Metro Expo Line, Regional Connector, and Metro Gold Line Eastside Extension tracks): Metro Expo Line trains from Santa Monica would travel on existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, the trains would continue north along the new Regional Connector tracks to a new junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to a new portal on 1st Street, and continue along the Metro Gold Line Eastside Extension tracks to the Eastside in

the vicinity of I-605.North-South Route (Claremont to Long Beach via the Metro Gold Line, Regional Connector, and Metro Blue Line tracks): After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to a new junction beneath 1st and Alameda Streets. Trains would then travel to a new portal on the LADWP maintenance yard site, and continue along the Pasadena Metro Gold Line and the Foothill Extension to Claremont.

The east-west and north-south routes would each operate with five minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

Vehicle and Pedestrian Circulation

The Regional Connector alignment would not affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possibleVehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns with the exception of the removal of a newly installed traffic signal at 1st and Hewitt Streets and potentially reduce lane of traffic and parking lane between Wilshire and 5th Streets.

Compared to other alternatives, the LPA alignment would require relatively small changes to surface traffic and pedestrian circulation patterns. There would be some changes on 1st Street between Alameda Street and the 1st Street Bridge where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area. Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns with the exception of the removal of a newly installed traffic signal at 1st and Hewitt Streets. Through traffic movements would no longer be permitted along Hewitt Street at 1st Street, and left turns would no longer be possible to or from Hewitt Street.

An enhanced pedestrian walkway would be created along Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets, which would improve the pedestrian connection between the Financial District and the 7th Street/Metro Center Station. Pedestrian enhancements would include an enhanced pedestrian walkway with landscaping, wayfinding signage, art features, and amenities aimed at improving pedestrian experience and safety.

Permanent roadway and lane reconfigurations would also be needed around the proposed 2nd/Hope Street station and the proposed pedestrian walkway enhancement along Flower

Street. At the 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. One traffic lane would need to be removed from Flower Street between 4th and 6th Streets to accommodate the enhanced pedestrian walkway from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets.

3.0 METHODOLOGY FOR IMPACT EVALUATION

3.1 Regulatory Framework and Standards of Significance

This section discusses the applicable federal, state, and local regulations that 1) define historic properties and historical resources and 2) provide thresholds for determining effects to historic properties under NHPA and impacts to historical resources under CEQA.

3.1.1 Federal

A number of federal laws address the protection of historic properties. Analysis of expected effects to built environment resources are primarily addressed through NEPA, the National Historic Preservation Act (NHPA), and Section 4(f) of The Department of Transportation Act of 1966.

3.1.1.1 National Environmental Policy Act (NEPA)

The intent of NEPA is to protect the natural and built environment, including historic properties, from adverse effects resulting from federal actions. Before a federal agency may proceed with a proposed action, an environmental evaluation must be made to determine whether the action may have a significant effect on the environment. Effects on historic properties are usually assessed in coordination with the process established under Section 106 of the NHPA.

NEPA requires that agencies evaluate the degree to which an action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for the National Register of Historic Places. Properties that are listed in or eligible for listing in the National Register are defined as "historic properties" (See 36 CFR 800.16(l)). NEPA requires federal agencies to evaluate the significance of potential project-related effects, including both direct and indirect effects upon historic properties.

3.1.1.2 National Historic Preservation Act (NHPA)

Any project, activity, or program that is permitted, licensed, approved, or funded in whole or in part by a federal agency must comply with Section 106 of the NHPA. Federal agencies are required to take into account the effect of their actions on historic properties listed in or eligible for the National Register. Under 36 CFR Part 800.8, federal agencies are specifically encouraged to coordinate compliance with Section 106 and the NEPA process.

The NRHP, created under the NHPA, is the federal list of historic, archaeological, and cultural resources worthy of preservation. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture. The NRHP is maintained and expanded by the National Park Service on behalf of the Secretary of the Interior. The California Office of Historic Preservation (in Sacramento) administers the statewide NRHP program under the

direction of the SHPO. To guide the selection of properties included in the NRHP, the National Park Service has developed the NRHP Criteria for Evaluation. The criteria are standards by which every property that is nominated to the NRHP is judged. Significance in American history, architecture, archaeology, and culture is possible in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling and association, and meet one of the following Criteria (36 CFR 60.4):

- Criterion A: A property is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: A property is associated with the lives of a person or persons significant in our past; or
- Criterion C: A property embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: A property has yielded, or may be likely to yield, information important in prehistory or history.

Buildings less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance under Criteria Consideration G, as described in the NPS's Bulletin No. 22, "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years." Other NRHP criteria considerations are used for religious properties, moved properties, birthplaces or graves, cemeteries, reconstructed properties, and commemorative properties.

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Part 800.5(a) (1). These standards of significance are used in the evaluation of potential project effects and are described further in Section 3.2.

Section 110(f) of the NHPA of 1966, as codified in 36 CFR 800.10, requires federal agencies to undertake planning and actions to minimize harm to designated National Historic Landmark (NHL) properties. If a proposed project is found to have the potential for an adverse effect on a NHL, the Secretary of the Interior (typically represented by a representative of the National Park Service) is invited to participate under Section 110(f) of the NHPA. For this project, the Little Tokyo Historic District NHL is situated within the APE and would not be adversely affected. Consultation with the National Park Service will be conducted.

3.1.1.3 U.S. Department of Transportation Act (USDOT), Section 4(f)

Section 4(f) (23 CFR Part 774) of the U.S Department of Transportation (USDOT) Act of 1966, as amended (49 USC 1653[f]), defines impacts of DOT agency projects to be the "use" of certain types of resources, including "historic sites."

DOT agencies, including FTA, cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites that are listed in or eligible for listing in the National Register unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land; and
- The action includes all possible planning to minimize harm to the property resulting from use (FHWA 2009).

Under Section 4(f), a historic site is significant if it is a historic property (i.e. a property listed in or eligible for the NRHP). Historic properties are considered 4(f) resources that are subject to the provisions of 23 CFR Part 774.

3.1.2 State

The protection of historical resources in California is addressed through the regulatory compliance of the CEQA. The identification and designation of resources in California follow guidelines set in the California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

3.1.2.1 California Environmental Quality Act (CEQA)

CEQA includes regulatory compliance in relation to historical resources. The CEQA guidelines define a significant historical resource as "a resource listed in or eligible for listing in the California Register of Historical Resources" (CRHR) (Public Resources Code Section 5024.1; 14 CCR 4852). The term historical resource is defined as any site that:

- Is listed in, or determined to be eligible by the State Historical Resources Commission for listing in the CRHR, or is determined to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and
- Meets any of the following criteria, denominated 1 through 4:

    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    2. Is associated with the lives of persons important in California's past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, a resource included in a local register of historical resources, as defined by Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC is presumed to be historically or culturally significant.

3.1.2.2 California Register of Historical Resources (California Register)

Under California PRC Section 5024.1, the CRHR was established to serve as an authoritative guide to the State's significant historic and archaeological resources. A resource is considered historically significant if it meets the criteria for listing in the CRHR (PRC Section 5024.1, Title 14 CCR Section 4852). For a property to be considered eligible for listing in the CRHR, it must be found significant under at least one of four criteria by the State Historical Resources Commission. The four criteria include a finding that the resource:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to possessing one of the above-listed characteristics, to be eligible for listing in the CRHR, resources must retain "substantial" integrity to their period of significance. The seven aspects or qualities of integrity are the same as those applied to NRHP-eligible properties: location, design, setting, materials, workmanship, feeling, and association.

The CRHR also includes properties which:

- Have been determined eligible for listing in, or are listed in the National Register;
- Are registered State Historical Landmark Number 770 and all consecutively numbered landmarks above Number 770 (see Section 3.1.2.3);

- Are points of historical interest that have been reviewed and recommended to the State Historical Resources Commission for listing (see Section 3.1.2.4);
- Are city- and county-designated landmarks or districts (see Section 3.1.3., historic districts) are a concentration of historic buildings, structures, objects, or sites within precise boundaries that share a common historical, cultural or architectural background. Individual resources within a historic district may lack individual significance but be considered a contributor to the significance of the historic district (PRC Section 5024.1 (d) (1-3)).
- Are identified as significant in a historic resource survey if it meets the following criteria:

    1. The survey has been or will be included in the State Historical Resources Inventory;
    2. The survey and the survey documentation were prepared in accordance with Office of Historic Preservation (OHP) procedures and requirements;
    3. The resource is evaluated and determined by the office to have a significance rating of category "1–5" on California Department of Parks and Recreation (DPR) series 523 form; and
    4. If the survey is five or more years old, at the time of its nomination for inclusion in the California Register the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource (PRC Section 5024.1(g)).

3.1.2.3 California Historical Landmarks

California Historical Landmarks (CHLs) are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value.

Designated CHLs are numbered sequentially as they are listed by the State Historical Resources Commission. CHLs numbered 770 and higher are automatically listed in the CRHR. According to PRC Section 5031(a), to be eligible for California Historical Landmark designation, a property must be of "statewide historical importance" and must demonstrate its statewide significance by meeting one of the following three requirements:

- The property is the first, last, only, or most significant historical property of its type in the region. The regions are Southern California, Central California, and Northern California.

- The property is associated with an individual or group having a profound influence on the history of California. The primary emphasis should be the place or places of achievement of an individual. Birthplace, death place, or place of interment shall not be a consideration unless something of historical importance is connected with his or her birth or death.

- The property is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or it is one of the more notable works, or the best surviving work in a region of a pioneer architect, designer, or master builder.

3.1.2.4 California Points of Historical Interest

California Points of Historical Interest include "sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value." Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register. To be designated, a property must meet at least one of the following criteria:

- The first, last, only, or most significant of its type within the local geographic region (City or County).

- Associated with an individual or group having a profound influence on the history of the local area.

- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

3.1.3 Local

The City of Los Angeles designates local landmarks (Historic-Cultural Monuments) and historic districts, through Ordinance Number 175891, Section 12.20.3, of the Los Angeles Municipal Code.

NEPA and CEQA guide lead agencies to incorporate local designations in the review and evaluation of project effects. Therefore, designated Historic-Cultural Monuments and Historic Preservation Overlay Zones are also considered in the affected environment and included in identified properties. Since Los Angeles is a Certified Local Government, locally designated properties have "presumptive significance" under CEQA. If project alternatives

are expected to affect locally designated historic properties, mitigation measures are recommended, as for CEQA, to avoid, minimize, and mitigate those effects. No Historic Preservation Overlay Zones are located in the APE for this project.

3.1.3.1 City of Los Angeles Designation

Local landmarks in Los Angeles are designated as "Historic-Cultural Monuments." To be eligible for separate designation, properties must meet the criteria described in City of Los Angeles Administrative Code Section 22.130. Historic Cultural Monuments would include any site (including significant trees or other plant life located thereon), building, or structure which:

- Is of particular historic or cultural significance to the City of Los Angeles, such as historic structures or sites in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or
- Is identified with historic personages or important events in the main currents of national, State or local history; or
- Embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period style or method of construction; or
- A notable work of a master builder, designer, or architect whose individual genius influenced his age.

Properties are usually submitted to City of Los Angeles Office of Historic Resources staff for review, and if considered are presented to the Cultural Heritage Commission. If approved, the Cultural Heritage Commission makes a recommendation to a preliminary committee for its review and later to the City Council for designation.

3.2 Standards of Significance

3.2.1 Federal (NHPA) Criteria of Adverse Effect – Section 106

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Part 800.5(a) (1):

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include

reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

If a project's effects do not diminish the integrity of a historic property, then a "no adverse effect" finding is appropriate (36 CFR 800.5(b)). An "adverse effect" finding is appropriate when any of the following project effects occur:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR Part 800.5(a) (2)).

If an adverse effect is expected to occur as a result of a proposed project, the lead agency shall consult further to resolve the adverse effect, pursuant to 36 CFR Part 800.5(2) and develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties (36 CFR Part 800.6).

3.2.2 CEQA Standards of Significance for Potential Impacts

As noted in Section 3.1.2.1, under CEQA, proposed public projects must be evaluated for their probability to cause significant effects on "historical resources." Historical resources are defined as "a resource listed in, or determined eligible for listing in, the California Register of Historical Resources" in PRC Section 21084.1. CEQA equates a "substantial adverse change" in the significance of a historic property with a significant effect on the environment (PRC Section 21084. 1). Thresholds of substantial adverse change are established in PRC Section

5020.1, and include demolition, destruction, relocation, or "alteration activities that would impair the significance of the historic resource."

Material impairment occurs when a project results in demolishment, or materially alters in an adverse manner, the physical characteristics that convey a property's historic significance, or that are the reason for that property's inclusion in an official register of historic resources (PRC Section 15064. 5[b] (2)).

If a proposed project or alternative under consideration is expected to cause substantial adverse change to a historical resource, an evaluation of alternatives for the project or implementation of mitigation measures to reduce or avoid impacts is required. If the project is expected to result in an effect on historical resources, CEQA guidelines require an analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project and avoid, or substantially lessen, any significant effects on the historical resource.

3.2.3 Noise and Vibration

Noise generated by construction equipment can cause adverse effects to historic properties and significant impacts to historical resources when exposure exceeds the "severe level" as established by FTA (Hanson 2006). Noise that reaches a severe level which cannot be reduced through mitigation or other measures may cause a reduction in use or access to historic properties or historical resources, and thus cause an adverse effect to historic properties or a significant impact to historical resources. For properties or resources where the sense of quiet represents a characteristic of its historical significance, increases in noise may also cause adverse effects and/or significant impacts.

Ground borne vibration (GBV) generated by construction equipment can also cause adverse effects to historic properties and significant impacts to historical resources that are in close proximity construction activities. Construction-related vibration can cause damage ranging from minor cosmetic damage to interior plaster or woodwork damage to major structural damage. Thus, GBV can harm the characteristics that make historic properties eligible for the NRHP and historical resources eligible for the CRHR.

GBV is established by measuring the vibratory potential of construction equipment, the distance between the equipment and a sensitive receptor (i.e. historical resource or historic property), and the structural category of the historic property and/or historical resource. When assessing the potential for building damage, GBV is usually expressed in terms of the peak particle velocity (PPV) in units of inches per second. FTA vibration damage criteria for various structural categories are listed in Table 3-1.

Depending on the types of construction equipment and the category of buildings, potential "minimum safe distances" for GBV for this project have been calculated in Table 3-2. The

approximations in Table 3-2 are based on "typical" equipment and construction activities as well as the general classification of structures.

Table 3-1. FTA Construction Vibration Damage Criteria

Building Category and Description	PPV (in/sec)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: U.S. Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual, May 2006. FTA-VA-90-1003-06. Table 12-3.

Table 3-2. Calculated "Minimum Safe Distances" from Construction Equipment to Reduce Potential for GBV Damage (ft)

Equipment		Building Categories and (FTA Guideline Damage Thresholds)			
		Cat I (0.5 PPV) Inch/sec	Cat II (0.3 PPV) Inch/sec	Cat III (0.2 PPV) Inch/sec	Cat IV (0.12 PPV) Inch/sec
Pile Driver (Impact)	Upper Range	53	74	97	136
	Typical	30	42	55	77
Pile Driver (Sonic)	Upper Range	33	46	60	84
	Typical	13	18	23	32
Large Vibratory Roller		15	20	26	37
Hoe Ram		8	12	15	21
Large Bulldozer		8	12	15	21
Caisson drilling		8	12	15	21

3.3 Area of Potential Effects

The project-specific Area of Potential Effects (APE) (See Figures 3-1 through 3-9) was established through consultation between the lead federal agency, FTA, the lead CEQA agency, Metro, SHPO, and other consulting parties, in accordance with 36 CFR 800. Consistent with 36 CFR 800.16(d), the APE is defined as:

> The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

The project APE was delineated to ensure identification of historic properties and historical resources that may be directly or indirectly affected by the project and that are listed in or eligible for inclusion in the NRHP and/or CRHR. The APE was established using methodology consistent with those of previous Metro projects. The 1.9-mile-long APE consists of 246 Los Angeles County Office of the Assessor parcels, some of which are subdivided into multi-property entities.

The SHPO concurred with the project APE on September 9, 2009. Subsequent to the September 2009 APE concurrence, two new alternatives were developed by MTA. As a result, the APE was revised and resubmitted to SHPO for review of the new areas on December 24, 2009. The SHPO concurred with the revised APE on February 10, 2010. Although the Fully Underground Alternative has been altered slightly due to project refinements the APE has not changed.

Correspondence between FTA and SHPO for this project is included in Appendix E.

3.4 Evaluation Methodology

3.4.1 Records Search

A California Historical Resources Information System (CHRIS) records search was conducted at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton for the area within the APE. The SCCIC houses cultural resources records for Los Angeles County and the primary purpose of the CHRIS records search was to identify any previously recorded cultural resources known to exist within or adjacent to the project corridor. The records review included a review of listings for the National Register of Historic Places California Register of Historical Resources, State Historical Landmarks, and California Points of Historical Interest. In addition, complete listings for designated local landmarks were also reviewed.

3.4.2 Built Environment Survey Methods

SWCA architectural historians conducted reconnaissance-level built environment surveys of the 1.8-mile-long APE in April 2009. In December 2009 to two new alternatives were added to the proposed project, requiring subsequent field surveys, bringing the total project length to approximately 1.9 miles. Each parcel in the direct and indirect APE containing improvements completed in or before 1968 was digitally photographed and researched, using data from the Los Angeles County Office of the Assessor and other sources. Since construction year records are not entirely reliable, all properties in the APE were field-checked to verify whether or not their construction may have occurred more than 50 years from the anticipated project construction date of 2018.

SWCA assumed that the historic status of properties listed in or determined eligible for the National and/or California Registers was unchanged, unless improvements were no longer extant or major alterations had recently been made as noted. One building that was determined eligible for listing in the National Register was field-checked and the determination, which is believed to have been made in error, was corrected in this document as a finding. DPR series 523 forms were prepared for properties that have been demolished since they were listed or eligibility determinations were made for National and/or California Registers.

In April and May 2009 and again in December 2009, SWCA conducted intensive-level surveys of properties containing improvements completed in or before 1968 in the APE that required evaluation or re-evaluation for historical significance. SWCA reviewed those properties in the field, photographed, and performed subsequent building permit and other research on properties that retained sufficient integrity to warrant evaluation for National Register and/or California Register eligibility. Those properties were studied to identify the architects, builders, owners, and tenants, as well as events that may have taken place, in order to make recommendations regarding their historic significance.

3.4.3 Consultation/Coordination

In addition to consultation with the SHPO (see Appendix E), Metro has coordinated with other interested parties regarding cultural resources as described in Section 3.4.3.1, Section 3.4.3.2, and the Cultural Resources – Archaeology Technical Memorandum. This early coordination is intended to assist in the identification of potential cultural resources and historic properties in support of the effects evaluation.

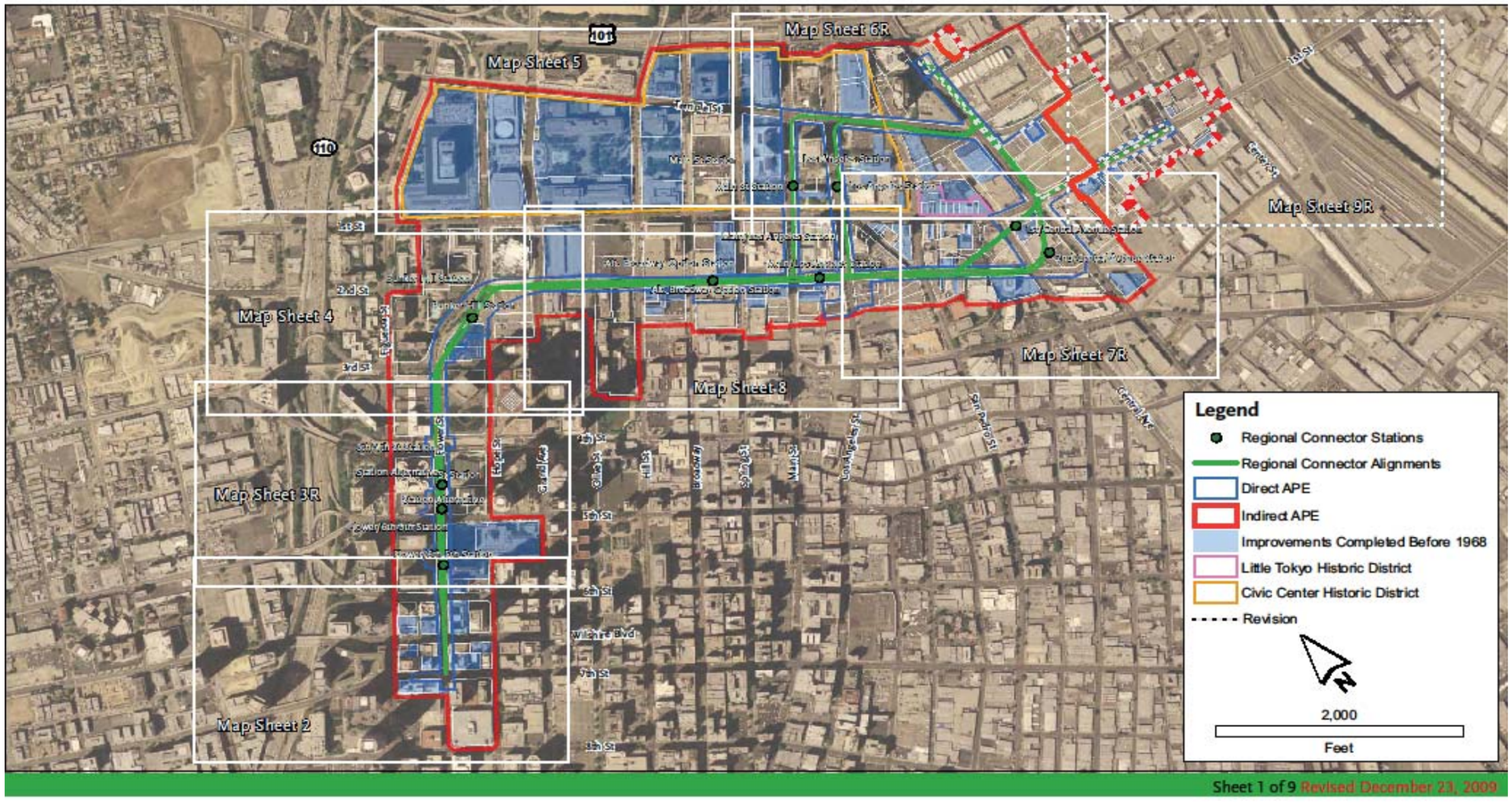

Figure 3-1. Area of Potential Effects Map, Sheet 1

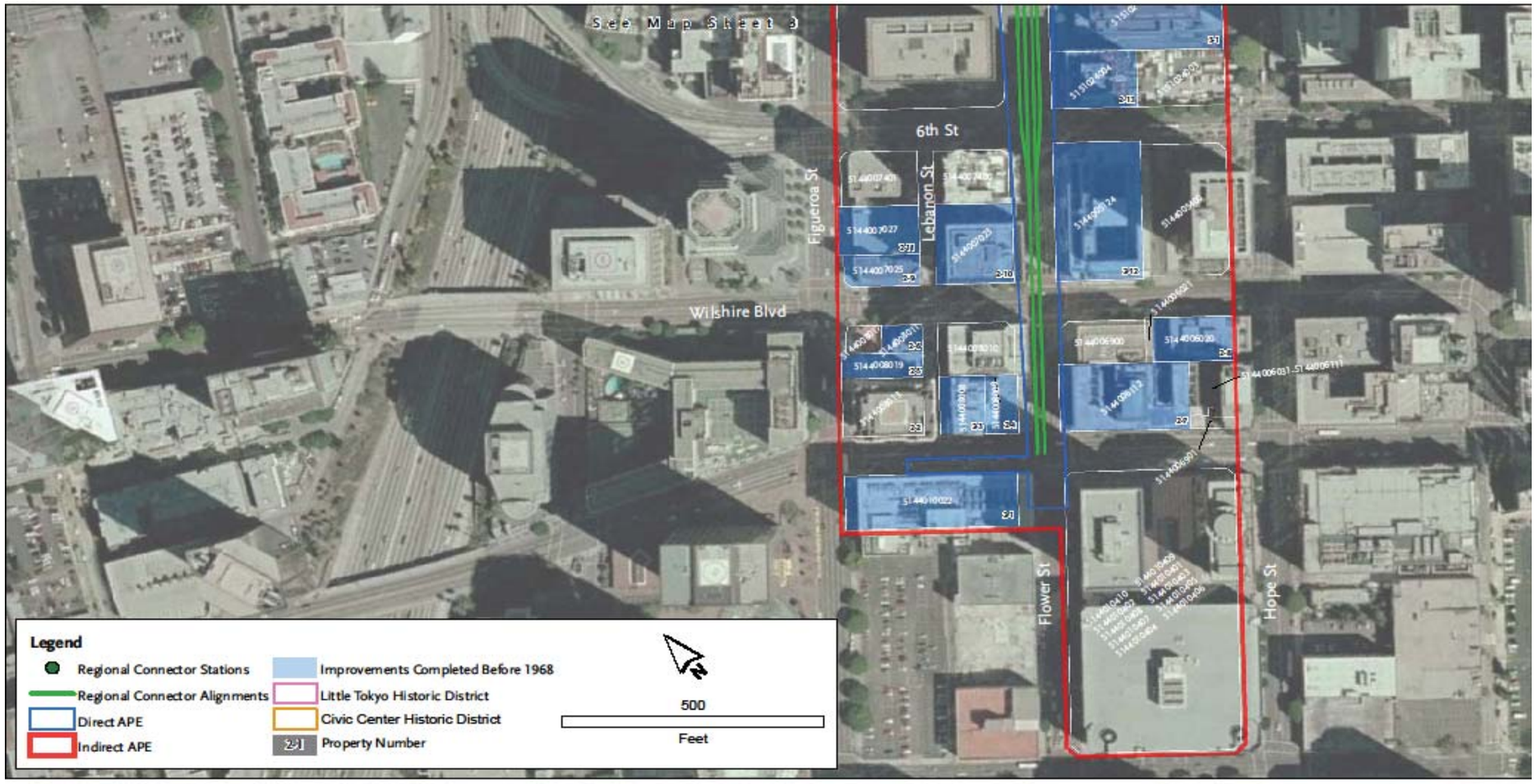

Figure 3-2. Area of Potential Effects Map, Sheet 2

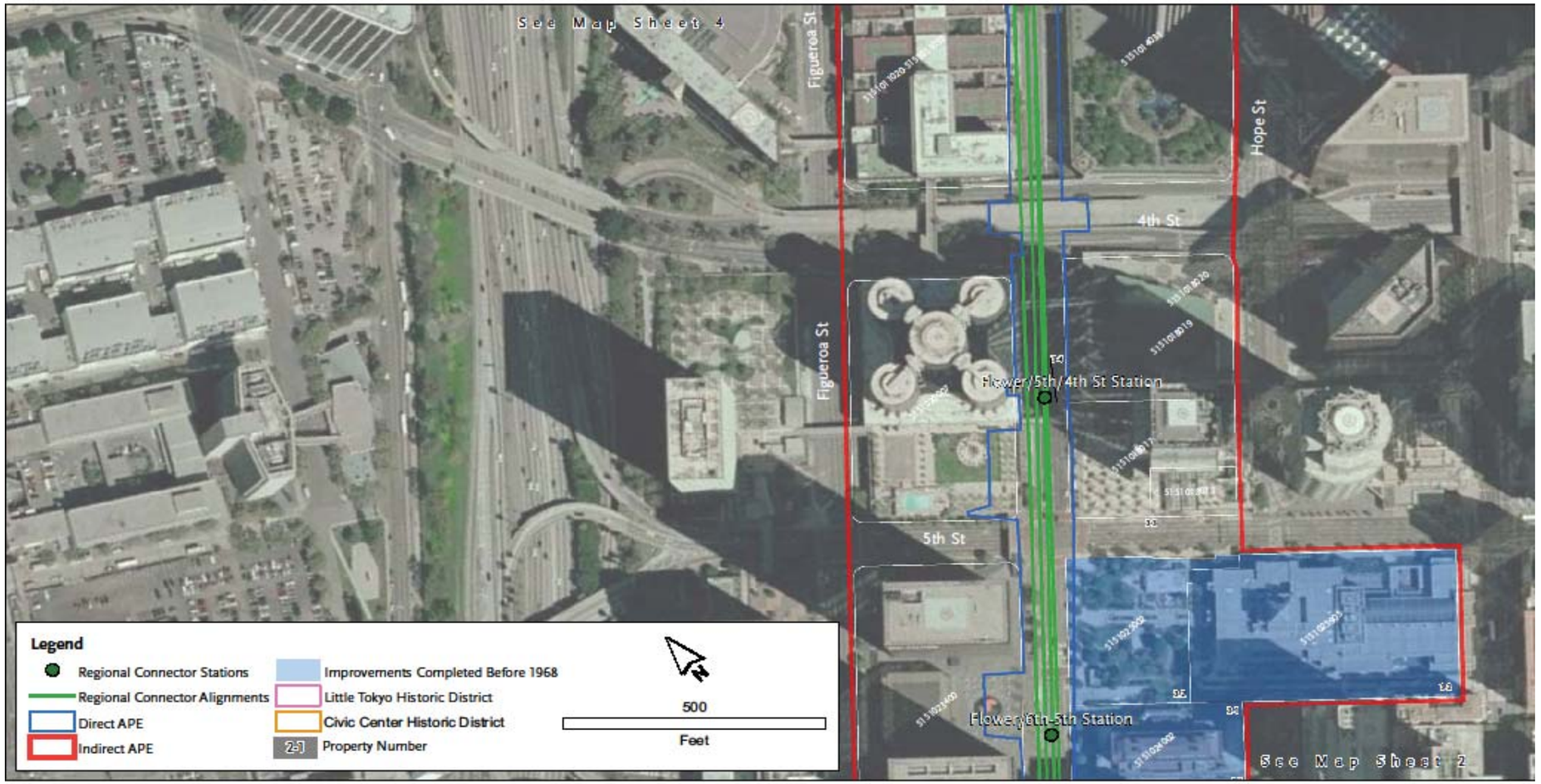

Figure 3-3. Area of Potential Effects Map, Sheet 3R

Sheet 4 of 9

Figure 3-4. Area of Potential Effects Map, Sheet 4

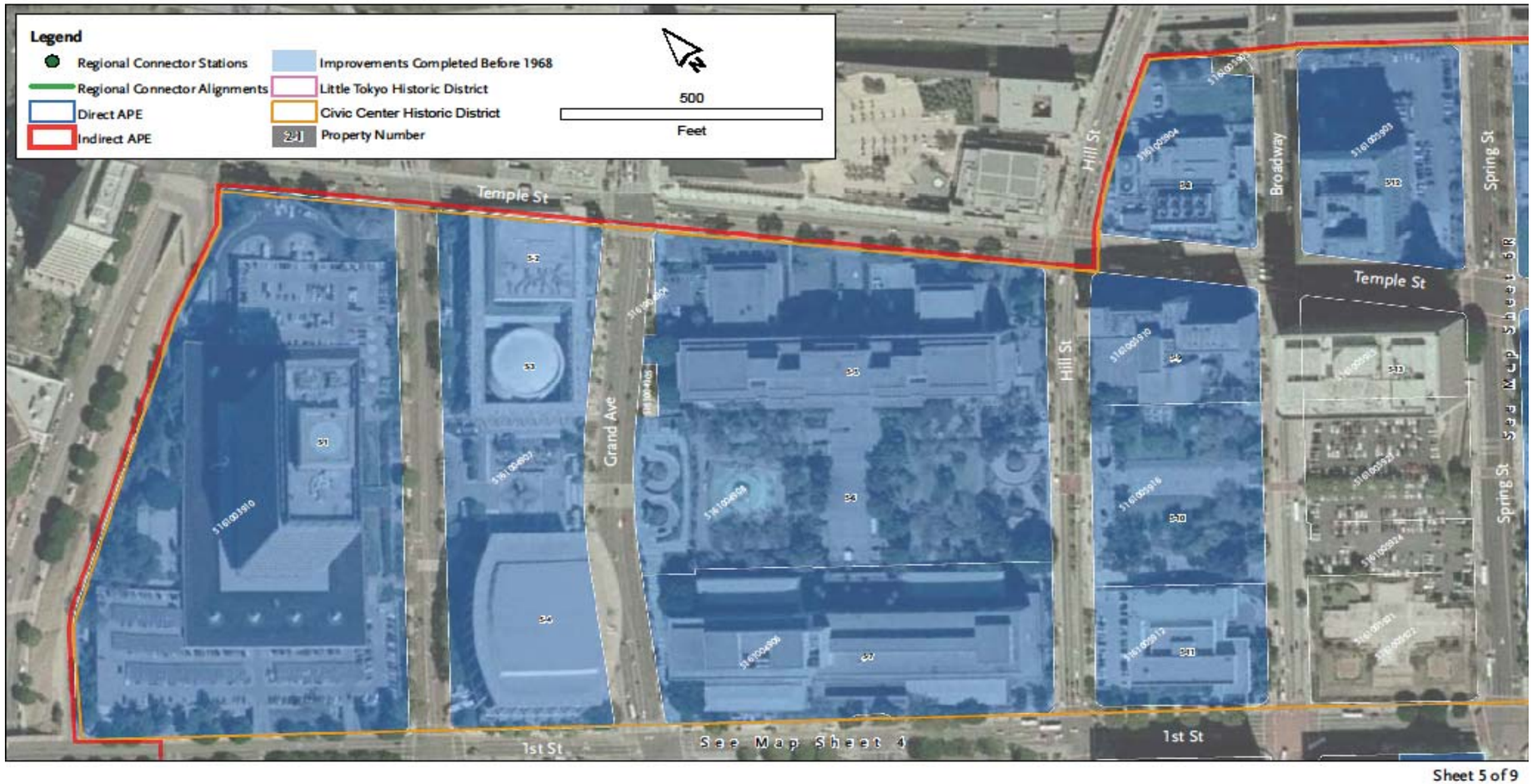

Figure 3-5. Area of Potential Effects Map, Sheet 5

Figure 3-6. Area of Potential Effects Map, Sheet 6R

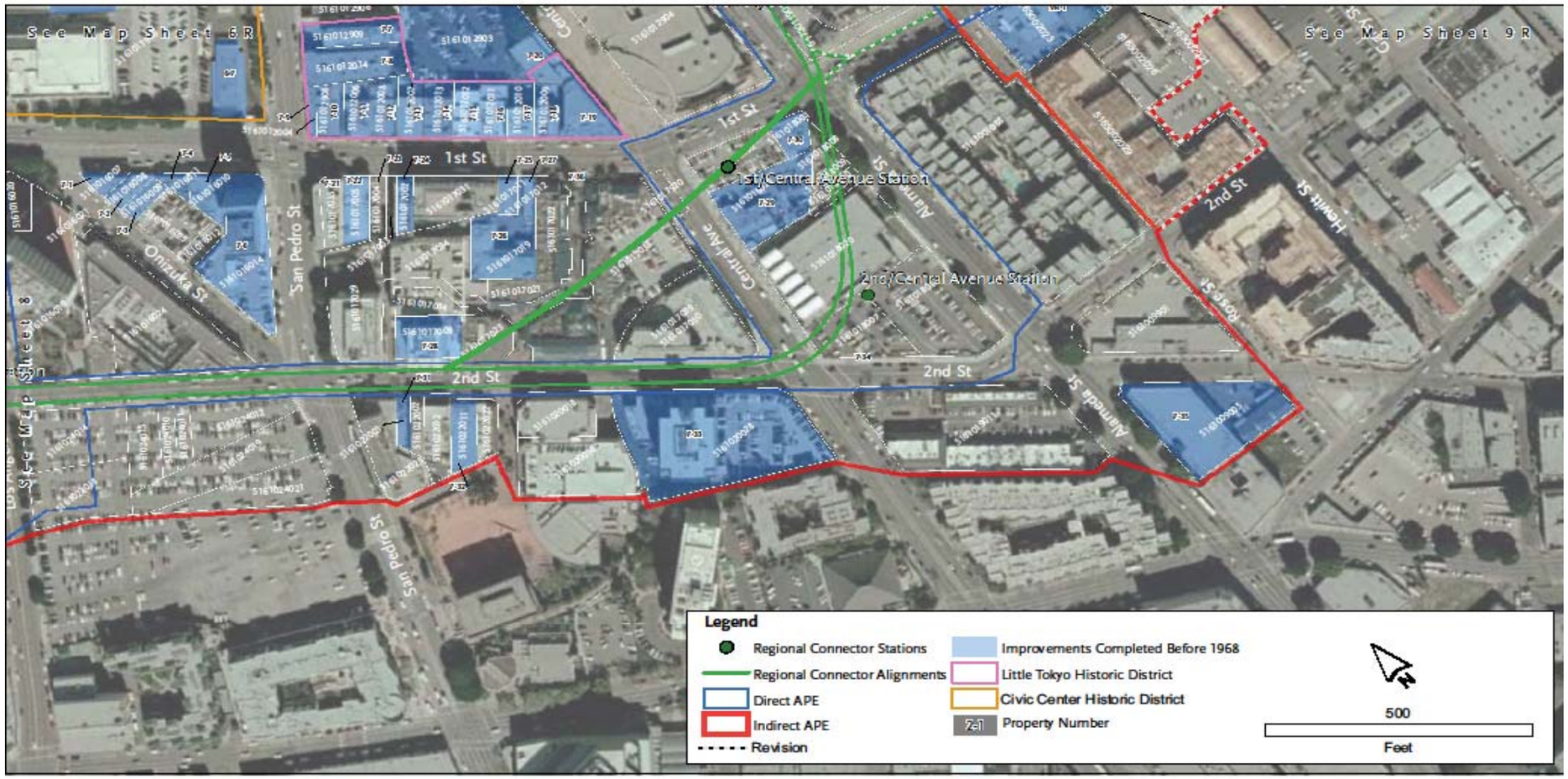

Figure 3-7. Area of Potential Effects Map, Sheet 7R

Figure 3-8. Area of Potential Effects Map, Sheet 8

Figure 3-9. Area of Potential Effects Map, Sheet 9

3.4.3.1 Native American Coordination

In compliance with Section 106 of the NHPA, FTA initiated the consultation process with Native American tribes with interests in the project area as consulting parties, pursuant 36 CFR Part 800.

Under the guidance of FTA, SWCA contacted the California Native American Heritage Commission (NAHC) by a letter dated February 10, 2009, requesting review of the Sacred Lands File and a list of appropriate Native American contacts for the project. The NAHC search of the Sacred Lands File indicated the presence of Native American cultural resources in the project area. The NAHC also provided a list of five Native American contacts.

SWCA sent letters via U.S. mail to the five Native American contacts on April 16, 2009, requesting information regarding potential cultural resources that may be located within the project APE. These letters included location maps and a description of the proposed project and its related APE. A follow-up contact with each group was made via telephone on May 11, 2009, and subsequent follow-ups via telephone and/or email were made as necessary. Not all of the contacts responded.

Details of SWCA's contacts with the tribes are provided in the Regional Connector Transit Corridor Cultural Resources – Archaeology Technical Memorandum.

3.4.3.2 Local Historical Group/Local Government Coordination

Metro's representative, SWCA, sent letters via U.S. mail to nine local government, local historic preservation advocacy, and history advocacy groups to request information regarding historic resources that may be located within the project APE. The letters were mailed on April 16, 2009, and described the proposed project and its related APE, and included location maps (Appendix C). SWCA followed up with each group via telephone and/or email between April 23 and May 14, 2009, and made subsequent follow-up efforts, as necessary. The Fully Underground LRT Alternative (Little Tokyo Variation 1 and 2) were added to the project in December 2009. These alternatives are in or immediately adjacent to the original study area; therefore, additional consultation was not undertaken.

Five groups did not provide responses. One asserted that it was too early in the project to discuss. One agency and one local historic preservation advocacy group reserved the right to consult regarding effects in the future. Subsequently, meetings were held with each of these groups and one meeting was jointly held with both groups. One group commented on general environmental issues, and another group provided additional research on the history of Little Tokyo and the Atomic Café. Results of the coordination are described in detail in Table 3-3. Coordination regarding identification, effects, and mitigation are ongoing as part of this project's Section 106 compliance efforts.

On March 16, 2011 METRO, FTA, Cardno ENTRIX and other project staff met with the Los Angeles Conservancy and the City of Los Angeles to discuss project refinements and proposed mitigation for the project.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
City of Los Angeles Office of Historic Resources, Department of City Planning 200 N. Spring Street, Room 620 Los Angeles, CA 90012 Contact: Ken Bernstein, Director	4/16/09, via U.S. Priority Mail	4/27/09, telephone call from Mr. Bernstein	• 4/23/09, telephone message by Francesca Smith (FS), SWCA • 4/27/09, Mr. Bernstein returned the call to FS3/7/11 An invitation was sent by email to invite the City to participate in a meeting to discuss project refinements	Mr. Bernstein stated on 4/27/09: "No comments, really." He asserted that when Survey LA is "up and running" they will be able to provide more information. He recommended that SWCA contact the Los Angeles Conservancy, which recently teamed with the Downtown Los Angeles Council to create a street map that identified historic resources. Map was obtained for reference. He also said that once effects were identified, their agency would likely want to consult on the project. In a brief telephone call and subsequent e-mail message sent on 8/4/09, Mr. Bernstein said that his office was "starting to hear concerns from the downtown community about potential historic resources impacts, including impacts on historic Little Tokyo. He requested "a briefing/consultation meeting for Office of Historic Resources staff. We would be happy to include other interested parties in the historic preservation community, including the Los Angeles Conservancy," suggesting potential meeting dates. A joint meeting was held with Los Angeles Conservancy staff on 9/2/09. The project was presented, identification efforts were described, and very general ideas about effects and mitigation were discussed. Consultation is expected to be ongoing. A joint meeting was held with Los Angeles Conservancy

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
				staff on 03/16/2011. The project was presented, identification efforts were described, and very general ideas about effects and mitigation were discussed. Consultation is expected to be ongoing.
Conference of California	4/16/09, via U.S. Priority		• 4/23/09, sent e-mail message sent to	No response.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
Historical Societies University of the Pacific Stockton, CA 95211 Contact: Richard S. Kimball, President	Mail		Margarita Noyola, Administration and Membership Services • 5/8/09, sent additional e-mail message to Ms. Noyola	No further action necessary.
Historical Society of Southern California P.O. Box 93487 Pasadena, CA 91109 Contact: Patricia Adler-Ingram, Ph.D., Executive Director	4/16/09, via U.S. Priority Mail		• 5/8/09, telephone messages by FS • 5/11/09, second telephone message by FS	No response. No further action necessary.
Los Angeles City Historical Society P.O. Box 41046 Los Angeles, CA	4/16/09, via U.S. Priority Mail		• 5/8/09, telephone call by FS, Number on website was disconnected 5/12/09,	No response. No further action necessary.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
90041 Contact: Ann Shea, President			sent e-mail message on 5/12/09. • 5/12/09, sent additional e-mail message	
Little Tokyo Community Council, Inc. 369 East 1st Street Los Angeles, CA 90012 Contact: June Aochi Berk	4/16/09, via U.S. Priority Mail	5/11/09, June Burk called FS	• 5/8/09, telephone message by FS • 5/11/09 call was returned and FS returned Ms. Berk's call	Ms. Burk said that LTCC sent comments to Dolores Roybal Saltarelli at MTA. She asked that we re-send the letter and attachments by email. It was re-sent on 5/11/09. No further action necessary.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
Los Angeles Conservancy 523 West 6th Street, Suite 826 Los Angeles, CA 90014 Contact: Mike Buhler, Director of Advocacy	4/16/09, via U.S. Priority Mail	4/20/09, Mr. Buhler called K. Harper (KH), SWCA	• 4/30/09, Mr. Buhler called KH to discuss late in work day. KH asked if we could discuss on the following day, he agreed. • FS called Mr. Buhler back and left voicemail messages on 5/1/09 and 5/9/09. • Mr. Buhler spoke with FS via telephone on 5/28/09. • 02/23/11 Ms. Flathman (Cardno ENTRIX) spoke with Flora Chou to invite LA Conservancy staff to attend the meeting to discuss project refinements	On 5/28/09, Mr. Buhler spoke with FS. Mr. Buhler followed up after the phone call via email and stated "As we discussed, the Los Angeles Conservancy would like to request a meeting with SWCA and MTA to discuss the Regional Connector Project and its potential impacts on historic resources located on or near the proposed alternatives under consideration." A meeting was held on 7/22/09, the project was presented and very general ideas about effects and mitigation were discussed. Mr. Buhler provided a copy of the poster prepared by the Conservancy with the Downtown Los Angeles Council for use. Consultation is expected to continue. A joint meeting was held with the City of Los Angeles Office of Historic Resources staff on 9/2/09. In that meeting, the project was presented again and much of the discussion was focused on expected effects and proposed mitigation. Consultation is expected to be ongoing. A joint meeting was held with the City of Los Angeles Office of Historic Resources staff on 03/16/2011 In that meeting, the project was presented again and much of the discussion was focused on expected effects and proposed mitigation. Consultation is expected to be ongoing.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
Japanese American Cultural & Community Center 244 South San Pedro Street Los Angeles, CA 90012 Contact: Sandra Sakamoto, Esq., Chair	4/16/09, via U.S. Priority Mail	5/11/09, Sandra Sakamoto left telephone message 5/13/09, received letter from Chris Aihara	• 5/809, telephone message by FS with Mika, receptionist • 5/11/09, Sent re-formatted letter to Christine Aihara at Ms. Sakamoto's request • 5/13/09, received letter from Chris Aihara	Ms. Sakamoto called on 5/11/2009 and left a telephone message that she did not see the letter (because she is a volunteer board member) but suggested that we contact Chris Aihara, President of the Little Tokyo Community Council. Sent re-formatted letter to Ms. Aihara on 5/11/09. Ms. Aihara responded via e-mail on 5/13/09 and in her letter discussed effects of construction on small businesses. She noted that "traffic congestion and elimination of parking will inhibit visitors and patrons to shop, attend community events, and attend cultural classes. Noise due to construction will hinder the visitor experience. The short-term impact could be so great that the important aspects of the community will not survive." No further action necessary.

Table 3-3. Coordination with Local Groups: Government, Historical Society, Historic Preservation, and History Advocacy

Local Group	Letter Sent	Reply Date	Follow-up	Results
Little Tokyo Service Center 231 East 3rd Street, Suite G-106 Los Angeles, CA 90013 Contact: Bill Watanabe Executive Director	4/16/09, via U.S. Priority Mail	4/20/09, via telephone	• 4/21/09, via telephone and via email. • 5/11/09, telephone message by FS • 5/14/09, telephone message by FS	On 4/20/09, Mr. Takao Suzuki called to request a copy of the APE map. KH forwarded the map via email. No response to telephone messages. No further action necessary.
Little Tokyo Historical Society 231 East 3rd Street, Suite G-106 Los Angeles, CA 90013 Contact: Deanna Matsumoto	4/16/09, via U.S. Priority Mail	5/18/09, telephone call from Ms. Matsumoto	• 5/18/09, Resent letter via e-mail to Craig Ishii at LTSC	Ms. Matsumoto informally provided additional information on the Aoyama Tree, Little Tokyo history and Atomic Café history.

4.0 AFFECTED ENVIRONMENT

4.1 Historic Overview

The project is located within the City of Los Angeles in Los Angeles County, California. Generally, the APE extends in a northeasterly direction from south of the intersection of Flower and 7th streets to the Gold Line at Alameda Street between 2nd and Temple streets in downtown Los Angeles. The project crosses several community areas in downtown Los Angeles, including the Civic Center and Little Tokyo communities. This area is highly urbanized with development ranging from commercial, public, and institutional uses to high density residential. The following historic context statement was prepared to present an overview of development of the overall community and project area and provides the framework used to evaluate historic significance of properties within the project APE.

4.1.1 Spanish Period (1769–1822)

Los Angeles was established in 1781 as a Spanish pueblo near the Los Angeles River. The Spanish governor of California, Felipe de Neve, led a procession of soldiers, laypeople, and priests from nearby Mission San Gabriel Arcángel and founded the pueblo near the Porciúncula, now Los Angeles River. The objective of the settlement was to supplement the agricultural goods produced at the Mission San Gabriel. The mission and Los Angeles were designed according to the Laws of the Indies, the town planning guidelines codified by the Spanish in the mid-sixteenth century for colonial towns (Fogelson 1993). Due to seasonal river flooding, the settlement was relocated three times before its final location was established. All three iterations of the pueblo had similar plans: houses and buildings faced a central square, oriented to the cardinal points. The pueblo lands were divided and distributed among the 44 original settlers, or pobladores, each of whom received two suertes, or fields, of irrigable land, two fields of dry land, and a house lot, facing the central square (Ríos-Bustamante and Castillo 1986). The third site chosen by the Spanish for the new pueblo was located in what is now known as the Plaza, to the north of the project APE. Selected in 1825, the final pueblo site was originally named El Pueblo de la Reina de Los Angeles (Ríos-Bustamante and Castillo 1986).

4.1.2 Mexican Period (1822–1848)

Mexico gained independence from Spain in 1821; the subsequent secularization of the mission system and distribution of its holdings dramatically shifted the character of land ownership in Los Angeles and much of California. Mission secularization in 1833 marked the beginning of highly profitable private trade in cattle hide and tallow exports, which eventually resulted in larger, commercially driven farms. During Mexican rule of California, between 1821 and 1848, land owned by the Spanish crown and clergy was distributed in more than 800 land grants, passing mostly to Mexican settlers born in California, or Californios. This shift marked the beginning of the rancho system that would "dominate California life for nearly half

a century..." (Poole 2002) but the rural character of the pueblo of Los Angeles and its surroundings remained (Fogleson 1993).

Many ranchers maintained second homes near the pueblo area, which was managed by the ayuntamiento or common council. The ayuntamiento was responsible for an informal system of zanjas or irrigation ditches that conveyed water for both agricultural and domestic use. By the 1830s, the population of the settlement had grown from the original 44 to approximately 1,000 persons, making Los Angeles the most populous of the original three pueblos, as well as the center of economic and political life, in Alta (or upper) California (Fogleson 1993).

4.1.3 American Period (1848–Present)

With the signing of the Treaty of Guadalupe Hidalgo in 1848, the U.S.-Mexican War formally ended. California was annexed to the United States and subsequently gained statehood in 1850. That same year, the City of Los Angeles was incorporated. During the city's transition from a Mexican pueblo to an American town, public authority rather than private enterprise became the influence behind development.

In 1849, the first survey of Los Angeles was made when Lieutenant Edward O. C. Ord produced the city's first map. Ord made his plat according to the same grid plan (albeit using the pueblo's original orientation to the cardinal points) that had become the standard for American cities by this time (O'Flaherty 1978). The survey had a northeast-southwest street alignment, which was influenced by natural landforms, colonial irrigation patterns, and the concept that no side of the street be entirely in shade or shadow during the most important business hours. The city's oldest areas, just east of Main Street, still exhibit the characteristics of the imperfect platting that dates from before 1848. The 33-degree "skewed" grid orientation of downtown Los Angeles characterizes the north-south streets east of Hoover Avenue and west of Indiana Street.

With the 1849 Gold Rush, and growing influx of European-Americans to Southern California, the population of Los Angeles expanded substantially. During the American period, from 1850 to 1860, the population grew nearly 300 percent from approximately 1,600 to 4,300 persons (Hill 1929). Many of the new residents were farmers who came to Southern California to take advantage the abundance of inexpensive land and water. As settlement continued to expand outward of the central city, the core of Los Angeles, its Plaza area, continued to serve as the center of social and religious life in the town. Harris Newmark came from West Prussia (now Germany) to settle in Los Angeles in 1853. He learned Spanish before mastering English and subsequently published his recollections of early Los Angeles. Newmark described the Plaza area as the "nucleus" of town, around which were "clustered the homes of many of those who were uppermost in the social scale" (Newmark and Newmark 1970).

The three major railroads, Southern Pacific Railroad, Atchison Topeka & Santa Fe Railway, and Union Pacific Railroad, came to Los Angeles in 1876, 1872 and 1905, respectively. Their presence, coupled with an agricultural boom, helped to fuel the community's then-unparalleled growth. As one of the first cities to significantly benefit from the presence of railroads, the citrus industry expanded enormously after the advent of the refrigerated freight car. Artificially cooled freight cars allowed produce to be shipped to other markets that previously only had access to such goods during colder months.

Once the railroads came to Los Angeles, development of the city was tremendously influenced by transit and transportation patterns, which expanded as the community matured. Growth of the community and enhancements in transportation modes each influenced the other more compellingly than in more established cities, where principal transit corridors had already been identified before rail transit became a factor.

Its strategic location on the Pacific Ocean made Los Angeles a regional business center during the early American Period, but was still viewed as a small town with rough edges. In *Inventing the Dream*, the pronounced effect of railroads on the region was summarized:

> [t]he railroads settled Southern California: first the Southern Pacific, blasting its way through the San Fernando Mountains in 1876 to link Los Angeles with San Francisco and the east, and then, in 1885, the Atchison Topeka and Santa Fe Railway arriving overland through the deserts and gorges of the southwest (Starr 1985).

The consequences of rail traffic were further illustrated in the community's sudden progress:

> [i]n the...1870s... [Los Angeles] became an American city. Adobe gave way to brick and wood, candles and kerosene to gas. The streets were paved and tracks laid for horse-drawn streetcars. Police and fire departments were organized on a permanent basis and a lending library was established. A city hall was built, together with a train station a county hospital, an opera house, and a [large] theater... (Starr 1985).

4.1.4 City of Los Angeles

Between 1880 and 1900, Los Angeles grew from a town of 11,000 to a bustling city of 100,000 residents, prompting the development and expansion of city roads, buildings, and services. A dramatic real estate rush in Los Angeles between roughly 1886 and 1888, coupled with price wars between the three transcontinental railways serving the region, led to further increases; the population peaked in 1888 at 80,000. In the downtown area, development was particularly dense as government and commercial buildings were constructed throughout the area that now comprises the Civic Center (Roseman et al. 2004).

The plaza and community matured as daily newspapers, public and private schools and universities, and a racetrack were established. Expansion of railroads, as well as the growth of

port facilities, contributed substantially to the celebrated economic boom that occurred in the region in the 1880s (Caughey and Caughey 1977; Dumke 1944). Although the real estate boom exponentially affected surrounding areas, Los Angeles, as the commercial center, also reaped substantial benefits from the unprecedented growth. That growth was spurred by efforts of community boosters, who assisted in propelling the small town into a major city. Los Angeles was the subject of "the longest, loudest, [and] most persistent promotional campaign" to promote an American city between the 1870s and the Depression (Zimmerman 2008). Due to their obvious role in moving goods and transporting the populace, local, regional, and national railroad companies helped shape the development and growth of present-day Los Angeles as well as the surrounding region.

The first Sanborn Fire Insurance Company maps prepared for Los Angles portrayed north-south streets in 1888. The west-to-east sequence was: Pearl Street (currently Figueroa Street), Flower Street, Hope Street, Bunker Hill Avenue (not applicable to current street name), Grand Avenue, Olive Avenue, Hill Street, Fort Street (now Broadway), Spring Street, Main Street, Los Angeles Street, San Pedro Street (currently Judge John Aiso Street north of 1st Street), and Vine Street (currently Central Avenue). Figure 4-1 shows an excerpted image of 1888 Sanborn Fire Insurance map with proposed project alternatives overlaid to show how the essential arrangement of streets has not substantially changed since that time. By 1888, the rise in real estate values had finally deflated; causing the population to slide down to 50,900. The subsequent economic depression lasted through the mid-1890s (O'Flaherty 1978).

4.1.4.1 The Metropolis Develops

By the turn of the twentieth century, downtown Los Angeles was growing quickly in size and stature. Although affected by the real estate downturn of the late 1880s, industrial and commercial activity remained high throughout downtown, as well as in the rest of the city. The 1890 discovery of oil prompted the development of new technologies and sparked a wave of manufacturing activities, including furniture, sportswear, and homes. By 1900, the city's first central business district emerged, centered around 2nd and Spring Streets, consisting of some 20 city blocks (Longstreth 1998; Fogelson 1993).

As the city grew, the need for interurban transportation significantly increased. A number of small, short rail lines were established throughout the city to provide residents with local transportation. Many of these rail lines operated for brief periods of time, lasting only a few years before being bought out by larger firms or forced out of business by competing lines. One of the unique smaller lines that managed to succeed was Angel's Flight, established in 1901 by Colonel J. W. Eddy to serve the residents of Bunker Hill in the northwest area of present-day downtown. The steep climb up 3rd Street between Hill and Olive Streets proved difficult for the affluent residents. The short funicular rail line only traveled a block or two, but the route was up a steep grade and it proved invaluable to residents. Angel's Flight closed in 1969 and was dismantled. It was briefly reopened one-half block south of its original location

at 3rd and Hill streets and is currently situated mid-block between 3rd and 4th streets, just south of the project APE.

Henry Huntington was a nephew of Collis P. Huntington, one the notorious "big four" who built the Central Pacific Railroad, the western portion of the first transcontinental railroad in the United States. The younger Huntington completed his first streetcar line, the Pacific Electric Railway Company (PE), in 1902. The line connected Los Angeles to Long Beach. In part because of the PE interurban rail lines, Broadway evolved as a main retail thoroughfare. Many of the PE's routes terminated at 4th Street and Broadway. Public use of the PE peaked in 1924, and it made that intersection and corridor valuable commercial property. Broadway was developed with commercial uses, specifically retail and theater buildings. Beginning in the early 1910s and extending to the 1940s it was the center of retail commerce in the growing city of Los Angeles.

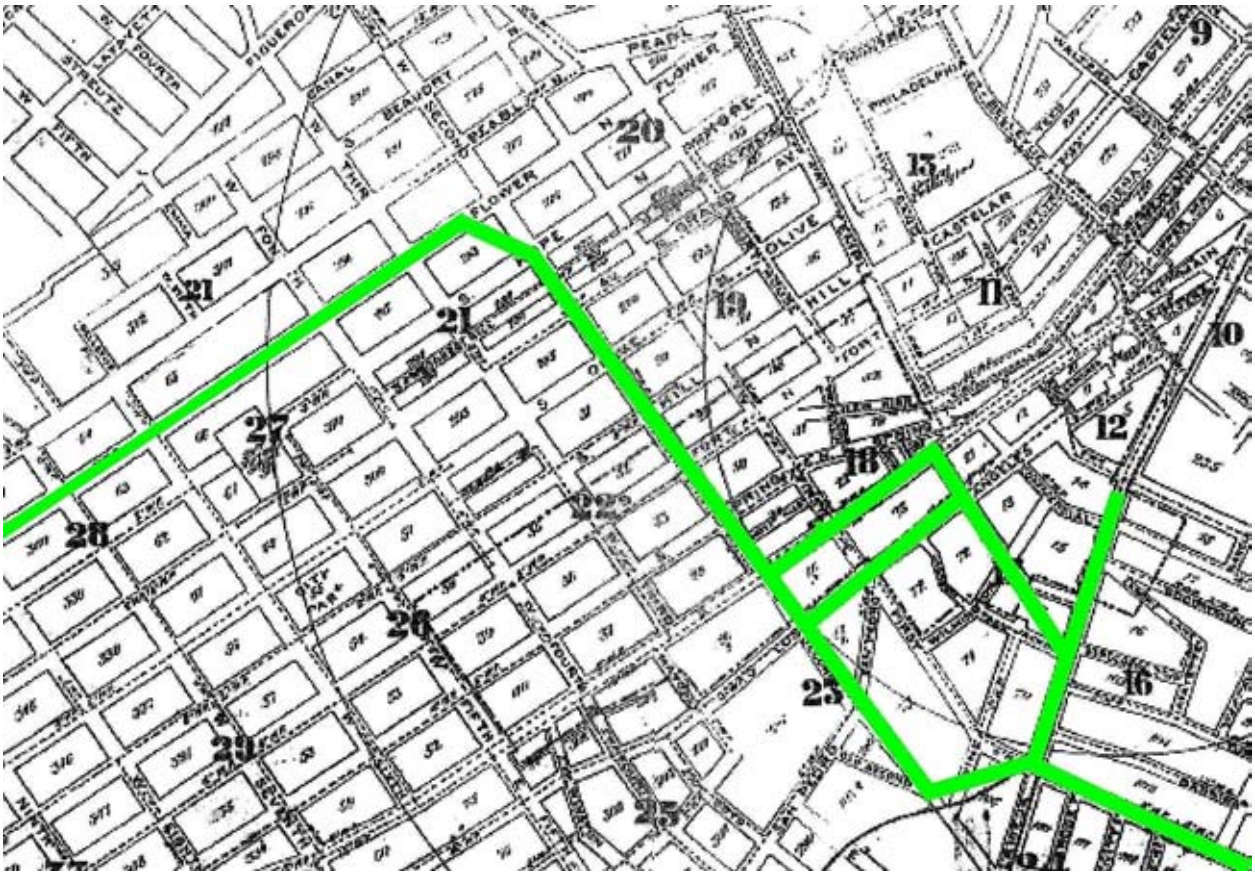

Figure 4-1. Excerpted Sanborn Fire Insurance Company maps of Los Angeles, California dated 1888.

Notes: Index sheets combined and annotated, graphically depicting all proposed project alternatives in green. Note that the arrangement of streets is essentially the same in 2010 as they were in 1888.

Along with early city growth the first demand for organized urban planning was made. Until planning and zoning rules were implemented, single-family homes (some belonging to city fathers) were dwarfed by tall, commercial buildings. City officials and residents became vigilant regarding fast-paced changes occurring in downtown, which were largely fueled by private commercial development. When the 12-story Braly (now Continental) Building (400 South Spring Street; John D. Parkinson) was completed in 1902, the city adopted its first of two height limit ordinances, establishing what became the uniform height of 150 feet or less for all buildings.

By the 1910s, city planners were calling for more parks, fewer saloons, and improved streets. To implement these goals, planners turned to the "City Beautiful" trend for direction. The City Beautiful movement was a progressive concept that had great influence on American civic design and planning from the late 1800s to the early twentieth century (Bluestone 1988). Espousing precepts that monumental formal design, beautification, and grandeur would improve cities, it was expected that those noble efforts would counteract the increasing moral and physical decay of poverty. Originally associated with the cities of Chicago, Detroit, and Washington, D.C., this influential planning style did not promote beauty for the sake of aesthetics, but was intended to be a subtle social control device for creating moral and civic virtue in urban populations. Advocates of the movement believed that such beautification could thus provide a harmonious social order that would improve the lives of the inner-city poor. The City Beautiful movement resulted, in part, in gracious long vistas in civic plazas; usually light-colored, formal buildings and other structures; the inclusion of diagonal streets rather than simple grids; and gracious public gardens and parks.

In an unintended move that foretold the city's future as a major metropolis, the City of Los Angeles Municipal Arts Commission engaged "city architect" Charles Mulford Robinson to bring the City Beautiful concept to the community. The City Beautiful principal was adopted in 1908, the same year that Los Angeles adopted a zoning code. Its realization in Los Angeles was complicated and ultimately compromised by the demise of the PE and the concurrent rise in use of the private automobile. It did, however, provide the first dialogue for development of a civic center, a plan that would not finally be realized until after World War II (Starr 1990).

The Los Angeles River Bridges are an ensemble of 12 City Beautiful-inspired bridges, built near downtown between 1911 and 1933. It is the largest and most architecturally significant grouping of concrete bridges in the state according to some experts (Mikesell 1986). Each of the 12 is a reinforced concrete structure, built in concrete strengthened by interior reinforcing steel bars. The steel was notably included in the concrete curing process.

Reinforced concrete technology began in Europe in the 1840s and continues to evolve and improve. California engineers are credited with introducing reinforced concrete use to the rest of the nation, in part because of the ready availability of raw concrete ingredients such as

sand. The state became a proving ground for reinforced concrete, and the Los Angeles River Bridges are considered by many to be the finest examples of its use.

The 1st Street Viaduct (property 9R-7) was completed in 1929 as the eighth of the 12 bridges. The first was North Buena Vista Viaduct/North Broadway Bridge in 1911, and the final bridge in the series was 6th Street Viaduct/Whittier Boulevard Viaduct in 1933. The resulting remarkable series of concrete bridges and viaducts cross the river with surprising grace. Each of the bridges (nine of the 12 are technically viaducts) adapted the unique qualities of reinforced concrete and used state of the art engineering and design concepts.

By the 1920s, the economic core of downtown had expanded to 50 square blocks. The Central Business District, the center of which was once the Plaza, had "migrated southwesterly since the boom the 1880s, so that Broadway and 7th [were] its main shopping arteries" during most of the twentieth century (Lantis et al. 1973). This economic expansion prompted a period of unprecedented growth in Los Angeles, both in population and in physical development. Strides in manufacturing, oil development, tourism, land development, and the film industry prompted a period of rapid construction and invigorated downtown, which became home to about three-quarters of the city's commercial and professional activity (Fogleson 1993). As described in *Material Dreams: Southern California Through the 1920s*, "the financing of Los Angeles's exfoliating real-estate, construction, oil, port, manufacturing, entertainment and aviation industries remained largely in local hands, and so Los Angeles emerged as a banking center as well" (Starr 1990). So many of these financial institutions were located along Spring Street, the street was known as the "Wall Street of the West."

Retail expansion was focused along Broadway and Hill Street, crowded with department stores that sold everything from shoes to pianos. Barker Brothers Furniture Store (Property 2-1, 818 West 7th Street, Curlett & Beelman), completed in 1925 in the Classical Revival style, was a striking example of a multi-story retail complex constructed during the period. At the time, it was one of the largest furniture stores in the United States; its facilities were separated into interior spaces that reflected the organization and spaces found in the average household (Hatheway 1978).

In addition to commercial expansion that occurred in the 1920s, many of the civic improvements drafted earlier in the century finally came to fruition, including the early beginnings of a civic center district. At the center of this achievement was Los Angeles City Hall (Property 6-2, 200 North Spring Street, Austin, Parkinson & Parkinson and Martin), which was completed in 1926 on the former site of the Temple Block. When it was built, City Hall was the tallest building downtown; at 454 feet, it was substantially taller than the allowable 150-foot building height limitation in place at the time. The Los Angeles Central Library (Property 3-2, 630 West 5th Street, Bertram Goodhue with Carlton Winslow), completed in 1926 was another ambitious 1920s civic building project that announced Los Angeles as a

major city. The "light of learning" theme was a remarkable architectural collaboration at the time and remains one of the largest library systems in the nation.

By 1924, downtown was thriving; a reported 1.2 million people (a figure greater than the city's total population) traveled each day to the area, which by that time had expanded to encompass Temple Avenue, Los Angeles Street, Pico Boulevard, and Figueroa Street. Although downtown retained an intricate network of rail lines and trolley cars that connected the big city to outlying communities, the automobile had begun to guide development throughout Los Angeles. Inter-urban streetcar use began to wane as the automobile gained relevance. Adding to the difficulty were the thousands of at-grade streetcar-automobile intersections, which greatly impeded streetcar service. By 1921, some of the urban railways offered bus service. The Roosevelt Building (Property 2-7, 727 West 7th Street, Curlett & Beelman), completed in 1925, was one of the many downtown buildings that incorporated automobile parking into its design, offering subterranean space for 350 vehicles, when comparable competitors offered only 120 spaces (Longstreth 1998).

Improvements to roads were also necessary to accommodate the influx of automobiles. The 2nd Street Tunnel (APE Map # 4-3), completed in 1924, was the fourth in a sequence of significant tunnels to be built by the City of Los Angeles to ease traffic congestion in the early twentieth century (Los Angeles Times 1924). The first was Broadway Tunnel (opened 1901, demolished 1969), followed by the 3rd Street Tunnel (1907, significantly altered 1967), and the Hill Street Tunnel (1909, demolished 1948). The sleek, tile-lined 2nd Street Tunnel is noteworthy for its construction methods and as a masonry arch structure, supported by eight rings of brick in the upper section of the arch.

Figueroa Street was one of a handful of great boulevards of Los Angeles that were expanded in the 1920s. An early alignment of Figueroa Street was part of the famed US Route 66, and is currently a component of the Pasadena Freeway (Interstate 110). The notable Figueroa Street Tunnels, near present-day Chinatown, were once a part of Figueroa Street as well. Figueroa Street is credited with being one of the longest avenues in the United States, with a length of more than 30 miles, stretching between Eagle Rock to the Los Angeles Harbor.

Downtown continued to thrive throughout the 1920s. The commercial and civic core of the city continued to shift farther south, toward a new center at 7th and Hill Streets (Fogleson, 1993). Throughout the twentieth century, businesses and retail services crept south, with major businesses eventually abandoning the Broadway and Spring Street areas for 7th Street, and later Figueroa and Flower Streets (Starr 1997).

Along the eastern end of downtown, the Japanese-American community of Little Tokyo was also thriving. The first Japanese American resident had arrived in Los Angeles in 1886 and started a restaurant on East 1st Street. By the end of the nineteenth century, Japantown (as it was then known) was home to more than 2,000 Japanese Americans, and a prosperous

community had been established. Many of those residents had moved to the area to lay track for the Pacific Electric interurban streetcar system. By 1935, Los Angeles was home to 13,000 people of Japanese ancestry, most of whom resided close to or within Little Tokyo (Starr 2002; Hayden 1996).

Figure 4-2. Figueroa Street Tunnels, view north, circa 1940s.

Source: Longshaw Post Card Company. Private collection, used with permission.

Downtown's building frenzy continued until 1929, when the stock market crash brought both large and small investment to a halt. As real estate and automobile values plummeted, shops and apartments stood vacant. In downtown Los Angeles, few buildings were added to the downtown skyline during the 1930s. As described in *City Center to Regional Mall, Architecture, the Automobile and Retailing in Los Angeles, 1920-1950*:

> Between the early 1930s and early 1950s little new construction of consequence occurred in the [business] district. The depression did not, of course destroy downtown Los Angeles; it only accelerated tendencies set in motion during the previous decade when the city center seemed indomitable. Many property owners 'held on' and many put new capital into their buildings (Longstreth 1998).

The decade of the 1930s eventually included additional growth in Los Angeles, although much of it was outside of downtown. The San Fernando Valley expanded as an agricultural,

commercial, and residential center. The Los Angeles Memorial Coliseum (John and Donald Parkinson), actually completed in 1924, was built for the 10th Olympiad in 1932. Griffith Park Planetarium (John C. Austin and Frederick Ashley) was completed in 1934. The Union Passenger Terminal (John and Donald Parkinson) was built on the north end of downtown in 1939. Along with residential development, retail areas expanded from downtown to include Wilshire, Sunset, and Santa Monica Boulevards, each of which drew away more and more of what had been downtown's loyal patronage. Notable downtown projects ranged from the Los Angeles Times Building (Property 8-2, 101 South Spring Street, Gordon B. Kaufmann), built in 1935, to the United States District Courthouse Building (Property 6-1, 312 North Spring Street), completed in 1940, and the concept and design for a new, unified Civic Center began to take shape.

4.1.4.2 World War II and Post-war Los Angeles

In the immediate aftermath of the attack on Pearl Harbor, downtown Los Angeles became involved in the war effort, as did the rest of the nation. Within Little Tokyo, the bombing sparked the beginning of significant change for business owners and residents. During World War II, Executive Order 9066 gave the Army authority to relocate more than 110,000 Japanese Americans on the west coast to internment camps in isolated and barren areas. As suggested in *Embattled Dreams: California in War and Peace*, "the Japanese-Americans of California suffered the trauma and indignity of an incarceration that represented the most massive violation of the constitutional rights of any single ethnic group in this nation after the ending of slavery" (Starr 2002). The spirit of what was the largest Nihonmachi (Japantown) in the United States was suddenly extinguished, as its Japanese-American residents were forced into internment camps. This action eradicated Japanese settlements and culture until after the end of the war and caused interned families to start their lives over - personally, emotionally, and financially - after release from incarceration.

During the war, African Americans, who had come to Los Angeles in large numbers to work in the defense industry, moved into Little Tokyo. Like other Japanese communities in California, after blacks moved in, the area became a thriving "Bronzeville" until the 1950s (Waugh et al. 1988). Part of the explanation for the widespread and local African-American population changeover was that Little Tokyo was not subject to deed restrictions.

Downtown failed to return to its 1920s economic peak in the aftermath of the Second World War. Nearly 13 million veterans returned to the United States, ready to buy homes and settle into suburban life. While many returned to or decided to settle in or near Los Angeles, patterns changed, and these residents moved away from the city center, residing in the growing, outlying residential suburbs. Home ownership in the nation was propelled to unprecedented numbers, in part due to low-interest loans and long-term mortgages provided by the G.I. Bill (Servicemen's Readjustment Act of 1944, Public Law 78-346, 58 Statute 284m). Through the late 1950s, the effect of the automobile was reflected in the built environment, as

the economic potential from commercial establishments along heavily traveled highways and thoroughfares prompted roadside development.

During the post-WWII period, many downtown areas suffered economic downturns, including that of Los Angeles. Suburbs became increasingly desirable as residential and commercial hubs, and as a result downtown Los Angeles lost some of its caché as a business center and retail destination. The 1940 opening of Arroyo Seco Parkway (now Interstate-110), constructed to ease downtown commuting, instead sent the populace away, leaving the downtown area empty compared to its pre-war level of activity. The growth of the suburbs pushed population away from the city center, and many downtown buildings deteriorated as a result. Once grand movie places were no longer crowded, department store flagship stores were no longer fashionable destinations, and ornate office buildings were not the sought-after real estate they had once been.

Figure 4-3. Postcard depicting view of freeway and Civic Center, c. 1953.

Source: Private collection, used with permission.
Notes: View southwest toward Civic Center, looking across Hollywood Freeway (U.S. 134). Back of postcard reads "The Hollywood Freeway is one of a vast network of major highways engineered and designed to provide unobstructed driving to and from the metropolitan area of Los Angeles."

In an effort to combat the urban slump, the California Community Redevelopment Law was passed in 1945, followed by Title 1 of the Federal Housing Acts of 1946 and 1949. These laws

were designed to legally and financially assist cities to address problems of decay and neglect within their communities. In response to this new legislation, the Community Redevelopment Agency of the City of Los Angeles (CRA) was established in 1948, in part to cure economic "blight" by funding and overseeing redevelopment. As its first major project, the CRA sought to improve the Bunker Hill area, which had been one of the more exclusive residential neighborhoods at the turn of the twentieth century but had deteriorated and fallen out of fashion. Despite many proposals, plans to redevelop Bunker Hill were rejected, and ultimately not begun until the 1960s, when large hotels and Victorian-era homes were bulldozed and the landforms were rearranged. Slowly, over the past 50 years, a community of high-rises has been constructed in their place (Kawaratani 2008).

When the Harbor Freeway (Interstate-110) was completed in 1952, it was hopefully called "downtown's new Main Street" by noted local architect A. C. Martin, Jr. (Los Angeles Times 1967). Construction of the freeway and the repeal of the building height ordinance in 1954 created a significant new concentration of high- and midrise buildings, eventually concentrated on Figueroa and 7th Streets.

The downtown civic center began to take shape in the post-war era. As discussed in *California: A Land of Contrast*:

> Business blocks of the late nineteenth century have been replaced by the Civic Center, whose buildings, most of contemporary design, are flanked by multi-acre parking lots. The Civic Center has encroached westward upon Bunker Hill, once occupied by the city's wealthier residents and now experiencing impressive [redevelopment] (Lantis, et al. 1973).

The resulting Civic Center plan, adopted in 1947, has an east-west axis and is roughly bounded on the north by Aliso Street, on the south by 2nd Street, Grand Avenue to the west, and Alameda Street on the east side.

A new police facilities building was constructed on two city blocks formerly occupied by shops and residences in Little Tokyo. The new police building (Property 6-6, 150 North Los Angeles Street, constructed in 1955) was expected to "revolutionize the design of law enforcement buildings" and was designed by Welton Becket and Associates and J. E. Stanton. The new building consolidated activities that were previously scattered throughout the city and provided a modern anchor for the eastern terminus of the expanded civic center (Los Angeles Police Department, no date).

Additional contributions to the Civic Center included the Courthouse in 1958 (Property 5-7); the County Hall of Records in 1962 (Property 5-9, 320 West Temple Street, Richard Neutra and Robert Alexander); the City Department of Water and Power building in 1965 (Property 5-1, 111 North Hope Street, Albert C. Martin & Associates); the Federal Office Building in 1966

(Property 6-5, 300 North Spring Street, Welton Becket); and the Music Center (Properties 5-2, 3, 4) 135 North Grand Avenue, Welton Becket), containing the Dorothy Chandler Pavilion (Property 5-4, completed in 1964), the Mark Taper Forum, and the Ahmanson Theatre (Properties 5-3 and 5-2, both constructed in 1967).

Within Little Tokyo, redevelopment efforts began as early as the 1960s when local Japanese-American businessmen initiated a $50 million rejuvenation plan that sought to control urban renewal and protect the unique community atmosphere. A number of office and retail buildings as well as banks and hotels were developed under this effort (Hebert 1965). Redevelopment efforts within Little Tokyo continued into the 1970s and 1980s under the management of the CRA, which implemented an aggressive improvement plan that unwittingly destroyed most of the old vestiges of the community. Little Tokyo was dramatically shifting from a quaint enclave of low- and midrise buildings into a mixed-use area of large-scale commercial high-rises, hotels, and shopping centers, including Weller Court (123 Weller Court, constructed in1982) and Japanese Village Plaza (350 East 1st Street, constructed in 1978).

Efforts to combat redevelopment in 1986 succeeded with listing the Little Tokyo Historic District in the National Register of Historic Places (Properties 7-7 through 7-19). In 1995, the District received the higher distinction of being designated a National Historic Landmark (NHL) district. In 1990, artist Sheila de Bretteville was commissioned by the City of Los Angeles' CRA to design a public art exhibit to showcase the history of the Little Tokyo Historic District. Working in collaboration with Japanese-American artists and assistants, the Little Tokyo 1st Street public art initiative took four years to create and the final design was approved by community members and local agencies. Completed by 1996 the decorative terrazzo with concrete sidewalk designs depict images of Japanese-American culture, personal testimonials (transcribed in English and Japanese), and historic names and tenants for each building in the district. The resulting Omoide no Shotokyo (Remembering Old Little Tokyo) installation includes an oversized replica of the camera used by photographer Toyo Miyatake to capture images documenting the Manzanar Internment Camp (Hayden 1996).

One of the most recent hallmarks of the Civic Center, the Walt Disney Concert Hall (Property 4-4), was completed in 2003. It was built in stages, funded through a public-private partnership, to serve as the new home for the Los Angeles Philharmonic Orchestra. It was completed at a reported cost of nearly $300 million, after 16 years of funding and construction challenges. Designed by Frank O. Gehry, in collaboration with Japanese acoustician Yasuhisa Toyota, it was applauded for its state-of-the-art acoustics.

The development of downtown Los Angeles continued throughout the twentieth century and beyond, surviving peaks and valleys in the real estate market. Recent trends have included conversion of historically significant, vacant office and residential hotel buildings to residential apartment and condominium uses. This movement has brought an entirely new

residential population to downtown and has encouraged the development and reintroduction of additional services and improvements. Although the inevitable problems that gentrification brings have been part of the revitalization of downtown, it has nonetheless invigorated what was recently a collective nine to five streetscape. New services include the completion of the Red, Blue, and Gold line transit systems in the 1990s, and redevelopment of the Convention Center area. The addition of Staples and Nokia Centers with these other factors has all worked toward returning downtown to a more animated character, with a less commuter-focused economy.

4.2 California Historic Resources Information Literature Search (CHRIS)

SWCA conducted a cultural resources records search for the Regional Connector Transit Corridor project at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) on February 10, 2009 in Fullerton, CA (Appendix B). Subsequent requests for information were made in March, April, and May 2009 and in January 2010. The records search included a review of the available documents and site records within a 0.25-mile radius of the project area. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places – Listed Properties (2006, updated to present)
- California Register of Historical Resources (2006, and review of minutes from State Historic Resources Commission meetings thereafter)
- California Inventory of Historical Resources (1976)
- California State Historical Landmarks (1996 and updates)
- California Points of Historical Interest (1992 and updates)
- Office of Historic Preservation Historic Property Directory and Determinations of Eligibility (2008)
- Survey of Surveys: A Summary of California's Historical and Architectural Resource Surveys (1986)
- Five Views: An Ethnic Sites Survey for California (1988)

The records search focused on obtaining information on private and public lands located within a 0.25-mile search radius of the project alignment.

4.2.1 Previous Studies in 0.25-mile Radius of APE

Downtown Los Angeles has been the subject of a large number of cultural resources studies in the last three decades. The SCCIC records search identified 143 prior cultural resources studies within a 0.25-mile radius of the direct APE. Twenty-three of the studies are located within the direct APE and 12 studies are adjacent to the direct APE (Table 4-1).

4.2.2 Previously Recorded Built Environment Resources within 0.25 miles Radius of Project APE

The SCCIC records search revealed 47 previously recorded built environment resources in the APE (Table 4-2). The majority of these resources were built in the early years of the twentieth century. Of these 47 resources, 33 were listed in, determined eligible for listing in, or found eligible for listing in the National Register. An additional three were listed in, determined eligible for listing in, or found eligible for listing in the California Registers. One of the resources is a designated California Historical Landmark. The remaining 10 properties were found not eligible for National or California Register-listing. Of the 47 previously recorded properties in Table 4-2, six resources were found in this survey to be no longer extant and one evaluation was found to have likely been made in error. Therefore, there are a total of 29 previously recorded properties that are listed in or eligible for listing in the National and/or California Registers.

Table 4-2 lists previously identified properties, including those listed in, determined eligible for listing in, or found eligible for listing in the National or California registers, otherwise recognized by the state or locally designated.

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA447	Preliminary Evaluation of Cultural Resources Located Along a Series of Proposed Urban Mass Transit System Alignment Alternatives in the City of Los Angeles, California	Singer, C.	unknown	within
LA483	Archaeological Resources Survey for the Proposed Downtown People Mover Project	Greenwood, R.	1978	within
LA982	Archaeological Resource Survey and Impact Assessment of a Proposed Parking Lot, Los Angeles, California	Bove, F.	1977	within
LA1578	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	Westec Services, Inc.	1983	within
LA1770	Report of Archaeological Reconnaissance Survey of: ESA Project 7217B, City of Los Angeles, Los Angeles County, CA	Salls, R.	1989	within
LA3103	Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1	Greenwood, R.	1993	within
LA3668	St. Vibiana's Cathedral Los Angeles, California	Dillon, B.	1997	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA3813	An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California	Peak & Associates	1992	within
LA4215	Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, Near West Third Street and South Grand Avenue, City and County of Los Angeles	Conkling, S.	1998	adjacent
LA4263	General Services Administration Federal Center: Archaeological Assessment Report Phase	Padon, B.	1986	within
LA4448	Section 106 Documentation for the Metro Rail Red Line East Extension in the City and County of Los Angeles, California	Anonymous	1994	within
LA4742	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-01, County of Los Angeles, California	Lapin, P.	1999	within
LA4836	Phase I Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	Science Applications International Corporation	2000	adjacent
LA5093	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 679-11, County of Los Angeles, CA	Duke, C.	1999	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA5098	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA-226-01, County of Los Angeles, CA	Duke, C.	1999	adjacent
LA5200	Assessment of Archaeological and Paleontological Sensitivity on the Proposed California Department of Transportation District 7 Headquarters Replacement Project	Warren, K. *et al.*	2001	within
LA5447	Archaeological Monitoring Report: 911 Dispatch Center First and Los Angeles Streets	Schmidt, J.	1999	within
LA5448	Cultural Resource Assessment for AT&T Wireless Services Facility Number R299.1, County of Los Angeles	Duke, C.	2000	within
LA5451	The VA Outpatient Clinic Project	Padon, B.	unknown	within
LA6351	Nextel Communications CA-7837 A/Onizuka 332 2nd Street, Los Angeles, California	Earthtouch, LLC	2001	within
LA6375	Highway Project to close Vignes Street on-ramp and Hewitt Street on/off ramp to US-101 and to construct new on/off ramps to the south at Garey Street, Los Angeles, California	Sylvia, Barbara	2002	adjacent

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA6396	An Archaeological Assessment of the Proposed Verizon Wireless Grand Avenue, East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles County, California 90071	Tetra Tech, Inc.	2001	adjacent
LA6424	Cultural Resource Assessment Cingular Wireless Facility No. SM 140-01, Los Angeles County, California	Duke, C.	2002	adjacent
LA6435	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA679-11, County of Los Angeles, California	Duke, C.	1999	adjacent
LA6463	A Section 106 Historic Preservation Review of the Proposed Verizon Wireless Grand Avenue East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles, CA 90071	Tetra Tech, Inc.	2002	adjacent
LA7178	Report on Cultural Resources Mitigation and Monitoring Activities Fluor/Level (3) Los Angeles Local Loops	unknown	2001	within
LA7527	Caltrans Statewide Historic Bridge Inventory Update Tunnels	Feldman, J. *et al.*	2006	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA7533	Archaeological/Paleontological Monitoring at 3rd Street and San Pedro	McKenna, J.	2004	adjacent
LA7547	Phase I Archaeological Survey/Class III Inventory for the Hall of Justice Study Area, Los Angeles, Los Angeles County, California	Whitely, D.	2003	adjacent
LA7558	Archaeological Monitor Report, Alameda Street Improvement	Hale, Alice, and Scott Savastio	2004	within
LA7733	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate LSANCA0739 (811 Wilshire), 811 Wilshire Boulevard, Los Angeles, Los Angeles County, California	Bonner, W.	2006	within
LA8515	Historical Evaluation Report for the Downtown Bus Maintenance and Inspection Facility, Los Angeles, California	Wuellner, M.	2005	adjacent
LA8516	3rd and San Pedro Archaeological Monitoring (Addendum)	McKenna, J.	2004	adjacent

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA8541	Cultural Resource Records Search Results and Site Visit for Cingular Telecommunications Facility Candidate LA-057-01, (EL-005-01), DWP Equipment Yard, 433 East Temple Avenue, Los Angeles, Los Angeles County, California	Bonner, W.	2005	within
LA8910	Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles	Messick, P. and Hale, A.	2007	within

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-172125 2-2	Home Savings Building	654 South Figueroa Street	Hatheway, R. 1979	7R	No longer extant
P-19-170984, P-19-172126 2-3	Fine Arts Building, Global Marine House	811 West 7th Street	Hatheway *et al.* 1982 Hatheway, R. 1979 Smith and Sitton, 1976	2S2, 5S1	Eligible for NRHP Listed in CRHR Locally listed or designated
P-19-167276 2-5	Engine Company No. 28	644 South Figueroa Street	Biele, H. 1979	1S, 5S1	Listed in NRHP and CRHR Locally listed or designated
P-19-170985 2-7	Roosevelt Building	727 West 7th Street	Grimes, T. 2007	1S, 5S1	Listed in NRHP and CRHR Locally listed or designated

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-188406 2-10	811 Wilshire building, Tishman 615 building, Wilflower building	811 Wilshire Boulevard	Crawford, K. 2006	2S2 determination likely made in error	Eligible for NRHP Listed in CRHR
P-19-172123 2-1	Barker Brothers	818 West 7th Street	Hatheway, R. 1979 Hatheway and Chase 1978 Hatheway *et al.* 1982	2S2, 5S1	Eligible for NRHP Locally listed or designated
P-19-188405 2-12	General Petroleum, Mobil Oil Building	612 South Flower Street	McAvoy and Trotoux, 2003	1S, 5S1	Listed in NRHP and CRHR
P-19-187083 2-13	Superior Oil Company Building	550 South Flower Street	McAvoy and Minasian, 2002	1S, 5S1	Listed in NRHP and CRHR
P-19-166934 3-1	The California Club	538 South Flower Street	Hatheway, R. 1978	2S	Eligible for NRHP

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-166803, P-19-167179 3-2	Los Angeles Central Library	630 West 5th Street	McCoy, E. 1969	1S, 5S1	Listed in NRHP and CRHR
P-19-173800 n/a (nearby 3-3)	5th Street Retaining Wall	5th Street between Grand Avenue and Flower Street	Hatheway, R. 1978	2S2	no longer extant
P-19-187743 4-1	3rd Street Tunnel, Bridge #53C1339	3rd Street between Flower and Hill Streets	Feldman, J. and Greenwood, D. 2003	6	Not Eligible
P-19-173174 5-12	Hall of Justice Building	211 West Temple Street	Starzak, R. 1983	2S4	Eligible for NRHP Listed in CRHP
P-19-173225 6-1	U.S. Post Office and Courthouse Building	312 North Spring Street	Blalock, C. 1980; and unknown 2005	1S	Listed in NRHP and CRHR
P-19-173078 6-2	Los Angeles City Hall	200 North Spring Street	Hatheway, R. and Chase, J. 1978 Smith and Sitton, 1976	2S2. 5S1	Eligible for NRHP Listed in CRHR

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-167099 6-3	Site of the *Los Angeles Star*	300 block of North Main Street, between Temple and Aliso Streets	Arbuckle, J. 1971	1CL	Listed in CRHR
P-19-167104 6-3	Bella Union Hotel Site	314 North Main Street	unknown	7L	Needs to be reevaluated
P-19-186882 6-6	The Police Facilities Building, Parker Center	150 North Los Angeles Street	Gregory, C. and Wuellner, W. 2004	3CS	Eligible for CRHR
P-19-186888 6-6	Los Angeles Police Memorial	150 North Los Angeles Street	Gregory, C. and Wuellner, M. 2004	3CS	Eligible for CRHR
P-19-186883 6-7	Motor Transport Division	151 North John Judge Aiso Street	Gregory, C. 2004	6Z	Not Eligible
P-19-186887 6-8	Tinkertoy Parking Structure	140 North Judge John Aiso Street	Gregory, C. and Wuellner, M. 2004	3CS	Eligible for CRHR

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-186884 6-11	1-3 story commercial building	432 East Temple Street	Gregory, C. 2004	6Z	Not eligible
P-19-167499 7-7 through 7-19	Little Tokyo Historic District	301-369 East 1st and 106-120 North San Pedro Streets, Los Angeles (38 acres, 9 buildings)	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167487 7-7	Japanese Union Church of Los Angeles	120 North San Pedro Street	Tanji, M. 1980 Sitton, T. 1977	1D, 5S1	Listed in NRHP and CRHR Locally listed or designated
P-19-167488, P-19-167499 7-8	San Pedro Firm Building	108-116 North San Pedro Street	Los Angeles Conservancy, 1986	1D, 5S1	Listed in NRHP and CRHR Locally listed or designated

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-167489, P-19-167499 7-9	1-3 story commercial building, Mark Kuwata Real Estate	301 East 1st Street	Los Angeles Conservancy, 1986	7N	Needs reevaluation
P-19-167490, |-19-167499 7-10	1-3 story commercial building, Little Tokyo Visitor Center	303 and 307 East 1st Street	Los Angeles Conservancy, 1986	7N	Needs reevaluation
P-19-167491, P-19-167499 7-11	1-3 story commercial building, Anzen Hardware	309-313 East 1st Street	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167493, P-19-167499 7-13	1-3 story commercial building, Video Paradise	321-323 East 1st Street	Los Angeles Conservancy, 1986	6X	Not Eligible
P-19-167494, P-19-167499 7-14	1-3 story commercial building, Little Tokyo Hotel	325 East 1st Street	Los Angeles Conservancy, 1986	1D, 5S1	Listed in NRHP and CRHR Locally listed or designated

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-167495, P-19-167499 7-15	1-3 story commercial building, Ace Japanese Restaurant	331-335 East 1st Street	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167496, P-19-167499 7-16	A. Sperl Building	337-339 East 1st Street	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167497, P-19-167499 7-17	3+ story commercial building, Daimora Hotel	341-345 East 1st Street	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167499 7-18	Far East Café Building	347-353 East 1st Street	Los Angeles Conservancy, 1986	1D	Listed in NRHP and CRHR
P-19-167083, P-19-167498 7-19	Former Nishi Hongwanji Buddhist Temple	119 North Central Avenue	Tanji, M. 1980 Sitton, T. 1976	1D, 5S1	Listed in NRHP and CRHR Locally listed or designated

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-167026 7-21	Newmark Brothers Building	312 East 1st Street	Sitton, T. 1976	3S	No longer extant
P-19-167027 7-23	Progressive Theatre	320 East 1st Street	Sitton, T. 1976	3S	No longer extant
P-19-173342, P-19-173343, P-19-173344 7-26	Koyasan Buddhist Temple	342 East 1st Street	Hlava, D. 1987	7N	Needs Reevaluation
P-19-167028 7-36	Moline Plow Company	352 East 1st Street	Sitton, T. 1977	3S	No longer extant
P-19-173080 8-2	*Los Angeles Times* Building	202 West 1st Street	Hatheway, R. and Chase, J. 1978 Hatheway, R. 1978	2S2	Eligible for NRHP Listed on CRHR
P-19-174925 8-3	The *Mirror* Building	145 South Spring St.	Arbuckle, J. 1979	7L, 1CL	Needs reevaluation

Table 4-2. Previously Recorded Buildings, Structures, Objects and Districts in the APE

Primary No. Property No.	Historic Name Resource Description	Address	Recorded by and Year	CHR Status Codes*	NRHP/CRHR/ Local Eligibility
P-19-173083 8-4	Astor Apartments	200 South Hill Street	Dolan, C. 2000	7N	Needs reevaluation
P-19-173103 8-6	2nd Street Annex Building	222 South Hill Street	Hatheway and Chase 1978	7R	Not evaluated
P-19-150330, P-19-166842 8-12	Cathedral of St. Vibiana	114 East 2nd Street	unknown, 1983 Sitton, T. 1974 unknown, 1963	3S, 5S1	Eligible for NRHR Locally listed or designated
9R-6	J.R. Newberry Company Building	900 East 1st Street	JRP, 2002	2S2, 5S3	Eligible for NRHR Listed on CRHR Eligible for local listing
9R-7	1st Street Viaduct (Bridge #53C-1166)	1st Street between Vignes Street and Mission Road	FHWA, 2001	2S2	Eligible for NRHR
P-19-167029 9R-9	Los Angeles Soap Company Building	617 East 1st Street	Hatheway, R. 1976	3S	No longer extant

Note: for California Historical Resource Status Codes, see Appendix F.

4.2.3 Recently Evaluated Built Environment Resources within a 0.25 Mile Radius of Project APE

Table 4-3 lists the 18 properties in the APE that were recently evaluated for the National and California Register eligibility as part of the Grand Avenue Project DEIR Technical Report (PCR Services Corporation 2006). Of these 18 properties, 13 were found eligible for listing in the National or California Registers. This survey, which identified the Los Angeles Civic Center Historic District, was not included in records on file at the SCCIC, and no California Department of Parks and Recreation (DPR) 523 forms were on file for the properties. Many of the buildings in the survey were found to "appear eligible for the National Register as an individual property through survey evaluation." The Civic Center complex was found to "appear eligible for the California Register as a contributor to a California Register-eligible district through survey evaluation." No evidence was found to demonstrate SHPO concurrence with the findings.

Los Angeles City Hall was recently determined eligible for listing in the National Register through the Section 106 process and is therefore listed in the California Register. City Hall was also found to be a contributor to the California Register-eligible Civic Center district.

4.2.4 Structures within the APE

The following 24 structures, including bridges, pedestrian overcrossings (POCs) and pedestrian undercrossings (PUCs), are in or cross the boundaries of the project APE (Table 4-4). One bridge within the APE was constructed prior to 1968; the 1st Street Viaduct (1929) was previously determined eligible for listing in the National Register. The remaining twenty-three structures within the APE were constructed after 1968 or were not found to be exceptionally significant, under Criteria Consideration G.

Table 4-3. Recently Evaluated Built Environment Resources in the APE

Historic Name Resource Description and Property No.	Address	Assessor's Parcel No.	Built Date	CHR Status Code*	NRHP/CRHR/ Local Eligibility
Walt Disney Concert Hall, 4-4	111 South Grand Avenue	5151-004-907	2003	3S	Eligible for NRHP
Los Angeles Civic Center Historic District, 5-1 though 5-13, 6-1 through 6-7, 6-12	various	various	1953–2003	3CS	Eligible for CRHR
Dorothy Chandler Pavilion, 5-4	135 North Grand Avenue	5161-004-907	1964	3S, 3CD	Eligible for NRHP and CRHR
Mark Taper Forum, 5-3	135 North Grand Avenue	5161-004-907	1967	3S, 3CD	Eligible for NRHP and CRHR
Ahmanson Theatre, 5-2	135 North Grand Avenue	5161-004-907	1967	3S, 3CD	Eligible for NRHP and CRHR
Kenneth Hahn Hall of Administration, 5-5	500 West Temple Street	5161-004-905	1960	3CD	Eligible for CRHR

Table 4-3. Recently Evaluated Built Environment Resources in the APE					
Historic Name Resource Description and Property No.	**Address**	**Assessor's Parcel No.**	**Built Date**	**CHR Status Code***	**NRHP/CRHR/ Local Eligibility**
Civic Center Mall–El Paseo de los Pobladores de Los Angeles, 5-6	between Kenneth Hahn Hall of Administration and Los Angeles County Courthouse- Stanley Mosk Courthouse	5161-004-908	1966	3CD	Eligible for CRHR
Los Angeles County Courthouse–Stanley Mosk Courthouse, 5-7	111 North Hill Street	5161-004-906	1958	3CD	Eligible for CRHR
Los Angeles County Hall of Records, 5-9	320 West Temple Street	5161-005-910	1962	3CD	Eligible for CRHR

Table 4-3. Recently Evaluated Built Environment Resources in the APE					
Historic Name Resource Description and Property No.	**Address**	**Assessor's Parcel No.**	**Built Date**	**CHR Status Code***	**NRHP/CRHR/ Local Eligibility**
Civic Center Mall–Court of Historic Flags, 5-10	between Los Angeles County Hall of Records and Los Angeles County Law Library	5161-005-916	1968	3CD,5S2	Eligible for CRHR And Eligible for local listing or designation
Los Angeles County Law Library–Mildred E. Lille building, 5-11	301 West 1st Street	5161-005-912	1953	3CD	Eligible for CRHR
Clara Shortridge Foltz Criminal Justice Center, 5-13	210 West Temple Street	5161-005-915	1972	3CD	Eligible for CRHR
Los Angeles City Hall, 6-2	200 North Spring Street	5161-005-906	1928	2S2, 3CD	Eligible for NRHP and CRNR

Table 4-3. Recently Evaluated Built Environment Resources in the APE

Historic Name Resource Description and Property No.	Address	Assessor's Parcel No.	Built Date	CHR Status Code*	NRHP/CRHR/ Local Eligibility
parking lot	227 North Spring Street	5161-005-917 5161-005-918 5161-005-919 5161-005-920	n/a	6Z	Not eligible
vacant lot–concrete foundation of former State Office Building	217 West 1st Street	5161-005-921 5161-005-922	unknown	6Z	Not eligible
Classic Parking (parking structure)	131 South Olive Street	5149-010-946	1968	6Z	Not eligible
Colburn Center of Performing Arts	200 South Grand Avenue	5149-010-266	1998	6Z	Not eligible
parking lot	—	5151-004-908	n/a	6Z	Not eligible

Source: Grand Avenue Project DEIR, PCR Services Corporation, June 2006.
** Note: for California Historical Resource Status Codes, see Appendix F.*

Table 4-4. Structures within the APE				
Structure No.	**Name/Location**	**Description or Features Intersected**	**Year Built or Altered**	**NRHP/CRHR/ Local Eligibility**
53C1165	Figueroa Street POC	4th & 5th Streets	1977	Not eligible
53C1168	Flower Street POC	3rd & 4th Streets	1976	Not eligible
53C1171	4th Street Ramp "A"	Hope & Figueroa Streets	1972	Not eligible
53C1172	4th Street Ramp "C"	Flower Street	1972	Not eligible
53C1173	4th Street Ramp "D"	Flower Street	1972	Not eligible
53C1184	Grand Avenue Viaduct	2nd Street	1975/1996	Not eligible
53C1184	Grand Avenue	2nd. & 4th Streets	1975	Not eligible
53C1202	Hill Street	1st & Temple Streets	1970	Not eligible
53C1203	Hill Street	1st & Temple Streets	1970	Not eligible
53C1208	Hope Street PUC	3rd Street	1976	Not eligible
53C1209	Hope Street PUC	3rd Street	1976	Not eligible

Table 4-4. Structures within the APE				
Structure No.	**Name/Location**	**Description or Features Intersected**	**Year Built or Altered**	**NRHP/CRHR/ Local Eligibility**
53C1210	Hope Street Tunnel	Hope & Flower Streets	1972	Not eligible
53C1242	Main Street POC	1st & Temple Streets	1970	Not eligible
53C1337	Temple Street POC	n/a	1975	Not eligible
53C1733	5th Street POC	Flower Street	1978	Not eligible
53C1734	4th Street POC	4th Street	1979	Not eligible
53C1737	4th Street POC	Flower & Figueroa Streets	1977	Not eligible
53C1338	3rd Street POC	Figueroa Street	1976	Not eligible
53C1740	Figueroa Street POC	3rd Street	1980	Not eligible
53C1771	Civic Center East Tunnel	Los Angeles Street	1971	Not eligible
53C1780	Civic Center East Mall PUC	Temple Street	1975	Not eligible
53C1827	Transit Tunnel	Grand Avenue	1982	Not eligible

Table 4-4. Structures within the APE

Structure No.	Name/Location	Description or Features Intersected	Year Built or Altered	NRHP/CRHR/ Local Eligibility
53C1907	Flower Street POC	5th Street	1983	Not eligible
53C1166	1st Street Viaduct	Between Vignes and Mission Road	1929 (altered 2008)	NRHP Eligible

4.3 Built Environment Survey

The built environment survey methods were described in Section 3.4.2.

4.3.1 Survey Results

The proposed APE includes a total of 289 properties. Appendix A lists all of the properties within the APE that were surveyed for this project. Of those, there were 118 buildings, structures, or objects that were constructed more than 50 years before the assumed project construction date of 2018. Of the 118 properties, 29 were previously listed in or determined eligible for the National and/or California Registers (Table 4-2). DPR forms were not prepared for those properties unless current conditions necessitated updating, because of changes in improvements or if improvements were no longer extant. The remaining properties in the APE that were built in or prior to 1968 and have not been listed in or determined eligible for the National and California Registers required evaluation for historical significance. Those properties are discussed in Section 4.3.2.

4.3.2 Significance Evaluations

A total of 118 resources, including buildings, structures, and objects were either previously identified or investigated for this project. California DPR series 523 forms were prepared for each property containing improvements completed in or before 1968 that were not previously listed in or determined eligible for the National and California Registers to evaluate their National and California Register eligibility. The results of those evaluations, in support of this section, are included in Appendix D.

Table 4-5 shows the 85 properties that contain improvements completed in or prior to 1968, according to Los Angeles County tax assessor records and/or building permits, and that were re-evaluated or evaluated for historic significance. The DPR 523 forms for these properties are included in Appendix D. Also included in Table 4-5 are properties that fall within the APE but do not have specific APNs. One building, Walt Disney Concert Hall, was completed in 2003, but meets Criteria Consideration G for properties that have achieved significance in less than 50 years and has therefore been included in the table. The Los Angeles Civic Center District was found eligible for listing in the National and California Registers for this project. Properties that are located within the district and that were built after 1968 were also evaluated for historical significance and therefore included in the table. Table 4-5 depicts resources that were evaluated or re-evaluated for National and California Register eligibility.

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
2-2	Home Savings of America Tower, Figueroa Tower	660 South Figueroa Street	5144-008-013	1989			6Z	Not eligible No longer extant
2-4	Bank of America, Coffee Bean & Tea Leaf, Quizno's	801 West 7th Street	5144-008-009	1950			6Z	Not eligible
2-6	Metropolitan Federal Savings & Loan Building, G & G building	818 Wilshire Boulevard	5144-008-011	1948			6Z	Not eligible
2-8	700 Wilshire Boulevard, Honeywell Headquarters, Peck-Norman building	700 Wilshire Boulevard	5144-006-020	1966			6Z	Not eligible
2-9	Glore Forgan, William Staats, Inc. Investments Building, Japan California Bank, Fed Ex Kinko's	835 Wilshire Boulevard	5144-007-025	1968			6Z	Not eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
2-10	Tishman 615 Building, Wilflower Building	811 Wilshire Boulevard	5144-007-023	1960			6Z 2S2	Not eligible (National Register determination in 2006 likely made in error)
2-11	Tishman 615 Parking Garage, 811 Wilshire Parking	616 South Figueroa Street	5144-007-027	1960			6Z	Not eligible
3-3	5th Street Retaining Wall	5th Street between Grand and Flower	—	—			6Z	Not eligible (No longer extant)
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Hill Street, between 4th and 5th Streets, to Glendale and Beverly	—	1925			3CS 5S1	Eligible for CRHR Locally listed or designated

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
4-1	3rd Street Tunnel, Bridge (tunnel) #53C 1339	3rd Street, between Flower and Hill Streets	—	1907			6Z	Not eligible
4-2	Bunker Hill Central Plant	703 West 3rd Street	5151-014-032; 5151-014-033	1966			6Z	Not eligible
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	2nd Street, between Grand Avenue and Figueroa Street		1924			3S	Eligible for NRHP
4-4	Walt Disney Concert Hall	111 South Grand Avenue	5151-004-907	2003			3S	Eligible for NRHP

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	various	--	1925-1972	D[1]		3D, 3CD	Eligible for NRHP and CRHR
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	111 North Hope Street	5161-003-910	1965	C		3B, 3CB	Eligible for NRHP and CRHR
5-2	Ahmanson Theatre	135 North Grand Avenue	5161-004-907	1967	C		3B, 3CB	Eligible for NRHP and CRHR
5-3	Mark Taper Forum	135 North Grand Avenue	5161-004-907	1967	C		3B, 3CB	Eligible for NRHP and CRHR

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
5-4	Dorothy Chandler Pavilion	135 North Grand Avenue	5161-004-907	1964	C		3B, 3CB	Eligible for NRHP and CRHR
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	500 West Temple Street, 222 North Grand Avenue	5161-004-908	1956–1961	C		3B, 3CB	Eligible for NRHP and CRHR
5-6	El Paseo de los Pobladores de Los Angeles	224 North Grand Avenue	5161-004-908	1966	C		3D, 3CD	Eligible for NRHP and CRHR
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	111 North Hill Street	5161-004-906	1958	C		3B, 3CB	Eligible for NRHP and CRHR
5-8	County of Los Angeles Central Heating and Refrigeration Plant	301 North Broadway	5161-005-904	1958	C		3D, 3CD	Eligible for NRHP and CRHP

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
5-9	Los Angeles County Hall of Records	320 West Temple Street	5161-005-910	1962	C		3B, 3CB	Eligible for NRHP and CRHP
5-10	Court of Historic American Flags	224 North Hill Street, 100 block Hill Street	5161-005-916	1971	C		3D, 3CD, 5S2	Eligible for NRHP and CRHP Eligible for local listing or
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	301 West 1st Street	5161-005-912	1953	C		3D, 3CD	Eligible for NRHP and CRHR
5-12	Hall of Justice, Los Angeles County Jail	211 West Temple Street	5161-005-903	1925	C		2S4, 3B, 3CB	Eligible for NRHP and CRHR

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
5-13	Clara Shortridge Foltz Criminal Justice Center	210 West Temple Street	5161-005-915	1972	C		3B, 3CB	Eligible for NRHP and CRHR
6-1	U.S. Post Office and Court House Building, Federal Building	312 North Spring Street	5161-005-902	1940	C		1S, 3B, 3CB	NRHP listed
6-2	Los Angeles City Hall	200 North Spring Street	5161-005-906	1928	C		2S2, 3B, 3CB	Eligible for NRHP and CRHR
6-3	City Hall East	200 North Main Street	5161-014-901	1973	NC		6Z	Not Eligible
6-4	City Health Building, City Hall South	111 East 1st Street	5161-014-902	1954	C		3B, 3CB	Eligible for NRHP and CRHR

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
6-5	Federal Building, North Los Angeles Field office	300 North Los Angeles Street	5161-011-906	1965	C		3D, 3CD	Eligible for NRHP and CRHR
6-6, 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	150 North Los Angeles Street 151 North Judge John Aiso Street	5161-013-904, 5161-013-905	1955/ 1958	C		3B, 3CB	Eligible for NRHP and CRHP
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	140 North Judge John Aiso Street	5161-012-901, 5161-012-902	1968			3CS	Eligible for CRHR
6-9	corrugated metal shed	140 North Judge John Aiso Street (in parking lot)	5161-012-902	c. late 1960s			6Z	Not eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
6-10	Union Hardware and Metal Company, Los Angeles Police Garage, The Geffen Contemporary at MOCA	152 North Central Avenue	5161-012-904, 5161-012-905	1947			6Z	Not eligible
6-11	Office Depot Warehouse, City of Los Angeles Medical Services Division Building	432 East Temple Street	5173-008-906	1952			6Z	Not eligible
6-12	201-225 Los Angeles Street Plaza Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	201-225 Los Angeles Street, 111 East 1st Street, 314 North Main Street	5161-010-901	1974	NC		7L	Not Eligible No longer extant
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	220-226 ½ East 1st Street	5161-016-007	1910			3CS	Eligible for CRHR

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-2	International Theater, San Kwo Low, S.K. Uyeda Store, La Chicken	230 East 1st Street	5161-016-008	1907			6Z	Not eligible
7-3	Olympic Shop, Fianzas	114-116 Astronaut Ellison S. Onizuka Street	5161-016-009	1910/ 1926			6Z	Not eligible
7-4	Aid & Abet Bail Bonds, Fianzas, Joseph's Men's Wear (Clothier Shorter Men), Get Legal Immigrations Service	234-240 East 1st Street	5161-016-011	1964			6Z	Not eligible
7-5	Sakura Rent-a-Car, Insurance, David Baraz Bail Bonds, Nail Service, Los Angeles Immigration and Photo Services	242-248 East 1st Street	5161-016-010	1900			6Z	Not eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-6	Sumitomo Bank Tower, California Bank & Trust	101 South San Pedro Street	5161-016-014	1967			6Z	Not eligible
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	various	--	--	D		1D	NRHP listed National Historic Landmark
7-9	Mark Kuwata Real Estate	301 East 1st Street, 104-106 North San Pedro Street, 104-106 Judge John Aiso Street	5161-012-004	1908		C	3D	Eligible for NRHP
7-10	Little Tokyo Visitor Center	303-307 East 1st Street	5161-012-908	1907		NC	6Z	Not eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-12	Ace Hi Cleaners, Fugetsu-Do Sweet Shop, Little Tokyo Arts & Gift, Zippo DVD	315, 317, 319 East 1st Street	5161-012-008	1957		NC	6Z	Not eligible
7-13	Video Paradise, Korean Barbeque	321-323 East 1st Street	5161-012-007	1930		NC	6Z	Not eligible
7-21	Color and Copy	312 East 1st Street	5161-017-035	1991			6Z	Not Eligible (No longer extant)
7-22	Mitsuru's Sushi-Bar & Grill, Mikarana	314 East 1st Street	5161-017-005	1909			6Z	Not Eligible
7-23	Progressive Theatre, Sapproro-Ya	320 East 1st Street	5161-017-003	1910			6Z	Not Eligible (No longer extant)

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-24	Citibank	324 East 1st Street	5161-017-002	1965			6Z	Not Eligible
7-25	Bun Ka Do Gifts Music	340 East 1st Street	5161-017-011	1964			6Z	Not Eligible
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	342 East 1st Street	5161-017-019	1940			3S	Eligible for NRHP
7-27	Ginza-Ginza, Tokyo Salon	342-342 ½ East 1st Street	5161-017-012	1938			6Z	Not Eligible
7-28	Three Twenty One building, Federal Public Defender building, Mitsubiushi Bank	321 East 2nd Street	5161-017-009	1965			6Z	Not Eligible
7-29	Weiland Brewery, Café Cuban Restaurant	114 South Central Avenue	5161-018-021	1897			6Z	Not Eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	416 East 1st Street	5161-018-001	1913			3CS	Eligible for CRHR
7-31	Eigiku Café, Kouraku Japanese Restaurant	314 East 2nd Street	5161-022-003	1896/ 1906			6Z	Not Eligible
7-32	Little Tokyo Movie Theatre, Rafu Busan	326 East 2nd Street	5161-022-011	1967			6Z	Not Eligible
7-33	Brunswig Drug Company, Purepac Corporation, Brunswig Square, American Apparel	356-374 East 2nd Street	5161-017-009	1930, 1985			6Z	Not Eligible
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	216 South Alameda Street	5163-009-005	1913			3S	Eligible for NRHP

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
7-36	Japanese Village Plaza (Moline Plow Company, Nisei Trading Company)	352 East 1st Street	5161-017-003 (and various others)	1978			6Z	Not Eligible (No longer extant)
8-1	Parking Lot 17, "Tinkertoy" parking structure	131 South Olive Street	5149-010-946	1968			6Z	Not Eligible
8-3	The Mirror Building (Site of Butterfield Stage Station), Los Angeles Times-Mirror Annex, Times Building South, Mirror-News Building	145 South Spring Street	5149-001-003	1948			3S, 5S1	Eligible for NRHP Locally listed or designated
8-4	Astor Hotel, Kawada Hotel	200 South Hill Street	5149-009-017	1918			6Z	Not Eligible
8-5	Los Angeles Law Center, Redwood Bar & Grill	316 East 2nd Street	5149-009-024	1926			6Z	Not Eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
8-6	2nd Street Annex Garage	222 South Hill Street	5149-009-023	1926			6Z	Not Eligible
8-7	Los Angeles Law Center	205 South Broadway	5149-009-019	1911			6Z	Not Eligible
8-8	Los Angeles Law Center, Merchants Trust Building	207 South Broadway	5149-009-022	1905			6Z	Not Eligible
8-9	Wilcox Building, Wilcox Block, Cityside Federal Credit Union	206-210 South Spring Street	5149-007-006	1905			6Z	Not Eligible
8-10	Wilcox Annex, Blue Cube Burger, Metropolitan News Enterprise	212-218 South Spring Street	5149-007-005	1950			6Z	Not Eligible
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	108 West 2nd Street	5149-006-010	1910			3CS, 5S1	Eligible for CRHR Locally listed or designated

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
8-12	Cathedral of Saint Vibiana	214 South Main Street	5161-026-022	1876			3S, 5S1	Eligible for NRHP Locally listed or designated
8-13	Cathedral of Saint Vibiana, Rectory	114 East 2nd Street	5161-026-023, 5161-026-024	1934			3S	Eligible for NRHP
9R-1	S.K. Uyeda Building, Aloha Plumbing, Tactical Depot, P.G. Motoring, Kato's Sewing Machines Sales and Service	606 East 1st Street	5163-002-023	1913			6Z	Not Eligible
9R-2	620 East 1st Street building	620 East 1st Street	5163-002-020	1913			6Z	Not Eligible
9R-3	Little Tokyo Carwash	622 East 1st Street	5163-002-006	1931			6Z	Not Eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
9R-4	700 East 1st Street building	700 East 1st Street	5163-003-001	1909			6Z	Not Eligible
9R5	120 South Vignes Street building	120 South Vignes Street	5163-005-007	1909			6Z	Not Eligible
9R-6	J.R. Newberry Company Building	900 East 1st Street	5163-005-006	1900			2S2, 5S3	Eligible for NRHP Eligible for local listing or designation
9R-7	1st Street Viaduct	1st Street between Vignes Street and Mission Road	n/a	1929			2S2, 5S1	Eligible for NRHP Eligible for local listing or designation
9R-8	Bordello Bar, Little Pedro's Restaurant & Cantina	901 East 1st Street	5173-013-014	1885			6Z	Not eligible

Table 4-5. All Properties in Project APE Built in or Prior to 1968 Evaluated or Re-Evaluated for National and California Register Eligibility

APE Map No.	Name	Address	Assessor's Parcel No.	Built Date	Civic Center	Little Tokyo	CHR Status Code*	NRHP/CRHR/ Local Eligibility
9R-9	Los Angeles Soap Company	617 East 1st Street	5173-012-900	n/a			6Z	Not eligible (No longer extant)

** Note: California Historical Resource Status Codes, see Appendix F.*

Of the total 118 resources that were investigated for this project, 49 were found to be listed in or eligible for listing in the National and California Register. Six were found eligible for listing only in the California Register, and 63 resources were found to be ineligible for either listing. Figure 4-4 shows eligible historic properties and historical resources within the APE. Table 4-6 outlines all of the resources (previously recorded and evaluated for this project) that are listed in or eligible for listing in the National and/or California Registers.

Figure 4-4. Historic Properties and Historical Resources within the APE Eligible for the National or California Registers

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
2-1	Barker Brothers	818 West 7th Street		Eligible	Listed
2-3	Fine Arts Building, Global Marine House	811 West 7th Street		Eligible	Listed
2-5	Engine Company No. 28	644 South Figueroa Street		Listed	Listed
2-7	Roosevelt Building	727 West 7th Street		Listed	Listed
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	811 Wilshire Boulevard		Eligible	Listed
2-12	General Petroleum, Mobil Oil Building	612 South Flower Street		Listed	Listed
2-13	Superior Oil Company Building	550 South Flower Street		Listed	Listed
3-1	The California Club	538 South Flower Street		Eligible	Listed
3-2	Los Angeles Central Library	630 West 5th Street		Listed	Listed

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Hill Street, between 4th and 5th Streets, to Glendale and Beverly			Eligible
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	2nd Street, between Grand Avenue and Figueroa Street		Eligible	Eligible
4-4	Walt Disney Concert Hall	111 South Grand Avenue	5151-004-907	Eligible	Eligible
5-1 Through 5-13, 6-1 through 6-7, 6-12	Los Angeles Civic Center Historic District	Various		Eligible	Eligible
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	111 North Hope Street	5161-003-910	Eligible	Eligible

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
5-2	Ahmanson Theatre	135 North Grand Avenue	5161-004-907	Eligible	Eligible
5-3	Mark Taper Forum	135 North Grand Avenue	5161-004-907	Eligible	Eligible
5-4	Dorothy Chandler Pavilion	135 North Grand Avenue	5161-004-907	Eligible	Eligible
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	500 West Temple Street, 222 North Grand Avenue	5161-004-908	Eligible	Eligible
5-6	El Paseo de los Pobladores de Los Angeles	224 North Grand Avenue	5161-004-908	Eligible	Eligible
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	111 North Hill Street	5161-004-906	Eligible	Eligible

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
5-8	County of Los Angeles Central Heating and Refrigeration Plant	301 North Broadway	5161-005-904	Eligible	Eligible
5-9	Los Angeles County Hall of Records	320 West Temple Street	5161-005-910	Eligible	Eligible
5-10	Court of Historic American Flags	224 North Hill Street, 100 block Hill Street	5161-005-916	Eligible	Eligible
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	301 West 1st Street	5161-005-912	Eligible	Eligible
5-12	Hall of Justice, Los Angeles County Jail	211 West Temple Street	5161-005-903	Eligible	Eligible
5-13	Clara Shortridge Foltz Criminal Justice Center	210 West Temple Street	5161-005-915	Eligible	Eligible

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
6-1	U.S. Post Office and Court House Building, Federal Building	312 North Spring Street	5161-005-902	Listed	Listed
6-2	Los Angeles City Hall	200 North Spring Street	5161-005-906	Eligible	Eligible
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	300 block of North Main Street, between Temple and Aliso Streets			Listed California Historical Landmark
6-4	City Health Building, City Hall South	111 East 1st Street	5161-014-902	Eligible	Eligible
6-5	Federal Building, North Los Angeles Field office	300 North Los Angeles Street	5161-011-906	Eligible	Eligible
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	150 North Los Angeles Street 151 North Judge John Aiso Street	5161-013-904, 5161-013-905	Eligible	Eligible

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	140 North Judge John Aiso Street	5161-012-901, 5161-012-902		Eligible
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	220-226 ½ East 1st Street	5161-016-007		Eligible
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Various		Listed National Historic Landmark	Listed
7-7	Japanese Union Church of Los Angeles	120 North San Pedro Street		Listed	Listed
7-8	San Pedro Firm Building	108-116 North San Pedro Street		Listed	Listed

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
7-9	Mark Kuwata Real Estate	301 East 1st Street, 104-106 North San Pedro Street, 104-106 Judge John Aiso Street	5161-012-004	Eligible	Eligible
7-11	1-3 story commercial building, Anzen Hardware	309-313 East 1st Street		Listed	Listed
7-14	1-3 story commercial building, Little Tokyo Hotel	325 East 1st Street		Listed	Listed
7-15	1-3 story commercial building, Ace Japanese Restaurant,	331-335 East 1st Street		Listed	Listed
7-16	A. Sperl Building	337-339 East 1st Street		Listed	Listed
7-17	3+ story commercial building, Daimora Hotel	341-345 East 1st Street		Listed	Listed
7-18	Far East Café Building	347-353 East 1st Street		Listed	Listed

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
7-19	Former Nishi Hongwanji Buddhist Temple	119 North Central Avenue		Listed	Listed
7-20	Aoyama Tree	119-135 North Central Avenue		Not Eligible	Eligible
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	342 East 1st Street	5161-017-019	Eligible	Eligible
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	416 East 1st Street	5161-018-001		Eligible
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	216 South Alameda Street	5163-009-005	Eligible	Eligible
8-2	*Los Angeles Times* Building	202 West 1st Street		Eligible	Listed

Table 4-6. NRHP and CRHR Eligible and Listed Properties in APE

APE Map No.	Name	Address	Assessor's Parcel No.	NRHP Eligibility	CRHR Eligibility
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	145 South Spring Street	5149-001-003	Eligible	Eligible
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	108 West 2nd Street	5149-006-010		Eligible
8-12	Cathedral of Saint Vibiana	214 South Main Street	5161-026-022	Eligible	Eligible
8-13	Cathedral of Saint Vibiana, Rectory	114 East 2nd Street	5161-026-023, 5161-026-024	Eligible	Eligible
9-R6	J.R. Newberry Company Building	900 East 1st Street	5163-005-006	Eligible	Eligible
9-R7	1st Street Viaduct (Bridge #53C-1166)	1st Street between Vignes Street and Mission Road		Eligible	Eligible

5.0 IMPACTS

The impacts analysis examined likely effects of the proposed project to historic properties under NHPA and impacts to historical resources under CEQA. This analysis incorporates the findings of other applicable technical studies, including displacement, right-of-way, noise and vibration studies, sound walls, retaining walls, geotechnical studies, and station designs. Tables 5-1 through 5-8 list the potential project effects to historic properties and impacts to historical resources by alternative. A discussion of the potential effects to historic properties and impacts to historical resources under the No Build Alternative and the TSM Alternatives are included in the text.

As noted previously in Section 3.0 of this technical memorandum, if a project affects a "historic property" within the APE, the lead federal agency must assess whether the effect is adverse in order to comply with Section 106 of the NHPA. This is accomplished in consultation with the SHPO by applying the "criteria of adverse effect" as stated in 36 CFR 800.5(a)(1).

If a project's effects do not diminish the integrity of a historic property, then a "no adverse effect" finding is appropriate (36 CFR 800.5(b)). Adverse effects are defined in Section 3.2.

If an adverse effect is expected to occur as a result of a proposed project, the lead agency shall consult further to resolve the adverse effect, pursuant to 36 CFR Part 800.5(2) and develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties (36 CFR Part 800.6).

Section 110(f) of the NHPA of 1966, as codified in 36 CFR 800.10, requires federal agencies to undertake planning and actions to minimize harm to designated National Historic Landmark (NHL) properties. If a proposed project is found to have the potential for an adverse effect on a NHL, the Secretary of the Interior (typically represented by a representative of the National Park Service) is invited to participate under Section 110(f) of the NHPA. For this project, the Little Tokyo Historic District NHL is situated within the APE and would not be adversely affected by any of the alternatives. If project planning necessitates changes, and potential adverse effects to the NHL arise, consultation with the National Park Service will be conducted.

As noted in Section 3.0, CEQA also requires that proposed public projects be evaluated for their probability to cause significant effects on "historical resources." CEQA equates a "substantial adverse change" in the significance of a historic property with a significant effect on the environment (PRC Section 21084.1). Thresholds of substantial adverse change are established in PRC Section 5020.1, and include demolition, destruction, relocation, or "alteration activities that would impair the significance of the historic resource."

5.1 No Build Alternative

5.1.1 Construction Impacts

The No Build Alternative would not result in short-term or long-term construction related effects to historic properties or impacts to historical resources. This alternative does not include capital improvements, and thus would not result in construction or implementation-related effects to historic properties under NEPA or impacts on historical resources under CEQA within the project APE.

5.1.2 Operational Impacts

The No Build Alternative would not result in operational short- or long-term effects to historic properties or impacts to historical resources. This alternative would not result in the introduction of any new improvements that would be expected to cause effects on historic properties under NEPA or have impacts under CEQA on historical resources in the project APE.

5.1.3 Cumulative Impacts

The No Build Alternative would not result in cumulative effects to historic properties or impacts to historical resources, other than the current effects on resources though continued high and escalated levels of vehicular traffic, unabated by additional mass transit options. Therefore, the No Build Alternative would not contribute to a cumulative effect to historic properties or impacts to historical resources.

5.2 Transportation System Management (TSM) Alternative

Under the TSM Alternative, the transit infrastructure investment (two new bus routes and associated structures) would use the existing street and sidewalk networks and would not require the displacement or relocation of properties, residents, or employees.

Improvements under this alternative would entail minor physical modifications, such as the installation of bus stops along existing city streets and rebuilding some curbs, sidewalks, and street surfaces to accommodate increased bus weights and traffic frequency.

No detailed engineering plans for the TSM alternative have been prepared to date.

5.2.1 Construction Impacts

5.2.1.1 Addition of Bus Stops

Under the TSM Alternative, an unspecified number of buses would be added throughout the APE. Installation of up to six new bus stops within the APE would entail minor alterations to the sidewalks, curbs, and other features in the public right of way.

Section 106 Effects Analysis for Historic Properties

An effect, but no adverse effect, to historic properties would result from the addition of bus stops because the current streetscapes were historically busy transportation corridors. The new proposed features would not alter the characteristics of historic properties located in the APE in a manner that would diminish the integrity of any historic materials.

CEQA Impact Analysis for Historical Resources

The addition of a limited number of bus stops in the APE would not constitute a substantial adverse change that would impair the significance of historical resources. The resources' features would remain to convey their significance. The project, therefore, would have a less than significant impact upon historical resources.

5.2.1.2 One-Way Express Bus Traffic

The construction and implementation of the TSM Alternative may result in the rebuilding of curbs, sidewalks, and street surfaces to accommodate increased bus weights and traffic frequency.

Section 106 Effects Analysis for Historic Properties

The improvements to facilitate bus traffic would result in an effect, but no adverse effect, to historic properties because the current streetscapes were historically busy transportation corridors. The changes would not alter a characteristic of a historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential changes to sidewalks and street surfaces to accommodate bus traffic would not constitute a substantial adverse change that would impair the significance of historical resources. The majority of the resource's features would remain to convey their significance. The TSM Alternative, therefore, would have a less than significant impact upon historical resources.

5.2.1.3 Noise and Vibration

According to the Noise and Vibration Technical Memorandum, the TSM Alternative may include minor construction, i.e. install new bus stop benches and signage. These activities would take less than a day to erect, require no heavy equipment, and would not exceed ambient levels of noise in the APE. Noise generated by this alternative is not expected to cause an adverse effect to historic properties or a significant impact to historical resources.

For the TSM Alternative, no major construction activities that use the larger equipment in Table 3-2 are planned, therefore no adverse effects or significant impacts under CEQA from ground borne vibration (GBV) are anticipated.

Section 106 Effects Analysis for Historic Properties

Selecting construction techniques that use specified equipment within safe distances from sensitive buildings would diminish the potential for ground borne vibration and noise. Large equipment would not adversely affect historic properties. Potential noise would also not rise above existing conditions. Any changes that could occur as a result of GBV or noise generated by this alternative would not alter a characteristic of a historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential changes generated by GBV and noise for this alternative would not constitute a substantial adverse change that would impair the significance of historical resources. The resources' features would remain to convey their significance. The project, therefore, would have a less than significant impact upon historical resources.

5.2.2 Operational Impacts

5.2.2.1 Noise and Vibration

Under the TSM Alternative, potential sources of future noise and vibration levels would not increase over the existing sources of noise and vibration. Buses currently use the routes associated with this alternative. Therefore, the operation of additional buses along the proposed route would not result in a noticeable increase in vibration or noise levels over those currently generated by existing buses. Additional bus use may reduce cumulative noise by decreasing personal vehicle use.

Section 106 Effects Analysis for Historic Properties

Noise and vibration caused by the operation of buses would not adversely affect historic properties in the APE. Potential changes would not alter the characteristics of a historic property in a manner that would diminish the integrity of the location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Potential noise and vibration generated from bus service in the APE would not constitute a substantial adverse change that would impair the significance of any historical resources. Character defining features would remain to convey the significance of the historical resources. The TSM Alternative, therefore, would have a less than significant impact upon historical resources.

5.2.3 Cumulative and Indirect Impacts

There are no expected indirect impacts under the TSM Alternative.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic brought about by increased density as new buildings are constructed. Taken collectively, the reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that would be affected by the TSM Alternative.

5.2.4 Potential Effects to Section 4(f) Resources

Section 4(f) applies to the Regional Connector Transit Corridor project because several of the project alternatives potentially affect 4(f) properties. The TSM Alternative, however, would not affect, displace, alter, or use any 4(f) properties to implement construction and/or project operation.

5.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

The At-Grade Emphasis LRT Alternative would install double-track light-rail guideways in the existing street system, rebuild street surfaces and underground utilities, rebuild curbs and sidewalks, and install stations, all within the APE. Underground segments of the alternative would use parts of the existing 2nd Street Tunnel (APE Map # 4-3) and would require new cut and cover tunneling under Flower Street between 7th and 4th Streets north of the 7th Street/Metro Center Station.

5.3.1 Construction Impacts

Construction activities were analyzed using the Criteria of Adverse Effect for their potential to impact properties. The following discussion describes the types of effects that may occur in the APE due to construction activities for the At-Grade Emphasis LRT Alternative. Short-term effects from construction typically result from dirt, changes in the visual environment, or alteration to access. Other types of construction effects may be related to specific construction activities or locations. Operational effects are discussed in Section 5.3.2. Table 5-1 indicates the resources that may experience construction-related effects due to their location within the APE.

5.3.1.1 Temporary Dirt/Unintended Damage

Properties in the APE may experience effects from construction including dirt and unintended damaged. Metro would employ best management practices (BMPs) to ensure that these effects are short-term.

Section 106 Effects Analysis for Historic Properties

Dirt and other damage from construction would result in effects, but not adverse effects, to historic properties in the APE because the effects would be short-term. The effects would not

directly alter a characteristic of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Potential dirt and other unintended damage during construction would not constitute a substantial adverse change that would impair the significance of the historical resources. The impacts would be short-term and the majority of the resources' features would remain to convey their significance. This alternative, therefore, would have a less than significant impact upon historical resources.

5.3.1.2 Traffic Congestion/Parking/Access

Changes in access to properties and resources within the APE may result from road closures, use of equipment, and other construction activities. Metro would employ BMPs to minimize these changes and keep the public and property owners informed of potential issues.

Section 106 Effects Analysis for Historic Properties

Potential effects, but no adverse effects, would result from changes in access during construction. The effects would be short-term and would not alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Changes in access resulting from congestion and loss of parking during construction would not constitute a substantial adverse change that would impair the significance of the historical resources. The impacts would be short-term and the majority of the resources' features would remain to convey their significance. The At-Grade Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.3.1.3 Visual

Visual changes may result from the storage and operation of equipment, cuts in the road, and signage used during construction. Metro would employ best management practices (BMPs) to minimize these changes and they would be short term.

Section 106 Effects Analysis for Historic Properties

Visual changes during construction would result in an effect, but not an adverse effect, to historic properties because the effects would be short-term. The changes would not directly alter a characteristic of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Visual changes during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the resources' character-defining features would remain to convey their significance. The At-Grade Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.3.1.4 Demolition, Partial Takes or Alteration of a Property:

As part of the At-Grade Emphasis LRT Alternative a portion of several properties may be acquired (partial takes). Portions of properties occupied by the Los Angeles Police Facilities Building (APE Map #6-6), Motor Transport Division Building (APE Map #6-7), and City Health Building (City Hall South) (APE Map #6-4), three contributing resources to the Los Angeles Civic Center Historic District, would be acquired to accommodate new stations (Metro 2010). A temporary construction staging easement would also be acquired. A portion of the CRHR eligible "Tinkertoy" Parking Structure (APE Map #6-8), would be acquired to accommodate the turning radius as the rail line joins the existing Gold Line Extension tracks. Drive way access would also be potentially limited. The Tinkertoy Parking Structure is not eligible for the NRHP.

Section 106 Effects Analysis for Historic Properties

There are no adverse effects to historic properties under this alternative from partial property acquisitions. Since only a portion of the properties would be acquired and converted to new uses, the change would not affect the physical buildings, the historic district that they are a part of, or the characteristics that make them eligible for the NRHP, and thus would not diminish their integrity of location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Partial property acquisitions would not constitute a substantial adverse change that would impair the significance of historical resources in the APE. The characteristics that make the historical resources eligible for the CRHR and NRHP would remain to convey their significance. This alternative, therefore, would not have a significant impact upon historical resources.

5.3.1.5 Above-Ground Station Construction

One potential at-grade station is proposed for the At-Grade Emphasis LRT Alternative. The proposed station would be a one-way couplet located on Main and Los Angeles Streets in the NRHP and CRHR Eligible Civic Center Historic District (APE Map #51-1 through 5-13, 6-1 though 7-7, 6-12) and immediately beside three NRHP and CRHR eligible properties; the Los Angeles Police Facilities Building (APE Map #6-6), Motor Transport Division Building (APE

Map #6-7) and City Health Building (City Hall South) (APE Map #6-4). Based upon the preliminary designs, the platforms would be simple poured concrete platforms with modest coverings (IBI Group 2009) similar to what are already used in the nearby Little Tokyo/ Arts District Station.

Section 106 Effects Analysis for Historic Properties

The construction of the proposed at-grade station would result in an effect, but not an adverse effect, to historic properties under this alternative. The proposed changes would not alter the setting of any historic properties in a manner that would diminish either the integrity of the individual properties that are contributors to the historic district or the historic district itself.

CEQA Impact Analysis for Historical Resources

Construction of the proposed station would not constitute a substantial adverse change that would impair the significance of either the Civic Center Historic District or the individual resources that contribute to the district. The historical resources' character-defining features would remain to convey the significance of the Historic District and the individual contributors. This alternative, therefore, would have a less than significant impact upon historical resources.

5.3.1.6 Flower Street Station Entry Construction

As part of the At-Grade Emphasis LRT Alternative, pedestrian entrances would be constructed to provide access to the underground station on Flower Street. Although not finalized, the initial designs show that escalators would rise from the underground station. A glass canopy, supported by a steel frame, would shelter the opening. The entrances would be located on the east side of Flower Street in areas that provide views of the NRHP and CRHR listed Central Public Library (APE Map #3-2). One entrance would also be located in front of NRHP eligible California Club (APE Map #3-1). A glass enclosed elevator would also be constructed on the southeast side of Flower Street in front of the Maguire Gardens. This elevator would be adjacent to Maguire Gardens, on the west side of the Central Library (IBI Station Planning Report 2009).

Section 106 Effects Analysis for Historic Properties

No adverse effects to historic properties would occur as the result of proposed improvements for the Flower Street Station. Although the improvements are a change to the setting of the California Club and the Central Public Library; the scale, massing, size, and materials of the new facilities would not alter characteristics of any of the historic properties in a manner that would diminish the integrity of the location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential entrances and elevators associated with Flower Street Station would not constitute a substantial adverse change that would impair the significance of historical resources (Central Public Library, see APE Map #3-2; and California Club, see APE Map #3-1). The character-defining features of these resources would remain to convey their significance. This alternative, therefore, would have a less than significant impact upon historical resources.

5.3.1.7 Catenary pole and Wire Installation

Catenary poles and wires would be installed in the portion of the APE where the trains run at-grade. Catenary poles provide support for the wires that would be suspended overhead. The final spacing, method of installation, and design for the poles and wires has not been established.

Section 106 Effects Analysis for Historic Properties

No adverse effects to historic properties would result from the installation of the catenary poles and wires because the project area streetscapes are historically dynamic and have changed dramatically over time. Changes to the streetscape resulting from the addition of catenary poles and wires as proposed under this alternative are within the range of past changes, and therefore, would not alter historic properties in a manner that would diminish the integrity of any property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential changes to install catenary poles and wires under this alternative would not constitute a substantial adverse change that would impair the significance of historical resources. The resources' features would remain to convey their significance. The project, therefore, would have a less than significant impact upon historical resources.

5.3.1.8 Tunnels

Under this alternative the NRHP eligible 2nd Street Tunnel (APE Map #4-3) would be altered. The walls of the tunnel would be partially demolished along its southwest interior wall to construct a new entrance and exit for the new tunnel in which the light rail would run. New elements that would be added to the tunnel include double tracks, catenary wires, and a sidewalk.

The cut and cover trench would also require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP.

Section 106 Effects Analysis for Historic Properties

In applying the criteria of adverse effect for historic properties (36 CFR 800.5(a)(1)) potentially affected by the construction near 2nd Street, an adverse effect would occur due to the demolition of a portion of the NRHP eligible 2nd Street Tunnel and the subsequent change in use. The changes would directly alter a characteristic of the historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Documentation of the property in accordance with mitigation measure MM-BE-1 would resolve the potential adverse effect.

CEQA Impact Analysis for Historical Resources

Potential changes to the 2nd Street Tunnel would constitute a substantial adverse change that would impair the significance of the historical resource. However, the majority of the resource's features would remain to convey its significance. Additionally, implementation of MM-BE-1 would reduce the impact to a less than significant level. The implementation of MM-BE-1 would reduce any impact to the CRHR-eligible Belmont Tunnel to a less than significant level.

5.3.1.9 Traction Power Substations

Construction of traction power substations (TPSS) adjacent to the right-of-way along at-grade segments is proposed. The substations deliver electricity to overhead catenary systems. The designs have not been identified but the substations can fit in rooms or standalone buildings of 5,000 square feet or less. The only at-grade location currently identified as a proposed site for a TPSS is on the southwest corner of Spring and 2nd Streets. There are no historical resources or historic properties at this location.

Section 106 Effects Analysis for Historic Properties

The proposed location for the TPSS would not be located on or near any historic properties and therefore, there would be no adverse effects to historic properties. If any additional locations are identified, the criteria of adverse effect would be applied to any historic properties that might be affected (36 CFR 800.5(a)(1)). However, because of the small scale of the TPPS, their construction is an effect, but not an adverse effect, that would alter a characteristic of historic properties in a manner that would diminish the integrity of a property' s location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The proposed TPSS location would not be on or near any historical resources and therefore there would be no impact under CEQA. If additional stations are proposed, a CEQA analysis would be conducted. However, due to the small scale of the feature, it is likely that the construction of a TPSS would not constitute a substantial adverse change that would impair the significance of any historical resources. The majority of the resources' features would

remain to convey their significance. The project, therefore, would have a less than significant impact upon historical resources.

5.3.1.10 Differential Settlement

According to the *Description of Construction*, some of the buildings situated near cut and cover excavation would be susceptible to differential settlement. Differential settlement is defined as "unequal settling of material; gradual downward movement of foundations due to compression of soil which can lead to damage if settlement is uneven" (Allaby 1999). Differential settlement occurs when a building or feature's shape is twisted, or is raised and lowered in different places, sometimes imperceptibly. Differential settlement can cause foundations to settle and crack, floors to buckle and go out of level, walls to shift out of plumb and plane, and roofs to twist and deform. The resulting changes in structural systems and cladding or finish materials, including wood and masonry, floor tiles, wood flooring, concrete floors, plaster, marble, and other decorative wall and ceiling treatments, and adobe, stucco, and wood-framed walls can be cracks, fractures, and other noticeable (as well as long term, not immediately visible) deformations and damage. Since historically significant buildings often have archaic construction and finish attachment systems, including unreinforced masonry, those building types are usually more susceptible to the effects of ground-borne vibration than more recently constructed buildings.

According to the *Description of Construction*, at least seven NRHP and/or CRHR eligible properties could be potentially affected by cut and cover construction associated with the At-Grade Emphasis LRT Alternative. These buildings include the Superior Oil Company Building(APE Map #2-13), California Club (APE Map #3-1), 2nd Street Tunnel (APE Map #4-3), Walt Disney Concert Hall (APE Map #4-4), the former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), and St. Vibiana's Cathedral (APE Map #8-12).

Section 106 Effects Analysis for Historic Properties

The implementation of design measures would protect and stabilize the ground near historic properties as noted in MM-BE-2, MM-BE-3, and MM-BE-5. These measures would avoid adverse effects to all properties. If properly implemented, short term construction activities would not directly alter a characteristic of the historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for differential settlement could constitute a substantial adverse change that would impair the significance of the Superior Oil Company Building(APE Map #2-13), California Club (APE Map #3-1), 2nd Street Tunnel (APE Map #4-3), Walt Disney Concert Hall (APE Map #4-4), the former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los

Angeles Times Building (APE Map #8-2), and St. Vibiana's Cathedral (APE Map #8-12). The implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce the potential impacts to these historical resources to a less than significant level.

5.3.1.11 Noise and Vibration

Noise generated by construction equipment can cause adverse effects to historic properties and significant impacts to historical resources when exposure exceeds the "severe level" established by FTA. Noise that reaches a severe level, which cannot be reduced through mitigation or other measures, may cause a reduction in use or access to historic properties or historical resources. This may result in an adverse effect to historic properties or a significant impact to historical resources. For properties or resources where a sense of quiet represents a characteristic of its historical significance, increases in noise may also cause adverse effects and/or significant impacts.

According to the Noise and Vibration Technical Memorandum, construction activities with the most potential for noise impacts under the At-Grade Emphasis LRT Alternative, include the cut and cover tunnel along Flower Street, the proposed cut and cover stations at Flower/6th/5th and 2nd/Hope Street, and the Temple and Alameda junction, which includes lowering Alameda Street. To ensure noise impacts are minimized during construction, all construction activities would conform to the provisions in Section 41.40(a) of the City of Los Angeles Code. Furthermore, best management practices (BMPs) would be employed to reduce any potential noise effects to historic properties and result in a no adverse effect finding and reduce potential impacts to historical resources to a less than significant level.

GBV generated by construction equipment can also cause adverse effects on historic properties and significant impacts to historical resources that are in close proximity to construction activities. Construction-related vibration can cause damage ranging from minor cosmetic damage to interior plaster or woodwork damage to major structural damage. Thus GBV can harm the characteristics that make historic properties eligible for the NRHP and historical resources eligible for the CRHR.

For the At-Grade Emphasis LRT Alternative, pre-augering of soldier piles at the cut and cover sections would eliminate the need for impact pile driving. This would leave "Large Bulldozer" and "Drill Rigs" as the main construction vibration sources (Table 3-2). If these large pieces of equipment are not used within the 21 feet of a historic property or historical resource, it is reasonably foreseeable that no adverse effects or significant impacts to historic properties and historical resources from GBV could occur. Buildings near potential construction activities include Barker Brothers (APE Map #2-1), Roosevelt Building (APE Map #2-7), General Petroleum-Mobil Oil Building (APE Map #2-12), Superior Oil Building (APE Map #2-13), California Club (APE Map #3-1), Los Angeles Central Library (APE Map #3-2), 2nd Street Tunnel (APE Map #4-3), Mirror Building (APE Map #8-3), Higgins Building(APE Map #8-11,

CRHR-eligible only), Cathedral of Saint Vibiana (APE Map #8-12), Cathedral of Saint Vibiana Rectory (APE Map #8-13).

Section 106 Effects Analysis for Historic Properties

No adverse effects would occur if measures MM-BE-2 and MM-BE-3 are implemented. If these measures are properly implemented, potential effects of the At-Grade Emphasis LRT Alternative would not diminish the integrity of the historic properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Under the At-Grade Emphasis LRT Alternative, construction-induced vibration could potentially cause a substantial adverse change that would impair the significance of any or all of the historical resources noted in this section. The implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce potential impacts to a less than significant level.

5.3.2 Operational Impacts

The At-Grade Emphasis LRT Alternative would add transit options that would be consistent with the historic use of streetcars within the APE. Additionally, the LRT could benefit historic properties and historical resources in the APE by increasing pedestrian access and use of the area.

Activities associated with the operation of the At-Grade Emphasis LRT Alternative may also cause impacts to properties within the APE. The potential effects are described below and summarized in Table 5-2.

5.3.2.1. Traffic Congestion/Parking/Access:

Operation of the At-Grade Emphasis LRT Alternative may result in loss of parking and changes to vehicular patterns that result in increased congestion.

Section 106 Effects Analysis for Historic Properties

Changes in access, parking, and traffic patterns would result in effects, but no adverse effects, to historic properties. The changes would not alter a characteristic of historic properties in the APE in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Potential changes to traffic patterns and access would not constitute a substantial adverse change that would impair the significance of historical resources. The majority of the resources' features would remain to convey their significance. This alternative, therefore, would have a less than significant impact upon historical resources.

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	SI				X
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 Thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS	X		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS	X		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS				
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	LTS		X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS			X	
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	SI			X	

Table 5-1. Potential At-Grade Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS		X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI			X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.3.2.2 Visual:

Operation of the At-Grade Emphasis LRT Alternative above ground along 2nd, Main, Los Angeles, and Temple Streets would be a minimal change to the visual setting of properties in this area of the APE.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to historic properties in areas in the APE where the new LRT would be visible. No adverse effect would occur because the changes would not directly alter characteristics of historic properties in the APE in a manner that would diminish the integrity of the property' s location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Potential changes to historical resources within the APE where the LRT would be visible would not constitute a substantial adverse change that would impair the significance of historical resources. The project, therefore, would have a less than significant impact upon historical resources.

5.3.2.3 Noise and Vibration

Noise from LRT operations would be generated from the interaction of wheels on track, motive power, signaling and warning systems, platform announcements, and operation of TPSS. The interaction of steel wheels on rails generates three different types of noise depending on the type of track work. These include: (1) noise generated from wheel squeal on tightly curved track, (2) noise generated on special trackway sections, such as at crossovers or turnouts, and (3) noise generated by rolling of the wheel over continuous rail. According to the Noise and Vibration Technical Memorandum, only one moderate noise effect/impact is anticipated from LRT operation to a CRHR-eligible property. Only the first floor of the Higgins Building (APE Map #8-11) would be subjected to a moderate noise effect/impact, but since the Higgins Building is not eligible for the NRHP, no historic properties would be affected. Wheel skirts would be included on LRT vehicles to reduce the wayside noise levels, but this design implementation would not reduce noise levels on the first floor of the Higgins Building to below moderate levels. Since the noise levels on the first floor of the Higgins Building would not be considered severe, the noise from LRT operation would not be considered a significant impact to a historical resource under CEQA.

Vibration impacts from transit operations would be generated by motions/actions at the wheel/rail interface. While vibration from a passing train would have a relatively small potential to move through the geologic strata, it could result in building vibration from energy transferred through the earth to the building's foundation. The principal concern with rail transit vibration is annoyance to building occupants; it is extremely unlikely that GBV from transit operations would cause any effect on or damage of any kind to buildings. For the At-

Grade Emphasis LRT Alternative no adverse effects or significant impacts to historic properties or historical resources would be expected.

Section 106 Effects Analysis for Historic Properties

Noise and vibration caused by project operation would be an effect, but not an adverse effect, to historic properties within the APE. Project operations would not alter characteristics of historic properties in the APE in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Potential noise and vibration impacts caused by operation of the At-Grade Emphasis LRT Alternative to the CRHR-eligible Higgins Building would not constitute a substantial adverse change that would impair the significance of the historical resource. The resource's features would remain to convey its significance. This alternative, therefore, would have a less than significant impact upon historical resources.

5.3.3 Cumulative and Indirect Impacts

There are no expected indirect impacts under the At-Grade Emphasis LRT Alternative on historic resources.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic brought about by increased density as new buildings are constructed. Taken collectively, reasonably foreseeable projects within the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that would be affected by the At-Grade Emphasis LRT Alternative.

5.3.4 Potential Effects to Section 4(f) Resources

The At-Grade Emphasis LRT Alternative would require the acquisition and/or use of property associated with five NRHP-eligible properties: Civic Center Historic District, Los Angeles Police Motor Transport Building (APE Map #6-7), City of Los Angeles Parker Center Police Department Building (APE Map #6-6), City Hall South (APE Map #6-4) as well as the 2nd Street Tunnel (APE Map #4-3).

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X	
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS	X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS	X		

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS	X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS	X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS	X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS	X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS	X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS	X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS	X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS	X		

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS	X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS	X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS	X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	LTS	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS		X	
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	

Table 5-2. Potential At-Grade-Emphasis LRT Alternative Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

Los Angeles Police Motor Transport Building

The At-Grade Emphasis LRT Alternative would require the acquisition in-fee of a 16-foot strip of property that would be used for the construction of the proposed Los Angeles/1st Street station (northbound). An additional easement would be acquired for construction staging and would be situated to the east of the 16-foot strip. Neither the fee property nor the easement would touch or adversely affect the historic integrity of the Motor Transport Building as a more modern building currently buffers the Motor Transport Building from Los Angeles Street. Contingent upon consultation with the California SHPO and the Advisory Council on Historic Preservation (if the ACHP participates in consultation) and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

City of Los Angeles Parker Center Police Department Building

The At-Grade Emphasis LRT Alternative would require the acquisition in-fee of a 16-foot strip of property that would be used for the construction of the proposed Los Angeles/1st Street station (northbound). An additional easement would be acquired for construction staging and would be situated to the east of the 16-foot strip. Both the fee property and construction staging easement are located on the east side of Los Angeles Street and neither would touch or adversely affect the historical integrity of the Parker Center. Contingent upon consultation with the California SHPO and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

City Hall South

The At-Grade Emphasis LRT Alternative would require the acquisition of an 18-foot strip of property that would be used for the construction of the proposed Main/1st Street station (southbound). A construction staging easement would also be acquired along Main Street, as well as on the west side of Los Angeles Street. None of these acquisitions would touch or adversely affect the historical integrity of the City Hall South building. Contingent upon consultation with the California SHPO and the Advisory Council on Historic Preservation (if the ACHP participates in consultation) and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

2nd Street Tunnel

The At-Grade Emphasis LRT Alternative would require the piercing and use of the 2nd Street Tunnel to accommodate the proposed LRT corridor. The "punch through" required by this alternative would adversely affect the characteristics that make the 2nd Street Tunnel eligible for the NRHP. This would constitute a direct use, as the tunnel would be permanently incorporated into the proposed project. This use could only occur if 1) there is no prudent and feasible alternative to using the resource; and 2) the project includes all possible planning

to minimize harm to the tunnel from the use. Additional analysis of project alternatives and consultation with the California SHPO would be required.

Civic Center Historic District

The At-Grade Emphasis LRT Alternative would require the fee acquisition of two strips of streetside property for the two parts of the split station as well as several construction staging easements on properties that are associated with three contributors to the NRHP/CRHR eligible Civic Center Historic District (as discussed above); the City Hall South Building, the City of Los Angeles Parker Center Police Department Building, and the Los Angeles Motor Transport Building. These acquisitions would not affect the historical integrity of these individual contributors and would also not affect the overall historical integrity and ability of the historic district as a whole to convey its significance. The property acquisitions, therefore, would have no adverse effect upon the Civic Center Historic District. Contingent upon consultation with the California SHPO and the Advisory Council on Historic Preservation (if the ACHP participates in consultation) and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

5.4 Underground Emphasis LRT Alternative

5.4.1 Construction Impacts

Construction activities were analyzed using the Criteria of Adverse Effect (discussed in Section 3.2.1) for their potential to impact historic properties. Potential effects that may occur in the APE due to construction activities for the Underground Emphasis Alternative are discussed in this section. Short-term effects from construction typically result from dirt, changes in the visual environment, or alteration to access. Other types of construction effects may be related to specific construction activities or locations. Operational effects are discussed in Section 5.4.2. Table 5-3 indicates the resources that may experience construction effects due to their location within the APE.

5.4.1.1 Temporary Dirt/Unintended Damage:

Properties in the APE would be affected by construction activities including dirt and unintended damaged. Metro would employ BMPs to ensure that these effects are short-term.

Section 106 Effects Analysis for Historic Properties

Dirt and other damage from construction would affect, but not adversely affect, historic properties in the APE because the potential effects would be short-term. The potential effects would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Dirt and other unintended damage during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the majority of the resources' features would remain to convey their significance. The Underground Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.4.1.2 Traffic Congestion/Parking/Access:

Changes in access to properties and resources within the APE may result from road closures, use of equipment, and other construction activities. Metro would employ BMPs to minimize these changes and keep the public and property owners informed of potential issues.

Section 106 Effects Analysis for Historic Properties

Potential effects, but no adverse effects, would result from changes in access during construction. The effects would be short-term and would not alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Changes in access resulting from congestion and loss of parking during construction would not constitute a substantial adverse change that would impair the significance of historical resources. Potential impacts would be short-term and the majority of the resources' features would remain to convey their significance. The Underground Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.4.1.3 Visual:

Visual changes may result from the storage and operation of equipment, cuts in the road, and signage used during construction. Metro would employ BMPs to minimize these changes and they should be short term.

Section 106 Effects Analysis for Historic Properties

Visual changes during construction would affect, but not adversely affect, historic properties because the effects would be short-term. The changes would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Visual changes during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the resources' character-defining features would remain to convey their significance. The

Underground Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.4.1.4 Demolition, Partial Takes, or Alteration of a Property:

To construct the Underground-Emphasis LRT Alternative, one parcel that contains a historical resource would be acquired. The S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports (APE Map #7-30) is a CRHR-eligible (not NRHP eligible) commercial building built in 1913. The entire parcel is anticipated to be acquired to serve as the underground egress/ingress portal.

A subsurface easement would be acquired for the Higgins Building (APE Map #8-11). The easement would extend approximately five feet beyond the property line for the CRHR-eligible Higgins Building (not NRHP eligible). No project-related construction would affect the Higgins Building.

The Underground Emphasis LRT Alternative would also require the acquisition of a subsurface easement beneath the NRHP Eligible Cathedral of St. Vibiana Rectory (APE Map #8-13). The subsurface easement would extend approximately five feet beyond the north (2nd Street side) property line of the building. The easement acquisition is a requirement of the project to provide a buffer between subsurface project facilities and at-grade structures.

Section 106 Effects Analysis for Historic Properties

The subsurface easement for the area beneath the Cathedral of St. Vibiana Rectory would affect, but not adversely affect, the historic property. No project facilities would use any portion of the Rectory building or adversely affect the characteristics that make it eligible for the NRHP.

CEQA Impact Analysis for Historical Resources

The subsurface easement acquisitions that would extend five feet beyond the north (2nd Street side) property lines of the Higgins Building and the Cathedral of St. Vibiana Rectory would not constitute a substantial adverse change that would impair the significance of the historical resources, as no other project-related construction or use would directly affect the buildings. Due to the proximity of proposed project facilities to the buildings, indirect effects such as differential settlement and project related vibration have the potential to affect the structures (see Differential Settlement, Section 5.4.1.8, and Noise and Vibration, Section 5.4.1.7).

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1 and MM-BE-5 would reduce impacts to a less than significant level.

5.4.1.5 Station Construction

For the Underground Emphasis LRT Alternative, a new station would be constructed beneath Flower Street between 5th and 4th Streets. This would require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP. Another new station would be constructed on 2nd street. This alternative evaluates two possible locations for the proposed 2nd Street station: a location near Broadway or a location near Los Angeles Street. The Broadway Option would have entrances facing the NRHP eligible Los Angeles Mirror Building (APE Map #8-2). The Los Angeles Street Option has proposed entrances opposite and next to the NRHP eligible St Vibiana Rectory (APE Map #8-13). Although the design of proposed stations is not finalized, conceptual renderings indicate simple glass canopies supported on steel frames would be likely. The design and materials would be clearly differentiated from the PWA Moderne Style of the Mirror Building and the Classical Revival Style of the Rectory Building. The massing and scale would be modest in comparison with nearby historic properties.

Section 106 Effects Analysis for Historic Properties

Construction of proposed stations would affect, but not adversely affect, the Los Angeles Mirror Building or the St. Vibiana Rectory. No adverse effects would occur to these historic properties because the changes would not diminish the integrity of the location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Construction of proposed stations would not constitute a substantial adverse change that would impair the significance of the historical resources. The change in setting created by the station would not diminish the integrity of the properties' significant historic features. The Underground Emphasis LRT Alternative would therefore have a less than significant impact upon historical resources. Implementation of MM-BE-1 would reduce any impact to the CRHR-eligible Belmont Tunnel to a less than significant level.

5.4.1.6 Portal

The proposed train portal at the intersection of Alameda and 1st Street would be within the viewshed of two historic properties, the Little Tokyo National Historic Landmark Historic District and the NRHP eligible John A. Roebling Sons Co. Building (APE Map #7-35). However, the portal area is not encompassed within the boundary of a historic property, historical resource, or a contributing element to the significance of either property. An asphalt paved parking lot currently occupies the majority of the parcel.

Section 106 Effects Analysis for Historic Properties

No adverse effect would occur to the Little Tokyo National Historic Landmark District or the John A. Roebling Sons Co Building from the construction of the portal. Potential effects

would not alter the setting of historic properties in a manner that would diminish the integrity of the historic district.

CEQA Impact Analysis for Historical Resources

Construction of the portal would not constitute a substantial adverse change that would impair the significance of historical resources. The change in setting created by the portal would not diminish the integrity of the resources' significant historic features. The Underground Emphasis LRT Alternative, therefore, would have a less than significant impact upon historical resources.

5.4.1.7 Noise and Vibration

According to the Noise and Vibration Technical Memorandum, construction activities with the most potential for noise impacts include the cut and cover tunnel under Flower Street, proposed underground cut and cover stations at Flower/6th/5th Streets and 2nd/Hope Street, and the junction at Temple and Alameda Streets, which includes lowering Alameda Street. To ensure potential noise impacts are minimized during construction, all construction activities would conform to the provisions in Section 41.40(a) of the City of Los Angeles Code. Furthermore, BMPs would be employed to reduce any potential noise effects to historic properties to result in a "no adverse effect" finding and/or minimize potential impacts to historical resources to a less than significant level.

Noise levels for the tunnel boring machine (TBM) were not evaluated as a part of the Noise and Vibration Technical Memorandum because the TBM "is underground and produces little to no noise that reaches the surface land uses." Operations at the portal/launch site for the TBM, where bored material is hauled out, treated, and removed, also would not impact historic properties and historical resources as noise levels from these activities would not exceed ambient noise levels.

For the Underground Emphasis LRT Alternative, pre-augering of soldier piles at cut and cover sections would eliminate the need for impact pile driving. This would leave "Large Bulldozer" and "Drill Rigs" as the main sources of construction vibration. If these large pieces of equipment are not used within 21 feet of a historic property or historical resource, there would be no adverse effects and significant impacts to historic properties and historical resources from GBV would not occur. Properties that are close to the project work zone and which may be affected by construction-related vibration include Barker Brothers (APE Map #2-1), Roosevelt Building (APE Map #2-7), General Petroleum-Mobil Oil Building (APE Map #2-12), Superior Oil Building (APE Map #2-13), California Club (APE Map #3-1), Los Angeles Central Library (APE Map #3-2), 2nd Street Tunnel (APE Map #4-3), Mirror Building (APE Map #8-3), Higgins Building(APE Map #8-11), Cathedral of Saint Vibiana (APE Map #8-12), and Cathedral of Saint Vibiana Rectory (APE Map #8-13).

The TBM would not cause vibratory effects or impacts to historic properties or historical resources because the TBM performs a slow moving drilling process that generates very little vibration to the surrounding areas. Studies have measured TBM vibration to be in the range of 0.0024 to 0.0394 inches per second PPV at a distance at 33 feet. The proposed TBM tunnels on 2nd Street would vary in depth due to the existing topography, as well as vertical curves in the alignment. The tunnel would range from about 140 feet below the surface (distance from street level to the top of the tunnel) to about 40 feet below the surface. The vibratory potential of the TBM is minimal and would be well below the FTA threshold for Category IV buildings (buildings extremely susceptible to vibration damage) of 0.12 inches per second PPV.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library, 2nd Street Tunnel, Mirror Building, Cathedral of Saint Vibiana, and the Cathedral of Saint Vibiana Rectory from noise and vibration-induced damage from construction, if measures MM-BE-2 and MM-BE-3 are implemented. If these measures are properly implemented, construction of this alternative would not diminish the integrity of the historic properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for construction-related vibration could cause a substantial adverse change that would impair the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library 2nd Street Tunnel, Mirror Building, Cathedral of Saint Vibiana, the Cathedral of Saint Vibiana Rectory, or the Higgins Building. The implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce the potential impacts to a less than significant level.

5.4.1.8 Differential Settlement

According to the Description of Construction, at least eight NRHP and/or CRHR eligible properties could be potentially affected by tunneling (TBM operation) and cut and cover construction. They include the Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), Walt Disney Concert Hall (APE Map #4-4), 2nd Street Tunnel (APE Map #4-3), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), Higgins Building (APE Map #8-11), and St. Vibiana's Cathedral (APE Map #8-12). Implementation of mitigation measures MM-BE-2, MM-BE-3, and MM-BE-4 (when applicable) would avoid potential adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

Section 106 Effects Analysis for Historic Properties

Implementation of measures to protect and stabilize the ground near the Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), 2nd Street Tunnel (APE Map #4-3), Walt Disney Concert Hall (APE Map #4-4), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), and St. Vibiana's Cathedral (APE Map #8-12) noted in MM-BE-2, MM-BE-3, and MM-BE-5, would avoid adverse effects to all properties under this alternative. If properly implemented, differential settlement would not directly alter characteristics of historic properties in a manner that would diminish the integrity of each property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for differential settlement could constitute a substantial adverse change that would impair the significance of any or all of the historical resources noted in this section. Implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce potential impacts to a less than significant level.

5.4.2 Operational Impacts

The additional transit options proposed under the Underground Emphasis LRT Alternative would be consistent with the historic use of streetcars within the APE. Additionally, the LRT could benefit historic properties and historical resources in the APE by increasing pedestrian use of the area.

Potential visual changes, traffic, and congestion from operation of the LRT under this alternative would have similar effects to historic properties under NEPA and impacts to historical resources under CEQA as those discussed for the At-Grade Emphasis LRT Alternative. Table 5-4 lists potential effects from operation of the Underground Emphasis LRT Alternative.

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI			X	
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	

Table 5-3. Potential Underground Emphasis LRT Alternative Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X[a]	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X[a]		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

[a] *Right of Way Required is a sub-surface easement*
Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.4.2.1 Noise and Vibration

The Underground Emphasis LRT Alternative has the same potential sources of noise impacts during operations as the At-Grade Emphasis LRT Alternative. According to the Noise and Vibration Technical Memorandum, no noise, adverse effects, or significant impacts to historic properties or historical resources would be expected. Most of this alternative would be situated underground, and thus project operations would not exceed FTA Noise Impact Criteria. Operation of the Underground Emphasis LRT Alternative would result in a moderate noise impact at only one location, a proposed switch on Alameda near 1st Street. Moderate noise impacts do not exceed the FTA Noise Impact Criteria.

For the Underground Emphasis LRT Alternative, potential vibration impacts from transit operations would be generated by two of the same potential sources as the At-Grade Emphasis LRT Alternative: motions/actions at the wheel/rail interface and areas of special track work. While vibration from a passing train and areas of special track work have a relatively small potential to move through the geologic strata, it can result in building vibration from energy transferred through the earth to a building's foundation. The principal concern with rail transit vibration is annoyance to building occupants; it is extremely unlikely that GBV from transit operations would have any effect on or cause any damage to buildings. For the Underground Emphasis LRT Alternative, no adverse effects or significant impacts to historic properties or historical resources related to vibration would be expected.

Table 5-4 lists the potential operational effects and impacts for this alternative by resource.

5.4.3 Cumulative and Indirect Impacts

There would be no indirect impacts from the Underground Emphasis LRT Alternative.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by increased density as new buildings are constructed. Taken collectively, reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that would be affected by the Underground Emphasis LRT Alternative.

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X	
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X	
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X	
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X	

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X	
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X	
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X	
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X	
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X	
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X	
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X	
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X	
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X	

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-16	A. Sperl Building	Listed	Listed	LTS		X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	

Table 5-4. Potential Underground Emphasis LRT Alternative Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS		X	
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.4.4 Potential Effects to Section 4(f) Resources

The Underground Emphasis LRT Alternative would require the acquisition of a subsurface easement beneath the Cathedral of St. Vibiana Rectory (APE Map #8-13). The subsurface easement would extend approximately five feet beyond the north (2nd Street side) property line of the building. The easement acquisition is a requirement of the project to provide a buffer between subsurface project facilities and at-grade structures. No project facilities would use any portion of the Rectory building or adversely affect the characteristics that make it eligible for the NRHP. Contingent upon consultation with the California SHPO and the Advisory Council on Historic Preservation (if the ACHP participates in consultation) and their respective concurrence, a *de minimus* impact finding would be consistent with FTA's *Guidance for Determining De Minimus Impacts to Section 4(f) Resources*.

5.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

5.5.1 Construction Impacts

The following discussion describes potential effects in the APE due to construction activities for the Fully Underground LRT Alternative – Little Tokyo Variation 1. Table 5-5 lists the effects/impacts for each NRHP property/CRHR resource.

5.5.1.1 Temporary Dirt/Unintended Damage

Potential effects and impacts from dirt and unintended damage to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those previously described for the Underground Emphasis LRT Alternative.

5.5.1.2 Traffic Congestion/Parking/Access

Potential effects and impacts from changes in access, parking, and traffic patterns to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those described for the Underground Emphasis LRT Alternative

5.5.1.3 Visual

Potential visual effects and impacts to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be similar to those described for the Underground Emphasis LRT Alternative.

5.5.1.4 Demolition, Partial Takes or Alteration of a Property

Potential impacts to historical resources under this alternative from demolition or property acquisitions would be identical to those described for the Underground Emphasis LRT Alternative.

5.5.1.5 Station Construction

For the Fully Underground LRT Alternative - Little Tokyo Variation 1 a station would be constructed beneath Flower Street between 5th and 4th Streets. This would require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP. Another station would be constructed at the intersection of 2nd Street and Broadway. The effects of these construction activities on the NRHP eligible LA Mirror Building would be similar to those described for the Underground Emphasis LRT Alternative.

A proposed station would be constructed under Flower Street between 5th and 4th Streets. Although still conceptual and preliminary, the potential designs for station entrances would be modest glass canopies supported on steel frames. Largely transparent, the new entrances would not significantly alter views to the Los Angeles Central Library or the California Club.

Another proposed station would be constructed underground southwest of the intersection of 2nd and Hope Streets. The National Register eligible Walt Disney Concert Hall (APE Map #4-4) is located on the hill above the proposed station. The preliminary conceptual designs would be compatible with the contemporary forms, materials, and massing of this historical resource. The station is also near the NRHP eligible 2nd Street Tunnel (APE Map #4-3).

A fourth station would be constructed at 2nd Street and Central Avenue. This underground station may also include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. If the entrances are similar to those proposed for the other stations, the changes would not result in a significant effect to the NRHP eligible John A. Roebling's Sons Co. Building (APE Map #7-35). While the station would also be near the CRHR eligible S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports (APE Map #7-30), this building would be removed as a result of the open cut method of construction in this portion of the alignment.

Section 106 Effects Analysis for Historic Properties

Construction of proposed stations would create effects to the Los Angeles Central Library, Walt Disney Concert Hall, California Club, and the John A. Roebling Sons Co Buildings. However, the effects on these historic properties would not be considered adverse because the potential changes would not diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Construction of proposed stations would not constitute a substantial adverse change that would impair the significance of the Los Angeles Central Library, California Club, John A. Roebling Sons Co building, or the 2nd Street Tunnel, or the Disney Concert Hall. Implementation of MM-BE-1 would reduce any potential impact to the CRHR-eligible Belmont

Tunnel to a less than significant level. Potential changes in setting created by stations would not diminish the integrity of the resources' significant historic features. The Fully Underground LRT Alternative – Little Tokyo Variation 1, therefore, would have a less than significant impact upon historical resources.

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1 and MM-BE-5 would reduce impacts to a less than significant level.

5.5.1.6 Portals

For this alternative two portals would be constructed. One portal would be located northeast of the Little Tokyo/Arts District Station and tracks. There are no historical resources or historic properties in the vicinity of this portal.

The second portal would be located within 1st Street between Alameda and Vignes Streets. The NRHP eligible J.R. Newberry Company Building (APE Map #9-6R) is located just east of the intersection of 1st Street and Vignes Street but would not be affected by this alternative.

Section 106 Effects Analysis for Historic Properties

The NRHP eligible J.R. Newberry Company Building (APE Map #9-6R) would be affected by the construction of a portal. No adverse effect would occur because the changes would not directly alter the setting of the historic property in a manner that would diminish the integrity of the historic property.

CEQA Impact Analysis for Historical Resources

Construction of a portal would not constitute a substantial adverse change that would impair the significance of the J.R. Newberry Company Building (APE Map #9-6R). The change in setting created by the portal would not diminish the integrity of the property's significant historic features. This alternative, therefore, would have a less than significant impact upon historical resources.

5.5.1.7 Noise and Vibration

Potential effects and impacts to historic properties and historical resources caused by noise and vibration would be the same as those discussed for the Underground Emphasis LRT Alternative. Implementation of mitigation measures MM-BE-2 and MM-BE-3 would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (subsurface easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	

Table 5-5. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.5.1.8 Differential Settlement

Potential effects and impacts to historic properties and historical resources caused by differential settlement would be the same as those discussed in the Underground Emphasis LRT Alternative. Implementation of mitigation measures MM-BE-2, MM-BE-3, and MM-BE-4 (when applicable), would avoid adverse effects to historic properties and lower impacts to historical resources to a less than significant level.

5.5.2 Operational Impacts

Potential operational effects and impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be the same to historic properties and historical resources as those discussed for the Underground Emphasis LRT Alternative, except that a proposed switch, located at 1st and Alameda for the Underground Emphasis LRT Alternative, would instead be located at the intersection of 1st and Vignes Streets. Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would result in a moderate noise impact at this location. This switch is located near the NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) and the 1st Street Viaduct (APE Map #9R-7). Moderate noise effects/impacts do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-6 lists potential effects and impacts by resource.

5.5.3 Cumulative and Indirect Impacts

There are no anticipated indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 1.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by an increase in density as new buildings are constructed. Taken collectively, the reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that are affected by the Fully Underground LRT Alternative - Little Tokyo Variation 1.

5.5.4 Potential Effects to Section 4(f) Resources

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map # 8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS	X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS	X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS	X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS	X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS	X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS	X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS	X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS	X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS	X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS	X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS	X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS	X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Demolished under this alternative	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS		X	

Table 5-6. Potential Fully Underground LRT Alternative – Little Tokyo Variation 1 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets.

5.6.1 Construction Impacts

The following sections describe potential effects that may occur to historic properties in the APE due to construction activities for the Fully Underground LRT Alternative – Little Tokyo Variation 2. Table 5-7 lists the construction effects/impacts for each NRHP property/ CRHR resource.

5.6.1.1 Temporary Dirt/Unintended Damage

Potential effects and impacts from dirt and unintended damage to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those previously described for the Underground Emphasis LRT Alternative.

5.6.1.2 Traffic Congestion/Parking/Access

Potential effects and impacts from changes in access, parking, and traffic patterns to historic properties and historical resources from the construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those described for the Underground Emphasis LRT Alternative.

5.6.1.3 Visual

Potential visual effects and impacts to historic properties and historical resources from construction of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be similar to those described for the Underground Emphasis LRT Alternative.

5.6.1.4 Portals

As part of the Fully Underground LRT Alternative – Little Tokyo Variation 2 new portals would be constructed to connect the proposed tracks to the Metro Gold Line tracks heading north to Azusa and east towards I-605. One portal containing the northbound and southbound tracks would be located northeast of the Little Tokyo/Arts District Station and tracks. There are no historical resources or historic properties within the APE that would be impacted by this new portal.

Two additional portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line tracks towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track

between Hewitt and Vignes Streets. The NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) is located at the east side of the intersection of 1st Avenue and Vignes Street.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to the J.R. Newberry Company Building (APE Map #9R-6). No adverse effect would occur to this historic property because potential changes would not directly alter the setting in a manner that would diminish its integrity.

CEQA Impact Analysis for Historical Resources

Construction of the portals would not constitute a substantial adverse change that would impair the significance of the J.R. Newberry Company Building. The change in setting created by the portals would not diminish the integrity of the resource's significant historic features. This alternative, therefore, would have a less than significant impact upon historical resources.

5.6.1.5 Station Construction

Potential effects/impacts from construction of proposed stations would be similar to those described for Fully Underground LRT Alternative – Little Tokyo Variation 1.

5.6.1.6 Demolition, Partial Takes or Alteration of a Property

Potential impacts to historical resources from this alternative due to demolition or property acquisitions would be identical to those described for the Underground Emphasis LRT Alternative.

5.6.1.7 Noise and Vibration

Potential effects and impacts to historic properties and historical resources caused by noise and vibration would be the same as those discussed for the Underground Emphasis LRT Alternative and the Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1. Implementation of mitigation measures MM-BE-2 and MM-BE-3 would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

5.6.1.8 Differential Settlement

Potential effects and impacts to historic properties and historical resources caused by differential settlement would be the same as those discussed for the Underground Emphasis LRT Alternative and the Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1. Implementation of mitigation measures MM-BE-2, MM-BE-3, and when applicable MM-BE-4, would avoid adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level. Table 5-7 lists the potential effects and impacts for construction for the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI		X		

Table 5-7. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Sub surface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.6.2 Operational Impacts

Potential operational impacts of the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be largely the same on historic properties and historical resources as those described for the Underground Emphasis LRT Alternative, except that a proposed switch, located at 1st and Alameda for the Underground Emphasis LRT Alternative, would instead be located at the intersection of 1st and Vignes Streets. Operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would result in a moderate noise impact at this location. This switch is located near the NRHP eligible J.R. Newberry Company Building (APE Map #9R-6) and the 1st Street Viaduct (APE Map #9R-7). Moderate noise effects/impacts do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-8 lists the potential effects and impacts for operation for the Fully Underground LRT Alternative - Little Tokyo Variation 2.

5.6.3 Cumulative and Indirect Impacts

There would be no expected indirect impacts from the Fully Underground LRT Alternative – Little Tokyo Variation 2.

Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by increased density created as new buildings are constructed. Taken collectively, the reasonable foreseeable projects do not appear to have additional effects upon historic properties or impacts upon historical resources that would be affected by the Fully Underground LRT Alternative – Little Tokyo Variation 2.

5.6.4 Potential Effects to Section 4(f) Resources

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X	
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X	
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X	
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X	
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X	
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X	
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X	
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X	
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X	
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X	
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X	
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X	
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS		X	

Table 5-8. Potential Fully Underground LRT Alternative – Little Tokyo Variation 2 Operation Effects							
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.7 Locally Preferred Alternative (LPA)

5.7.1 Construction Impacts

Construction activities were analyzed using the Criteria of Adverse Effect (discussed in Section 3.2.1) for their potential to impact historic properties. The following discussion describes potential effects in the APE due to construction activities for the LPA. Table 5-9 lists the effects/impacts for each NRHP property/CRHR resource.

Short-term effects from construction typically result from dirt, changes in the visual environment, or alteration to access. Other types of construction effects may be related to specific construction activities or locations. Operational effects are discussed in Section 5.7.2.

5.7.1.1 Temporary Dirt/Unintended Damage

Properties in the APE would be affected by construction activities including dirt and unintended damaged. Metro would employ BMPs to ensure that these effects are short-term.

Section 106 Effects Analysis for Historic Properties

Dirt and other damage from construction would affect, but not adversely affect, historic properties in the APE because the potential effects would be short-term. The potential effects would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Dirt and other unintended damage during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the majority of the resources' features would remain to convey their significance. The LPA, therefore, would have a less than significant impact upon historical resources.

5.7.1.2 Traffic Congestion/Parking/Access

Changes in access to properties and resources within the APE may result from road closures, use of equipment, and other construction activities. Metro would employ BMPs to minimize these changes and keep the public and property owners informed of potential issues.

Section 106 Effects Analysis for Historic Properties

Potential effects, but no adverse effects, would result from changes in access during construction. The effects would be short-term and would not alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Changes in access resulting from congestion and loss of parking during construction would not constitute a substantial adverse change that would impair the significance of historical resources. Potential impacts would be short-term and the majority of the resources' features would remain to convey their significance. The LPA therefore, would have a less than significant impact upon historical resources.

5.7.1.3 Visual

Visual changes may result from the storage and operation of equipment, cuts in the road, and signage used during construction. Metro would employ BMPs to minimize these changes and they should be short term.

Section 106 Effects Analysis for Historic Properties

Visual changes during construction would affect, but not adversely affect, historic properties because the effects would be short-term. The changes would not directly alter characteristics of historic properties in a manner that would diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Visual changes during construction would not constitute a substantial adverse change that would impair the significance of historical resources. The impacts would be short-term and the resources' character-defining features would remain to convey their significance. The LPA. therefore, would have a less than significant impact upon historical resources.

5.7.1.4 Demolition, Partial Takes or Alteration of a Property

To construct the LPA, one parcel that contains a historical resource would be acquired. The S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports (APE Map #7-30) is a CRHR-eligible (not NRHP eligible) commercial building built in 1913. The entire parcel is anticipated to be acquired for station construction.

A subsurface easement would be acquired for the Higgins Building (APE Map #8-11). The easement would extend approximately five feet beyond the property line for the CRHR-eligible Higgins Building (not NRHP eligible). No project-related construction would affect the Higgins Building.

The LPA., would also require the acquisition of a subsurface easement beneath the NRHP Eligible Cathedral of St. Vibiana Rectory (APE Map #8-13). The subsurface easement would extend approximately five feet beyond the north (2nd Street side) property line of the building. The easement acquisition is a requirement of the project to provide a buffer between subsurface project facilities and at-grade structures.

Section 106 Effects Analysis for Historic Properties

The subsurface easement for the area beneath the Cathedral of St. Vibiana Rectory would affect, but not adversely affect, the historic property. No project facilities would use any portion of the Rectory building or adversely affect the characteristics that make it eligible for the NRHP.

CEQA Impact Analysis for Historical Resources

The subsurface easement acquisitions that would extend five feet beyond the north (2nd Street side) property lines of the Higgins Building and the Cathedral of St. Vibiana Rectory would not constitute a substantial adverse change that would impair the significance of the historical resources, as no other project-related construction or use would directly affect the buildings. Due to the proximity of proposed project facilities to the buildings, indirect effects such as differential settlement and project related vibration have the potential to affect the structures (see Differential Settlement, Section 5.5.1.8, and Noise and Vibration, Section 5.5.1.7).

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1 and MM-BE-5 would reduce impacts to a less than significant level.

5.7.1.5 Station Construction

For the LPA. a station is proposed to be constructed underground southwest of the intersection of 2nd and Hope Streets. The National Register eligible Walt Disney Concert Hall (APE Map #4-4) is located on the hill above the proposed station. The preliminary conceptual designs would be compatible with the contemporary forms, materials, and massing of this historical resource. However, noise and vibration from the construction of the station of the LRT would affect the use of the historic property as a concert hall and recording facility. The station is also near the NRHP eligible 2nd Street Tunnel (APE Map #4-3). This would require demolition of a portion of the CRHR eligible Belmont Tunnel (APE Map #3-4). The Belmont Tunnel is not eligible for the NRHP.

There will also be a station on 2nd Street between Broadway and Spring Street. Entrances will be located in the property currently used as a surface parking lot on the south side of 1st Street between Broadway and Spring Streets. A portion of the property located on the northwest corner of 2nd and Broadway will be used for access and other ancillary facilities. The construction of the station and other facilities are in the vicinity of the Los Angeles Mirror Building (APE #8-3).

A new underground station would be constructed to serve the Little Tokyo/ Arts District. The station is located under Central Avenue, Alameda Street and privately held properties on the south side of 1st Street behind Central Avenue. This station may include a small building at

ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed. The property currently contains the California Register Eligible S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports (APE Map #7-30), this building would be removed as part of construction for the LPA.

Section 106 Effects Analysis for Historic Properties

Construction of proposed stations would create effects to the Walt Disney Concert Hall (APE Map #4-4), and Los Angeles Mirror Building (APE Map #8-3). However, the effects on these historic properties would not be considered adverse because the potential changes would not diminish the integrity of the properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

Construction of proposed stations would not constitute a substantial adverse change that would impair the significance of the Walt Disney Concert Hall or Los Angeles Mirror Building (APE Map #8-3). I. Implementation of MM-BE-1 would reduce any potential impact to the CRHR-eligible Belmont Tunnel to a less than significant level. Potential changes in setting created by stations would not diminish the integrity of the resources' significant historic features. The Locally Preferred Alternative, therefore, would have a less than significant impact upon these historical resources.

The property acquisition and subsequent demolition of the S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports building would constitute a substantial adverse change that would impair the significance of the historical resource. However, implementation of MM-BE-1, MM-BE-5 , MM-BE6, and MM-BE7 would reduce impacts to a less than significant level.

5.7.1.6 Portals

For this alternative two portals would be constructed. One would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line Tracks. There are no historic properties or historical resources within the vicinity of the portal.

The second portal would be located within 1st Street between Alameda and Gatey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line Tracks toward 1-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. This portal would be within the viewshed of two historic properties, the Little Tokyo National Historic Landmark Historic District and the NRHP eligible John A. Roebling Sons Co. Building (APE MAP #7-35). However, the portal is not encompassed within the boundary of a historic property, historical resource, or a contributing element to the significance of either property.

Section 106 Effects Analysis for Historic Properties

No adverse effect would occur to the Little Tokyo National Historic Landmark District or the John A. Roebling Sons Co Building from the construction of the portal. Potential effects would not alter the setting of historic properties in a manner that would diminish the integrity of the historic district.

CEQA Impact Analysis for Historical Resources

Construction of the portal would not constitute a substantial adverse change that would impair the significance of historical resources. The change in setting created by the portal would not diminish the integrity of the resources' significant historic features. The LPA. therefore, would have a less than significant impact upon historical resources.

5.7.1.7 Noise and Vibration

According to the Noise and Vibration Technical Memorandum, construction activities with the most potential for noise impacts include the cut and cover tunnel under Flower Street, proposed underground cut and cover stations at Flower/6th/5th Streets and 2nd/Hope Street, and the junction at Temple and Alameda Streets, which includes lowering Alameda Street. To ensure potential noise impacts are minimized during construction, all construction activities would conform to the provisions in Section 41.40(a) of the City of Los Angeles Code. Furthermore, BMPs would be employed to reduce any potential noise effects to historic properties to result in a "no adverse effect" finding and/or minimize potential impacts to historical resources to a less than significant level.

Noise levels for the tunnel boring machine (TBM) were not evaluated as a part of the Noise and Vibration Technical Memorandum because the TBM "is underground and produces little to no noise that reaches the surface land uses." Operations at the portal/launch site for the TBM, where bored material is hauled out, treated, and removed, also would not impact historic properties and historical resources as noise levels from these activities would not exceed ambient noise levels.

For the LPA. pre-augering of soldier piles at cut and cover sections would eliminate the need for impact pile driving. This would leave "Large Bulldozer" and "Drill Rigs" as the main sources of construction vibration. If these large pieces of equipment are not used within 21 feet of a historic property or historical resource, there would be no adverse effects and significant impacts to historic properties and historical resources from GBV would not occur. Properties that are close to the project work zone and which may be affected by construction-related vibration include Barker Brothers (APE Map #2-1), Roosevelt Building (APE Map #2-7), General Petroleum-Mobil Oil Building (APE Map #2-12), Superior Oil Building (APE Map #2-13), California Club (APE Map #3-1), Los Angeles Central Library (APE Map #3-2), 2nd Street Tunnel (APE Map #4-3), Mirror Building (APE Map #8-3), Higgins Building(APE Map

#8-11), Cathedral of Saint Vibiana (APE Map #8-12), and Cathedral of Saint Vibiana Rectory (APE Map #8-13).

The TBM would not cause vibratory effects or impacts to historic properties or historical resources because the TBM performs a slow moving drilling process that generates very little vibration to the surrounding areas. Studies have measured TBM vibration to be in the range of 0.0024 to 0.0394 inches per second PPV at a distance at 33 feet. The proposed TBM tunnels on 2nd Street would vary in depth due to the existing topography, as well as vertical curves in the alignment. The tunnel would range from about 140 feet below the surface (distance from street level to the top of the tunnel) to about 40 feet below the surface. The vibratory potential of the TBM is minimal and would be well below the FTA threshold for Category IV buildings (buildings extremely susceptible to vibration damage) of 0.12 inches per second PPV.

Section 106 Effects Analysis for Historic Properties

There would be an effect, but no adverse effect, to the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library, 2nd Street Tunnel, Walt Disney Concert Hall, Mirror Building, Cathedral of Saint Vibiana, and the Cathedral of Saint Vibiana Rectory, from noise and vibration-induced damage from construction, if measures MM-BE-2, MM-BE-3,MMBE-5, and MMBE-8 are implemented. If these measures are properly implemented, construction of this alternative would not diminish the integrity of the historic properties' location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for construction-related vibration could cause a substantial adverse change that would impair the Barker Brothers, Roosevelt, General Petroleum Mobil Oil Building, Superior Oil Building, California Club, Los Angeles Central Library 2nd Street Tunnel, Mirror Building, Cathedral of Saint Vibiana, the Cathedral of Saint Vibiana Rectory, or the Higgins Building. The implementation of MM-BE-2, MM-BE-3, and MM-BE-8 would reduce the potential impacts to a less than significant level.

5.7.1.8 Differential Settlement

According to the Description of Construction, some of the buildings situated near cut and cover excavation would be susceptible to differential settlement. Differential settlement is defined as "unequal settling of material; gradual downward movement of foundations due to compression of soil which can lead to damage if settlement is uneven" (Allaby 1999). Differential settlement occurs when a building or feature's shape is twisted, or is raised and lowered in different places, sometimes imperceptibly. Differential settlement can cause foundations to settle and crack, floors to buckle and go out of level, walls to shift out of plumb and plane, and roofs to twist and deform. The resulting changes in structural systems and

cladding or finish materials, including wood and masonry, floor tiles, wood flooring, concrete floors, plaster, marble, and other decorative wall and ceiling treatments, and adobe, stucco, and wood-framed walls can be cracks, fractures, and other noticeable (as well as long term, not immediately visible) deformations and damage. Since historically significant buildings often have archaic construction and finish attachment systems, including unreinforced masonry, those building types are usually more susceptible to the effects of ground-borne vibration than more recently constructed buildings.

According to the Description of Construction, at least eight NRHP and/or CRHR eligible properties could be potentially affected by tunneling (TBM operation) and cut and cover construction. They include the Superior Oil Building/Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), Walt Disney Concert Hall (APE Map #4-4), 2nd Street Tunnel (APE Map #4-3), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), Higgins Building (APE Map #8-11), and St. Vibiana's Cathedral (APE Map #8-12). Implementation of mitigation measures MM-BE-2, MM-BE-3, and MM-BE-4 (when applicable) would avoid potential adverse effects to historic properties and reduce potential impacts to historical resources to a less than significant level.

Section 106 Effects Analysis for Historic Properties

Implementation of measures to protect and stabilize the ground near the Standard Hotel (APE Map #2-13), California Club (APE Map #3-1), 2nd Street Tunnel (APE Map #4-3), Walt Disney Concert Hall (APE Map #4-4), former Nishi Hongwanji Buddhist Temple (APE Map #7-19), Los Angeles Times Building (APE Map #8-2), and St. Vibiana's Cathedral (APE Map #8-12) noted in MM-BE-2, MM-BE-3, and MM-BE-5, would avoid adverse effects to all properties under this alternative. If these measures are properly implemented, differential settlement would not directly alter characteristics of historic properties in a manner that would diminish the integrity of each property's location, design, setting, materials, workmanship, feeling, or association.

CEQA Impact Analysis for Historical Resources

The potential for differential settlement could constitute a substantial adverse change that would impair the significance of any or all of the historical resources noted in this section. Implementation of MM-BE-2, MM-BE-3, and MM-BE-5 would reduce potential impacts to a less than significant level.

Table 5-9. LPA Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS			X	
2-5	Engine Company No. 28	Listed	Listed	LTS			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS			X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS		X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS		X		

Table 5-9. LPA Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-3	Mark Taper Forum	Eligible	Eligible	LTS		X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS		X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS		X		
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS		X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS		X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS		X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS		X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS		X		

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS		X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS		X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS		X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS			X	
6-2	Los Angeles City Hall	Eligible	Eligible	LTS			X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS		X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS			X	

Table 5-9. LPA Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS			X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS			X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS		X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS		X		
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS			X	

Table 5-9. LPA Construction Effects								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS			X	
7-8	San Pedro Firm Building	Listed	Listed	LTS			X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS			X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS			X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS			X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS			X	
7-16	A. Sperl Building	Listed	Listed	LTS			X	
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-18	Far East Café Building	Listed	Listed	LTS			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS		X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Resource demolished during construction	X	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (subsurface easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface Easement)		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS			X	

Table 5-9. LPA Construction Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS			X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

5.7.2 Operational Impacts

Operation of the LPA could cause noise and vibration at the Walt Disney Concert Hall (Ape Map 4-4). For this resource the implementation of mitigation measures MM-BE-9 would reduce the adverse effects. Moderate noise effects/impacts from other project activities do not exceed the FTA Noise Impact Criteria, therefore no adverse effects to historic properties and no significant impacts to historical resources are anticipated from project operations. Table 5-10 lists potential effects and impacts by resource.

5.7.3 Cumulative and Indirect Impacts

There are no anticipated indirect impacts from the LPA. Cumulative effects and impacts include short-term effects during construction such as noise, dirt, changes in setting from the use or storage of equipment, or lack of access due to congestion or revisions in traffic patterns. Cumulative effects may also result from long-term effects such as additional traffic generated by an increase in density as new buildings are constructed. Taken collectively, the reasonably foreseeable projects in the project area do not appear to have additional effects upon historic properties or impacts upon historical resources that are affected by the LPA.

5.7.4 Potential Effects to Section 4(f) Resources

The LPA would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map # 8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	LTS		X	
2-3	Fine Arts Building, Global Marine House	Eligible	Listed	LTS		X	
2-5	Engine Company No. 28	Listed	Listed	LTS		X	
2-7	Roosevelt Building	Listed	Listed	LTS		X	
2-10	811 Wilshire building, Tishman 615 building, Wilflower building	Eligible	Listed	LTS		X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	LTS		X	
2-13	Superior Oil Company Building	Listed	Listed	LTS		X	
3-1	The California Club	Eligible	Listed	LTS		X	
3-2	Los Angeles Central Library	Listed	Listed	LTS		X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	LTS	X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	LTS		X	
5-1 thru 5-13, 6-1 thru 6-7, 6-12	Los Angeles Civic Center Historic District	Eligible	Eligible	LTS		X	
5-1	Los Angeles Department of Water and Power Building, John Ferraro Office Building	Eligible	Eligible	LTS	X		
5-2	Ahmanson Theatre	Eligible	Eligible	LTS	X		
5-3	Mark Taper Forum	Eligible	Eligible	LTS	X		
5-4	Dorothy Chandler Pavilion	Eligible	Eligible	LTS	X		
5-5	Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration	Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
5-6	El Paseo de los Pobladores de Los Angeles	Eligible	Eligible	LTS	X		
5-7	Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse	Eligible	Eligible	LTS	X		
5-8	County of Los Angeles Central Heating and Refrigeration Plant	Eligible	Eligible	LTS	X		
5-9	Los Angeles County Hall of Records	Eligible	Eligible	LTS	X		
5-10	Court of Historic American Flags	Eligible	Eligible	LTS	X		
5-11	Los Angeles County Law Library, Mildred L. Lillie Building	Eligible	Eligible	LTS	X		
5-12	Hall of Justice, Los Angeles County Jail	Eligible	Eligible	LTS	X		
5-13	Clara Shortridge Foltz Criminal Justice Center	Eligible	Eligible	LTS	X		
6-1	U.S. Post Office and Court House Building, Federal Building	Listed	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
6-2	Los Angeles City Hall	Eligible	Eligible	LTS		X	
6-3	Site of the *Los Angeles Star* Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site	Not Eligible	Listed California Historical Landmark	LTS	X		
6-4	City Health Building, City Hall South	Eligible	Eligible	LTS		X	
6-5	Federal Building, North Los Angeles Field office	Eligible	Eligible	LTS		X	
6-6 6-7	The Police Facilities Building, Parker Center, Motor Transport Division	Eligible	Eligible	LTS		X	
6-8	City of Los Angeles Parking Lot 3, "Tinkertoy" Parking Structure	Not Eligible	Eligible	LTS	X		
7-1	Dorner & Hinz Saloon, Nelson Hotel, Red Wing Shoes, California Floral Company	Not Eligible	Eligible	LTS	X		

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-7 thru 7-9, 7-11, 7-14 thru 7-19	Little Tokyo Historic District	Listed National Historic Landmark	Listed	LTS		X	
7-7	Japanese Union Church of Los Angeles	Listed	Listed	LTS		X	
7-8	San Pedro Firm Building	Listed	Listed	LTS		X	
7-9	Mark Kuwata Real Estate	Eligible	Eligible	LTS		X	
7-11	1-3 story commercial building, Anzen Hardware	Listed	Listed	LTS		X	
7-14	1-3 story commercial building, Little Tokyo Hotel	Listed	Listed	LTS		X	
7-15	1-3 story commercial building, Ace Japanese Restaurant,	Listed	Listed	LTS		X	
7-16	A. Sperl Building	Listed	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-17	3+ story commercial building, Daimora Hotel	Listed	Listed	LTS		X	
7-18	Far East Café Building	Listed	Listed	LTS		X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	LTS		X	
7-20	Aoyama Tree	Not Eligible	Listed	LTS	X		
7-26	Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple	Eligible	Eligible	LTS		X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI Demolished under this alternative	X		
7-35	John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated	Eligible	Eligible	LTS		X	
8-2	*Los Angeles Times* Building	Eligible	Listed	LTS		X	

Table 5-10. LPA Operation Effects

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	LTS		X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	LTS	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	LTS		X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	LTS		X	
9-R6	J.R. Newberry Company Building	Eligible	Eligible	LTS		X	
9-R7	1st Street Viaduct (Bridge #53C-1166)	Eligible	Eligible	LTS		X	

Key for CEQA Impacts
LTS = Less Than Significant impact, no mitigation required
SI = Significant Impact that can be mitigated to less than significant
SU = Significant and Unavoidable impact

6.0 POTENTIAL MITIGATION MEASURES

Consistent with 36 CFR 800.6(a), federal agencies are required to develop and evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Since the proposed Regional Connector project has the potential for adverse effects, this report outlines measures to mitigate the potential effects. The mitigation measures presented in this section are also intended to assist Metro in reducing the project's potential impacts on historical resources to a less than significant level.

The only National Register eligible historic property that would be adversely affected by any of the project alternatives would be the 2nd Street Tunnel. Proposed mitigation measures for the adverse effects to this property are listed in Table 6-2.

There are 14 historical resources where construction activities could significantly impact the resource. These resources are listed in Table 6-1. The resources and measures proposed as mitigation to reduce potential impacts to a less than significant level are listed in Table 6-3.

Table 6-1. Historical Resources Potentially Affected by Construction				
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact
2-7	Roosevelt Building	Listed	Listed	Vibration
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	Vibration
2-13	Superior Oil Company Building	Listed	Listed	Vibration Settlement
3-1	The California Club	Eligible	Listed	Vibration Settlement
3-2	Los Angeles Central Library	Listed	Listed	Vibration
3-4	Belmont Tunnel	Not Eligible	Eligible	Partial Removal
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Vibration
4-4	Walt Disney Concert Hall	Eligible	Eligible	Vibration Settlement
7-19	former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	Settlement

Table 6-1. Historical Resources Potentially Affected by Construction				
APE Map No.	**Name**	**NRHP Eligibility**	**CRHR Eligibility**	**Impact**
8-2	*Los Angeles Times* Building	Eligible	Listed	Settlement
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	Vibration
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	Vibration Settlement
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	Vibration Settlement
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	Vibration

Table 6-2. Mitigation Measures for Resources Adversely Affected Under Section 106 of the NHPA						
APE Map No.	**Name**	**NRHP Eligibility**	**CRHR Eligibility**	**Adverse Effect**	**Proposed Mitigation**	**Project Alternative**
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Partial Demolition/ Alteration	MM_BE-1 MM-BE-5	AGELRT[1]

[1] *AGELRT = At-Grade Emphasis LRT Alternative*

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
2-7	Roosevelt Building	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
2-13	Superior Oil Company Building	Listed	Listed	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
3-1	The California Club	Eligible	Listed	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
3-2	Los Angeles Central Library	Listed	Listed	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
3-4	Belmont Tunnel	Not Eligible	Eligible	Partial Removal	MM-BE-1	AGELRT UELRT FULRT (Var. 1&2) FUG
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
4-4	Walt Disney Concert Hall	Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4 MM-BE-8 MM-BE-9	AGELRT UELRT FULRT (Var. 1&2) FUG
7-19	Former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	Settlement	MM-BE-4	UELRT FULRT (Var. 1&2) FUG
8-2	*Los Angeles Times* Building	Eligible	Listed	Settlement	MM-BE-4 MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG
8-3	The *Mirror* Building (Site of Butterfield Stage Station), *Los Angeles Times-Mirror* Annex, *Times* Building South, *Mirror-News* Building	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

Table 6-3. Mitigation Measures to Reduce Impacts on Historical Resources to a Less-Than-Significant Level

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	Impact	Proposed Mitigation	Project Alternative
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	Vibration Settlement	MM-BE-2, MM-BE-3, MM-BE-5 MM-BE-4	AGELRT UELRT FULRT (Var. 1&2) FUG
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	Vibration	MM-BE-2, MM-BE-3, MM-BE-5	AGELRT UELRT FULRT (Var. 1&2) FUG

AGELRT = At-Grade Emphasis LRT Alternative
UELRT = Underground Emphasis LRT Alternative
FULRT (Var.1&2) = Fully Underground LRT Alternative – Little Tokyo Variations 1 and 2

LPA = Locally Preferred Alternative

6.1 Proposed Construction Impact Mitigation Measures

MM-BE-1 Historic Properties/Historical Resources Documentation

Documentation of historic properties and historical resources adversely affected by the project would consist of the development of individual Historic American Building Survey/Historic American Engineering Record (HABS/HAER) submissions. The HABS/HAER documents would be prepared so that the original archival-quality documentation could be donated for inclusion in the Library of Congress if the National Park Service accepts these materials. Archival copies of the documentation would also be offered for donation to local repositories, including the Los Angeles Central Library and the Los Angeles Conservancy. The appropriate level of recordation would be established in consultation with the California SHPO and formalized as a part of MM-BE-5.

MM-BE-2 Pre-construction baseline survey and geo-technical investigations

A survey of historic properties and/or historical resources within 21 feet of vibration producing construction activity would be conducted to assess the building category and the potential for GBV to cause damage. The survey would also be used to establish baseline, pre-construction conditions for historic properties and historical resources.

During preliminary and final design of the project, subsurface (geotechnical) investigations would be undertaken under this measure to evaluate soil, groundwater, seismic, and environmental conditions along the alignment. This analysis would assist in the development of appropriate support mechanisms for cut and fill construction areas. The subsurface investigation would also identify areas that could experience differential settlement as a result of using a tunnel boring machine in close proximity to historic properties and/or historical resources. An architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards would provide input and review of final design documents prior to implementation of measures (36 CFR Part 61).

MM-BE-3 Building Protection Measures, Geotechnical and Vibration Monitoring, and Post Construction Survey

For those historic properties and historical resources that have the potential to be affected or impacted by ground borne vibrations and/or differential settlement, Metro would use building protection measures such as underpinning, soil grouting, or other forms of ground improvement, as well as lower vibration equipment and/or construction techniques. These techniques, combined with a geotechnical and vibration monitoring program, would help protect identified historic properties and historical resources. The historic property and historical resource protection measures as well as the geotechnical and vibration monitoring program would be reviewed by an architectural historian or historical architect who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) to ensure that the measures would adequately protect the properties/resources. A post construction survey

would also be undertaken to ensure that no adverse effects or significant impacts had occurred to historic properties and historical resources.

MM-BE-4 TBM Specifications/Requirements near Historic Properties and Historical Resources

For those historic properties and historical resources that have the potential to be affected or impacted by differential settlement caused by TBM construction, a contractor would be required to develop and use an earth pressure balance or slurry shield tunnel boring machine. The method of machine operation would be based on the anticipated ground conditions near historic properties and historical resources. These construction methods and machinery types would reduce the potential for differential settlement near historic properties and historical resources.

MM-BE-5 Memorandum of Agreement

For those historic properties and that would be anticipated to experience adverse effects, a memorandum of agreement would be developed to resolve those adverse effects consistent with 36 CFR 800. This agreement, developed by FTA and Metro in consultation with the CA SHPO and other consulting parties would resolve and/or avoid, minimize, or mitigate potential effects to historic properties and/or historical resources. The agreement would include stipulations that outline the specific requirements for consultation and decision making between the lead federal agency and consulting parties, specify the level of HABS/HAER recordation, outline specific requirements for pre- and post- construction surveys, geotechnical investigations, building protection measures, and TBM specifications.

MM-BE-6 Relocation of Senor Fish Building

The Señor Fish/Atomic Café building (to be removed) shall be offered for a period of one year following certification of the Final EIS/EIR for the price of $1 to any party willing to move it off of the 1st/Central Avenue station site at their own expense. Should no parties come forward, Metro shall incorporate materials from the building into the project facilities.

MM-BE-7 Interpretive Programs for Senor Fish Building

Metro shall explore keeping portions of the building intact for use in the 1st/Central Avenue station. Metro shall also offer to provide an exhibit commemorating the building at the Japanese American National Museum, the 1st/Central Avenue station site, or other suitable location. An individual Historic American Building Survey/Historic American Engineering Record (HABS/HAER) submission shall be developed. MM-BE-8 Mitigation for effects from noise and vibration during operation to the Walt Disney Concert Hall.

Metro shall conduct additional evaluations during the preliminary engineering phases to verify the appropriate criteria for recording activities and to verify initial estimates. If necessary, Metro shall specify that the contractor will employ high compliance resilient

fasteners, floating slab trackbed or other appropriate measures to reduce operational groundborne noise impact during operation.

6.2 Operation Impacts Mitigation Measures

The implementation of the following mitigation measures would reduce the effects on the Walt Disney Concert Hall from the operation of the LRT.

MM-BE-9 Mitigation for effects from noise and vibration during construction to the Walt Disney Concert Hall

During constructionMetro shall provide monitoring for groundborne noise at the Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT). LACMTA shall also provide advance notification to Walt Disney Concert Hall and the Roy and Edna Disney/CalArts Theater (REDCAT) regarding schedules for tunneling and other activities.

7.0 CONCLUSIONS

7.1 No Build Alternative

7.1.1 NEPA Findings

This alternative would not include capital improvements, and thus the No Build Alternative would be expected to result in no adverse construction or implementation-related effects on historic properties in the project APE.

7.1.2 CEQA Determination

The No Build Alternative does not include the introduction of any new improvements that would be expected to result in construction or operational impacts to historical resources in the project APE. The No Build Alternative would not be expected to result in cumulative impacts to historical resources, other than potential impacts on resources through continued high and escalated levels of vehicular traffic, unabated by additional mass transit options. The No Build Alternative would not contribute to a cumulative impact on these resources.

7.1.3 Section 4(f) Effects

The No Build Alternative would not result in any Section 4(f) impacts.

7.2 Transportation System Management (TSM) Alternative

7.2.1 NEPA Findings

Project construction and operation would not result in any direct or indirect adverse effects to historic properties.

7.2.2 CEQA Determination

Construction and operation of the TSM Alternative would not result in any direct or indirect significant impacts on historical resources.

7.2.3 Section 4(f) Effects

The TSM Alternative would not result in the use of any Section 4(f) resources.

7.3 At-Grade Emphasis LRT Alternative

7.3.1 NEPA Findings

Construction of the At-Grade Emphasis LRT Alternative would be expected to result in one direct adverse effect. Alteration of the 2nd Street Tunnel (APE Map #4-3) during construction to accommodate the At-Grade Emphasis LRT Alternative would require the implementation of MM-BE-1 and MM-BE-5. Consistent with 36 CFR 800, consultation with the California SHPO

and other consulting parties would need to be completed before project construction could begin.

7.3.2 CEQA Determination

Construction of the At-Grade Emphasis LRT Alternative would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. All of these potential impacts could result in a substantial adverse change to a historical resource. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation is not expected to cause direct or indirect impacts. Refer to Table 7-2 for additional information.

7.3.3 Section 4(f) Effects

The At-Grade Emphasis LRT Alternative would require the acquisition and/or use of property associated with five NRHP-eligible properties: Los Angeles Civic Center Historic District, Los Angeles Police Motor Transport Building (APE Map #6-7), City of Los Angeles Parker Center Police Department Building (APE Map #6-6), City Hall South (APE Map #6-4) as well as the 2nd Street Tunnel (APE Map #4-3). Four of these acquisitions would result in a Section 4(f) *de minimus* finding. The 2nd Street Tunnel alterations could only occur if 1) there is no prudent and feasible alternative to using the resource; and 2) the project includes all possible planning to minimize harm to the tunnel from the use. Additional analysis of project alternatives and consultation with the California SHPO would be required.

7.4 Underground Emphasis LRT Alternative

7.4.1 NEPA Findings

Construction and operation of the Underground Emphasis LRT Alternative would be expected to result in no direct or indirect adverse effects to historic properties.

7.4.2 CEQA Determination

Construction of the Underground Emphasis LRT Alternative would result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-3 for additional information.

Table 7-1. At-Grade Emphasis LRT Alternative Expected Effects to Historic Properties

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	SI				X

SI = Significant impact that can be mitigated to a less than significant level

Table 7-2. At-Grade Emphasis LRT Alternative Expected Impacts to Historical Resources								
APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-3	2nd Street Tunnel, Bridge (tunnel) #53C 1318	Eligible	Eligible	SI				X

Table 7-2. At-Grade Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	
7-19	Former Nishi Hongwanji Buddhist Temple	Listed (NHL)	Listed	SI			X	
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	*Mirror* Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI			X	

SI = Significant impact that can be mitigated to a less than significant level

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Senor Fish, and Coast Imports	Not Eligible	Eligible	SI	X Property would be acquired and building demolished	X		
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-3. Underground Emphasis LRT Alternative Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

7.4.3 Section 4(f) Effects

The Underground Emphasis LRT Alternative would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

7.5 Fully Underground LRT Alternative - Little Tokyo Variation 1

7.5.1 NEPA Findings

Construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would be expected to potentially result in no direct or indirect adverse effects to historic properties.

7.5.2 CEQA Determination

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 1 would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5 would reduce these potential impacts to a less than significant level. Project operation is not expected to cause direct or indirect impacts. Refer to Table 7-4 for additional information.

7.5.3 Section 4(f) Effects

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

7.6 Fully Underground LRT Alternative - Little Tokyo Variation 2

7.6.1 NEPA Findings

Construction and operation of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be expected to result in no potential direct or indirect adverse effects to historic properties.

7.6.2 CEQA Determination

Construction of the Fully Underground LRT Alternative - Little Tokyo Variation 2 would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-5, would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-5 for additional information.

Table 7-4. Fully Underground LRT Alternative - Little Tokyo Variation 1 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Effect	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-4. Fully Underground LRT Alternative - Little Tokyo Variation 1 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Effect	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-5. Fully Underground LRT Alternative - Little Tokyo Variation 2 Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

SI = Significant impact that can be mitigated to a less than significant level

7.7 Locally Preferred Alternative

7.7.1 NEPA Findings

Construction and operation of the LPA would be expected to result in no potential direct or indirect adverse effects to historic properties.

7.7.2 CEQA Determination

Construction of the LPA would potentially result in one direct significant impact and 14 indirect significant impacts to historical resources. Implementation of mitigation measures MM-BE-1 through MM-BE-9, would reduce these potential impacts to a less than significant level. Project operation would not be expected to cause direct or indirect impacts. Refer to Table 7-6 for additional information.

7.7.3 Section 4(f) Effects

The LPA would require the acquisition of a subsurface easement situated on one NRHP-eligible property; Cathedral of Saint Vibiana Rectory (APE Map #8-13). No adverse effects would occur to the Rectory building as a result of the easement. This acquisition would result in a Section 4(f) *de minimus* finding.

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
2-1	Barker Brothers	Eligible	Listed	SI			X	
2-7	Roosevelt Building	Listed	Listed	SI			X	
2-12	General Petroleum, Mobil Oil Building	Listed	Listed	SI			X	
2-13	Superior Oil Company Building	Listed	Listed	SI			X	
3-1	The California Club	Eligible	Listed	SI			X	
3-2	Los Angeles Central Library	Listed	Listed	SI			X	
3-4	Belmont Tunnel, Hollywood-Glendale-Burbank-San Fernando Valley Tunnel	Not Eligible	Eligible	SI		X		
4-4	Walt Disney Concert Hall	Eligible	Eligible	SI			X	

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
7-19	Former Nishi Hongwanji Buddhist Temple	Listed	Listed	SI			X	
7-30	S. Kamada Restaurant, Atomic Café, Señor Fish, Coast Imports	Not Eligible	Eligible	SI	X	X		
8-2	*Los Angeles Times* Building	Eligible	Listed	SI			X	
8-3	Mirror Building	Eligible	Eligible	SI			X	
8-11	Higgins Building, General Petroleum Building, (Los Angeles) County Engineers Building	Not Eligible	Eligible	SI	X (Subsurface Easement)	X		
8-12	Cathedral of Saint Vibiana	Eligible	Eligible	SI			X	

Table 7-6. LPA Expected Impacts to Historical Resources

APE Map No.	Name	NRHP Eligibility	CRHR Eligibility	CEQA Evaluation	Right of Way Required	No Historic Properties Affected	Effect-Not Adverse	Adverse Effect
8-13	Cathedral of Saint Vibiana, Rectory	Eligible	Eligible	SI	X (Subsurface easement)		X	

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APPENDIX A
PROJECT AREA OF POTENTIAL EFFECTS

APPENDIX B

RECORDS SEARCH RESULTS

APPENDIX C

COORDINATION WITH LOCAL HISTORIC GROUPS/LOCAL GOVERNMENT

APPENDIX D

CALIFORNIA DEPARTMENT OF PARKS & RECREATION SERIES 523 FORMS

APPENDIX E

PROJECT-RELATED FTA/SHPO CORRESPONDENCE

APPENDIX F

CALIFORNIA HISTORICAL RESOURCE STATUS CODES

APPENDIX G

THE SECRETARY OF THE INTERIOR'S REHABILITATION GUIDELINES

Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report

APPENDIX Y

CULTURAL RESOURCES - ARCHEOLOGY (UPDATED)

State Clearinghouse Number: 2009031043

LOCALLY PREFERRED ALTERNATIVE IMPACTS TO ARCHEOLOGICAL AND PALEONTOLGICAL RESOURCES

The Draft Technical Memoranda for Archaeological Resources and Paleontological Resources were included with the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) that was released for public comment on September 3, 2010.This addendum serves to finalize the draft report. Two variations of the Fully Underground LRT Alternative (Little Tokyo Variation 1 and Little Tokyo Variation 2) were analyzed in this report. Little Tokyo Variation 2 was subsequently dropped from consideration, and Little Tokyo Variation 1 became the sole alignment for the Fully Underground LRT Alternative.

On October 28th, 2010, Metro's Board of Directors approved staff's recommendation to designate the Fully Underground LRT Alternative described in the publicly reviewed Draft EIS/EIR for the Regional Connector Transit Corridor as the Locally Preferred Alternative (LPA). After the close of the Draft EIS/EIR comment period, refinements were made to the LPA to reduce impacts and address comments received. This addendum incorporates those refinements. The LPA would provide a direct connection from 7th Street/Metro Center Station to the Metro Gold Line near 1st and Alameda Streets. The Metro Gold, Blue and Expo light rail lines would be connected allowing trains to operate between Claremont and Long Beach, and from Santa Monica to the Eastside. In the action for approval, the Board also directed staff to remove the property located on the southeast corner of 2nd and Spring Streets from the list of potential acquisitions as well as eliminate the station at 5th and Flower Streets. This was due to its close proximity to the existing 7th Street/Metro Center Station and a need to reduce costs. The designated LPA thus includes three new stations instead of the original four described in the Draft EIS/EIR. On January 4th, 2011, the Federal Transit Administration (FTA) authorized Metro to initiate Preliminary Engineering as part of FTA New Starts funding program. In its authorization, FTA requested that Metro among other items pursue the identification of appropriate mitigations and realize potential cost savings. Consistent with FTA's authorization, refinements to the Locally Preferred Alternative have been identified and are to be analyzed as part of the development of the Final EIS/EIR.

This addendum to the Technical Memoranda was developed to describe the project refinements to the LPA. The effects on archeological and paleontological resources are the same as what was described in the Draft Technical Memoranda.

1.0 UPDATED PROJECT DESCRIPTION

On October 28th, 2010, the Metro Board of Directors concurred with staff's recommendation to designate the Fully Underground LRT Alternative as the LPA. The LPA alignment is

essentially the same as the Fully Underground LRT Alternative, except it does not include the Flower/5th/4th Street station and has a modified route through Little Tokyo. However, it still travels under the intersection of 1st and Alameda Streets rather than crossing at-grade, and connects to the Metro Gold Line within 1st Street and north of Temple Street.

LPA refinements made since the Draft EIS/EIR to reduce impacts include:

- Relocation of the proposed tunnel boring machine (TBM) insertion site to the Mangrove property northeast of 1st and Alameda Streets in order to reduce community disruption due to construction activities
- Elimination of cut and cover construction on 2nd Street in Little Tokyo
- Extension of TBM machine operation from 2nd/Hope Street station to 4th and Flower Streets, allowing an additional block of cut and cover construction to be eliminated
- Slight modifications to tunnel depths
- Rerouting of the tunnels beneath Japanese Village Plaza in order to reduce acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street

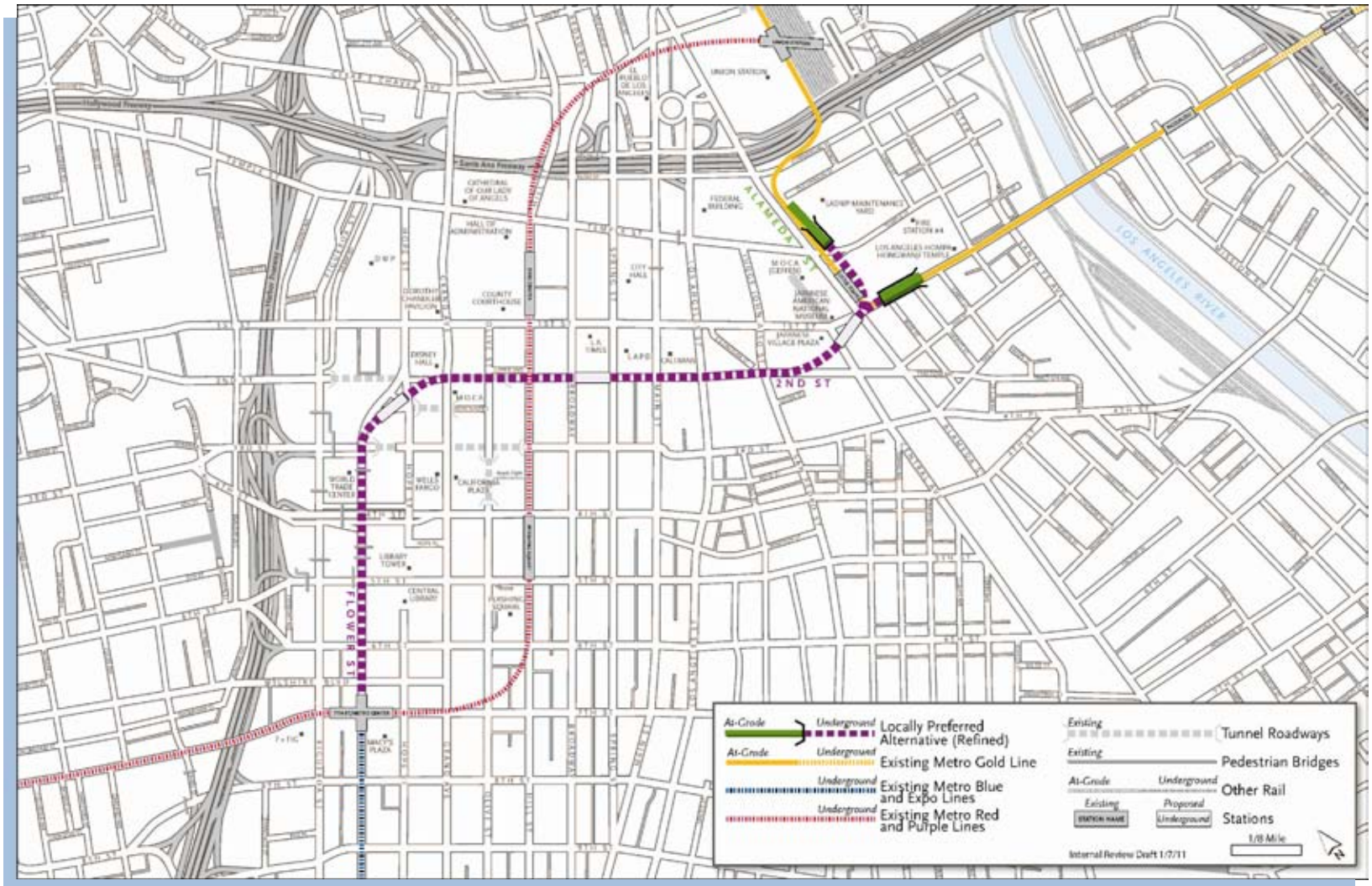

Figure 1 –Locally Preferred Alternative

1.1 Route Overview

The LPA alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station and would run underneath Flower Street. An enhanced pedestrian walkway would be provided along Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets, which would improve the pedestrian connection between the Financial District and the 7th Street/Metro Center Station. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets. A new underground station would be located just southwest of the intersection of 2nd and Hope Streets.

At 2nd and Hope Streets, a new pedestrian connection would be made to Upper Grand Avenue. A pedestrian plaza connecting to Upper Grand Avenue is currently planned above General Thaddeus Kosciuszko Way as part of the Broad Museum. Metro would construct an elevator from the station entrance to the plaza if one is not already provided. If the plaza is not built, Metro would build a pedestrian bridge to connect the elevator to Upper Grand Avenue.

Tracks would then head east underneath 2nd Street to the next proposed underground station between Broadway and Spring Street (2nd Street/Broadway station). The tracks would continue east underneath 2nd Street to just west of Central Avenue at approximately the pedestrian signal to the JVP, where the alignment would then veer northeast under privately held property and Central Avenue to a newly proposed Little Tokyo/Arts District underground station (1st/Central Avenue station). The proposed underground station would be partially located within Central Avenue and the northern half of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking would need to be acquired for construction of this station. However, the remaining businesses on that block would remain, including the Office Depot and associated parking. This station may include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed

An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Two new portals would be located to the north and east of the junction, where trains would rise to the surface to connect to the Metro Gold Line heading north to Claremont and east to I-605.

One portal would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line tracks. This portal would rise to the north within the maintenance yard of the City of Los Angeles Department of Water and Power (LADWP) and connect to the existing LRT bridge over US 101, allowing a connection to the Metro Gold Line to Claremont. Tracks would run from the junction under 1st and Alameda Streets through a new tunnel crossing beneath Temple Street and the Mangrove property (the parcel on the northeast corner of 1st and Alameda Streets) to the new portal. This new tunnel

would run immediately east of the existing Little Tokyo/Arts District Station and Metro Gold Line tracks.

The second portal would be located within 1st Street between Alameda and Garey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. The widening would start at Alameda Street and continue east, significantly tapering down as it crosses Hewitt Street, returning to the existing condition prior to the Los Angeles Hompa Hongwanji Buddhist Temple, to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

Access to property northeast of 1st and Alameda Streets, the Mangrove property, would need to be acquired for insertion of the TBM, to stage construction of both portals, to connect to the Metro Gold Line LRT bridge, and to construct the tunnels beneath Temple Street and the Mangrove property. During construction, tracks would be installed in this area at-grade to allow service to proceed on the Metro Gold Line while construction activities occur within the project area. Figure 2-10 provides a map of this alternative.

The existing Metro Gold Line Eastside Extension and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction with intermittent disruptions related to construction activities. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles and the existing, at-grade Little Tokyo/Arts District Station would terminate. In its place, Metro would initiate operations on two routes:

- Between Claremont and Long Beach
- Between East Los Angeles and Santa Monica

Crossovers could be located just east of the proposed station at 2nd and Broadway Streets, underground beneath 1st Street just east of the intersection of 1st and Alameda Streets, and underground beneath the Mangrove property, north of the rail junction. In addition, a pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. The crossovers and pocket track may not be needed at these locations and may ultimately be placed in other locations. Tunnel boring machines cannot be used for construction of crossovers since underground crossover locations require cut and cover construction. More information on these construction methods is provided in the Description of Construction, Appendix K.

1.2 Operating Characteristics

The Fully Underground LRT Alternative (LPA) consolidates the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

East-West Route (Santa Monica to I-605 via the Metro Expo Line, Regional Connector, and Metro Gold Line Eastside Extension tracks): Metro Expo Line trains from Santa Monica would travel on existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, the trains would continue north along the new Regional Connector tracks to a new junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to a new portal on 1st Street, and continue along the Metro Gold Line Eastside Extension tracks to I-605.

North-South Route (Claremont to Long Beach via the Metro Gold Line, Regional Connector, and Metro Blue Line tracks): After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to a new junction beneath 1st and Alameda Streets. Trains would then travel to a new portal on the LADWP maintenance yard site, and continue along the Pasadena Metro Gold Line and the Foothill Extension to Claremont.

The east-west and north-south routes would each operate with five minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

2.0 LPA EFFECTS, IMPACTS AND MITIGATION FOR ARCHAEOLOGICAL RESOURCES

Construction of the Fully Underground LRT Alternative (LPA) has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles Zanja System, and sites CA-LAN-3588, P-19-003338, and P-19-003339 (Details regarding these resources can be found in the body of the Technical Memorandum for Archaeology).

Archaeological features associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect. Implementation of mitigation measures described in Sections 1.2.2.1 and 1.2.2.2 would reduce potential direct impacts to identified and previously unidentified archaeological resources to a less than significant level. The LPA would not result in operational impacts to both identified and previously unidentified archaeological resources.

Given that implementation of the mitigation measure described in Section 1.2.2.1 1 would reduce potential construction impacts to previously unidentified archaeological resources to a less than significant level, the LPAwould not contribute to a cumulative impact on unidentified archaeological resources.

Potential destruction of portions of the Los Angeles Zanja System could contribute to a cumulative impact to this resource. Implementation of the mitigation measure described in Section 1.2.2.1.2 would reduce both direct and cumulative impacts to known archaeological resources, including the Zanja System, to a less than significant level.

2.1 NEPA Finding and CEQA Determination

Construction of the LPA has the potential to affect previously unknown resources. With implementation of mitigation measures, potential construction and cumulative impacts would not be adverse or significant under NEPA or CEQA. The LPA would not result in adverse or significant operational impacts to archaeological resources.

2.2.Mitigation Measures

Construction of the Regional Connector Transit Corridor project may impact one or more NRHP- or CRHR-eligible archaeological sites along with an unknown number of previously unidentified archaeological resources.

Since operational impacts to archaeological resources, including both previously recorded and undiscovered resources, are not expected for any of the project alternatives, mitigation for operation would not be required for this project.

In the event that resource avoidance is not possible, and to mitigate impacts to previously unidentified archaeological resources, the following mitigation measures related to construction activities are recommended.

Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

2.2.1 Treatment of Undiscovered Archaeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementing this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementing a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected.

If cultural resources are discovered or if previously identified resources are affected in an unexpected manner, the CRMMP would ensure that such resources receive mitigation to reduce the impact to a less than significant level. This plan would include, but not be limited to, the following elements:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains

- Reporting of monitoring and mitigation results

Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist would conduct a short awareness training session for all construction workers and supervisory personnel. The session would explain the importance of and legal basis for protecting significant archaeological resources.

Each worker would also learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of the supervisor and the archaeological monitor.

This worker education session could include visual representations of artifacts (prehistoric and historic) that might be found in the project vicinity, and it could take place on-site immediately prior to the start of ground disturbance.

Supervisory personnel may benefit from longer training sessions, while a brief training would suffice for non-supervisory workers. The brief (approximate 30- to 45-minute) training session may be conducted on-site by video, PowerPoint presentation, or similar media.

Archaeological Monitoring, Evaluation, and Mitigation

Due to poor surface visibility and high archaeological sensitivity of the direct APE, an archaeological monitor would be present during ground-disturbing activities in archaeologically sensitive areas. This would reduce the potential level of impact to buried archaeological resources to a less than significant level. This work would be completed under the direction of an archaeologist who meets the Secretary of the Interior's Standards for archaeologists. An adequate number of monitors would be present to ensure that all earth-moving activities are observed and would be on-site during all grading activities for areas to be monitored.

During the original excavation of previously undisturbed soils, the archaeological monitor(s) would be on-site at a frequency determined by the lead archaeologist. Inspection frequency may vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. Full-time monitoring is warranted within one-half block of potentially significant archaeological resources that are known or suspected to be present within the direct APE.

If potentially significant archaeological resources are exposed during ground-disturbing activities, the project manager would be notified immediately. Archaeological monitor(s) would have the authority to divert or temporarily halt ground-disturbing operations in the area of discovery to allow the resources to be evaluated. Excavation work would halt until the archaeological monitor makes a determination of the significance of the archaeological resource. Construction activities may continue in other areas.

Evaluation of such resources is typically accomplished by a test-level excavation designed to determine the horizontal and vertical extent of the resource, and to characterize its contents. If the discovery proves to be potentially eligible for listing on the NRHP or the CRHR and project plans cannot be altered to avoid affecting the site, then an adverse effect would result within the project area. This adverse effect may be resolved by implementing a Memorandum of Agreement (MOA) between Metro and the SHPO.

Before construction activities are allowed to resume in an affected area, artifacts would be recovered and features recorded using professional archaeological methods. The lead archaeologist operating under the direction of the MOA would determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the construction monitoring program would be processed using professional archaeological methods. An appropriate sample of recovered materials, selected by the lead archaeologist, would be curated at a curation facility that meets federal standards per 36 CFR Part 79 and made available to other archaeologists and researchers for further study.

Native American Participation

If Native American cultural resources (i.e., prehistoric or ethnohistoric-period artifacts, food remains, or features associated with Native Americans) are exposed during project-related ground disturbance, Metro would contact the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation. Both groups have expressed interest in the project. One or both of these groups would be asked to provide the services of a trained Native American consultant to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis, and would be intended to ensure that Native American concerns are taken into account during the construction process.

Human Remains

The discovery of human remains is always a possibility during ground disturbance. For example, an unmarked early Spanish period Native American cemetery was recently discovered near the APE (Applied Earthworks 1999).

The State of California Health and Safety Code Section 7050.5 addresses what should be done when human remains are found during construction. This code section states that when human remains are encountered, no further disturbance would occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner would be immediately notified of the find.

If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant (MLD). The MLD shall complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts to human remains may remain significant even after mitigation.

Reporting

If cultural resources are not discovered in the course of construction monitoring, a brief letter to that effect would be prepared by the consulting archaeologist, indicating that the monitoring activities have been satisfied. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report would be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.

2.2.2 Treatment of Known Archaeological Resources

Destruction of a resource that is eligible for listing in the NRFP or CRHR would be a significant adverse effect. This effect may be resolved through by implementing an MOA between FTA, Metro, and the SHPO, as well as other interested parties.

Four archaeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the NRHP and the CRHR. These include the Los Angeles Zanja System (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archaeological sites can be mitigated to a less than significant level by preparing and implementing a data recovery plan under Section 106 and CEQA. The actual mitigation measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archaeological resources within the direct APE that are eligible for listing in the NRHP or CRHR. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archaeological data recovery.

Los Angeles Zanja System

The Los Angeles Zanja system was an extensive and integrated water conveyance network that served large areas of the City for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the overall Zanja system to be evaluated, given the requirements that the OHP clarified in its recent letter (Toffelmier 2009).

It is likely that other projects (such as emergency utility repair) have damaged segments of the Zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect, particularly given the likelihood of damaging the zanjas prior to discovery during project construction process.

Inadvertent project-related damage to the zanjas may constitute an adverse effect under the Criteria of Adverse Effect, "physical destruction or damage" (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects.

Both Section 106 of the NHPA (as amended) and CEQA require identification, documentation, and evaluation of historic properties/historic resources in a project area (or direct APE). For a poorly mapped and buried linear resource like the Zanja system, identification alone is challenging.

Rather than a costly archaeological excavation program or a remote sensing (ground-penetrating radar, etc.) survey that is unlikely to produce clear-cut results, a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner is recommended.

This would include using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjas within the APE. Where these alignments are expected to be affected by the proposed project, particularly where cut-and-cover or other near-surface construction techniques (as opposed to tunneling 20 or more feet below the ground surface) are planned in the vicinity of mapped zanja segments, full-time archaeological monitoring would be instituted to ensure documentation.

The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments prior to their adequate documentation.

Documenting and evaluating the Los Angeles Zanja system would be best accomplished with a system-wide approach that incorporates historical, archaeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. Documentation of the zanja segments' alignments and slopes would have the added benefit of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles Zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archaeological testing, and architectural documentation, and would be followed by a formal evaluation of NRFP and CRHR eligibility.

It should be noted that substantial documentation already exists for the Zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is proposed here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document creation, maintenance, modification, and abandonment of the system.
- Archaeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE by using physical exposure through controlled excavation following its discovery during construction monitoring. Resources would be documented using DPR series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archaeological Resource Management Report (OHP 1990) guidelines. The report would address research questions and assess the NRHP and CRHR eligibility of the system.

- Architectural documentation of exposed zanja segments by producing narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.
- Preserving the results of the historical, archaeological, and historic architectural studies in repositories (e.g., the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter).
- Interpretation of the Los Angeles Zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

3.0 LPA EFFECTS, IMPACTS AND MITIGATION PALEONTOLOGICAL RESOURCES

The LPA involves ground disturbance associated with excavations to construct three new stations and an entirely underground tunnel located from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Any ground disturbances in areas of high sensitivity will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible resulting in significant and unavoidable impacts.

The LPA would not result in operational impacts to paleontological resources.

In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources to less than significant. In areas where mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may be unavoidable.

3.1NEPA Finding and CEQA Determination

The LPA could have adverse effects on paleontological resources. With implementation of mitigation, potential construction and cumulative impacts would not be adverse under NEPA. The LPA would not have significant effects on paleontological resources with implementation of proposed mitigation measures with the exception of areas where tunneling operations cannot be mitigated. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible and thus construction and cumulative impacts would be significant and unavoidable.

The LPA would not result in adverse or significant operational impacts to paleontological resources.

3.2 Mitigation Measures

3.2.1 Construction Mitigation Measures

The following mitigation measures have been developed in accordance with the SVP (1995) standards and guidelines and meet the paleontological requirements of CEQA. Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

- A qualified paleontologist would produce a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring would include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor would have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.

- All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these geologic sediments are determined to have a high paleontological sensitivity (Figure 4.12.3-3). Very shallow surficial excavations (less than 5 feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected (Figure 4.12.3-3). Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.

- At each fossil locality, field data forms would be used to record pertinent geologic data, stratigraphic sections would be measured, and appropriate sediment samples would be collected and submitted for analysis.

- Due to the likelihood of the presence of microfossils, matrix samples would be collected and tested within the Puente Formation and Fernando Formation. Testing for microfossils would consist of screen-washing samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests would result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.

- Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

- The paleontologist would prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository.

3.2.2 Operational Mitigation Measures

No mitigation is required because operational impacts to paleontological resources are not expected for any of the project alternatives.

California State Office of Historic Preservation Coordination

The Cultural Resources – Archaeology Technical Memorandum for the Regional Connector Transit Corridor project contained in this appendix was submitted to the California State Office of Historic Preservation. The State Historic Preservation Officer (SHPO) reviewed the technical memorandum including the determinations of eligibility for all potentially eligible properties within the Area of Potential Effect (APE). On June 1, 2010, the SHPO concurred with the determinations of eligibility and with the findings of effect from project alternatives. That concurrence letter is included in the following pages.

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1 June 2010

Reply To: FTA090409B

Dolores Roybal Saltarelli
Project Manager, LACMTA
One Gateway Plaza
Los Angeles, CA 90012-2952

Re: Determinations of Eligibility and Finding of Effect for the Regional Connector Transit Corridor Project, Los Angeles, Los Angeles County, CA

Dear Ms. Saltarelli:

Thank you for your letter of 19 April 2010 continuing consultation on behalf of the Federal Transit Authority (FTA) for the above referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation at 36 CFR Part 800. You are requesting that I review the determinations of eligibility and assessment of effects for the Regional Connector Transit Corridor Project.

After reviewing the enclosed cultural resources report, I am able to concur with FTA's determinations of eligibility. 289 properties were identified in the APE for the project. Of those 289, 118 were of sufficient age to be considered for inclusion in the National Register of Historic Places (NRHP). Fifteen properties were previously listed in the NRHP and 33 were determined eligible by FTA. FTA has determined the following properties are eligible for inclusion in the NRHP:

1. Barker Brothers, 818 West 7th Street
2. Fine Arts Building, Global Marine House, 811 West 7th Street
3. 811 Wilshire Building, Tishman 615 Building, Wilflower Building, 811 Wilshire Boulevard
4. The California Club, 528 South Flower Street
5. 2nd Street Tunnel, Bridge# 53C 1318
6. Los Angeles Civic Center Historic District
7. Los Angeles Department of Water and Power Building, John Ferraro Office Building, 111 North Hope Street
8. Ahmanson Theater, 135 North Grand Avenue
9. Mark Taper Forum, 135 North Grand Avenue
10. Dorothy Chandler Pavilion, 135 North Grand Avenue
11. Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration, 500 West Temple Street, 222 North Grand Avenue
12. El Paseo de los Pobladores de Los Angeles, 224 North Grand Avenue
13. Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse, 111 North Hill Street
14. County of Los Angeles Central Heating and Refrigeration Plant, 301 North Broadway
15. Los Angeles County Hall of Records, 320 West Temple Street
16. Court of Historic American Flags, 224 North Hill Street, 100 block Hill Street
17. Los Angeles County Law Library, Mildred L. Lillie Building, 301 West 1st Street
18. Hall of Justice, Los Angeles County Jail, 211 West Temple Street

19. Clara Shortridge Foltz Criminal Justice Center, 210 West Temple Street
20. Los Angeles City Hall, 200 North Spring Street
21. City Health Building, City Hall South, 111 East 1st Street
22. Federal Building, North Los Angeles Field Office, 300 North Los Angeles Street
23. The Police Facilities Building, Parker Center, Motor Transportation Division, 150 North Los Angeles Street and 151 North Judge John Aiso Street
24. Mark Kuwata Real Estate, 301 East 1st Street, 104-106 North San Pedro Street, 104-106 Judge John Aiso Street
25. Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple, 342 East 1st Street
26. John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated, 216 South Alameda Street,
27. Los Angeles Times Building, 202 West 1st Street
28. The Mirror Building (Site of Butterfield Stage Station), Los Angeles Times-Mirror Annex, Times Building South, Mirror-News Building, 145 South Spring Street
29. Cathedral of Saint Vibiana, 214 South Main Street
30. Cathedral of Saint Vibiana, Rectory, 114 East 2nd Street
31. J.R. Newberry Company Building, 900 East 1st Street
32. 1st Street Viaduct, 1st Street between Vignes Street and Mission Road
33. Walt Disney Concert Hall, 111 South Grand Avenue

I concur with the NRHP determinations but will not comment on those properties identified solely for CRHR determination. The remaining resources in the APE are not eligible for inclusion in the NRHP.

Only one historic property, the 2nd Street Tunnel will be adversely affected by the project. I concur with the FTA's determination of adverse effect. Once FTA has submitted a draft MOA for the consultation I can comment on the mitigation measures for the undertaking.

Thank your for considering historic properties in your planning process. If you have any questions, please contact Amanda Blosser of my staff at (916) 654-7372 or e-mail at ablosser@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD:ab

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Regional Connector Transit Corridor
Cultural Resources - Archaeology
Technical Memorandum

April 2, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043

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ACRONYMS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
California Register	California Register of Historical Resources
CDPR	California Department of Parks and Recreation
CEQA	California Environmental Quality Act
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CRMMP	Cultural Resources Monitoring and Mitigation Plan
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HAER	Historic American Engineering Record
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MLD	Most Likely Descendant
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places (National Register)
OHP	California Office of Historic Preservation
PRC	Public Resources Code
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
TCP	Traditional Cultural Properties/Places
TPS	Transit Priority System
TSM	Transportation Management System
USDOT	US Department of Transportation

1.0 SUMMARY

1.1 Purpose and Scope

SWCA Environmental Consultants (SWCA) conducted a cultural resources inventory of the project area that may be affected by the proposed Regional Connector Transit Corridor project. The project is 1.9 miles in length and located in the City of Los Angeles, Los Angeles County, California.

The purpose of the Regional Connector project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

1.2 Dates of Investigation

SWCA conducted an initial cultural resources records search for the project on February 10, 2009; additional data were requested and assessed between February 2009 and January 2010. The Native American Heritage Commission (NAHC) performed a Sacred Lands File search on February 11, 2009. SWCA conducted an intensive pedestrian survey of the direct Area of Potential Effects (direct APEs) on March 16 and April 7, 2009, and on January 7, 2010. This report was completed on January 11, 2010.

1.3 Investigation Constraints

Most of the direct APE is covered in buildings, pavement, or landscaping due to the urban nature of the project area. Consequently, ground-surface visibility ranges from extremely poor (0 to 5 percent) to good (70 percent) throughout the project area. Average visibility was extremely poor (less than 5 percent). Three parts of the direct APE were fenced to protect to active construction projects and not accessible to SWCA archeologists.

1.4 Summary of Findings

The records and literature search indicated that 24 previously recorded cultural resources are located within a 0.25-mile radius of the APE, including 21 historic archaeological sites, one prehistoric archaeological site, one multi-component site, and one historic isolate. Of the 24 previously recorded archaeological resources, five (CA-LAN-887H, CA-LAN-3588, P-19-003097, P-19-003338, and P-19-003339) are located within the project direct APE and four are adjacent (within one city block) to the direct APE.

The records and literature search also identified 143 previously conducted cultural resource studies within a 0.25-mile radius of the APE. Of these, 23 are located within the project direct APE, and 12 are adjacent to the direct APE.

Historic maps indicate that the direct APE was completely developed prior to 1888, and that several streets within the project area have been realigned over the past 120 years. The Los Angeles zanja system (the city' original water system, which operated from 1781 through the early 1900s) also crosses the direct APE in numerous locations.

The NAHC Sacred Lands File search indicated the presence of cultural resources important to Native Americans in the project area. The NAHC response included a list of five Native American contacts that may have knowledge of cultural resources in the project area. SWCA sent location maps, a description of the proposed project, and its APE to these five groups via U.S. mail; each letter was followed up with a telephone call.

Responses were received from two of the five Native American contacts. These responses are documented in Table 3-1. SWCA recommends that Metro consult with the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation.

In the course of the pedestrian survey, a single archaeological site (RC-1) within the direct APE was encountered. This resource consists of a historic brick alignment, likely representing part of a late nineteenth/early twentieth century structure foundation. Available evidence suggests that RC-1 lacks sufficient integrity; it is recommended not eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (California Register).

None of the five previously recorded archaeological sites within the direct APE were observed during the pedestrian survey. Site P-19-003097, a historic site consisting of nineteenth and twentieth century features and artifacts, was considered to be significant by its excavators.

Data recovery in 2002 indicated that impacts to this resource would be mitigated to less than significant levels and the site was subsequently destroyed. Site CA-LAN-3588, a historic site consisting of features and artifacts dating to ca. 1880–1935, is presumed eligible for listing on both the NRHP and California Register due to its association with earliest Japanese occupation of Little Tokyo.

Sites P-19-003338 and P-19-003339 are American period artifact deposits that have not been formally evaluated. For purposes of this analysis they are presumed eligible for both registers.

The Los Angeles zanja system (recorded as CA-LAN-887H, P-19-003103, and P-19-003352) crosses the direct APE in numerous places. A segment of the zanja system (P-19-003103) north of the APE was nominated for listing in the National Register under Criterion A at the local level of significance for its direct role in the development of Los Angeles between 1781

and ca. 1900. The system as a whole is presumed eligible for listing in the National Register and California Register for the same reason.

Resources are "presumed eligible" when, in the professional opinion of a qualified archeologist, there are reasons to believe that it may be eligible for listing in the National Register or California Register, but there are factors that inhibit excavation or direct examination of the resource. Therefore, resources presumed eligible may or may not ultimately be determined eligible.

1.5 Potential Impacts

The background research and archaeological survey results indicate that subsurface archaeological deposits are commonly encountered during construction projects in downtown Los Angeles. Consequently, most of the direct APE is considered highly sensitive for the presence of historical resources, including both prehistoric and historic archaeological sites.

Although the No Build Alternative would not affect archaeological resources, the remaining alternatives have the potential to alter, remove, or destroy both known and previously undiscovered archaeological resources within the APE. These potential impacts include direct construction impacts and cumulative impacts.

1.6 Recommendations

This evaluation identified four extant properties within the direct APE that are presumed to be eligible for listing in the National Register and California Register: the Los Angeles zanja system (CA-LAN-887H) and sites CA-LAN-3588, P-19-003338, and P-19-003339. The build alternatives have the potential to adversely affect these resources. Implementing two mitigation measures—Treatment of Previously Unrecorded Archaeological Resources (MM-A-1) and Treatment of Known Archaeological Resources (MM-A-2)—would reduce both direct and cumulative impacts to these resources. After mitigation, potential construction and cumulative impacts would not be significant under both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

1.7 Disposition of Data

This report will be filed with the Federal Transit Administration (FTA), Metro, CDM, the South Central Coastal Information Center (SCCIC) located at California State University in Fullerton, and SWCA. All field notes and records related to the project will remain on file at the South Pasadena office of SWCA.

2.0 INTRODUCTION

This technical memorandum identifies and evaluates archaeological resources and potential effects of construction and implementation of the proposed Regional Connector Transit Corridor project. Historic built environment and paleontological resources are addressed in separate reports.

2.1 Regulatory Setting

National Environmental Policy Act (NEPA) guidelines include compliance with related federal laws that require identification of historic properties, and consideration of project-related effects on those properties. This report was prepared to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and with regulations contained in 36 Code of Federal Regulations (CFR) Part 800. These regulations require federal agencies to consider the effects of proposed projects on historic properties as part of the environmental assessment process.

Section 106 of NHPA requires federal agencies take into account effects of undertakings on historic properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those undertakings, following these regulations (36 CFR Part 800).

This technical memorandum was also prepared to comply with requirements of CEQA and the CEQA Guidelines (CERES 2009) as they apply to cultural resources. Under CEQA, it is necessary for a lead agency to evaluate proposed projects for the potential to cause significant impacts on "historical resources." A proposed project that may affect historical resources is submitted to the State Historic Preservation Officer (SHPO) for review and comment prior to project approval by the lead agency and before any project-related clearance, demolition, or construction activities are commenced.

If a proposed project could be expected to cause substantial adverse change to a historical resource, environmental clearance for the project would require evaluating alternatives and/or implementing mitigation measures to reduce or avoid impacts. If a project is expected to result in an impact on historical resources, CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most the basic objectives of the project and avoid or substantially lessen any significant impacts on the historical resource.

Properties that may be historic resources within the identified project APE were evaluated for National Register of Historic Places (National Register)-eligibility according to criteria set forth in 36 CFR Part 60.4. The age criterion for inclusion in the National Register is 50 years and older, except in cases of overriding significance (criteria consideration G).

Properties were also considered for California Register of Historical Resources (California Register) eligibility; although there is no established age threshold for the California Register, the same 50-year cutoff was used for this project. Under Public Resources Code (PRC) Section 5024.1, the California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources.

If a proposed project and its related impacts would adversely affect the values of an archaeological or built environment site that is either listed in or determined eligible for inclusion in the National or California Register, such effects and/or impacts would be considered adverse.

2.2 Report Format

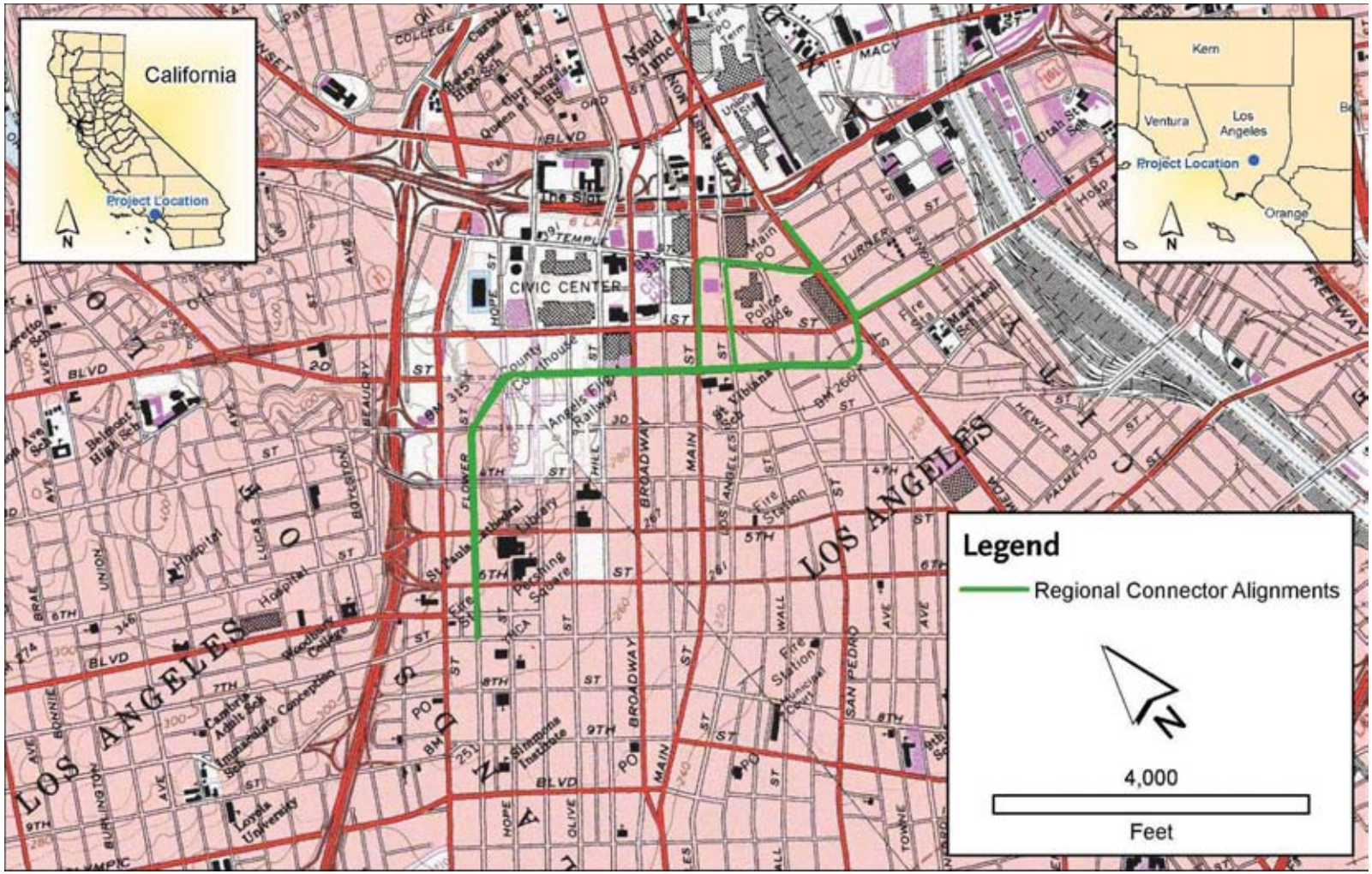
The report format used in this report follows *Archaeological Resource Management Reports: Recommended Contents and Format* (Office of Historic Preservation 1990). Archaeologist John Dietler, Ph.D., RPA was the principal investigator for this technical memorandum.

2.3 Project Description

The proposed project would extend 1.9 miles through downtown Los Angeles and provide enhanced Metro service throughout four distinct travel corridors that span over 50 miles across Los Angeles County (Figure 2-1). The proposed 1.9 miles of new dual-tracks in downtown Los Angeles would provide a direct link between the Metro Gold, Blue, and Expo Lines by bridging the gap in the regional light rail network between 7th Street/Metro Center Station at 7th and Flower Streets and the Little Tokyo/Arts District station at 1st and Alameda Streets. This would allow trains to travel directly from East Los Angeles to Culver City and from Long Beach to Pasadena. The project also includes construction of new stations in downtown that would allow all passengers on the Metro Gold, Blue, and Expo Lines to reach multiple destinations in the central business district without transferring.

The following alternatives are evaluated in this technical memorandum:

- No Build Alternative
- Transportation System Management (TSM) Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT Alternative- Little Tokyo Variation 1
- Fully Underground LRT Alternative- Little Tokyo Variation 2


California
Project Location
N
Kern
Ventura
Los Angeles
Project Location
Orange
N
Legend
Regional Connector Alignments
N
4,000
Feet
CIVIC CENTER
LOS ANGELES
BOYLE HEIGHTS
BOYLE HEIGHTS
LITTLE TOKYO
The Slot
Main PO
Police Bldg
Fire Station
Pershing Square
Fire Station
Fire Station
Library
Hospital
Hospital
Loyola University
Simmons Institute
Woodbury College
Belmont High Sch
Roosevelt High Sch
Queen of Angels High Sch
Our Lady of Angels Sch
Union Sch
Utah St Sch
Macy
Angels Flight Railway
County Courthouse
St Vibiana
St Paul's Cathedral
Immaculate Conception Sch
Cesar Chavez Adult Sch
Metropolitan Detention Center
Police Bldg
Fire Station
Fire Station
Municipal Courts
Fire Station
Fire Station
Fire Station

2.3.1 No Build Alternative

Transit service under the No Build Alternative is focused on preservation of existing services and projects. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line and the Metro Gold Line to East Los Angeles will have opened, and a number of bus routes will have been reorganized and expanded to provide connections with these new rail lines. All bus and rail lines would operate using a fleet of vehicles similar to those currently in service or identified for purchase in the LRTP. The transit network within the project area will otherwise be largely the same as it is now.

2.3.2 Transportation System Management (TSM) Alternative

The Transportation System Management (TSM) Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center and Union Stations. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. Rail service would remain the same as described for the No Build Alternative.

The two routes are described below and illustrated on Figure 2-2, TSM Alternative.

- Upper Grand Route – From the 7th Street/Metro Center Station, buses would proceed east on 7th Street, north on Olive Street, west on 5th Street, north on Grand Avenue, east on Temple Street, and then north on Los Angeles Street to Union Station. As a variation, buses could use Alameda Street between Temple Street and Union Station to allow a stop at Temple and Alameda Streets, near the Little Tokyo/Arts District Station. The alignment is assumed to follow the same route as part of the existing Los Angeles Department of Transportation (LADOT) DASH Route B service, proceeding from the 7th Street/Metro Center Station to Union Station using Grand Avenue, Temple Street, and Los Angeles Street. Shuttle buses would run less than eight minutes apart and provide coverage of the Bunker Hill and Civic Center areas.

- Lower Grand Route – This route would use the existing northbound bus-only lanes on Figueroa Street and mixed flow lanes on 2nd and 3rd Streets, which are lightly used by other bus lines. From the 7th Street/Metro Center Station, buses would proceed north on Figueroa Street, west on 2nd Street, and north on Alameda Street to Union Station. To return to 7th Street/Metro Center Station, buses would travel south on Alameda Street, west on 3rd Street, and south on Flower Street. The alignment passes by both

the Little Tokyo/Arts District Station and Union Station, and would provide good coverage of Little Tokyo and the southern edge of the Civic Center.

2.3.2.1 Operating Characteristics

The shuttle routes would be operated by Metro, and could use vehicles ranging from 30-foot shuttle buses to 60-foot articulated buses. Buses would run every few minutes during peak periods, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. Similar to the Metro Rapid Bus lines, a Transit Priority System (TPS) that allows longer green lights to oncoming transit vehicles would be used where possible to increase bus speed and efficiency.

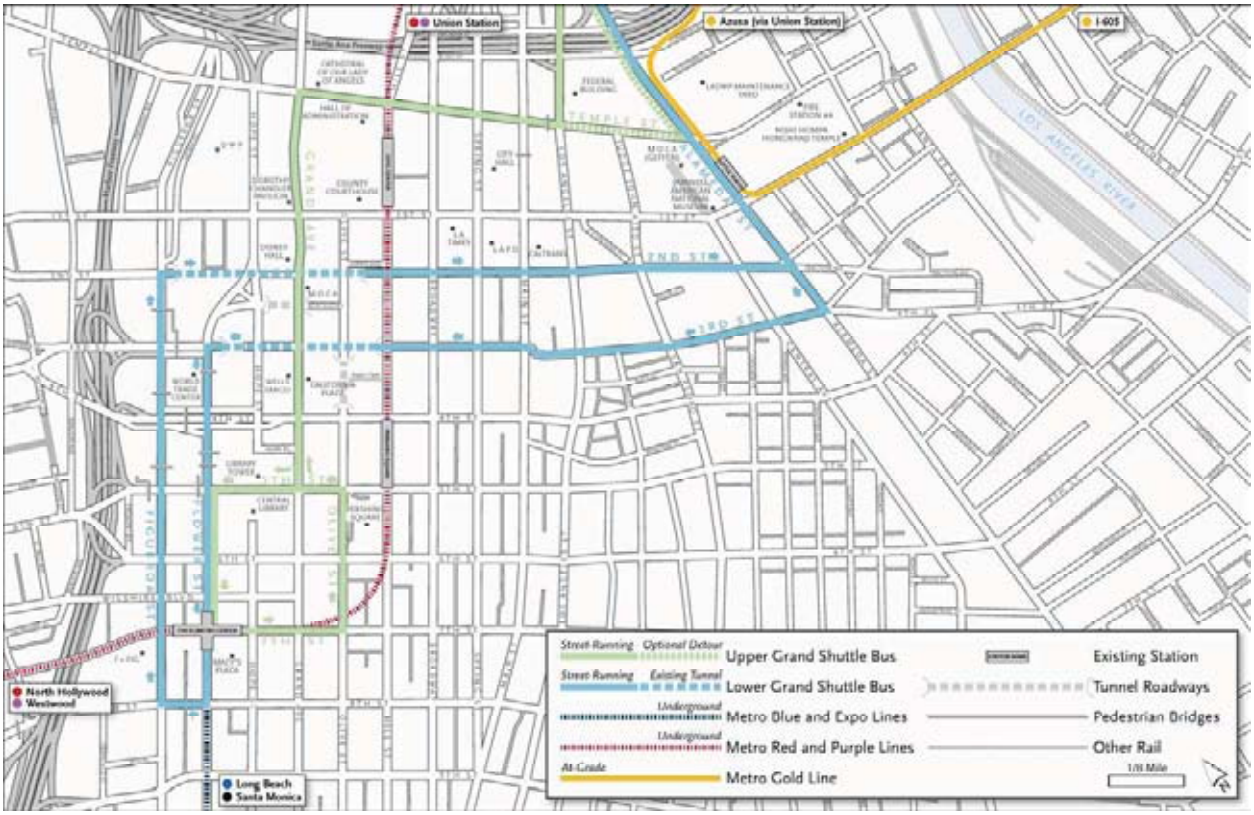


Figure 2-2. Transportation System Management (TSM) Alternative

2.3.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

2.3.3.1 Overview

The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets. Three new stations would be added, one would be a split station with single-direction platforms one block apart. This alignment includes a combination of underground and at-

grade segments, with 46 percent of the route underground. New stations would serve the Civic Center, Grand Avenue, and the Financial District. Conversion of 2nd Street to a pedestrian-friendly transit mall is assumed.

To implement this alternative, the number of traffic lanes and on-street parking spaces on 2nd Street would be reduced. As a result, traffic is likely to divert to adjacent parallel streets such as 1st and 3rd Streets, but the roadway capacity along these streets would remain unchanged, as with the No Build Alternative. Traffic congestion along these streets would likely increase. Figure 2-3 illustrates the At-Grade Emphasis LRT Alternative.

2.3.3.2 Route Configuration

From the existing platform at the 7th Street/Metro Center Station, the tracks would extend north underneath Flower Street to a new underground station just south of 5th Street. The tracks would then continue north, surface just south of 3rd Street, cross 3rd Street at grade, and veer northeast through a portal in the hillside to an underground station at 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The tracks would continue northeast, "punch" through the wall of the existing 2nd Street tunnel, and then travel east in the 2nd Street tunnel toward Hill Street.

This alignment would reduce the 2nd Street tunnel from four lanes to one (potentially two lanes, pending further detailed engineering). Trains would proceed east on 2nd Street to Main Street. 2nd Street would be transit-dedicated, with its current two travel lanes and two parking lanes reduced to a single travel lane primarily for access to parking lots and loading zones. This type of configuration would extend from Hill Street to Los Angeles Street.

At Main Street, the alignment would split into two single-track alignments. One track (for northbound trains) would continue east to Los Angeles Street and then north to Temple Street. The other track (for southbound trains) would travel north on Main Street and then west on Temple Street. Both tracks would have an at-grade station just north of 1st Street.

At Temple and Los Angeles Streets, the two tracks would rejoin and proceed west on Temple Street to Alameda Street, where the tracks would join the Metro Gold Line to East Los Angeles in a three-way (wye) junction. Before reaching Alameda Street, the tracks would shift to the south side of Temple Street to provide an adequate turning radius for trains turning north onto the Metro Gold Line's existing ramp leading to the bridge over the US 101 freeway to Union Station. The ramp would need to be reconfigured to a steeper slope to facilitate turning movements in the three-way junction area. The intersection of Temple and Alameda Streets would also have a vehicular underpass for through-traffic on Alameda Street and a pedestrian bridge to reduce potential conflicts between pedestrians, trains, and automobiles. The pedestrian bridge could potentially have endpoints located on each of the intersection's four corners.

At-grade crossovers could be located on 2nd Street between Hill Street and Broadway, and on 2nd Street between Broadway and Spring Street. Crossovers are mechanical track installations along the double-track alignment that allow trains traveling in either direction on either track to move to the other track and continue traveling in the same direction without stopping. Trains may also pass through the crossover without switching tracks. A wider right-of-way may be required in the vicinity of at-grade crossovers, thus potentially increasing the amount of roadway space needed for LRT facilities.

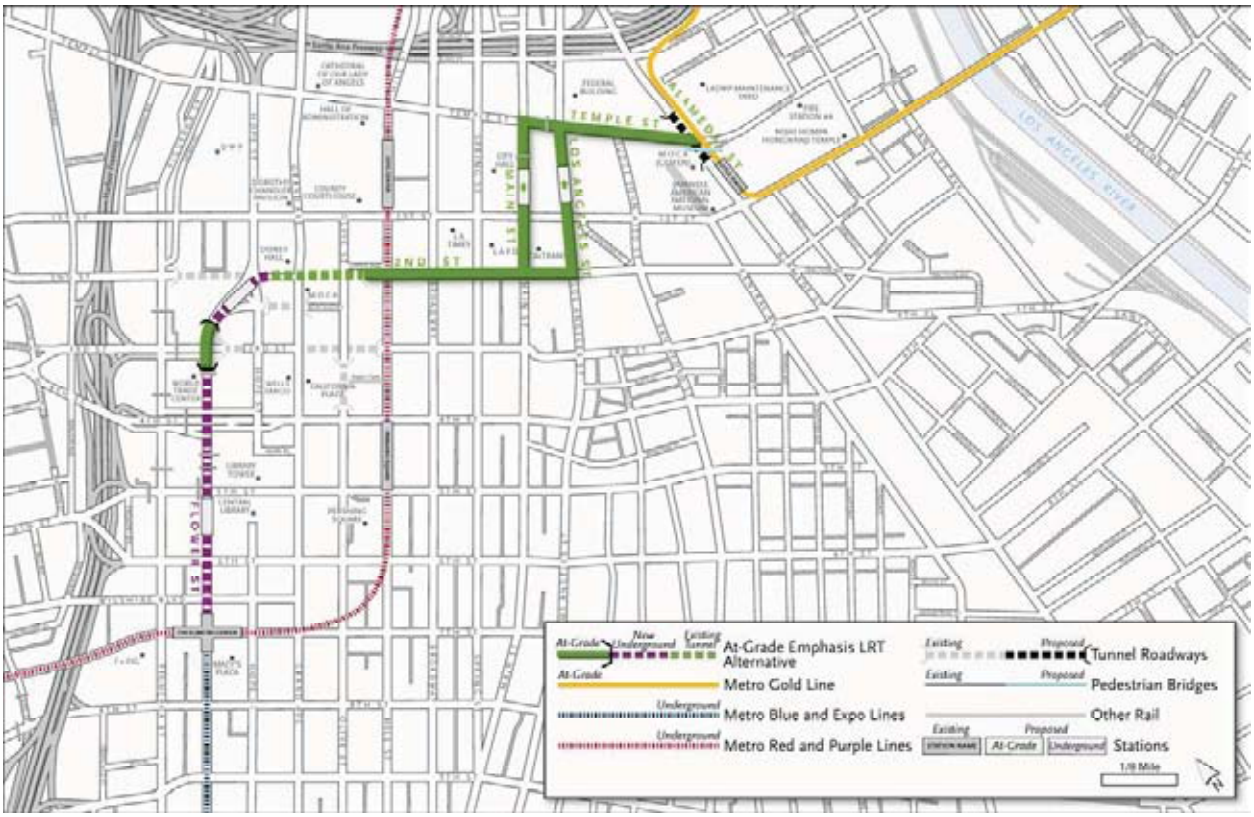


Figure 2-3. At-Grade Emphasis Light Rail Transit (LRT) Alternative

In summary, the At-Grade Emphasis LRT Alternative would connect the Metro Blue and Expo Line tracks at the 7th Street/Metro Center Station to the Metro Gold Line tracks at a new junction north of the Little Tokyo/Arts District Station. This would be accomplished using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated into two routes.

This report analyzes maximum potential effects for each station. Therefore, the actual effects may be smaller in magnitude than the impacts discussed in this analysis. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.3.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would use existing tracks to the 7th Street/Metro Center Station, continuing along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The alignment would then continue east along the Metro Gold Line tracks to East Los Angeles.

- North-South Route – Trains on the Metro Blue Line tracks would travel from the 7th Street/Metro Center Station north along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The alignment would then continue north along the existing Metro Gold Line tracks to Pasadena and the future Metro Gold Line extension to Azusa.

Vehicle and Pedestrian Circulation

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot-wide surface right-of-way bordered by mountable curbs. It is expected that this width would increase to 39 feet at center platform station locations.

Vehicular and pedestrian crossings would be limited to traffic signal–controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted.

Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities. Left-turn parking access and egress is presently allowed at many downtown sites. However, the at-grade LRT facilities would prohibit uncontrolled mid-block left turns, thus modifying existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT Alternative alignment would travel at-grade along 2nd Street. It is assumed that this street would be dedicated as a transit-only roadway between the tunnel and Los Angeles Street. This segment of 2nd Street may be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties. As a result of this proposed change in street circulation, through traffic using 2nd Street would be diverted to parallel roadways such as 1st and 3rd Streets east of Los Angeles Street; 2nd Street would maintain its current physical features and operating characteristics.

The one-way transit couplet near City Hall along Main and Los Angeles Streets between 2nd and Temple Streets would consist of a single LRT track along each roadway. Both Main and Los Angeles Streets are wide enough to accommodate a single track and maintain acceptable

vehicular operations. The curb-to-curb width of Temple Street, between Main and Alameda Streets, is 62 to 71 feet, leaving one lane of traffic in each direction with potentially mountable curbs for use by emergency vehicles. Traffic operations along this segment of Temple Street would be affected by the lane reduction.

To minimize conflicts between rail, vehicular, and pedestrian traffic and minimize delays at the intersection of Temple and Alameda Streets, a vehicular underpass and a proposed pedestrian overpass are proposed along Alameda Street to route the through traffic beneath the rail tracks and Temple Street traffic. Temple Street and the rail tracks would remain at-grade and the existing at-grade segment of Alameda Street lowered to pass under Temple Street.

Through traffic traveling north and south on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. Through traffic traveling east and west on Temple Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation. In addition, a one-lane southbound at-grade frontage road would be provided along Alameda Street to maintain access to the businesses and properties on the west side of the street.

2.3.4 Underground Emphasis LRT Alternative

2.3.4.1 Overview

The Underground Emphasis LRT Alternative would provide a direct connection from 7th Street/Metro Center Station to the Gold Line tracks at the Little Tokyo/Arts District Station, including three new station locations. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to a new portal on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue.

It is expected that a portion of this property would need to be acquired to construct the portal and stage construction of the tunnels beneath 2nd Street. The tracks would then connect to the Gold Line tracks.

The Underground Emphasis LRT Alternative would be located entirely underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets in the same type of three-way junction proposed for the At-Grade Emphasis LRT Alternative. Figure 2-4 illustrates this alternative.

2.3.4.2 Route Configuration

The Underground Emphasis LRT Alternative alignment would extend north from the existing platform at the 7th Street/Metro Center Station. Tracks would run underneath Flower Street to

the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station. There are two options for a station on 2nd Street. The Broadway Station option would place an underground station on 2nd Street between Broadway and Spring Street, and the Los Angeles Street Station option would include an underground station between Main and Los Angeles Streets.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast and surface in the lot bounded by 1st, Alameda, and 2nd Streets, and Central Avenue. The tracks would then enter an at-grade three-way junction in the intersection of 1st and Alameda Streets.

A new underpass would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction, and a proposed overhead pedestrian bridge structure would reduce most potential conflicts between pedestrians and trains. The pedestrian overpass could potentially have endpoints at each of the four corners of the intersection.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station on 2nd Street (whether it is between Broadway and Spring Street or between Main and Los Angeles Streets). Crossovers may not be needed at all of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel-boring machines cannot be used to construct underground crossovers.

In summary, the Underground Emphasis LRT Alternative would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction just south of the Little Tokyo/Arts District Station at 1st and Alameda Streets. This would be accomplished using new light-rail right-of-way and new stations, enabling the consolidation of the Metro Gold, Blue, and Expo Line services into two routes.

This study analyzes maximum potential impacts for each station. Ultimate impacts may therefore be less in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

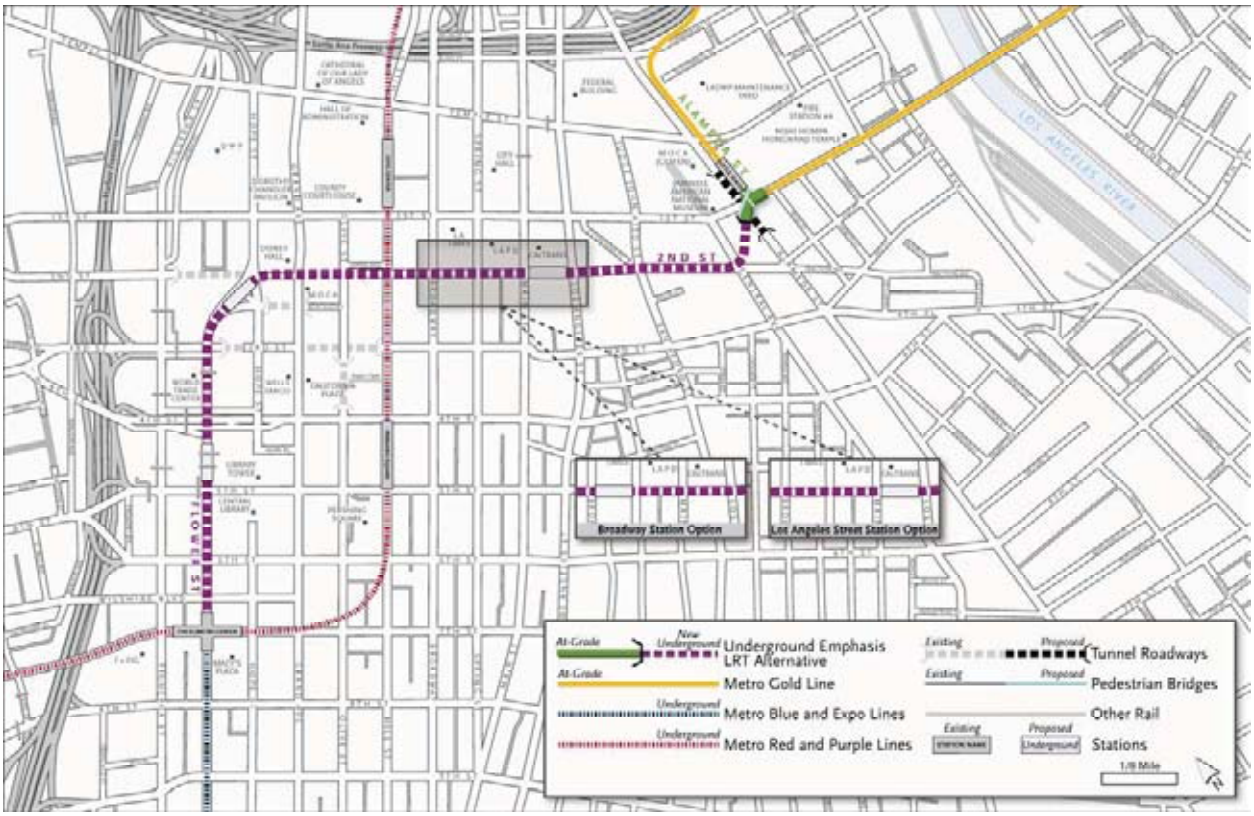


Figure 2-4. Underground Emphasis LRT Alternative

2.3.4.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would run on tracks to the 7th Street/Metro Center Station, then continuing north along the new Regional Connector tracks to the new three-way junction at the intersection of 1st and Alameda Streets. Trains would then turn east on 1st Street, bypassing the Little Tokyo/Arts District Station, and continue along the Metro Gold Line tracks to East Los Angeles.

- North-South Route – From the 7th Street/Metro Center Station, trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction at 1st and Alameda Streets. The trains would then turn north on 1st Street and stop at the existing Little Tokyo/Arts District Station before continuing along the Metro Gold Line route to Pasadena and Azusa.

Vehicle and Pedestrian Circulation

The Underground Emphasis LRT Alternative alignment would not affect surface traffic or pedestrian circulation except at the intersection of 1st and Alameda Streets, where the LRT

alignment would operate in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns.

The future roadway levels of service for this alternative would be the same as the No Build Alternative except at the intersection of 1st and Alameda Streets, where a vehicular underpass and pedestrian overpass are proposed to separate the heavy traffic volumes along Alameda Street from rail traffic to minimize delays. The proposed underpass would result in uninterrupted flow along Alameda Street in the north and south directions between 2nd and Temple Streets. Through traffic traveling east and west on 1st Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation.

To maintain access to adjacent businesses and properties, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection and on the southbound side of the street north of the intersection. A full northbound frontage road crossing 1st Street is not feasible because of the location of the tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street.

2.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

2.3.5.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue.

At 2nd and Central, the tracks would continue underground heading northeast under 1st and Alameda Streets. A three-way junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect to the Metro Gold Line heading north to Azusa and east to the San Gabriel Valley. One portal would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the City of Los Angeles Department of Water and Power (LADWP) Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line to Azusa. The portal would be connected to the 1st and Alameda junction by a new tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the Little Tokyo/Arts District Station and tracks.

The second portal would be located within 1st Street between Alameda and Vignes Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate the portal. Street widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street to join the existing 1st Street LRT tracks about one and half blocks west of the 1st Street Bridge.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 1 would be located entirely underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center Station. Figure 2-5 illustrates this alternative.

2.3.5.2 Route Configuration

The Fully Underground LRT Alternative- Little Tokyo Variation 1 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street. The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station, which would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

The tracks would continue from the station under the 1st and Alameda intersection into a new underground three-way junction. Separating from the junction, one set of tracks would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which will be extended to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

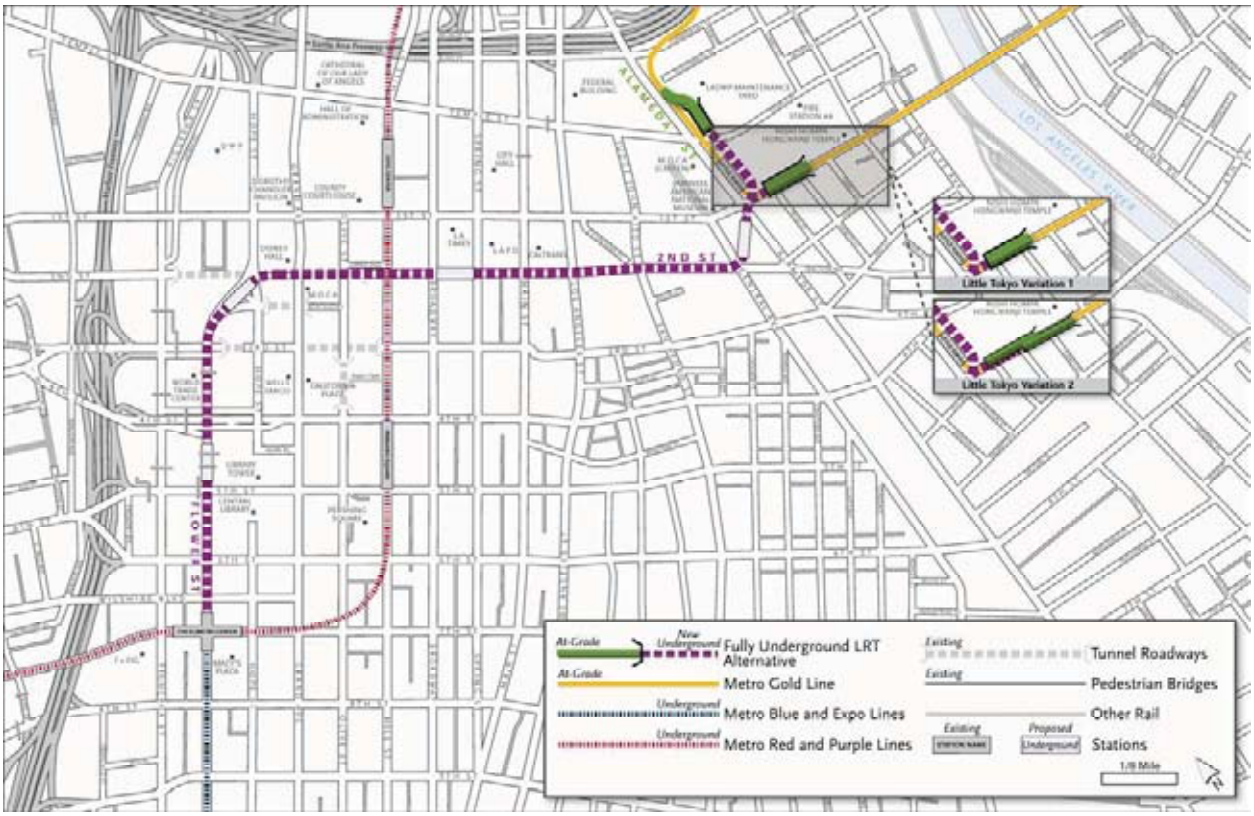


Figure 2-5. Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1 and Little Tokyo Variation 2

The other set of tracks leaving the three-way junction would rise to the east within 1st Street to accommodate a new portal as well as existing Metro Gold line tracks. 1st Street would be widened to the north to accommodate the portal. Street widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street to join the existing 1st Street LRT tracks, about one and half blocks west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold Line to East Los Angeles, which will be eventually extended to about I-605 per Metro's Long Range Transportation Plan.

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted. Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only.

The existing Metro Gold Line and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction, with only intermittent disruptions related to construction activities. Once construction is complete, operation of the

current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations, and may ultimately be placed in locations that are not adjacent to stations.

Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction under 1st and Alameda Streets. This would be accomplished using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate impacts may therefore be smaller in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.5.3 Operating Characteristics

Two consolidated routes:

The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

- East-West Route - Metro Expo Line trains from Santa Monica would run on the existing tracks north of the existing 7th Street/Metro Center Station, continuing north along new Regional Connector tracks to a new three-way junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portal on 1st Street, and continue along the Metro Gold Line tracks to about I-605.

- North-South Route - After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction beneath 1st and Alameda Streets. Trains would then travel to the new portal on the LADWP site, and continue along the Pasadena Metro Gold Line to Azusa.

The east-west and north-south routes would each operate with 5-minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector corridor.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment would not affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th/4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. At the proposed Flower/5th/4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

2.3.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

2.3.6.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1 from the 7th Street/Metro Center Station to 2nd Street and Central Avenue.

A new two-level underground junction would be constructed beneath the 1st and Alameda Streets intersection. Trains traveling north toward Azusa and east toward I-605 would use the lower level of the junction, and trains travelling south toward Long Beach and west toward Santa Monica would use the upper level. To the north and east of the junction, trains would rise to the surface through new portals to connect to the Metro Gold Line heading north to Azusa and east towards I-605.

One portal containing the northbound and southbound tracks would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the

LADWP Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line.

This portal would be connected to the 1st and Alameda junction by a new cut-and-cover tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the existing Little Tokyo/Arts District station and tracks. The new tunnel would feed southbound trains from the portal into the upper level of the junction, and carry northbound trains away from the lower level of the junction toward the portal.

Two portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

1st Street would be widened to the north to accommodate the westbound portal. The widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street. There, the new tracks would feed into the existing 1st Street LRT tracks, about a block west of the 1st Street Bridge. 1st Street would also be widened to the south between Hewitt and Vignes Streets to accommodate the eastbound track portal. The widening would taper down as it approaches Vignes Street. No modification to the 1st Street Bridge would be necessary.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property.

The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from the 7th Street/Metro Center Station to west of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.3.6.2 Route Configuration

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station

entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

From 3rd and Flower Streets, the tracks would head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station that would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

As the tunnels turn northeast from 2nd Street, the northbound tunnel would descend and the southbound tunnel would rise so that the southbound tunnel would be stacked on top of the northbound tunnel. The new underground station near 2nd Street and Central Avenue would have two underground levels, each with a single-track platform. The northbound track with trains headed north and east would be on the lower level, and the southbound track with trains headed south and west would be on the upper level.

The tracks would continue from the station under the 1st and Alameda intersection into a new two-level underground junction. Separating from the junction, one track from the lower level (northbound) and one track from the upper level (southbound) would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station.

These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which will be extended to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

A second track (westbound) leaving the upper level of the junction would rise to the east within 1st Street between Alameda and Hewitt Streets and link to the existing Metro Gold Line track. Another track (eastbound) leaving the lower level of the junction would rise to the east within 1st Street between Hewitt and Vignes Streets, adjacent to the westbound track, and link to the existing Metro Gold Line track.

1st Street would be widened to the north and south to accommodate the portal and temporary tracks to maintain Metro Gold Line service during construction. Widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street and again at Vignes Street, where tracks would join the existing 1st Street LRT tracks, just west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold

Line to East Los Angeles, which will be eventually extended toward I-605 per Metro's Long Range Transportation Plan.

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted.

Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only. The existing Metro Gold Line and Little Tokyo/Arts District Station and surface tracks would be maintained for continued service during construction, with intermittent disruptions related to construction activities.

One lane of 1st Street would need to be temporarily closed during construction between Alameda and Vignes Streets to maintain these surface tracks. The surface tracks would not remain in place beyond construction. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line. The link would be provided by a new two-level junction under 1st and Alameda Streets using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate impacts may therefore be smaller in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.6.3 Operating Characteristics

Two consolidated routes:

- The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes: East-West Route - Metro Expo Line trains from Santa Monica would run on the existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, they would continue north along the new Regional Connector tracks to the new two-level junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portals on 1st Street, and continue along the Metro Gold Line tracks towards I-605.

- North-South Route - After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to the new two-level junction beneath 1st and Alameda Streets. The trains would then travel to the new portal on the LADWP site, and continue along the Pasadena Metro Gold Line to Azusa.

The east-west and north-south routes would each operate with 5-minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would not permanently affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th /4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. At the proposed Flower/5th /4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section describes the processes for identifying cultural resources, determining the significance of those resources, evaluating potential effects from construction and operation of the project, assessing potential permanent changes to historic properties and/or their contextual settings, and determining thresholds of significance that are applied to potential impacts. Section 4.0 describes the historic properties identified in the project area and their significance. Section 5.0 evaluates potential direct, indirect, and cumulative impacts to these resources from construction and operation.

3.1 Regulatory Framework and Standards of Significance

3.1.1 Federal

A number of federal laws address the protection of historic and cultural resources. The analysis of potential effects to built environment resources are primarily guided by the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act of 1966, as amended; and Section 4(f) of the U.S. Department of Transportation Act (USDOT Act) of 1966.

3.1.1.1 National Environmental Policy Act (NEPA)

The intent of NEPA is to protect the natural and built environment, including historic properties, from adverse effects resulting from federal actions. Before a federal agency may proceed with a proposed action, an environmental evaluation must be made to determine whether the action may have a significant effect on the environment. Effects on historic properties are usually assessed in coordination with the process established under Section 106 of the NHPA. The Section 106 process typically must be completed before an EIS can be finalized.

Under NEPA, historic and cultural resources generally include properties that are listed in or determined eligible for listing in the National Register. While NEPA does not provide specific definitions or criteria for determining the significance of historic properties, CEQA guidelines direct agencies to comply with Section 106 of the NHPA to be in compliance with NEPA.

NEPA requires federal agencies to evaluate the significance of potential project-related effects including both direct and tangible (e.g., demolition or alteration) and indirect effects (less tangible effects such as noise or visual). NEPA provides guidance for determining significance as a measure of impact intensity (Section 1508.27).

Intensity refers to the severity of impact. Decision-makers must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

- Impacts may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to expect a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources.
- Whether the action threatens a violation of federal, state, or local laws or requirements imposed for the protection of the environment.

3.1.1.2 National Historic Preservation Act (NHPA)

This report was completed under the provisions of NHPA Section 106 (36 CFR 800) in its applications for determining "effects," or impacts, as described in Part 800.5(a)(1). Section 106 of the NHPA requires that federal agencies take into account effects on "historic properties" that may be caused by undertakings, and that the Advisory Council on Historic Preservation be afforded an opportunity to comment on those undertakings (16 USC 470a, 36 Code of Federal Regulations, CFR Part 800). Section 106 requires that historic properties be identified, that effects be analyzed, and if adverse effects would be expected, that appropriate mitigation be identified and implemented under a Memorandum of Agreement (MOA).

Cultural resources (or "historic properties" under NHPA) include any district, site, building, structure, or object that is included in or eligible for listing in the National Register (36 CFR Part 800.1).

Section 106 defines a historic property as:

> Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR Part 800 Protection of Historic Properties, Section 800.16 Definitions[l][1]).

Properties of traditional religious and cultural importance— also referred to as Traditional Cultural Properties/Places, or TCPs)—to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. TCPs can be National Register-eligible under any of the criteria, described in the following section.

National Register of Historic Places

The National Register of Historic Places is the nation's official list of districts, sites, buildings, structures, and objects worthy of preservation. The National Register currently includes approximately 80,000 listings, including icons of American architecture, engineering, culture, and history. Overseen by the National Park Service (NPS), under the Department of the Interior, the National Register was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

For a property to be listed in or determined eligible for National Register listing, it must be demonstrated to have the quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the following criteria:

- Be associated with events that have made a significant contribution to the broad patterns of our history;
- Be associated with the lives of persons significant in our past;
- Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in the National Park Service's National Register guidance as the ability of a property to convey its significance. To be listed in the National Register, a property must not only be shown to be significant under the National Register criteria, but it also must retain integrity.

The National Register guidance asserts that properties be at least 50 years old to be considered for eligibility. Properties completed less than 50 years before they are evaluated must be "exceptionally important" (Criteria Consideration G) to be considered eligible for listing, or under certain circumstances they must be part of a historic district whose period of significance extends forward to a date less than 50 years ago.

Effects on historic properties under Section 106 of the NHPA are defined in the Assessment of Adverse Effects in 36 *CFR* Part 800.5(a) (1):

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

Adverse effects on historic properties are defined as and include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the *Secretary's Standards for the Treatment of Historic Properties* (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 *CFR* Part 800.5(a) (2)).

To comply with Section 106, the criteria of adverse effect are applied to historic properties in the project Area of Potential Effects (APE), pursuant to 36 *CFR* Part 800.5 (a)(1). A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds set forth in the criteria of adverse effect, or in certain cases when the undertaking is modified to avoid or lessen effects, or conditions are imposed to ensure review of rehabilitation plans for conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (codified in 36 *CFR* Part 68). If adverse effects findings are made, mitigation would be proposed and resolution of adverse effects occurs through consultation pursuant to 36 *CFR* Part 800.6(a) to avoid, minimize, or mitigate adverse effects on historic properties.

Historic properties in the APE are described in Section 4. Sections 5 and 7 present the analysis of potential effects on historic properties in the APE. Recommended mitigation to reduce adverse effects is described in Section 6.

3.1.1.3 U.S. Department of Transportation Act (USDOT), Section 4(f)

Section 4(f) (23 CFR 774) of the USDOT Act of 1966, as amended (49 USC 1653[f]), defines impacts of transportation agency projects as the "use" of certain types of resources, including "historical sites."

USDOT agencies, including FTA, cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and historical sites (defined as listed in or determined eligible for listing in the National Register) unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.

- The action includes all possible planning to minimize harm to the property resulting from use (FHWA 2009).

In the Federal Highway Administration (FHWA) guidance "What is Section 4(f)?" the regulations are described as applying to "any publicly or privately owned historic site listed or [determined] eligible for listing on the National Register" (FHWA 2009). The guidance defers

to the definitions of "historical sites" found in the NHPA and its National Register criteria for historic properties as described in Section 3.1.1.2.

Impacts to 4(f) properties, defined as "use" of the property, must be either avoided, minimized, or mitigated, in that order. FTA follows FHWA procedures for resolving "*de minimis*" impacts through recorded administrative decisions, and mitigating impacts through 4(f) procedures (FHWA 2009).

3.1.1.4 Other Federal Regulations

Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others. Section 106 and NEPA procedures—particularly through involvement of Native American and other public constituents in the identification, evaluation, and mitigation processes—might address impact resolution through these other federal laws.

3.1.2 State

3.1.2.1 California Environmental Quality Act (CEQA)

Concurrently with the federal process, the California Environmental Quality Act (*Public Resources Code or PRC*, Section 5024) requires evaluation of proposed projects that may cause significant effects on historical resources. Under CEQA, "historical resources" must be identified, expected impacts must be analyzed, and mitigation must be identified and implemented as above, where necessary. For CEQA conformance, historical resources include the built environment as well as "unique paleontological resources" or "unique geologic features."

CEQA guidelines define a "historical resource" as:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register) PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered an historical resource, provided the

lead agency's determination is supported by substantial evidence in light of the whole record.

CEQA equates a "substantial adverse change" in the historic significance of a resource with a significant effect on the environment (PRC Section 21084.1). Thresholds of substantial adverse change are established in PRC Section 5020.1 as demolition, destruction, relocation, or "alteration activities that would impair the significance of the historic resource."

If a project is expected to result in an effect on historic resources, CEQA guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the most basic objectives of the project and avoid or substantially lessen any significant effects on the historical resource.

A proposed project that may affect historic resources is submitted to the SHPO for review and comment prior to project approval by the lead CEQA agency, and before any project-related clearance, demolition, or construction activities commence. If any CEQA impact conditions are met by the project's effects on historic properties, mitigation measures are recommended for avoidance, to minimize impacts, or to provide balanced compensation for adverse effects. See Sections 5.0 and 7.0 for an evaluation of project effects and impacts on those properties, and Section 6.0 for recommended mitigation measures.

3.1.2.2 California Register of Historical Resources (California Register)

Under California PRC Section 5024.1, the California Register was established to serve as an authoritative guide to the state's significant historic and archaeological resources. A resource is considered historically significant if it meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4852). For a property to be considered eligible for listing in the California Register, it must be found to be significant under at least one of the following four criteria by the State Historical Resources Commission. If the resource:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history

In addition to possessing one of the above-listed characteristics, resources must retain "substantial" integrity to their period of significance to be eligible for listing in the California Register. The seven aspects or qualities of integrity are the same as those applied to National Register-eligible properties: location, design, setting, materials, workmanship, feeling, and association.

The California Register also includes properties that:

- Have been determined eligible for listing in, or are listed in the National Register.
- Are registered State Historical Landmark No. 770 and all consecutively numbered landmarks above Number 770 (see Section 3.1.2.3).
- Are points of historical interest that have been reviewed and recommended to the State Historical Resources Commission for listing (see Section 3.1.2.4).
- Are city- and county-designated landmarks or districts (see Section 3.1.3). Historic Districts are a concentration of historic buildings, structures, objects, or sites within precise boundaries that share a common historical, cultural or architectural background. Individual resources within an historic district may lack individual significance but be considered a contributor to the significance of the historic district.
- Are identified as significant in a historic resource survey and meet the following criteria:

    1) The survey has been or will be included in the State Historical Resources Inventory.

    2) The survey and the survey documentation were prepared in accordance with California Office of Historic Preservation (OHP) procedures and requirements.

    3) The resource is evaluated and determined by the office to have a significance rating of category "1 to 5" on California Department of Parks and Recreation (CDPR) series 523 form.

    4) If the survey is five or more years old at the time of its nomination for inclusion in the California Register, it is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource (PRC Section 5024.1[g]).

3.1.2.3 California Historical Landmarks

Designated California Historical Landmarks (CHLs) are numbered sequentially as they are listed by the State Historical Resources Commission. CHLs numbered 770 and higher are

automatically listed in the California Register. According to PRC Section 5031(a), to be eligible for California Historical Landmark designation, a property must be of "statewide historical importance" and must demonstrate its statewide significance by meeting one of the following three requirements:

- The property is the first, last, only, or most significant historical property of its type in the region. The regions are Southern California, Central California, and Northern California. If a property has lost its historic appearance (integrity), it may not be listed as a site.
- The property is associated with an individual or group having a profound influence on the history of California. The primary emphasis should be the place or places of achievement of an individual. Birthplace, death place, or place of interment shall not be a consideration unless something of historical importance is connected with his or her birth or death. If a property has lost its historic appearance (integrity), it may not be listed as a site.
- The property is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or is one of the more notable works, or the best surviving work in a region, of a pioneer architect, designer, or master builder.

3.1.2.4 California Points of Historical Interest

California Points of Historical Interest include "sites, buildings, features, or events that are of local (city or county) significance and have an anthropological, cultural, military, political, architectural, economic, scientific, or technical, religious, experimental, or other value." Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register. To be designated, a property must meet at least one of the following criteria:

- The first, last, only, or most significant of its type within the local geographic region (city or county);
- Associated with an individual or group having a profound influence on the history of the local area; or
- A prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

3.2 Delineation of Area of Potential Effects

The project-specific APE (Figures E-1 through E-9, Appendix E) was established through consultation between the lead federal agency, FTA, the lead CEQA agency, Metro, the SHPO,

and other consulting parties in accordance with 36 CFR 800.16(d). Section 106 defines an APE as:

> the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

The project APE was delineated to ensure identification of significant cultural resources that may be directly or indirectly affected by the project, and are listed in or eligible for inclusion in the National and/or California Register. The APE was established using methodology consistent with those of previous Metro projects (Figures E-1 through E-9, Appendix E). The 1.9-mile-long APE consists of 213 Los Angeles County Office of the Assessor parcels, some of which are subdivided into multi-property entities.

The proposed project APE was determined by consensus between the undertaking's lead federal agency, FTA, and consulting parties, led by the SHPO. The California OHP defines the boundaries within which properties are identified and evaluated for their historic significance, and effects of the proposed project are analyzed. The project APE was approved on September 9, 2009. Correspondence between FTA and SHPO for this project is included in Appendix D.

For archaeological and paleontological resources, the proposed direct APE includes the proposed at-grade and underground right-of-way and/or areas of direct ground disturbance. The direct APE also includes areas with permanent site improvements and areas for staging and temporary construction activities. For much of the project alignment, the direct APE includes the full width of the street along which the alignment runs, as well as the adjacent sidewalks. The direct APE includes additional street segments and portions of adjacent city blocks in areas of proposed stations, connections with existing rail lines, alignments that deviate from existing streets, and staging areas.

To anticipate effects that may result by implementing both above-ground and subterranean construction and implementation, the proposed vertical APE extends from approximately the existing ground surface to 25 feet above the existing ground surface and approximately 100 feet below the existing ground surface.

3.3 Native American Coordination

SWCA contacted the California Native American Heritage Commission (NAHC) by letter dated February 10, 2009, requesting a review of the Sacred Lands File and a list of appropriate Native American contacts for the project. The NAHC search of the Sacred Lands File

indicated the presence of Native American cultural resources in the project area. The NAHC also provided a list of five Native American contacts.

SWCA sent letters via U.S. mail to the five Native American contacts on April 16, 2009, requesting information regarding potential cultural resources that may be located within the project APE. These letters included location maps and a description of the proposed project and its related APE (Appendix B). A follow-up contact with each group was made via telephone on May 11, 2009, and subsequent follow-ups via telephone and/or email were made as necessary. Not all of the contacts responded.

One of the groups, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, expressed dismay with Metro because the Band had never been contacted by anyone about the Metro Gold Line to East Los Angeles project, which was completed in November 2009. Tribal Chairperson Anthony Morales stated that he was concerned with the proposed project's proximity to the prehistoric village of Yangna and considers the project area highly sensitive for Native American resources and sacred places.

Mr. Morales further stated that he is aware that cultural resources, including human remains, have been uncovered during construction of various projects in the downtown area, and he wants Metro to know that his tribe has concerns.

A second tribe, the Tongva Ancestral Territorial Tribal Nation, responded via email that it objects to the proposed project and would like to prepare a detailed response, but has not received sufficient information to do so.

Metro is consulting with the Gabrieleno/Tongva San Gabriel Band of Mission Indians and Tongva Ancestral Territorial Tribal Nation should the project proceed. Details of SWCA's contacts with the Gabrieleno/Tongva San Gabriel Band of Mission Indians and Tongva Ancestral Territorial Tribal Nation are provided in Table 3-1.

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
Cindi Alvitre Ti'At Society 6515 E. Seaside Walk, #C Long Beach, CA 90803	4/16/09, via U.S. Priority Mail		5/11/09, message and email by Kip Harper (KH)	Left message. No further action necessary.
Robert Dorame Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707	4/16/09, via U.S. Priority Mail	5/11/09, telephone call from Mr. Dorame	5/11/09, telephone and email by KH	Mr. Dorame suggested that we look at historic maps/roadways. He said that he received the letter and would review the information and would respond via letter/email. He said that if we did not hear from him, then he had no response. SWCA re-sent the letter via email to facilitate his response. No response received. No further action necessary.
Sam Dunlap Gabrielino Tongva Nation P.O. Box 86908 Los Angeles, CA 90086	4/16/09, via U.S. Priority Mail		5/11/09, telephone and email by KH	Left message. No further action necessary.
Anthony Morales Gabrieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778	4/16/09, via U.S. Priority Mail	4/17/09, telephone call from Mr. Morales	4/17/09, telephone by KH	On 4/17/09, Mr. Morales left a message stating that he wanted to talk about the project. On 4/17/09, K. Harper spoke to Mr. Morales about the proposed project. Mr. Morales expressed dismay that Metro had never contacted him about the Gold Line Extension project. Mr. Morales stated that he is concerned with the Regional

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
				Connector's proximity to the village of Yangna. In addition, he stated that he considers the project area to be highly sensitive for Native American resources and sacred places considering that the project is located in the heart of the city. Mr. Morales said that he is aware that cultural resources have been uncovered during construction of pipelines in the downtown area, and that human remains were uncovered during construction of the Metropolitan Water District building. Mr. Morales wants Metro to know that a local tribe—the Gabrielino—has concerns. SWCA recommends that Metro consult with the Gabrielino/Tongva San Gabriel Band of Mission Indians.
John Tommy Rosas Tongva Ancestral Territorial Tribal Nation (TATTN)	4/16/09, via email (Samantha Murray)	4/16/09, via email; 4/17/09 via email; 5/11/09 via email	4/17/09, email by KH 5/11/09, email by KH	On 4/17/09, K. Harper responded to Mr. Rosas' email stating that his comments were received. Mr. Rosas responded via email on 4/17/09. In his email, Mr. Rosas stated that he objects to the proposed project "on the grounds that it[']s a growth inducing negative impact under CEQA, on violations to our indigenous rights, and that the TATTN lands are ours and so the claimed land titles by project [owners] is defective and illegal."

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
				On 4/17/09, Mr. Rosas also responded stating that he would send a more detailed response. No response was received. On 5/11/09, K. Harper emailed Mr. Rosas to follow up on his 4/17/09 response to facilitate his response. Mr. Rosas responded stating "Your information attachment-does not contain any environmental construction reports or details so we can continue our detailed response." Mr. Rosas did not provide any consequential information regarding cultural resource in the project area. SWCA recommends that Metro consult with the TATTN.

4.0 AFFECTED ENVIRONMENT

The project is located within the City of Los Angeles in Los Angeles County, California. Specifically, the direct APE extends in a northeasterly direction from the intersection of Flower and 7th Streets to the Gold Line at Alameda Street between 2nd and Temple Streets within downtown Los Angeles. The project crosses several communities of downtown Los Angeles, including the Bunker Hill, Historic Core, Civic Center, and Little Tokyo communities.

This area is highly urbanized, with development ranging from commercial to public and institutional uses. Most of the native vegetation has been removed and replaced by non-native trees and grasses. Elevations range from 250 to 270 feet (76 to 82 meters) above mean sea level. The nearest natural water source includes the now channelized course of the Los Angeles River, located approximately 0.72 miles (1.1 km) east of the project area.

The climate within the project area is typified by hot, dry summers with moderate winter precipitation. Summers are influenced by a high-pressure zone associated with descending dry air from the upper atmosphere. This persistent high pressure generally prevents rain-bearing storms from entering the area, keeping summers dry.

Summer temperatures can be hot, commonly reaching 80 or 90 degrees Fahrenheit (°F) and sometimes exceeding 100°F. Autumn brings the Santa Ana winds, which blow from the Mojave Desert westward toward the Pacific Ocean. Winter is generally characterized by alternating sporadic rainstorms with predominantly clear, sunny days (Schoenherr 1992).

4.1 Cultural Setting

4.1.1 Prehistoric Overview

Numerous chronological sequences have been devised to help understand cultural changes within southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's (1955) synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984), this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades (Byrd and Raab 2007).

Several revisions have been made to Wallace's (1955) synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Mason and Peterson 1994; Koerper et al. 2002). The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented in this memorandum is a composite of

information in Wallace (1955) and Warren (1968) as well as more recent studies, including Koerper and Drover (1983).

4.1.1.1 Horizon I – Early Man (ca. 10,000–6,000 B.C.)

When Wallace defined the Horizon I (Early Man) period in the mid-1950s, there was little evidence of human presence on the southern California coast prior to 6000 B.C. Archaeological work in the intervening years has identified numerous pre-8000 B.C. sites, both on the mainland coast and the Channel Islands (e.g., Erlandson 1991; Johnson et al. 2002; Moratto 1984; Rick et al. 2001).

The earliest accepted dates for occupation are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area about 10,000 years ago (Erlandson 1991). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego Counties contain several sites dating to 9,000 to 10,000 years ago (Byrd and Raab 2007; Macko, 1998a; Mason and Peterson 1994; Sawyer and Koerper 2006).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones, et al. 2002) and on Pleistocene lake shores in eastern San Diego County (Moratto 1984). Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Dillon 2002; Erlandson, et al. 1987), it is generally thought that the emphasis on hunting may have been greater during Horizon I than in later periods. Common elements in many sites from this period include, for example, leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents (Wallace 1978).

Subsistence patterns shifted around 6000 B.C. coincident with the gradual desiccation associated with the onset of the Altithermal climatic regime, a warm and dry period that lasted for about 3,000 years. After 6000 B.C., a greater emphasis was placed on plant foods and small animals.

4.1.1.2 Horizon II – Milling Stone (6000–3000 B.C.)

The Milling Stone Horizon of Wallace (1955, 1978) and Encinitas Tradition of Warren (1968) (6000 to 3000 B.C.) are characterized by subsistence strategies centered on collecting plant foods and small animals. Food procurement activities included hunting small and large terrestrial mammals, sea mammals, and birds; collecting shellfish and other shore species; near-shore fishing with barbs or gorges; processing yucca and agave; and extensively using seed and plant products (Kowta 1969; Reinman 1964).

The importance of seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages; namely, milling stones (metates and slabs) and handstones (manos and mullers). Milling stones occur in large numbers for the first time during this period, and are even more numerous near the end of this period. Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Milling Stone Horizon sites are common in the southern California coastal region between Santa Barbara and San Diego, and at many inland locations, including the Prado Basin in western Riverside County and the Pauma Valley in northeastern San Diego County (e.g., Herring 1968; Langenwalter and Brock 1985; Sawyer and Brock 1999; Sutton 1993; True 1958). Wallace (1955, 1978) and Warren (1968) relied on several key coastal sites to characterize the Milling Stone period and Encinitas Tradition, respectively. These include the Oak Grove Complex in the Santa Barbara region, Little Sycamore in southwestern Ventura County, Topanga Canyon in the Santa Monica Mountains, and La Jolla in San Diego County. The well-known Irvine site (CA-ORA-64) has occupation levels dating between ca. 6000 and 4000 B.C. (Drover, et al. 1983; Macko 1998b).

Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites.

Kowta (1969) attributes the presence of numerous scraper-planes in Milling Stone sites to preparation of agave or yucca for food or fiber. The mortar and pestle, associated with pounding foods such as acorns, were first used during the Milling Stone Horizon (Wallace 1955, 1978; Warren 1968).

Cogged stones and discoidals are diagnostic Milling Stone period artifacts, and most specimens have been found within sites dating between 4000 and 1000 B.C. (Moratto 1984). The cogged stone is a ground stone object with gear-like teeth on its perimeter. Discoidals are similar to cogged stones, differing primarily in their lack of edge modification. Discoidals are found in the archaeological record subsequent to the introduction of the cogged stone.

Cogged stones and discoidals are often purposefully buried, and are found mainly in sites along the coastal drainages from southern Ventura County southward, with a few specimens inland at Cajon Pass, and heavily in Orange County (Dixon 1968; Moratto 1984). These artifacts are often interpreted as ritual objects (Eberhart 1961; Dixon 1968), although alternative interpretations (such as gaming stones) have also been suggested (e.g., Moriarty and Broms 1971).

Characteristic mortuary practices of the Milling Stone period or Encinitas Tradition include extended and loosely flexed burials, some with red ochre, and few grave goods such as shell beads and milling stones interred beneath cobble or milling stone cairns. "Killed" milling stones, exhibiting holes, may occur in the cairns. Reburials are common in the Los Angeles County area, with north-oriented flexed burials common in Orange and San Diego Counties (Wallace 1955, 1978; Warren 1968).

Koerper and Drover (1983) suggest that Milling Stone period sites represent evidence of migratory hunters and gatherers who used marine resources in the winter and inland resources for the remainder of the year. Subsequent research indicates greater sedentism than previously recognized.

Evidence of wattle-and-daub structures and walls has been identified at several sites in the San Joaquin Hills and Newport Coast area (Koerper 1995; Strudwick 2005), while numerous early house pits have been discovered on San Clemente Island (Byrd and Raab 2007). This architectural evidence and seasonality studies suggest semi-permanent residential base camps that were relocated seasonally (de Barros 1996; Koerper, et al. 2002; Mason, et al. 1997) or permanent villages from which a part of the population left at certain times of the year to exploit available resources (Cottrell and Del Chario 1981).

4.1.1.3 Horizon III – Intermediate (3000 B.C.–A.D. 500)

Following the Milling Stone Horizon, Wallace's Intermediate Horizon and Warren's Campbell Tradition in Santa Barbara, Ventura, and parts of Los Angeles Counties, date from approximately 3000 B.C. to 500 A.D. and are characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. The Campbell Tradition (Warren 1968) incorporates David B. Rogers' (1929) Hunting Culture and related expressions along the Santa Barbara coast. In the San Diego region, the Encinitas Tradition (Warren 1968) and the La Jolla Culture (Moriarty 1966; Rogers 1939, 1945) persist with little change during this time.

During the Intermediate Horizon and Campbell Tradition, there was a pronounced trend toward greater adaptation to regional or local resources. For example, an increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites along the California coast during this period. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks become part of the toolkit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period.

Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave deserts between ca. 2000 B.C. and A.D. 500, to be

diagnostic of this period. Bone tools, including awls, were more numerous than in the preceding period, and the use of asphaltum adhesive was common.

Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment. Hopper mortars and stone bowls, including steatite vessels, appeared in the toolkit at this time as well. This shift appears to correlate with the diversification in subsistence resources.

Many archaeologists believe this change in milling stones signals a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow, et al. 1988; True 1993). It has been argued that mortars and pestles may have been used initially to process roots (e.g., tubers, bulbs, and corms associated with marshland plants), with acorn processing beginning at a later point in prehistory (Glassow 1997) and continuing to European contact.

Characteristic mortuary practices during the Intermediate Horizon and Campbell Tradition included fully flexed burials, placed face down or face up, and oriented toward the north or west (Warren 1968). Red ochre was common, and abalone shell dishes infrequent. Interments sometimes occurred beneath cairns or broken artifacts. Shell, bone, and stone ornaments, including charmstones, were more common than in the preceding Encinitas Tradition.

Some later sites include *Olivella* shell and steatite beads, mortars with flat bases and flaring sides, and a few small points. The broad distribution of steatite from the Channel Islands and obsidian from distant inland regions, among other items, attest to the growth of trade, particularly during the later part of this period. Howard and Raab (1993) have argued that the distribution of *Olivella* grooved rectangle beads marks "a discrete sphere of trade and interaction between the Mojave Desert and the southern Channel Islands" (Byrd and Raab 2007).

4.1.1.4 Horizon IV – Late Prehistoric (A.D. 500–Historic Contact)

In the Late Prehistoric Horizon (Wallace 1955, 1978), which lasted from the end of the Intermediate Horizon (ca. A.D. 500) until European contact, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts.

The recovery of a greater number of small, finely chipped, projectile points, usually stemless with convex or concave bases, suggests an increased utilization of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and

personal ornaments made from shell, bone, and stone. There is also an increased use of asphalt for waterproofing and as an adhesive.

Many Late Prehistoric sites contain beautiful and complex objects of utility, art, and decoration. Ornaments include drilled whole venus clam (*Chione* spp.) and drilled abalone (*Haliotis* spp.). Steatite effigies become more common, with scallop (*Pecten* spp. and *Argopecten* spp.) shell rattles common in middens.

Mortuary customs are elaborate and include cremation and interment with abundant grave goods. By A.D. 1000, fired clay smoking pipes and ceramic vessels began to appear at some sites (Drover 1971, 1975; Meighan 1954; Warren and True 1961).

The scarcity of pottery in coastal and near-coastal sites implies ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

There was an increase in population size during this period, accompanied by the advent of larger, more permanent villages (Wallace 1955). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura Counties; the Takic or Numic Tradition is present in the Los Angeles, Orange, and western Riverside Counties region; and the Yuman Tradition is present in the San Diego region.

The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are thought to be the result of a migration of people to the coast from inland desert regions to the east. In addition to the small triangular and side-notched points similar to those found in the desert regions in the Great Basin and Lower Colorado River, Colorado River pottery and introduction of cremation in the archaeological record are diagnostic of the Yuman Tradition in the San Diego region. This combination suggests a strong influence from the Colorado Desert region.

In Los Angeles, Orange, and western Riverside Counties, similar changes (introduction of cremation, pottery, and small triangular arrow points) are thought to be the result of a Takic migration to the coast from inland desert regions. This Takic, or Numic, Tradition was

formerly referred to as the "Shoshonean wedge" or "Shoshonean intrusion" (Warren 1968). This terminology, used originally to describe a Uto-Aztecan language group, is generally no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups who spoke Numic languages (Heizer 1978; Shipley 1978). Modern Gabrielino/Tongva, Juaneño, and Luiseño in this region are considered the descendents of the prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during this period or perhaps somewhat earlier.

4.1.2 Ethnographic Overview

The project area is located in the heart of Gabrielino/Tongva territory (Bean and Smith 1978; Kroeber 1925). Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There is documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

4.1.2.1 Gabrielino/Tongva

The name Gabrielino denotes those people who were administered by the Spanish from Mission San Gabriel, including people from the Gabrielino area proper as well as other social groups (Bean and Smith 1978; Kroeber 1925). Therefore, in the post-Contact period, the name does not necessarily identify a specific ethnic or tribal group.

The names by which Native Americans in southern California identified themselves have, for the most part, been lost. Many contemporary Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and refer to themselves as the Tongva (King 1994). This term is used in the remainder of this section to refer to the pre-Contact inhabitants of the Los Angeles Basin and their descendants.

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands, San Clemente, San Nicolas, and Santa Catalina. Their mainland territory was bounded on the north by the Chumash at Topanga Creek, the Serrano at the San Gabriel Mountains in the east, and the Juaneño on the south at Aliso Creek (Bean and Smith 1978; Kroeber 1925).

The Tongva language, as well as that of the neighboring Juaneño/Luiseño, Tatataviam/Alliklik, and Serrano, belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin area (Mithun 2004). This language family's origin differs substantially from that of the Chumash to the north and the Ipai, Tipai, and Kumeyaay farther south. The language of the Ipai, Tipai, and Kumeyaay is derived from the California-Delta branch of the Yuman-Cochimi language family, which originated in the American Southwest (Mithun 2004).

The Chumash language is unlike both the Yuman-Cochimi and Uto-Aztecan families, and may represent a separate lineage (Mithun 2004). Linguistic analysis suggests that Takic-speaking immigrants from the Great Basin area began moving into southern California around 500 B.C. (Kroeber 1925). This migration may have displaced both Chumashan- and Yuman-speaking peoples, but the timing and extent of the migrations and their impact on indigenous peoples is not well understood.

The Tongva language consisted of two main dialects, Eastern and Western; the Western group included much of the coast and the Channel Island population (King 2004). Lands of the Western group encompassed much of the western Los Angeles Basin and San Fernando Valley, northward along the coast to the Palos Verdes Peninsula (McCawley 1996).

Tongva society was organized along patrilineal non-localized clans, a characteristic Takic pattern. Clans consisted of several lineages, each with their own ceremonial leader. The chief, or *tómyaar*, always came from the primary lineage of the clan/village. One or two clans generally made up the population of a village.

Even though the Tongva did not have a distinctly stratified society, there were two general classes of individuals: elites and commoners. The elites consisted of primary lineage members, other lineage leaders (who maintained a separate ceremonial language), the wealthy, and the elite families of the various villages who commonly married among themselves. The commoner class contained those from "fairly well-to-do and long-established lineages" (Bean and Smith 1978). A third, lower class consisted of slaves taken in war and individuals, unrelated to the inhabitants, who drifted into the village.

The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000 (Bean and Smith 1978), but recent ethnohistoric work suggests a number more likely approaching 10,000 (O'Neil 2002).

Several Tongva villages appear to have served as trade centers, largely due to their centralized geographic position in relation to the Southern Channel Islands and other tribes. These villages maintained particularly large populations and hosted annual trade fairs that would bring their population to 1,000 or more for the duration of the event (McCawley 1996).

Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Fields for races and games, such as lacrosse and pole throwing, were cleared adjacent to Tongva villages (McCawley 1996).

The Tongva subsistence economy was based on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal ecological niches. As with most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh- and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978; Kroeber 1925; McCawley 1996).

A wide variety of tools and implements were employed by the Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Many plant foods were collected with woven seed beaters, several forms of burden baskets, carrying nets, and sharpened digging sticks, sometimes with stone weights fitted onto them.

Groups residing near the ocean used ocean-going plank canoes (known as a *ti'at*) and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. The ocean-going canoes were capable of holding six to 14 people and were used for travel and trade between the mainland and the Channel Islands. The tule balsa canoes were used for near-shore fishing (Blackburn 1963; McCawley 1996).

Tongva people processed food with a variety of tools, including portable and bedrock mortars, pestles, basket hopper mortars, manos and metates, hammerstones and anvils, woven strainers and winnowers, leaching baskets and bowls, woven parching trays, knives, bone saws, and wooden drying racks. Food was consumed from a number of woven and carved wood vessels.

The ground meal and unprocessed hard seeds were stored in large, finely woven baskets, and the unprocessed acorns were stored in large granaries woven of willow branches raised off the ground on platforms. Santa Catalina Island steatite was used to make comals, ollas, and cooking vessels that would not crack after repeated firings. In addition to cooking vessels, steatite was used to make effigies, ornaments, and arrow straighteners (Blackburn 1963; Kroeber 1925; McCawley 1996).

The Tongva participated in an extensive exchange network, trading coastal goods for inland resources. They exported Santa Catalina Island steatite products, roots, seal and otter skins, fish and shellfish, red ochre, and lead ore to neighboring tribes, as well as people as far away as the Colorado River. In exchange they received ceramic goods, deer skin shirts, obsidian, acorns, and other items. This burgeoning trade was facilitated by the use of craft specialists, a standard medium of exchange (*Olivella* bead currency), and the regular destruction of valuables in ceremonies, which maintained a high demand for these goods (McCawley 1996).

At the time of Spanish contact, the basis of Tongva religious life was the *Chinigchinich* cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices (McCawley 1996).

Deceased Tongva were either buried or cremated, with inhumation being more common on the Channel Islands and the neighboring mainland coast and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966), as well as scattered among broken ground stone implements (Cleland, et al. 2007). Archaeological data such as this correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Dakin 1978; Johnston 1962; McCawley 1996). At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period (McCawley 1996).

4.1.2.2 Native American Communities in Los Angeles

Ethnohistoric data indicate that the Gabrielino ethnographic village of *Yaanga* (*Yang-na*, *Yabit*, or other spellings) was located in or near the original Pueblo of Los Angeles. In 1852, Hugo Reid indicated that *Yang-na* and Los Angeles were one and the same (Dakin 1978). Gabrielino informant José Zalvidea told ethnographer J. P. Harrington that *Yaanga* "is the old name of the site of the Los Angeles plaza" and the name means "it is alkali, like the earth is salty" (McCawley 1996).

Alternative names associated with the community include *Iyakha* (meaning "poison oak" in Luiseño) and *Wenot* (meaning "river" in Gabrielino). *Yaanga* was abandoned prior to 1836, but was succeeded by a series of Native American settlements in the same area. The community of *Geveronga*, which contributed 31 neophytes to the San Gabriel Mission between 1788 and 1809, may have been located nearby (McCawley 1996).

The precise location of Contact-era (late seventeenth century) Native American communities within downtown Los Angeles, including *Yaanga*, *Geveronga*, and related settlements, is unclear. Historical records place *Yaanga* in the vicinity of the pueblo plaza, which was located less than 0.25 mile north northwest of the project area, although historians and archaeologists have presented multiple possible village locations within this general area (Applied Earthworks 1999).

The archaeological evidence for these settlements is not clear-cut. Early Spanish period Native American deposits have been identified in several locations, the most significant being the cemetery next to Union Station. It is unclear whether this cemetery was adjacent to, affiliated with, or precisely contemporary with *Yaanga* (Applied Earthworks 1999).

The preponderance of available evidence indicates that early historic Native American communities in the area were situated near the Los Angeles River, which is currently located approximately 0.5 mile east of the project. Consequently, the project has the potential to encounter archaeological deposits associated with these communities.

4.1.3 Historic Overview

The post-Contact history of California is divided into three periods: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

4.1.3.1 Spanish Period (1769–1822)

The first Europeans to observe what became southern California were members of the 1542–1543 expedition of Juan Rodriguez Cabrillo. Cabrillo noted the numerous campfires of the Gabrielino and thus named the area the Bay of Smokes. Cabrillo and other early explorers sailed along the coast and made limited expeditions into Alta (upper) California between 1529 and 1769. Although Spanish, Russian, and British explorers briefly visited Alta California during this nearly 250-year span, they did not establish permanent settlements (Starr 2007).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at San Diego in 1769. Mission San Diego de Alcalá was the first of 21 missions built by the Spanish between 1769 and 1823. Portolá continued north, passing through the project area and reaching San Francisco Bay on October 31, 1769.

On September 4, 1781, 12 years after the Portolá's initial visit, a dozen families from Sonora, Mexico founded *El Pueblo de la Reina de los Angeles* under the specific directions of Governor Felipe de Neve (Robinson 1979:238). The site chosen for the new pueblo was elevated on a broad terrace one-half mile west of the river (Gumprecht 1999). As a planned pueblo (one of only three in California), four square leagues (about 28 square miles) of land were set aside for the settlement (Robinson 1979).

The area's rich, well-watered soils created an ideal locale for a town meant to supply livestock and feed to the presidios of San Diego and Santa Barbara, and to serve as a home for retired Spanish soldiers. The soldiers were given vast tracts of land to start farms and ranches.

To expand their herds of cattle, colonists enlisted the labor of the surrounding Indian population (Engelhardt 1927b). By 1786, the flourishing pueblo attained self-sufficiency, and funding by the Spanish government ceased. Fed by a steady supply of water and an

expanding irrigation system, agriculture and ranching grew, and by the early 1800s the pueblo produced 47 different agricultural products (Gumprecht 1999).

The process of converting the local Native American population to Christianity through baptism and relocation to mission grounds began in this region by the Franciscan padres at the San Gabriel Mission, which was established in 1771 (Engelhardt 1927a). The San Fernando Mission was founded 26 years later, its location chosen as a stopping point between the San Gabriel and San Buenaventura missions (Engelhardt 1927b).

The majority of the Native Americans from the Los Angeles Basin were persuaded to settle in the vicinity of the two missions. These included the Eastern Gabrielino of the plains as far south as the Santa Ana River and west to the Los Angeles River. The padres also proselytized the Serrano of the San Gabriel and San Bernardino Mountains, the Vanyume Serrano of the Mojave Desert, many of the western Cahuilla in the Coachella and San Jacinto Valley, some Luiseño of the San Jacinto Valley, and Western Gabrielino of the plains west of the Los Angeles River, San Fernando Valley, and the southern Channel Islands.

The missions were charged with administering to the Indians within their areas. Although mission life gave the Indians skills needed to survive in their rapidly changing world, the close quarters and regular contact with Europeans transmitted diseases for which they had no immunity, decimating their populations (McCawley 1996).

4.1.3.2 Mexican Period (1822–1848)

After the end of the Mexican Revolution against the Spanish crown (1810–1821), all Spanish holdings in North America (including both Alta and Baja California) became part of the new Mexican republic. Alta California became a state in 1821, and Los Angeles selected its first city council the following year.

Independence and removal of economic restrictions attracted settlers to Los Angeles, and the town slowly grew in size, expanding to the south and west. The population nearly doubled during this period, rising from 650 to 1,250 between 1822 and 1845 (Weber 1992). Until 1832, Los Angeles was essentially a military post, with all able-bodied males listed on the muster rolls and required to perform guard duty and field duty whenever circumstances required (Los Angeles County 1963). The Mexican Congress elevated Los Angeles from pueblo to city status in 1835, declaring it the new state capital (Robinson 1979).

Under Mexican rule, the authority of the California missions gradually declined, culminating with their secularization in 1834. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its neophytes, the majority of these holdings quickly fell into non-Indian hands. Mission buildings were abandoned and quickly fell into decay.

If mission life was difficult for Native Americans, secularization was worse. After two generations of dependence upon the missions, they were suddenly disenfranchised. After secularization, "nearly all of the Gabrielinos went north while those of San Diego, San Luis and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required" (Dakin 1978).

Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land. Most of the land grants to Mexican citizens in California (Californios) were located inland, a policy intended to increase the population away from the coastal areas where the Spanish settlements were concentrated (Dakin 1978).

After years of surreptitious commerce, the first party of American immigrants arrived in Los Angeles in 1841, including William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands (Wilkman and Wilkman 2006). Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999).

4.1.3.3 American Period (1848–Present)

The United States took control of California in 1846, seizing Monterey, San Francisco, San Diego, and Los Angeles with little resistance. Los Angeles soon slipped from American control, however, and needed to be retaken in 1847.

Approximately 600 U.S. sailors, marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of 1847 to challenge the California resistance, which was led by General Jose Maria Flores. The American party scored a decisive victory over the Californios in the Battle of the Rio San Gabriel and at the Battle of La Mesa the following day, effectively ending the war and opening the door for increased American immigration (Harlow 1992).

Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, Arizona, New Mexico, Wyoming, and parts of Colorado. This represented nearly half of Mexico's pre-1846 holdings. California joined the Union in 1850 as the 31st state (Wilkman and Wilkman 2006).

Although the discovery of gold in northern California in 1848 gave rise to the California gold rush, Los Angeles was where the first California gold was found. Francisco López had found several gold nuggets clinging to wild onion roots near the San Fernando Mission in 1842 (Guinn 1977; Workman 1935). The big strike at Sutter's Creek seven years later led to an

enormous influx of American citizens in the 1850s and 1860s, and these "forty-niners" rapidly displaced the old rancho families.

One year after discovering gold, nearly 90,000 people journeyed to the California gold fields. With most miners drawn to central California by its well-known strikes, Los Angeles attracted people who were largely peripheral to the gold rush, including a healthy contingent of gamblers (Robinson 1979).

Surrounded by miles of ranchos, Los Angeles was the center of a vibrant cattle industry throughout the nineteenth century. The city served as a trading hub for southern California's "cow counties," and at mid-century the plaza was lined with the shops and town homes of ranch owners (Robinson 1979). In 1835, Los Angeles County had approximately 75,000 to 100,000 cattle, 1,700 horses, and 13,000 sheep, and produced about 4,000 bushels of cereal and legumes each year (Los Angeles County 1963).

Agricultural interests were gradually supplanted by more urban industries, with about a third of Los Angeles residents supporting themselves with non-agricultural pursuits by 1836 (Weber 1992). By 1853, the population of the state exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after completion of the transcontinental railroad in 1869.

When the Southern Pacific Railroad extended its line from San Francisco to Los Angeles in 1876, it signaled the beginning of Los Angeles' first major growth spurt. Newcomers poured into the city, nearly doubling the population between 1870 and 1880.

Completion of the second transcontinental line, the Santa Fe, took place in 1886, causing a price war that drove fares to an unprecedented low, including a promotional one-way ticket from Kansas City that sold for one dollar. More settlers continued to head west and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities.

The large ranchos that surrounded the City were each annexed, subdivided, and developed in turn. Los Angeles' population more than quadrupled in a decade, from 11,183 in 1880 to 50,395 by 1890 (Meyer 1981; Robinson 1979; Wilkman and Wilkman 2006). During the first three decades of the twentieth century, more than 2 million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area (Gumprecht 1999).

4.1.3.4 City of Los Angeles

The Spanish Governor of California, Felipe de Neve, recognized the need to establish a pueblo north of the Mission San Gabriel to help supply Spain's military Presidios in California as well as maintain Spain's control over the region. On September 4, 1781, 22 settlers from Mexico

accompanied by the governor, soldiers, mission priests, and several Native Americans arrived at the site alongside the Los Angeles River, which was officially declared *El Pueblo de la Reina de los Angeles,* or the Town of the Queen of the Angels (Ríos-Bustamante 1992).

Less than one month after the pueblo's founding, Los Angeles residents began constructing an extensive water management system. They diverted water from the river (near the present N. Broadway bridge) into a ditch named the *Zanja Madre* (mother ditch), which in turn fed numerous smaller zanjas. The city's residents used this water for ranching and agriculture, as well as domestic purposes such as drinking, bathing, and clothes washing (Newmark 1977). The Los Angeles zanja system was expanded and improved in subsequent decades and remained in use until the early 1900s.

Many zanja segments were converted into masonry-lined canals, iron or cement pipes, or brick-lined, subsurface conduits (Costello and Wilcoxon 1978; Gumprecht 1999; Slawson 2006). The early construction, extensive footprint, and longevity of this water system are evidence of its great importance to the city.

The Pueblo of Los Angeles grew in population during the Mexican period, but retained an emphasis on ranching as the primary economic activity. Mexican governors granted numerous ranchos during this period, and the few granted during the Spanish period continued to operate or were broken up into smaller ranchos.

On May 23, 1835, Los Angeles was officially declared a city by Mexican national decree (Bancroft 1886). During the Mexican period, Anglo-Americans such as Hugo Reid and Don Juan Forster were assimilated into Los Angeles's citizenry and culture (Dakin 1978).

On April 4, 1850, only two years after the Mexican American War and five months prior to California receiving statehood, the City of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period; the transition of many former rancho lands to agriculture and development of citriculture in the late 1800s further strengthened this status (Caughey and Caughey 1977).

These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the real estate boom of the 1880s in Los Angeles (Caughey and Caughey 1977; Dumke 1944). The boom's fiscal impact can be observed through the city's tax assessments: in 1886, Los Angeles was assessed $18 million; in 1889, the total was $46 million (Dumke 1944). Since the real estate boom largely occurred in surrounding areas, Los Angeles, as the commercial center, reaped substantial benefits from the explosive growth.

The City of Los Angeles recognized the need for water to sustain the growing population in the late 1800s, and Irish immigrant William Mulholland personified the city's efforts to establish a plentiful and stable water supply (Dumke 1944; Nadeau 1997). The city purchased

large tracts of land in the Owens Valley, and Mulholland planned and directed the construction of the 240-mile aqueduct that brought the valley's water to the city by 1913 (Nadeau 1997).

Los Angeles continued to grow in the twentieth century in part due to the discovery of oil in the area and its strategic location as a wartime port. The military presence led to the aviation and eventually aerospace industries having a large presence in the city and region.

Mines Field, which would become Los Angeles International Airport (LAX), was established in 1928. The complexion of this multicultural city continued to change; however, the process was frequently painful for new and often unwelcome ethnic groups (Garcia et al. 2004).

Hollywood became the entertainment capital of the world through the presence of film and television industries and continues to tenuously maintain that position. With nearly four million residents, Los Angeles is the second largest city in the U.S. (by population) and remains a city with worldwide influence, while continuing to struggle with its population's growth and needs.

4.2 CHRIS Literature Search

A cultural resources records search for the Regional Connector Transit Corridor project was performed by SWCA at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) on February 10, 2009 (Appendix A). Subsequent requests for information were made in March, April, and May 2009. The records search included a review of the available documents and site records within a 0.25-mile radius of the project area. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places – Listed Properties (2006, updated to present)
- California Register of Historical Resources (2006, and review of minutes from State Historic Resources Commission meetings thereafter)
- California Inventory of Historical Resources (1976)
- California State Historical Landmarks (1996 and updates)
- California Points of Historical Interest (1992 and updates)
- Office of Historic Preservation Historic Property Directory and Determinations of Eligibility (2008)

- Survey of Surveys: A Summary of California's Historical and Architectural Resource Surveys (1986)
- Five Views: An Ethnic Sites Survey for California (1988)

The records search focused on obtaining information about private and public lands located within a 0.25-mile search radius of the project alignment.

4.2.1 Previous Studies in 0.25-mile Radius of APE

Downtown Los Angeles has been the subject of a large number of cultural resources studies in the last three decades. The SCCIC records search identified 143 prior cultural resources studies within a 0.25-mile radius of the direct APE. Of these, 23 studies were located within the direct APE and 12 were adjacent to the direct APE (Table 4-1).

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA447	Preliminary Evaluation of Cultural Resources Located Along a Series of Proposed Urban Mass Transit System Alignment Alternatives in the City of Los Angeles, California	Singer, C.	unknown	within
LA483	Archaeological Resources Survey for the Proposed Downtown People Mover Project	Greenwood, R.	1978	within
LA982	Archaeological Resource Survey and Impact Assessment of a Proposed Parking Lot, Los Angeles, California	Bove, F.	1977	within
LA1578	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	Westec Services, Inc.	1983	within
LA1770	Report of Archaeological Reconnaissance Survey of: ESA Project 7217B, City of Los Angeles, Los Angeles County, CA	Salls, R.	1989	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA3103	Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1	Greenwood, R.	1993	within
LA3668	St. Vibiana's Cathedral Los Angeles, California	Dillon, B.	1997	within
LA3813	An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California	Peak & Associates	1992	within
LA4215	Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, Near West Third Street and South Grand Avenue, City and County of Los Angeles	Conkling, S.	1998	adjacent
LA4263	General Services Administration Federal Center: Archaeological Assessment Report Phase	Padon, B.	1986	within
LA4448	Section 106 Documentation for the Metro Rail Red Line East Extension in the City and County of Los Angeles, California	Anonymous	1994	within
LA4742	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-01, County of Los Angeles, California	Lapin, P.	1999	within
LA4836	Phase I Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	Science Applications International Corporation	2000	adjacent
LA5093	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 679-11, County of Los Angeles, CA	Duke, C.	1999	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE				
SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA5098	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA-226-01, County of Los Angeles, CA	Duke, C.	1999	adjacent
LA5200	Assessment of Archaeological and Paleontological Sensitivity on the Proposed California Department of Transportation District 7 Headquarters Replacement Project	Warren, K. *et al.*	2001	within
LA5447	Archaeological Monitoring Report: 911 Dispatch Center First and Los Angeles Streets	Schmidt, J.	1999	within
LA5448	Cultural Resource Assessment for AT&T Wireless Services Facility Number R299.1, County of Los Angeles	Duke, C.	2000	within
LA5451	The VA Outpatient Clinic Project	Padon, B.	unknown	within
LA6351	Nextel Communications CA-7837 A/Onizuka 332 2nd Street, Los Angeles, California	Earthtouch, LLC	2001	within
LA6375	Highway Project to Close Vignes Street On-Ramp and the Hewitt Street on/off ramps to US 101 and to construct new on/off ramps to the south at Garey Street in the City of Los Angeles	Slyvia, B.	2002	adjacent
LA6396	An Archaeological Assessment of the Proposed Verizon Wireless Grand Avenue, East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles County, California 90071	Tetra Tech, Inc.	2001	adjacent

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA6424	Cultural Resource Assessment Cingular Wireless Facility No. SM 140-01, Los Angeles County, California	Duke, C.	2002	adjacent
LA6435	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA679-11, County of Los Angeles, California	Duke, C.	1999	adjacent
LA6463	A Section 106 Historic Preservation Review of the Proposed Verizon Wireless Grand Avenue East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles, CA 90071	Tetra Tech, Inc.	2002	adjacent
LA7178	Report on Cultural Resources Mitigation and Monitoring Activities Fluor/Level (3) Los Angeles Local Loops	Unknown	2001	within
LA7527	Caltrans Statewide Historic Bridge Inventory Update Tunnels	Feldman, J. *et al.*	2006	within
LA7533	Archaeological/Paleontological Monitoring at 3rd Street and San Pedro	McKenna, J.	2004	adjacent
LA7547	Phase I Archaeological Survey/Class III Inventory for the Hall of Justice Study Area, Los Angeles, Los Angeles County, California	Whitely, D.	2003	adjacent
LA 7558	Archaeological Monitoring Report Alameda Street Improvements	Hale, A. and Scott, S.	2004	within
LA7733	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate LSANCA0739 (811 Wilshire), 811 Wilshire Boulevard, Los Angeles, Los Angeles County, California	Bonner, W.	2006	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE				
SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA8515	Historical Evaluation Report for the Downtown Bus Maintenance and Inspection Facility, Los Angeles, California	Wuellner, M.	2005	adjacent
LA8516	3rd and San Pedro Archaeological Monitoring (Addendum)	McKenna, J.	2004	adjacent
LA8541	Cultural Resource Records Search Results and Site Visit for Cingular Telecommunications Facility Candidate LA-057-01, (EL-005-01), DWP Equipment Yard, 433 East Temple Avenue, Los Angeles, Los Angeles County, California	Bonner, W.	2005	within
LA8910	Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles	Messick, P. and Hale, A.	2007	within

4.2.2 Previously Recorded Archaeological Resources within 0.25-mile Radius of Project APE

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

4.2.3 Historic Maps

A review of historic maps, including Sanborn Fire Insurance Maps, indicate a long and varied occupation history within the project Direct APE. Generally speaking, Los Angeles expanded from the original plaza (near today's N. Los Angeles and W. Arcadia Streets) to the west and south, and subsequently to the north and east. In terms of the current project, the city's development proceeded from the northeast to the southwest ends of the direct APE.

Sanborn maps from 1888 show nearly every parcel in the direct APE developed with commercial or residential buildings. The heaviest development is shown in the part of the direct APE between Alameda Street and Hill Street. Numerous commercial buildings such as hotels, banks, restaurants, and government buildings were located within this part of the direct APE. The western and southern parts of the direct APE, primarily along 2nd Street between Hill and Flower Streets and on Flower Street between 2nd and 7th Streets, were less heavily developed. Parcels within this part of the direct APE contained one or two buildings, primarily private residences, on large lots or were not developed at all. Street alignments for Flower and Temple Streets differ from their current alignments. The 1888 Sanborn shows Flower Street extending further north to Temple Street and Temple Street ending at Main Street.

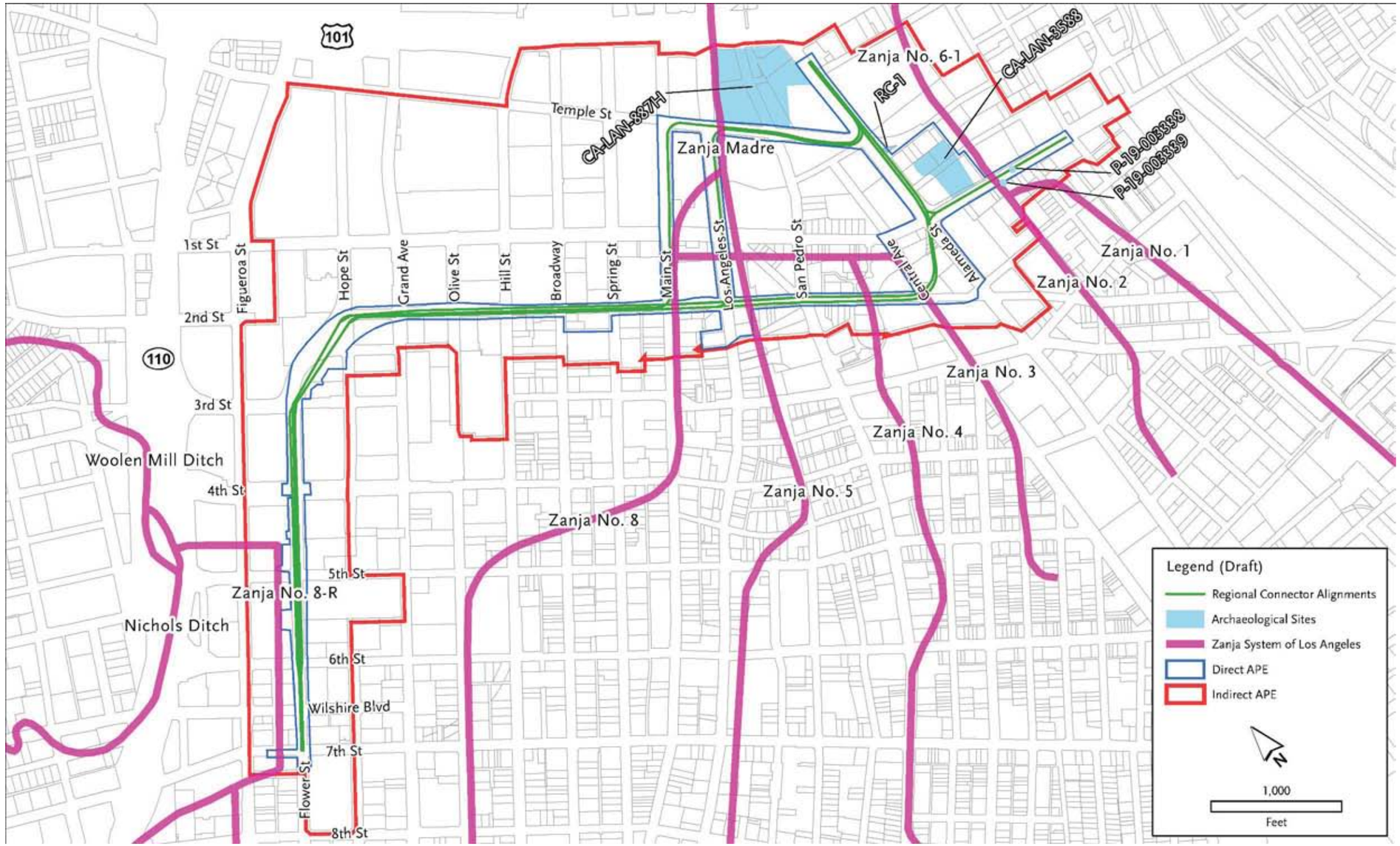
Sanborn Maps from 1951 show the direct APE between Alameda and Hill Streets continuing as an area dense with commercial and government buildings. The parts of the direct APE along 2nd Street between Hill and Flower Streets and on Flower Street between 2nd and 7th Streets are shown as more developed but continue to be primarily a residential area containing numerous apartment buildings and private residences.

A review of historic maps indicates that the route of the zanjas, Los Angeles' original domestic and irrigation water system, cross the direct APE in numerous locations. The original water system consisted of the main ditch, the Zanja Madre, and several branch ditches that flowed south and southwest into the city and beyond. A ca. 1880 map of the zanja system (reproduced in Gumprecht 1999) indicates that the route of the Zanja Madre and Zanjas 3, 4, 5, and 8 cross the project area in the northeastern part or the project direct APE. In addition, route of the West Branch Zanja 8R crosses the southwestern part of the direct APE.

Figure 4-1 depicts the approximate layout of the Los Angeles zanja system in 1880 in relation to the direct APE. This overlay is a digitization of Gumprecht's (1999:72) map of the system, which is based on a tracing of H.J. Stevenson's 1876 map of Los Angeles. The digitization uses the latest georeferencing tools (ArcGIS 9.3) to overlay Gumprecht's map on current (2009) County of Los Angeles parcel data. However, street alignments have changed, often dramatically, and the zanjas have been altered (moved, changed, or destroyed) to an unknown extent over the last 130 years. The margin of error inherent to Gumprecht's and Stevenson's maps is also unknown. Finally, these data have not been verified archaeologically within the direct APE. Consequently, Figure 4-1 should be thought of as an informed approximation of the location of the zanjas, but not as an "as built" plan of their current alignments.

4.3 Sacred Lands Files Search

SWCA initiated a Sacred Lands File Search for the project on February 3, 2009. SWCA contacted the California Native American Heritage Commission (NAHC) by letter to request a review of the Sacred Lands File. The NAHC responded on February 9, 2009, and stated that there are Native American cultural resources present in the project area and provided a list of Native American groups and individual contacts for Los Angeles County.



Source: Gumprecht 1999

Figure 4-1. Archaeological Resources within Direct APE including the Los Angeles Zanja System (Approximate Alignment)

4.4 Archaeological Survey

4.4.1 Survey Methods

SWCA Archaeologists John Dietler and Gini Austerman conducted an intensive-level archaeological survey of the original 1.8-mile-long direct APE on March 16, 2009. SWCA Archaeologist Robert Ramirez conducted an additional survey on April 7, 2009, to account for revisions in the project direct APE. Dr. Dietler conducted another survey of the additional 0.1 mile length of alignment where the Fully Underground LRT Alternatives differ from the previously analyzed Underground Emphasis LRT Alternative on January 7, 2010 of the portions of the direct APE associated with the Fully Underground alternatives. The archaeologists conducted pedestrian surveys using parallel transects spaced no more than 10 m (32.8 feet) apart. For most of the direct APE, this amounted to walking along paved sidewalks, either singly or in pairs. The archaeologists paid special attention to areas with exposed soil, which consisted primarily of planters and other landscaped areas.

SWCA archaeologists inspected the direct APE for the presence of archaeological deposits where ground visibility and access was possible. They took digital photographs of each street within the direct APE. All field notes, digital photographs, and records related to the current study are on file at SWCA's South Pasadena office. At the conclusion of the project, these materials will be transitioned to Metro for archiving.

4.4.2 Survey Results

Ground visibility was extremely poor (less than 5 percent) throughout most of the direct APE due to the presence of buildings, pavement, and/or landscaping.

Three areas of the direct APE were inaccessible due to the presence of construction site fences. These included sidewalks in the following locations:

- Northeast corner of parcel at 2nd Street and Spring Street (Assessor's Parcel Number [APN] 5149008032; see Figure E-5 in Appendix E)
- Parcel at 2nd Street and Main Street (APN 5149001902; see Figure E-5 in Appendix E)
- Parcel at Alameda Street between Temple Street and Ducommun Street (APN 5173006900; see Figure E-7 in Appendix E)

Numerous planters and unpaved areas that afforded fair to good (20–70 percent) visibility are present within the APE. These areas contained modern trash and the occasional un-diagnostic brick fragment. Planters and unpaved areas are present at the following locations:

- Parcels at Flower Street between 4th Street and 3rd Street (APN 5149001902; see Figure E-3 in Appendix E)

- Parcels and medians along W. General Thad Kosciuszko Way and Flower Street between 3rd Street and S. Grand Street (APNs 5151014033, 5151004911, 5151004912, 5151004913; see Figures E-3 through E-5 in Appendix E)
- Parcel at Los Angeles Street south of 2nd Street (APN 5161026035; see Figure E-6 in Appendix E)
- Parcels on 2nd Street between Central Avenue and Alameda Street (APNs 5161018007, 5161018011; see Figure E-6 in Appendix E)
- Parcels on Alameda Street between 2nd Street and 1st Street (APNs 5161018011, 5161018020, 5163001088; see Figure E-6 in Appendix E)
- Parcels at Los Angeles Street and Temple Street (APNs 5161013904, 5161014901; see Figure E-7 in Appendix E)
- Parcels on 1st Street between Alameda Street and Garey Street (APNs 5173011901, 5173011901; see Figure E-8 in Appendix E)

SWCA archaeologists encountered a single archaeological site within the direct APE, RC-1. This resource is described below. The five previously recorded archaeological sites (CA-LAN-887H, CA-LAN-3588, P-19-003338, P-19-003339, and P-19-003097) within the direct APE were encountered during ground-disturbing construction activities associated with earlier projects. They were not visible during this pedestrian survey.

Portions of Section 4.4.2 removed to protect confidential locations of archeological resources.

Portions of Section 4.4.2 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

5.0 IMPACTS

The majority of the direct APE (see Figures E-1 through E-9, Appendix E) should be considered highly sensitive for the presence of historical resources, including both prehistoric and historic archaeological sites. Five previously recorded archaeological sites, all of historic age, are located within the Direct APE.

Sanborn maps indicate that most parcels within the direct APE were occupied by commercial or residential buildings by 1888. Additional historic maps indicate that the routes of seven zanjas (Zanja Madre and Zanjas 8-R, 8, 5, 4, 3, and 6-1) cross parts of the direct APE. Archaeological studies that have been undertaken in the project vicinity support the map data: subsurface archaeological deposits, including zanja segments, are commonly encountered during construction projects in downtown Los Angeles.

For the proposed project's cumulative impact analysis, the potentially affected cultural resources under consideration include those located within the indirect APE, which is generally bounded by US 101 to the north, Center Street to the east, 3rd Street to the south, and Figueroa Street to the west. The indirect APE, as well as adjacent areas in and around downtown Los Angeles, includes some of the oldest sections of the City of Los Angeles. In these areas there are numerous examples of historic properties and historical resources (including archaeological resources) that are significant on local, state, and/or national levels.

In support of this analysis, lists have been compiled of major projects that are anticipated to be completed within the general project area prior to the start of construction (2009 to 2014) and during the projected construction period (2014 to 2018). These include 20 major renovation projects, 66 new construction projects, and 14 large transportation projects. No major utility projects were identified.

Direct cumulative impacts to archaeological resources generally occur when the destruction or substantial modification of resources or their contexts result in the degradation of resource significance. Indirect cumulative impacts generally occur when the context of a resource is destroyed or modified. Projects that do not include substantial ground disturbance are unlikely to cause direct cumulative effects to archaeological resources. The primary cumulative impact concern in this evaluation is the systematic demolition or alteration of archaeological resources.

5.1 No Build Alternative

5.1.1 Construction Impacts

The No Build Alternative, in which the project site would remain in its existing condition, would not result in construction impacts to archaeological resources because no ground disturbance would occur.

5.1.2 Operational Impacts

The No Build Alternative would not result in operational impacts to archaeological resources.

5.1.3 Cumulative and Indirect Impacts

The No Build Alternative would not result in impacts to archaeological resources. Therefore, the No Build Alternative would not contribute to a cumulative impact on these resources.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Construction Impacts

The TSM Alternative has the potential to alter, remove, or destroy archaeological resources within the APE during ground disturbance related to construction of bus stops and shelters. These facilities will be constructed every two to three blocks, but their precise locations have not yet been established.

The TSM Alternative crosses the Los Angeles zanja system, including the Zanja Madre (CA-LAN-887H) and the approximate alignments of Zanjas 3, 4, 5, 8, and 8-R. These alignments have not been confirmed archaeologically within the direct APE, but zanja segments have been observed in the project vicinity as shallow as 0.45 m (1.5 feet) below current grade (Zanja 6-1; P-19-003352). The potential to affect previously unrecorded archaeological resources elsewhere in the direct APE is high. Such damage to archaeological resources would represent a significant effect that could be mitigated. Implementation of Mitigation Measures (MM) A-1 and MM-A-2 would reduce this potential effect to less-than-significant level.

5.2.2 Operational Impacts

The TSM Alternative would not result in operational impacts to archaeological resources.

5.2.3 Cumulative and Indirect Impacts

Construction of the TSM Alternative, as stated above, has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources and the Los Angeles zanja system. Implementation of MM-A-1 (see Section 6.1) would reduce direct impacts to previously unidentified archaeological resources to less-than-significant level. Therefore, the TSM Alternative would not contribute to a cumulative impact on these resources.

The zanja system is a large, linear resource that winds throughout downtown Los Angeles and may be found immediately below current street grade. It has been affected by at least five previous construction projects and is likely to be affected by numerous future projects.

The system as a whole has not been documented by historians, archaeologists, or architectural historians in the modern era because it has been obscured by pavement and buildings for more than a century. Consequently, the zanja system is particularly vulnerable to cumulative impacts that would not be adequately addressed with standard archaeological mitigation measures. By providing documentation and interpretation of the zanja system on a system-wide scale, implementing MM-A-2 (see Section 6.1) would reduce both direct and cumulative impacts to this resource to less-than-significant level.

5.3 At-grade Emphasis Light Rail Transit (LRT) Alternative

5.3.1 Construction Impacts

The At-Grade Emphasis LRT Alternative has the potential to alter, remove, or destroy archaeological resources within the APE. Site RC-1, a historic brick alignment (see Section 4.4.2), may be affected during ground disturbance from construction of a proposed pedestrian bridge at the intersection of Temple and Alameda Streets.

Site RC-1 appears to be not eligible for National Register or California Register listing. However, previously unrecorded parts of the site that retain substantial integrity may be present. This alternative also has the potential to affect previously unrecorded archaeological resources during ground disturbance from constructing new underground tunnel segments on Flower Street between 7th Street and Hope Street; new stations proposed at Main/1st Streets, Los Angeles/1st Streets, 2nd/Hope Streets, and Flower/6th/5th Streets; and an automobile underpass and pedestrian overpass on Alameda Street at Temple Street. Such damage to archaeological resources would represent a significant effect that could be mitigated. Implementing MM-A-1 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.3.2 Operational Impacts

The At-Grade Emphasis LRT Alternative would not result in operational impacts to archaeological resources.

5.3.3 Cumulative and Indirect Impacts

Construction of the At-Grade Emphasis LRT Alternative has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources and previously undiscovered portions of site RC-1. However, implementing MM-A-1 would reduce this effect/impact to a less-than-significant level. Therefore, this alternative would not contribute to a cumulative impact on these resources.

5.4 Underground Emphasis LRT Alternative

5.4.1 Construction Impacts

The Underground Emphasis LRT Alternative involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations on 2nd Street (either at Broadway or at Los Angeles Street), 2nd/Hope Street, and Flower/5th/4th Streets; an automobile underpass on Alameda Street between 2nd and Temple Streets; and a potential pedestrian bridge at the intersection of Alameda and 1st Streets.

Potentially affected resources include site CA-LAN-3588 and the Los Angeles zanja system (specifically Zanjas 3, 4, 5, and 8; see Figure 4-1). Although the precise location and local integrity of the zanjas have not been established, the project's 2nd Street alignment likely crosses the system multiple times.

Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated. Construction of new stations would almost certainly affect any extant archaeological resources within their footprints. Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects to shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.4.2 Operational Impacts

The Underground Emphasis LRT Alternative would not result in operational impacts to archaeological resources.

5.4.3 Cumulative and Indirect Impacts

Construction of the Underground Emphasis LRT Alternative has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and site CA-LAN-3588. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Underground Emphasis LRT Alternative would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

5.5 Fully Underground LRT Alternative- Little Tokyo Variation 1

5.5.1 Construction Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 1 involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations at 2nd Street/Broadway, 2nd/Hope Street, Flower/5th/4th Streets, and 2nd/Central Avenue; and portals at 1st /Hewitt Streets and Alameda/Temple Streets.

Potentially affected resources include sites CA-LAN-3588, P-19-003338, and P-19-003339 and the Los Angeles zanja system (specifically Zanjas 3, 4, 5, and 8; see Figure 4-1). Although the precise location and local integrity of the zanjas have also not been established, the project's 2nd Street alignment likely crosses the system multiple times. Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated.

Construction of new stations would almost certainly affect any extant archaeological resources within their footprints. Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects on shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.5.2 Operational Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 1 would not result in operational impacts to archaeological resources.

5.5.3 Cumulative and Indirect Impacts

Construction of the Fully Underground LRT Alternative-Little Tokyo Variation 1 has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338, and P-19-003339. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Fully Underground LRT Alternative-Little Tokyo Variation 1 would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

5.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

5.6.1 Construction Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 2 involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations at 2nd Street/Broadway, 2nd/Hope Street, Flower/5th/4th Streets, and 2nd/Central Aveune; and portals at 1st /Hewitt Streets, 1st/Garey Streets, and Alameda/Temple Streets.

Potentially affected resources include sites CA-LAN-3588, P-19-003338, and P-19-003339 and the Los Angeles zanja system (specifically Zanjas 3, 4, 5, 8, and 6-1; see Figure 4-1). Although the precise location and local integrity of the zanjas have not been established, the project's 2nd Street alignment likely crosses the system multiple times.

Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated. Construction of new stations would almost certainly affect any extant archaeological resources within their footprints.

Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects on shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.6.2 Operational Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 2 would not result in operational impacts to archaeological resources.

5.6.3 Cumulative and Indirect Impacts

Construction of the Fully Underground LRT Alternative-Little Tokyo Variation 2 has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338, and P-19-003339. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Fully Underground LRT Alternative-Little Tokyo Variation 2 would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

6.0 POTENTIAL MITIGATION MEASURES

Direct impacts to archaeological resources are typically mitigated on a project-specific basis by construction monitoring, testing, and data recovery. This approach to mitigation is adequate for small archaeological sites, including many prehistoric sites and the historic sites that are commonly encountered within urban settings, such as building foundations, privies, and artifact deposits. However, it may not be adequate for large, linear resources such as water conveyance systems because most projects in established urban areas encounter and mitigate impacts only on small segments of these resources.

Even the most comprehensive investigation of a small segment of a large, linear resource may fail to provide adequate documentation and contextual information for the system as a whole. These linear resources are repeatedly affected by construction projects because of their large spatial extent, resulting in the loss of contributing segments and, ultimately, system integrity.

The successive destruction of multiple linear resource segments without adequate documentation of the broader system constitutes a significant and adverse impact to the system that could be cumulatively considerable. The Los Angeles zanja system is a large, linear resource that is vulnerable to such cumulative impacts because it is almost entirely buried beneath the City's streets. These potential impacts and corresponding mitigation measures are discussed below.

6.1 Construction Impact Mitigation Measures

Portions of Section 6.1 removed to protect confidential locations of archeological resources.

Mitigation Measure 1 (MM-A-1): Treatment of Undiscovered Archaeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementing this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementing a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected.

If cultural resources are discovered or if previously identified resources are affected in an unexpected manner, the CRMMP would ensure that such resources receive mitigation to reduce the impact to a less-than-significant level. This plan would include, but not be limited to, the following elements:

- Worker training;
- Archaeological monitoring;
- The scientific evaluation and mitigation of archaeological discoveries;
- Native American participation, as needed;
- Appropriate treatment of human remains, if applicable; or
- Reporting of monitoring and mitigation results.

Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist would conduct a short awareness training session for all construction workers and supervisory personnel. The session would explain the importance of and legal basis for protecting significant archaeological resources.

Each worker would also learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of their supervisor and the archaeological monitor.

This worker education session could include visual representations of artifacts (prehistoric and historic) that might be found in the project vicinity, and it could take place on-site immediately prior to the start of ground disturbance. Supervisory personnel may benefit from longer training sessions, while a brief training would suffice for non-supervisory workers. The

brief (approximate 30- to 45-minute) training session may be conducted on-site by video, PowerPoint presentation, or similar media.

Archaeological Monitoring, Evaluation, and Mitigation

Due to poor surface visibility and high archaeological sensitivity of the direct APE an archaeological monitor would be present during ground-disturbing activities in archaeologically sensitive areas. This would reduce the potential level of impact to buried archaeological resources to a less-than-significant level. This work would be completed under the direction of an archaeologist (Principal Investigator) who meets the Secretary of the Interior's Standards for archaeologists. An adequate number of monitors would be present to ensure that all earth-moving activities are observed and would be on-site during all grading activities for areas to be monitored.

During the original excavation of previously undisturbed soils, the archaeological monitor(s) would be on-site at a frequency determined by the Principal Investigator. Inspection frequency may vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. Full-time monitoring is warranted within one-half block of potentially significant archaeological resources that are known or suspected to be present within the direct APE.

If potentially significant archaeological resources are exposed during ground-disturbing activities, the project manager would be notified immediately. Archaeological monitor(s) would have the authority to divert or temporarily halt ground-disturbing operations in the area of discovery to allow the resources to be evaluated. Construction activities may continue in other areas.

Evaluation of such resources is typically accomplished by a test-level excavation designed to determine the horizontal and vertical extent of the resource, and to characterize its contents. If the discovery proves to be potentially eligible for listing on the National Register or California Register, and project plans cannot be altered to avoid affecting the site, then an adverse effect would result. This adverse effect may be resolved by implementing a Memorandum of Agreement (MOA) between Metro and the State Historic Preservation Officer.

Before construction activities are allowed to resume in an affected area, artifacts would be recovered and features recorded using professional archaeological methods. The Principal Investigator operating under the direction of the MOA would determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the construction monitoring program would be processed using professional archaeological methods. An appropriate sample of recovered materials, selected by the Principal Investigator, would be curated at a curation facility that

meets federal standards per 36 Code of Federal Regulations [CFR] Part 79 and made available to other archaeologists and researchers for further study.

Native American Participation

If Native American cultural resources (i.e., prehistoric or ethnohistoric-period artifacts, food remains, or features associated with Native Americans) are exposed during project-related ground disturbance, Metro would contact the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation. Both groups have expressed interest in the project. One or both of these groups would be asked to provide the services of a trained Native American consultant to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis, and would be intended to ensure that Native American concerns are taken into account during the construction process.

Human Remains

The discovery of human remains is always a possibility during ground disturbance. An unmarked early Spanish period Native American cemetery was recently discovered less than 0.15 mile from the direct APE (Applied Earthworks 1999). Other historic period remains are known less than 0.3 mile from the direct APE as well.

The State of California Health and Safety Code Section 7050.5 addresses these findings. This code section states that when human remains are encountered, no further disturbance would occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner would be notified of the find immediately.

If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant (MLD). The MLD shall complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts to human remains may remain significant even after mitigation.

Reporting

If no cultural resources are discovered in the course of construction monitoring, a brief letter to that effect would be prepared by the consulting archaeologist, indicating that the monitoring activities have been satisfied. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report would be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.

Mitigation Measure 2 (MM-A-2): Treatment of Known Archaeological Resources

Destruction of a resource that is eligible for listing in the National Register or California Register would be a significant adverse effect. This effect may be resolved through by implementing an MOA between FTA, Metro, and the SHPO, as well as other interested parties.

Four archaeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the National Register and the California Register. These include the Los Angeles zanja system (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archaeological sites can be mitigated to a less than significant level by preparing and implementing a data recovery plan under Section 106 and CEQA. The actual measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archaeological resources within the direct APE that are eligible for listing in the National Register or California Register. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archaeological data recovery.

Los Angeles Zanja System

The Los Angeles zanja system was an extensive and integrated water conveyance network that served large areas of the City for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the overall zanja system to be evaluated, given the requirements that the OHP clarified in its recent letter (Toffelmier 2009).

It is likely that other projects (such as emergency utility repair) have damaged segments of the zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect, particularly given the likelihood of damaging the zanjas prior to discovery during project construction process.

Inadvertent project-related damage to the zanjas may constitute an adverse effect under the Criteria of Adverse Effect, "physical destruction or damage" (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects.

Both Section 106 of the National Historic Preservation Act (as amended) and the California Environmental Quality Act require identification, documentation, and evaluation of historic

properties/historic resources in a project area (or direct APE). For a poorly mapped and buried linear resource like the zanja system, identification alone is challenging.

Rather than a costly archaeological excavation program or a remote sensing (ground-penetrating radar, etc.) survey that is unlikely to produce clear-cut results, SWCA recommends a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner. This would include using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjas within the APE. Where these alignments are expected to be affected by the proposed project, particularly where cut-and-cover or other near-surface construction techniques (as opposed to tunneling 20 or more feet below the ground surface) are planned in the vicinity of mapped zanja segments, full-time archaeological monitoring would be instituted to ensure documentation. The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments prior to their adequate documentation.

Documenting and evaluating the Los Angeles zanja system would be best accomplished with a system-wide approach that incorporates historical, archaeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. Documentation of the zanja segments' alignments and slopes would have the added benefit of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archaeological testing, and architectural documentation, and would be followed by a formal evaluation of National Register and California Register eligibility.

It should be noted that substantial documentation already exists for the zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is proposed here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Such research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document creation, maintenance, modification, and abandonment of the system.

- Archaeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE by using physical exposure through controlled excavation following its discovery during construction monitoring. Resources would be documented using DPR series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archaeological Resource Management Report (OHP 1990) guidelines. The report would address research questions and assess the National Register and California Register eligibility of the system.

- Architectural documentation of exposed zanja segments by producing narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.

- Preserving the results of the historical, archaeological, and historic architectural studies in repositories such as the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter.

- Interpretation of the Los Angeles zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

6.2 Operational Impacts Mitigation Measures

Because operational impacts to archaeological resources, including both previously recorded and as-yet-undiscovered resources, are not expected for any of the project alternatives, no mitigation is required.

7.0 CONCLUSIONS

This evaluation included a review of relevant historic maps and archaeological records, a Native American coordination program, and an intensive archaeological survey of the project direct APE. The background study indicates that subsurface archaeological deposits are commonly encountered during construction projects in downtown Los Angeles.

The direct APE was found to contain five previously recorded (CA-LAN-887H, CA-LAN-3588, P-19-003097, P-19-003338, and P-19-003339) and one newly recorded (site RC-1) archaeological resources. Of these, P-19-003097 has been destroyed, RC-1 is recommended not eligible for listing in the National Register and California Register, and CA-LAN-887H, CA-LAN-3588, P-19-003338, and P-19-003339 are presumed eligible for listing in the National Register and California Register.

None of the alternatives will have operational impacts to archaeological resources, and the No Build Alternative will have no construction or cumulative impacts on archaeological resources. Construction of each of the other alternatives has the potential to alter, remove, or destroy archaeological resources within the APE, including both known and previously undiscovered archaeological resources.

Physical destruction of an archaeological resource eligible for listing in the National Register and California Register would result in an adverse effect under Section 106 regulations and a significant impact under CEQA. Potential destruction of portions of the Los Angeles zanja system could also contribute to a cumulative impact to this resource.

To address potential impacts to previously undiscovered archaeological resources, the project would include producing and implementing a detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) (MM-A-1). To address potential impacts to known archaeological resources that are eligible for listing in the National Register and California Register, the project would be implemented by treating these known resources under an MOA (MM-A-2). After mitigation, potential construction and cumulative impacts would not be significant under NEPA or CEQA.

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by Applied EarthWorks for Myra L. Frank and Associates. On file at South Central Coastal Information Center, California State University, Fullerton.

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APPENDIX A

RECORDS SEARCH RESULTS

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA4742 **DATE:** 1999 **PAGES** 14
AUTHOR Lapin, Philippe
FIRM: LSA Associates
TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-01, County of Los Angeles, California
AREA: < 1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA483 **DATE:** 1978 **PAGES** 175
AUTHOR Greenwood, Roberta
FIRM: Greenwood and Associates
TITLE: Archaeological Resources Survey the Proposed Downtown People Mover Project
AREA:
SITES: none

QUADNAME: Hollywood
Los Angeles
MEMO:

IC ID#: LA5200 **DATE:** 2001 **PAGES** 159
AUTHOR Warren, Keith M; Hamilton, Colleen; Robinson, Mark
FIRM: Applied earth Works, Inc.
TITLE: Assessment of Archaeological and Paleontological Sensitivity on the Proposed California Department of Transportation District 7 Headquarters Replacement Project
AREA: <>2.5 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA5203 **DATE:** 2001 **PAGES** 9
AUTHOR Foster, John M.
FIRM: Greenwood And Associates
TITLE: Archaeological Monitoring Report: Soil Test Pit Excavation for the Siqueiros Mural Project, El Pueblo de Los Angeles
AREA: <5 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5282 **DATE:** 2001 **PAGES** 6
AUTHOR Schmidt, James J.
FIRM: Compass Rose Archaeological, Inc.
TITLE: Negative Archaeological Survey Report: 29660 Harvester Rd., Malibu, CA
AREA: <1 ac
SITES: 19-001121

QUADNAME: Point Dume
MEMO:

IC ID#: LA5410 **DATE:** 1978 **PAGES** 35
AUTHOR Reinoenl, Gary
FIRM: Department of Parks and Recreation
TITLE: El Pueblo de Los Angeles State Historic Park Resource Management Plan
AREA: 10 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA1770 **DATE:** 1989 **PAGES** 37
AUTHOR Salls, Roy A.
FIRM: Northridge Center for Public Archaeology
TITLE: Report of Archaeological Reconnaissance Survey of:ESA Project 7217B, City of Los Angeles, Los Angeles County, Ca
AREA: 8 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2486 **DATE:** 1991 **PAGES** 17
AUTHOR Kaptain, Neal
FIRM: Greenwood and Associates
TITLE: Monitoring and Mapping: Union Station Utility Upgrade, CA-LAN-1575H
AREA:
SITES: 19-001575

QUADNAME: Los Angeles
MEMO:

IC ID#: LA292 **DATE:** 1978 **PAGES** 8
AUTHOR D'Altroy, Terence N.
FIRM: University of California Los Angeles Archaeological Surveyt
TITLE: Environmental Impact Statement: Assessment of the Impact on Archaeological Resources of Proposed Constructi of School Facilities and Parking Facilities at the Intersection of Sunset Boulevard and North Figueroa Street, Los Angeles, California
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3377 **DATE:** 1996 **PAGES** 3
AUTHOR FOSTER, JOHN
FIRM: Greenwood and Associates
TITLE:
AREA: 1 ac
SITES: CA-LAN-1103

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3501 **DATE:** 1990 **PAGES** 67
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management (NOS-NCOS) Project Los Angeles, California
AREA: 57,600 ac
SITES: 19-000053,19-000055,19-000056,19-000057,19-000068,19-000007,19-000097,19-000069,19-000070,19-000071,19-000072,19-000073,19-000074,19-000080,19-000171,19-000172,19-0001336,19-001399,19-000159,19-001261,19-000181,19-001112,19-001595,19-000887,19-000132,
19-000067
QUADNAME: Los Angeles,Pasadena,Venice,Beverly Hills,Burbank,Hollywood,Inglewood
MEMO:

IC ID#: LA3515 **DATE:** 1996 **PAGES** 8
AUTHOR Maki, Mary K.
FIRM: Fugro West, Inc.
TITLE: Negative Phase I Archaeological Survey of 0.84 Acre at 14751 and 14755 Garfield Ave and 7339 Petrol Street, City of Paramount, Los Angeles County, California
AREA: 0.84 ac
SITES: None

QUADNAME: South Gate
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3587 **DATE:** 1994 **PAGES** 415
AUTHOR King, Chester
FIRM: Topanga Anthropological Consultants
TITLE: Prehistoric Native American Cultural Sites in the Santa Monica Mountains
AREA: 13,337 ac
SITES: 19-000229,19-000267,19-000690,56-000003,19-000227,19-000776,56-000110,56-000010,56-000024,56-000089,56-000174,19-000052,19-000384,19-000114,19-000207,19-000264,56-000071,56-000865,56-000261,56-000737,56-000179,56-000095,56-000096,56-000341,56-000342,
19-000186,19-000242,19-000243,19-000413,19-000043,19-000059,19-000060,19-19-002200,56-000204,56-000538,56-001157,19-000002,19-000373,19-000324,56-000294,56-000606,19-000669,19-000466,56-000535,19-000807,56-000100,56-000070,56-000065,56-000001,56-000640,56-001154,56-000881,56-000880,56-000879,56-000878,56-000877,56-000876,
56-000875,56-000874,56-000873,56-000872,56-000871,56-000869,56-000145,56-000870,19-002154,19-002201,19-002202,56-000146,56-000145,19-001248,19-001341,56-000853,56-000536,56-000271,56-000045,56-000044,56-000124,56-000123,56-000221,56-000222,56-000705,
56-000706,56-000707,19-001352,19-000111,19-001326,19-001327,56-000884,56-000885,56-000883,56-000882,56-000886,19-002160,19-002153m19-002167,19-002168,19-001117,19-002165,19-002164,19-002162,19-002161,19-002159,19-002158,19-002157,19-002163,+more,see memo
QUADNAME: Point Dume,Triunfo Pass,Malibu Beach,Topanga,Beverly Hills,Hollywood,Burbank,Van
MEMO: Same as VN1462. Space did not permit the entry of all sites referenced within this

IC ID#: LA3645 **DATE:** 1995 **PAGES** 73
AUTHOR Whitley, David S.
FIRM: W & S Consultants
TITLE: Phase I Archaeological Survey and Cultural Resources Assessment of the Metropolitan Water District Headquarters Study Area, Los Angeles, California
AREA: 4 ac
SITES: 19-001575H

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3668 **DATE:** 1997 **PAGES** 182
AUTHOR Dillon, Brian D.
FIRM:
TITLE: St. Vibiana's Cathedral Los Angeles, California
AREA: 2.5 ac
SITES: 19-150330

QUADNAME: Los Angeles
MEMO: Missing Report Updated: 11/6/02

IC ID#: LA3783 **DATE:** 1993 **PAGES** 19
AUTHOR White, Robert S. and White, Laurie E.
FIRM: Archaeological Associates
TITLE: Archaeological Element of the Metropolitan Water District of Southern California Headquarters Facility Site Study Analysis
AREA: 101 ac
SITES: None

QUADNAME: Los Angeles
San Dimas
MEMO: 92 ac. Area on the San Dimas Quad was surveyed. Areas on Los Angeles Quad were not

IC ID#: LA3786 **DATE:** 1997 **PAGES** 173
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Cathedral of Our Lady of the Angles Los Angeles, California Cultural Resources Evaluation
AREA: Unknown
SITES: 19-000007,19-000887,19-00112,19-001575,19-120013

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3812 **DATE:** 1982 **PAGES** 20
AUTHOR Chace, Paul G.
FIRM: Paul G. Chace & Associates
TITLE: Archaeological Monitoring of the W-7 Ramp Project, Olvera St, El Pueblo de Los Angeles State Historic Park
AREA:
SITES: Palomares-Jones Property

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3813 **DATE:** 1992 **PAGES** 47
AUTHOR Anonymous
FIRM: Peak & Associates, Inc.
TITLE: An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California
AREA: 6.5 li mi
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3814 **DATE:** 1981 **PAGES** 45
AUTHOR Singer, Clay A.
FIRM: Northridge Archaeological Research Center, Ca. St. University
TITLE: Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church
AREA:
SITES: The Plaza Church

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3906 **DATE:** **PAGES** 239
AUTHOR Costello, Julia G., Wilcoxon, Larry R.
FIRM: Julia G. Costello, Larry R. Wilcoxon
TITLE: An Archaeological Assessment of Cultural Resources in Urban Los Angeles, California La Placita de Dolores -- Lan-887
AREA: 8 ac
SITES: 19-000887H

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3910 **DATE:** 1983 **PAGES** 62
AUTHOR Frierman, Jay D.
FIRM: Jay D. Frierman, Consulting Archaeologist
TITLE: Monitoring the Restoration and Rehabilitation of the Sepulveda Block 622-624 North Main Street El Pueblo de Los Angeles State Historic Park
AREA: 8 ac
SITES: 19-000887H

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3946 **DATE:** 1998 **PAGES** 26
AUTHOR McLean Deborah
FIRM: LSA Associates, Inc.
TITLE: Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility LA 057-03, 433 East Temple Street, City and County of Los Angeles, California
AREA: less than 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3986 **DATE:** 1981 **PAGES** 38
AUTHOR Chace, Paul G.
FIRM: Paul G. Chace & Associates
TITLE: A Cultural Resources Assessment of the Plaza El Pueblo de Los Angeles State Historic Park
AREA: None
SITES: 19-000007H

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4080 **DATE:** 1996 **PAGES** 110
AUTHOR Goldberg, Susan K.
FIRM: Applied Earth Works, Inc.
TITLE: Archaeological Research Design and Treatment Plan: the Metropolitan Water District of Southern California Headquarters Facility Project
AREA: 4.3 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4214 **DATE:** 1998 **PAGES** 3
AUTHOR Conkling, Steve
FIRM: LSA Associates, Inc.
TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R106, near West Fourth Street and South Hill Street, City and County of Los Angeles
AREA: 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA4215 **DATE:** 1998 **PAGES** 3
AUTHOR Conkling, Steve
FIRM: LSA Associates, Inc.
TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, near West Third Street and South Grand Avenue, City and County of Los Angeles
AREA: 1 ac
SITES: None

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA4237 **DATE:** 1998 **PAGES** 9
AUTHOR Conkling, Steve
FIRM: LSA Associates, Inc.
TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site r105, at the Intersection of West Third Street and South Spring Street, City and County of Los Angeles
AREA: <1ac
SITES: 19-002741

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4263 **DATE:** 1986 **PAGES** 203
AUTHOR Padon, Beth
FIRM: LSA Associates, Inc.
TITLE: General Services Administration Federal Center: Archaeological Assessment Report Phase
AREA: 4.8 ac
SITES: 19-000887

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA4448 **DATE:** 1994 **PAGES** 357
AUTHOR Anonymous
FIRM: Myra L. Frank & Associates
TITLE: Section 106 Documentation for the Metro Rail Red Line East Extension in the City and County of Los Angeles, California
AREA: 20 li mi
SITES: 19-174979,19-174978,19-174977,19-174976,19-174975,19-174974,19-167081,19-174973,19-174972,19-174971,19-174970,19-174968,19-172755,19-174964,19-176624,19-174941,19-174940,19-174235,19-174955,19-174954,19-174951,19-174957,19-174943,19-174958,19-174956
19-1748\952,19-174953,19-174950,19-174949,19-174948,19-174947,19-174946,19-
QUADNAME: Los Angeles
MEMO:

IC ID#: LA4452 **DATE:** 1982 **PAGES** 141
AUTHOR Hatheway, Roger G.
FIRM: Roger G. Hatheway & Associates
TITLE: Determination of Eligibility Report Chinatown
AREA: 200 ac
SITES: 19-173391,19-173392,19-170950,19-173393,19-170951,19-173394,19-170952,19-173395,19-170953,19-173396,19-170954,19-173397,19-170995,19-173398,19-170961,19-170962,19-170960,19-173399,19-170956,19-173400,19-170957,19-170958,19-170965,19-170963,19-173402
19-170959
QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA5437 **DATE:** 1980 **PAGES** 20
AUTHOR Chace, Paul G.
FIRM: Paul G. Chace & Associates
TITLE: An Archaeological Review and tests for the Tree Planting Program, El Pueblo de Los Angeles State Historic Park
AREA: 10 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5446 **DATE:** 2001 **PAGES** 3
AUTHOR Savastio, Scott
FIRM: Greenwood & Associates
TITLE: Report for Monitoring: Sewer pipe Repair at Alameda and Arcadia Streets, Los Angeles
AREA: 2 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5447 **DATE:** 1999 **PAGES** 10
AUTHOR Schmidt, James J.
FIRM: Greenwood & Associates
TITLE: Archaeological monitoring Report: 911 Dispatch Center First and Los Angeles Streets Los Angeles, California
AREA: 2 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA5448 **DATE:** 2000 **PAGES** 9
AUTHOR Duke, Curt
FIRM: LSA Associates, Inc.
TITLE: Cultural Resource Assessment for AT&T Wireless Services Facility Number R299.1, County of Los Angeles, CA
AREA: <1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5451 **DATE:** ? **PAGES** 84
AUTHOR Padon, Beth
FIRM: LSA Associates, Inc.
TITLE: the VA Outpatient Clinic Project
AREA: 1.85 ac
SITES: 19-000007

QUADNAME: Los Angeles
MEMO:

IC ID#: LA850 **DATE:** 1978 **PAGES** 215
AUTHOR Costello, Julia G., and Larry R. Wilcoxon
FIRM:
TITLE: An ARHCAEOLOGICAL Assessment of Cultural Resources in Urban LOS ANGELES, CALIforNIA -- LA PLACITA DE DOLORS -- LAN-887
AREA:
SITES: 19-000887

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA982 **DATE:** 1977 **PAGES** 5
AUTHOR Bove, Frederick J.
FIRM: UCLA Archaeological Survey
TITLE: Archaeological Resource Survey and Impact Assessment of A PROPOSED PARKinG LOT, LOS ANGELES, CALIforNIA
AREA:
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6359 **DATE:** 2001 **PAGES** 32
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report The Los Angeles Gas Works 513 North Main Street
AREA: 1 ac
SITES: 19-002891

QUADNAME: Los Angeles
MEMO: NPS72000231

IC ID#: LA6085 **DATE:** 2003 **PAGES** 35
AUTHOR Wlodarski, Robert J.
FIRM: Historical Environmental Archaeological Research Team
TITLE: A Phase I Archaeological Study For The Proposed Eugene Obregon Congressional Medal of Honor Memorial Within Father Serra Park and El Pueblo de Los Angeles State Historic Park, City of Los Angeles, Los Angeles County, California
AREA: .25 ac
SITES: none

QUADNAME: Los Angeles
MEMO: 19-000007

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA6087 **DATE:** 1996 **PAGES** 49
AUTHOR Lisecki, Lee
FIRM: Myra L. Frank & Associates, Inc.
TITLE: The Metropolitan Water District Of Southern California Headquarters Facility Project Archival Documentation For The Southern Ramp And Service Wing At Union Station, Los Angeles
AREA: 4.3 ac
SITES: none

QUADNAME: Los Angeles
MEMO: Union Station/National Register Historic Places

IC ID#: LA6340 **DATE:** 2001 **PAGES** 19
AUTHOR Wlodarski, Robert J.
FIRM: Historical,Environmental,Archaeological,Research,Team (H.E.A.R.T
TITLE: A Phase I Archaeological Study For 625 North Hill Street (Castellar Apartments) City of Los Angeles, Los Angeles County, California
AREA: 1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6343 **DATE:** 2001 **PAGES** 10
AUTHOR Foster, John M.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report: Sewer Line Trenching for the Avila Adobe Interpretive Center, El Pueble de Los Angeles
AREA: 4 ac
SITES: 19-000887

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA6351 **DATE:** 2001 **PAGES** 4
AUTHOR Unknown
FIRM: Earthtouch, LLC
TITLE: Nextel Communications CA-7837A/Onizuka 332 2nd Street Los Angeles, California
AREA: 1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6375 **DATE:** 2002 **PAGES** 4
AUTHOR Sylvia, Barbara
FIRM: Caltrans District 7
TITLE: Highway Project To close Vignes Street on-ramp and the Hewitt Street on-/off ramps to US-101 and to construct new on-/off ramps to the south at Garey Street in the City of
AREA: 1 limi
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6382 **DATE:** 1999 **PAGES** 340
AUTHOR Goldberg, Susan K., Bradley J. Adams, Carole Denardo, Scott A. Williams, Marilyn J. Wyss, Mark C. Robinson, Jill A. Onken, Melinda, C. Horne
FIRM: Aplied EarthWorks, Inc.
TITLE: The Metropolitan Water District of Southern California Headquarters Facility Project
The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H
AREA: 0 ac
SITES: 19-001575H

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA6841 **DATE:** 2003 **PAGES** 228
AUTHOR Unknown
FIRM: Sapphos Environmental, Inc.
TITLE: Plaze De Cltura Y Arte Invironmental Impact Report Volume I, Draft EIR SCH No. 2001 101 167
AREA: 4 ac
SITES: None

QUADNAME: Los Angeles
MEMO: Map location hand drawn, 19-000007H, 19-002741,19-100301,19-120028,19-

IC ID#: LA7178 **DATE:** 2001 **PAGES** 57
AUTHOR Unknown
FIRM: William Self Associates
TITLE: Report on Cultural Resources Mitigation and Monitoring Activities Fluor/Level (3) Los Angeles Local Loops
AREA: 200 ac
SITES: 19-003356,19-003337,19-003338,19-003339,19-003340

QUADNAME: Beverly Hills,Los Angeles,Hollywood
MEMO:

IC ID#: LA7533 **DATE:** 2004 **PAGES** 57
AUTHOR McKenna, Jeanette A.
FIRM: McKenna et al.
TITLE: Archaeological/Paleontological Monitoring at 3rd Street and San Pedro
AREA: ~1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA7547 **DATE:** 2003 **PAGES** 25
AUTHOR Whitley, David S.
FIRM: W & S Consultants
TITLE: Phase I Archaeological Survey/Class III Inventory for the Hall of Justice Study Area, Los Angeles, Los Angeles County, California
AREA: ~2 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA7551 **DATE:** 2006 **PAGES** 37
AUTHOR Foster, John M. and Kronzek, Lynn C.
FIRM: Greenwood and Associates
TITLE: Mitigation of Impacts on an Archaeological Feature in the Winery El Pueblo de Los Angeles Historical Monument
AREA: 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO: Mentions Features 1 and 2 as being sites, but no primary number, or DPR forms

IC ID#: LA7546 **DATE:** 2006 **PAGES** 7
AUTHOR Foster, John
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Program Final Report, La Placita Renovation and Winery Restroom Project, Los Angeles, California
AREA: <1 ac
SITES: 19-000882

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA7545 **DATE:** 2006 **PAGES** 24
AUTHOR Slawson, Dana N.
FIRM: Greenwood and Associates
TITLE: Mitigation of Impacts on the Zanja Madre Archaeological Feature, La Placita
AREA: <1 ac
SITES: None

QUADNAME: Los Angeles
MEMO: Excavation of segment of Zanja Madre

IC ID#: LA7556 **DATE:** 2006 **PAGES** 17
AUTHOR Slawson, Dana N.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Report EarthquakeRepair and Replacement Sewer Unit 338 (W.O. E2003260) El Pueblo de Los Angeles and Environs Los Angeles, California
AREA: ~309 li ft
SITES: 19-100515

QUADNAME: Los Angeles
MEMO:

IC ID#: LA7557 **DATE:** 2006 **PAGES** 14
AUTHOR Slawson, Dana N.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Report Sewer Line Repair Project El Pueble de Los Angeles and Environs Los Angeles, California
AREA: ~309 ft
SITES: 19-100515

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7558 **DATE:** 2004 **PAGES** 19
AUTHOR Hale, Alice and Savastio, Scott
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report Alameda Street Improvements
AREA: ~3000 ft
SITES: 19-000007x

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8026 **DATE:** 1985 **PAGES** 17
AUTHOR Carrico, Richard
FIRM: WESTEC Services, Inc.
TITLE: Treatment Plan for Potential Cultural Resources within Proposed Metro Rail Subway Station Locations in Metropolitan Los Angeles, California
AREA: ~80 ac
SITES: None

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA8515 **DATE:** 2005 **PAGES** 40
AUTHOR Wuellner, Margarita J.
FIRM: EDAW, Inc.
TITLE: Historical Evaluation Report for the Downtown Bus Maintenance and Inspection Facility, Los Angeles, California
AREA: 2.5 ac
SITES: 19-186945

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA8516 **DATE:** 2004 **PAGES** 12
AUTHOR McKenna, Jeanette A.
FIRM: McKenna et al.
TITLE: Re: 3rd and San Pedro Archaeological Monitoring (Addendum)
AREA: unknown
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8525 **DATE:** 2004 **PAGES** 9
AUTHOR Rehberger, Linda H. and Peter Messick
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Report, Veteran Memorial, El Pueblo de Los Angeles, Los Angeles Street and Alameda Street, Los Angeles, California
AREA: < 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8532 **DATE:** 2004 **PAGES** 6
AUTHOR Hale, Alice and Scott Savastio
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report: The Plaza House, 507-511 North Main Street, Los Angeles, California
AREA: < 1 ac
SITES: 19-002891, El Pueblo NRH District (NPA 72000231), Plaza House Hotel, Brunswig Drug Company, Brunswig Annex, Old Plaza Church, Antique Block, Uriquides Adobe, Pio Pico Townhouse, Baric Adobe, Pio Pico Townhouse Refuse Deposit, Los Angeles Gas Works

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA8541 **DATE:** 2005 **PAGES** 13
AUTHOR Bonner, Wayne H.
FIRM: MBA
TITLE: Cultural Resource Records Search Results and Site Visit for Cingular Telecommunications Facility Candidate LA-057-01,
(EL-005-01), DWP Equipment Yard, 433 East Temple Avenue, Los Angeles, Los Angeles County, California
AREA: < 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8910 **DATE:** 2007 **PAGES** 52
AUTHOR Messick, Peter and Alice E. Hale
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles,
AREA: 1.75 ac
SITES: 19-003588

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA1071 **DATE:** 1981 **PAGES** 45
AUTHOR Singer, Clay A.
FIRM: Northridge Archaeological Research Center
TITLE: Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church
AREA: 1 ac
SITES: 19-001112

QUADNAME: Los Angeles
MEMO:

IC ID#: LA110 **DATE:** 1974 **PAGES** 4
AUTHOR Clewlow, C. William Jr.
FIRM: University of California Archaeological Survey
TITLE: Report on the Archaeological Resources of Job No. 4059 for Ultrasystems, Inc.
AREA:
SITES: None

QUADNAME: Hollywood
MEMO:

IC ID#: LA1424 **DATE:** 1984 **PAGES** 40
AUTHOR Padon, Beth, Rod Raschke and Roger Hatheway
FIRM:
TITLE: Cultural Resource Assessment of the Proposed Los Angeles Federal Center, Los Angeles, California
AREA: 29 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA1577 **DATE:** 1985 **PAGES** 40
AUTHOR Anonymous
FIRM: Westec Services, Inc.
TITLE: Identification Study for Cultural Resources Within Proposed Metro Rail Subway Station Locations in Metropolitan Los Angeles, CA
AREA:
SITES: 19-000007

QUADNAME: Los Angeles
Hollywood
MEMO:

IC ID#: LA1578 **DATE:** 1983 **PAGES** 39
AUTHOR Anonymous
FIRM: Westec Services, Inc.
TITLE: Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report
AREA: 18 ac
SITES: None

QUADNAME: 1103
Burbank
MEMO:

IC ID#: LA1609 **DATE:** 1986 **PAGES** 75
AUTHOR Padon, Beth
FIRM: LSA Associates, Inc.
TITLE: Los Angeles Outpatient Clinic Veterans Administration Archaeological Assessment Report Phase II
AREA: 2 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA1642 **DATE:** 1980 **PAGES** 225
AUTHOR Costello, Julia G.
FIRM: Science Applications Inc.
TITLE: Los Angeles Downtown People Mover Program Archaeologica Resources Survey: Phast II Evaluation of Significance and Recommendations for Future Actions
AREA:
SITES: Historic structures

QUADNAME: Los Angeles
MEMO:

IC ID#: LA1643 **DATE:** 1981 **PAGES** 150
AUTHOR Costello, Julia G.
FIRM:
TITLE: Los Angeles Downtown People Mover Program Archaeological Resources Survey Phase
AREA:
SITES: None

QUADNAME: Los Angeles
Hollywood
MEMO:

IC ID#: LA1997 **DATE:** 1990 **PAGES** 84
AUTHOR Anonymous
FIRM: Environmental Science Assoc.
TITLE: First Street North Draft Environmental Impact Report
AREA: 8 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA2028 **DATE:** 1974 **PAGES** 40
AUTHOR Clewlow, Carl
FIRM: Ultrasystems, Inc.
TITLE: Draft Environmental Impact Report Bank of America Service Center Los Angeles,
AREA: 10 ac
SITES: None

QUADNAME: Hollywood
Los Angeles
MEMO:

IC ID#: LA2321 **DATE:** 1989 **PAGES** 66
AUTHOR Wheeler, T. L., P. L. Walker, E. Honeysett and, W. Wisura
FIRM: California Department of Parks and Recreation
TITLE: Report and Analysis of Cremated Human Remains from CA-LAN-840
AREA:
SITES: 19-000840

Mistake?

QUADNAME: Malibu Beach
MEMO:

IC ID#: LA2512 **DATE:** 1991 **PAGES** 34
AUTHOR Norwood, Richard H.
FIRM: RT Factfinders
TITLE: Phase II Cultural Resource Evaluation for Historic Site LAN-1990 H the Winchester-Grahm Property Lancaster, California
AREA:
SITES: 19-001990H

Mistake?

QUADNAME: Lancaster
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA2519 **DATE:** 1960 **PAGES** 23
AUTHOR Owen, J. Thomas
FIRM: Historical Society of Southern California
TITLE: The Church by the Plaza: A History of the Pueblo Church of Los Angeles
AREA:
SITES: 19-001112

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2567 **DATE:** 1979 **PAGES** 18
AUTHOR CHACE, PAUL G.
FIRM: Paul G. Chace and Associates
TITLE: Assessment of AN Archaeological Feature Beneath the Merced Theatre Building, El Pueblo De Los Angeles State Historic Park
AREA:
SITES: El Pueble State Historic Park, Natiional Register

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2692 **DATE:** 1985 **PAGES** 45
AUTHOR PADON, BETH, ROD RASCHKE, AND ROGER HATHOWAY
FIRM:
TITLE: Final Environmental Impact Statement Los Angeles Federal Center Master Plan
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA2712 **DATE:** 1978 **PAGES** 90
AUTHOR Huey, Geme
FIRM: CALTRANS
TITLE: Archaeological Survey Report for the El Monte Busway Extension in the City of Los Angeles, Los Angeles County, California
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2713 **DATE:** 1980 **PAGES** 75
AUTHOR Weitze, Karen J.
FIRM: CALTRANS
TITLE: Aliso Street Historical Report El Monte Busway Extension in the City of Los Angeles 07-LA-101 P.M.0. to .5 07202-417801
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2768 **DATE:** 1989 **PAGES** 72
AUTHOR DILLON, BRIAN, AND ROY SALLS
FIRM:
TITLE: Draft Environmental Impact Report Central City West Specific Plan
AREA: 465 ac
SITES: None

QUADNAME: Hollywood
Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA2892 **DATE:** 1993 **PAGES** 17
AUTHOR Stone, David and Robert Sheets
FIRM: Science International Corporation
TITLE: Phase I Archaeological Survey Report Pacific Pieline Project Santa Barbara Coastal Reroutes Ethnohistoric Village Placement Locations
AREA:
SITES:

QUADNAME: Long Beach
South Gate
MEMO:

Mistake?

IC ID#: LA2950 **DATE:** 1992 **PAGES** 356
AUTHOR Anonymous
FIRM: Peak and Associates
TITLE: Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project
AREA: 172 ac
SITES: See Report

QUADNAME: See Report
MEMO:

IC ID#: LA2966 **DATE:** 1993 **PAGES** 31
AUTHOR Anonymous
FIRM: Geotransit Consultants
TITLE: Draft Stage I Environmental Site Assessment Eastside Extension (from Whittier Boulevard and Atlantic Boulevard Intersection to Union Station area) Metro Red Line
AREA: 7 li mi
SITES:

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA3151 **DATE:** 1994 **PAGES** 224
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Alameda District Plan, los Angeles California: Prehistoric and Early Historic Archaeological Research
AREA: 68 ac
SITES: 19-000007,19-000887,19-001112, 19-001575

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3197 **DATE:** 1976 **PAGES** 36
AUTHOR GIERKE, FREDRICK JAMES
FIRM: Archaeology Laboratory, Spring Quarter
TITLE: Avila Adobe 1971 Excavation Potsherds
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3496 **DATE:** n.d. **PAGES** 65
AUTHOR Anonymous
FIRM: Unknown
TITLE: Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific Plan Amendments
AREA: 18.6 li mi
SITES: 19-000159,19-001945

QUADNAME: Burbank, Beverly Hills, Los Angeles,Van Nuys,Hollywood
MEMO: Indexed. No specific location map provided. Site mapped.

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3510 **DATE:** 1983 **PAGES** 20
AUTHOR Knight, Al
FIRM: Westec Services, Inc.
TITLE: Technical Report Archaeological Resources Los Angeles Rail Rapid Transit Project "Metro Rail" Draft Environmental Statement and Environmental Impact Report
AREA: 20 ac
SITES: 19-000007,19-000887,19-000159, 19-001945

QUADNAME: Los Angeles, Beverly Hills, Hollywood Burbank, Van Nuys
MEMO: Indexed. No specific location map provided. Sites mapped.

IC ID#: LA4238 **DATE:** 1998 **PAGES** 5
AUTHOR Conkling, Steve
FIRM: LSA Associates, Inc.
TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R107, at the Intersection of West First Street and South Hill Street, City and County of Los Angeles
AREA: <1ac
SITES: 19-100301

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4262 **DATE:** 1987 **PAGES** 124
AUTHOR Berger, Louis
FIRM: The Cultural Resource Group
TITLE: Zanja No. 3: Brick Culvert Historic American Engineering Record Documentation at the Proposed Federal Center Complex Los Angeles, California
AREA: 2 ac
SITES: 19-000887

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA4447 **DATE:** 1999 **PAGES** 63
AUTHOR Anonymous
FIRM: Myra L. Frank & Associates
TITLE: Los Angeles County Demolition of Buildings Between Spring Street and New High Street
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4623 **DATE:** 1986 **PAGES** 89
AUTHOR Unknown
FIRM: General Services Administration
TITLE: Los Angeles Federal Center Project: Determination of Effect on National Register
AREA: 11.1 ac
SITES: 19-171159, 19-170973, 19-167020, 19-173080, 19-173174, 19-173225
19-173078, 19-167499, 19-166939, 19-167278, 19-166858, 19-167010, 19-166891
QUADNAME: Los Angeles
MEMO:

IC ID#: LA4836 **DATE:** 2000 **PAGES** 319
AUTHOR ?
FIRM: Science Applications International Corporation
TITLE: Phase I Archaeological Survey Along onshore Portions of the Global West Fiber Optic Cable Project
AREA: 200 miles
SITES: none

QUADNAME: South Gate, Venice, Hollywood, Inglewood, Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA5129 **DATE:** 2000 **PAGES** 9
AUTHOR Greenwood, Roberta S.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring at La Golondrina Café, Olvera Street, Pueblo De Los Angeles State Historic Park
AREA: 1 ac
SITES: 19-167020, 19-167820

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5131 **DATE:** 1999 **PAGES** 4
AUTHOR Iverson, Gary
FIRM: Caltrans District 7
TITLE: Negative Archaeological Survey Report: 119910
AREA: <>.25 li mi
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5203 **DATE:** 2001 **PAGES** 9
AUTHOR Foster, John M.
FIRM: Greenwood And Associates
TITLE: Archaeological Monitoring Report: Soil Test Pit Excavation for the Siqueiros Mural Project, El Pueblo de Los Angeles
AREA: <5 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA5413 **DATE:** 2000 **PAGES** 9
AUTHOR Lapin, Philippe
FIRM: LSA Associates, Inc.
TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-02, County of Los Angeles, CA
AREA: <1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5426 **DATE:** 2001 **PAGES** 14
AUTHOR Hale, Alice
FIRM: Caltrans District 7
TITLE: Negative HPSR form: Central Ave. Improvements
AREA: 2 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5433 **DATE:** 2001 **PAGES** 7
AUTHOR Slawson, Dana N.
FIRM: Greenwood & Associates
TITLE: EXPOSURE OF BRICK REMAINS ALonG CENTRAL AVENUE LITTLE TOKYO, CITY OF LOS ANGELES
AREA: <1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA6358 **DATE:** 2002 **PAGES** 42
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report Chinatown Branch Library 639 North Hill Street Los Angeles, California
AREA: 1 ac
SITES: 19-002959

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6362 **DATE:** 1994 **PAGES** 35
AUTHOR Borg, Roger
FIRM: Caltrans District 7
TITLE: Finding of Effect on Historic Properties Arroyo Seco Parkway and Four Level Interchange
AREA: 6 li mi
SITES: None

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA6381 **DATE:** 1993 **PAGES** 33
AUTHOR Byrens, Joan
FIRM: General Services Administration, Region 9
TITLE: General Services Administration Design and Installation of Security Measures for the United States Courthouse Located at 312 North Spring Street, Los Angeles, California
AREA: 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO: No map provided, mapped by reference

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA6840 **DATE:** 2003 **PAGES** 68
AUTHOR Budinger, Fred E., Jr.
FIRM: Tetra, Tech, Inc.
TITLE: Phase I Archaeological Survey Former Aliso Street MGP Site Los Angeles, California
AREA: 52 ac
SITES: None

QUADNAME: Los Angeles
MEMO: 22 site within .5 miles are mentioned in report

IC ID#: LA7527 **DATE:** 2006 **PAGES** 50
AUTHOR Feldman, Jessica B., Lemon, David, and Hope, Andrew
FIRM: Myra L. Frank & Associates, Inc./California Department of Transp
TITLE: Caltrans Statewide Historic Bridge Inventory Update Tunnels
AREA: 0
SITES: 19-187739, 19-187740, 19-187741, 19-187742, 19-187743, 19-187744, 19-187745,

QUADNAME: Los Angeles, Malibu, Beach, Condor Peak, Agua Dulce, Mt. Baldy, Beverly Hills, Van
MEMO:

IC ID#: LA7552 **DATE:** 2000 **PAGES** 7
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report: Waste Line Trenching for the Cielito Lindo Restaurant Olvera Street, El Pueble de Los Angeles
AREA: ~.25 ac
SITES: Nat. Reg. Hist. Dist.

QUADNAME: Los Angeles
MEMO: Nat. Reg. Hist. Dist.

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7550 **DATE:** 2004 **PAGES** 76
AUTHOR Mirro, Vanessa and Gust, Sherri
FIRM: Cogstone Resource Management Inc.
TITLE: Archaeological and Paleontological Monitoring Report for the Grand Avenue Realignment Project, Los Angeles, California
AREA: ~.5 ac
SITES: 19-003129H

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA7555 **DATE:** 2004 **PAGES** 4
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Inspection of Auger Bore Samples for the Coyote Pass Geotechnical Project
AREA: ~7.5 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA7544 **DATE:** 2006 **PAGES** 15
AUTHOR Foster, John M.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Program, Alameda Street/North Spring Street Arterial Redesign-Phase 1, California
AREA: <1600 ft
SITES: 19-100542, 19-000007, 19-000887

QUADNAME: Los Angeles
MEMO: 30 sites within 1/2 mile radius of project area

SCCIC Bibliography: Regional Connector
LA Quadrangle

IC ID#: LA7888 **DATE:** 2004 **PAGES** 52
AUTHOR Strauss, Monica
FIRM: EDAW, Inc.
TITLE: Archaeological Resources Assessment for the Proposed Public Safety Facilities Master Plan Project, City of Los Angeles, California
AREA: 36 ac
SITES: 19-003347, 19-186944, 17 sites listed on pages 27 and 28

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8519 **DATE:** 1997 **PAGES** 50
AUTHOR Various
FIRM: Micropaleo Consultants, Georesources Associates, Beta Analytic
TITLE: The Metropolitan Water District of Southern California Headquarters Facility Project; Union Station,
Los Angeles, California
AREA: 1.5 ac
SITES: None

QUADNAME: Los Angeles
MEMO: Firms cont'd: Paleo Environmental Associates

IC ID#: LA8514 **DATE:** 2004 **PAGES** 81
AUTHOR Gregory, Carrie and Margarita Wuellner
FIRM: EDAW, Inc.
TITLE: Historical Assessment and Technical Report for the Proposed Public Safety Facilities Master Plan, Los Angeles, California
AREA: 36 ac
SITES: 19-186882, 19-186883, 19-186884, 19-186885, 19-186886, 19-186887, 19-186888

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA8969 **DATE:** 2007 **PAGES** 34
AUTHOR Warren, Keith
FIRM: Applied Earthworks, Inc.
TITLE: Results of Archaeological Monitoring for the New Police Administration Building
AREA: < 1 ac
SITES: 19-003091

QUADNAME: Hollywood,Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA110 **DATE:** 1974 **PAGES:** 4

AUTHOR: Clewlow, C. William Jr.

FIRM: University of California Archaeological Survey

TITLE: Report on the Archaeoldgical Resources of Job No. 4059 for Ultrasystems, Inc.

AREA:

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA1578 **DATE:** 1983 **PAGES:** 39

AUTHOR: Anonymous

FIRM: Westec Services, Inc.

TITLE: Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report

AREA: 18 ac

SITES: None

QUADNAME: 1103
Burbank

MEMO:

IC ID#: LA1642 **DATE:** 1980 **PAGES:** 225

AUTHOR: Costello, Julia G.

FIRM: Science Applications Inc.

TITLE: Los Angeles Downtown People Mover Program Archaeologica Resources Survey: Phast II Evaluation of Significance and Recommendations for Future Actions

AREA:

SITES: Historic structures

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA1741 **DATE:** 1989 **PAGES:** 75

AUTHOR: Dillon, Brian D.

FIRM:

TITLE: Archaeological and Paleontological Reconnaissance and Impact Evaluation of the Central City West Study Area Los Angeles, California

AREA: 350 ac

SITES: None

QUADNAME: Hollywood

Los Angeles

MEMO:

IC ID#: LA2028 **DATE:** 1974 **PAGES:** 40

AUTHOR: Clewlow, Carl

FIRM: Ultrasystems, Inc.

TITLE: Draft Environmental Impact Report Bank of America Service Center Los Angeles, California

AREA: 10 ac

SITES: None

QUADNAME: Hollywood

Los Angeles

MEMO:

IC ID#: LA2768 **DATE:** 1989 **PAGES:** 72

AUTHOR: DILLON, BRIAN, AND ROY SALLS

FIRM:

TITLE: Draft Environmental Impact Report Central City West Specific Plan

AREA: 465 ac

SITES: None

QUADNAME: Hollywood

Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA3103 **DATE:** 1993 **PAGES:** 415

AUTHOR: Greenwood, Roberta S.

FIRM:

TITLE: Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1

AREA: 4 li mi

SITES: 19-000007,19-000887,19-001575

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4215 **DATE:** 1998 **PAGES:** 3

AUTHOR: Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, near West Third Street and South Grand Avenue, City and County of Los Angeles

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA447 **DATE:** **PAGES:** 18

AUTHOR: Singer, Clay A.

FIRM:

TITLE: Preliminary Evaluation of Cultural Resources Located Along a Series of Proposed Urban Mass Transit System Alignment Alternatives in the City of Los Angeles, California

AREA:

SITES: ?

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA483 **DATE:** 1978 **PAGES:** 175

AUTHOR: Greenwood, Roberta

FIRM: Greenwood and Associates

TITLE: Archaeological Resources Survey the Proposed Downtown People Mover Project Corridor Area

AREA:

SITES: none

QUADNAME: Hollywood
Los Angeles

MEMO:

IC ID#: LA4836 **DATE:** 2000 **PAGES:** 319

AUTHOR: ?

FIRM: Science Applications International Corporation

TITLE: Phase I Archaeological Survey Along onshore Portions of the Global West Fiber Optic Cable Project

AREA: 200 miles

SITES: none

QUADNAME: South Gate, Venice, Hollywood, Inglewood, Los Angeles

MEMO:

IC ID#: LA5081 **DATE:** 2000 **PAGES:** 11

AUTHOR: Lapin, Philippe

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Wireless Facility LA 650-02, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA5093 **DATE:** 1999 **PAGES:** 14

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 679-11, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

IC ID#: LA5098 **DATE:** 1999 **PAGES:** 11

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 226-01, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

IC ID#: LA6362 **DATE:** 1994 **PAGES:** 35

AUTHOR: Borg, Roger

FIRM: Caltrans District 7

TITLE: Finding of Effect on Historic Properties Arroyo Seco Parkway and Four Level Interchange

AREA: 6 li mi

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA6437 **DATE:** 2000 **PAGES:** 22

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for AT&T Wireless Services Facility 1998, County of Los Angeles, California

AREA: 0.25 ac

SITES: 19-166958

QUADNAME: Hollywood

MEMO:

IC ID#: LA6435 **DATE:** 1999 **PAGES:** 16

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA679-11, County of Los Angeles, California

AREA: 0.25 ac

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6446 **DATE:** 2000 **PAGES:** 12

AUTHOR: Mason, Roger

FIRM: Chambers Group, Inc.

TITLE: Proposed AT&T Wireless Services Facility: 7th Hill (R282) in the City of Los Angeles, Los Angeles County, California

AREA: 0.25 ac

SITES: None

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector
Hollywood Quadrangle

IC ID#: LA6460 **DATE:** 2002 **PAGES:** 49

AUTHOR: Duke, Curt and Judith Marvin

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment Cingular Wireless Facility No. SM204-02, Los Angeles County, California

AREA: 0.25

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6396 **DATE:** 2001 **PAGES:** 56

AUTHOR: Anonymous

FIRM: Tetra Tech, Inc.

TITLE: An Archaeological Assessment of the Proposed Verizon Wireless Grand Avenue, East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles County, California 90071

AREA: 1 ac

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6463 **DATE:** 2002 **PAGES:** 95

AUTHOR: ANONYMOUS

FIRM: TETRA TECH, INC.

TITLE: A SECTION 106 HISTORIC PRESERVATION REVIEW OF THE PROPOSED VERIZON WIRELESS GRAND AVENUE EAST LOS ANGELES UNMANNED CELLULAR TELECOMMUNICATIONS SITE TO BE LOCATED AT 601 WEST 5TH STREET, LOS ANGELES, CA 90071

AREA: < 1AC

SITES:

QUADNAME: HOLLYWOOD

MEMO:

SCCIC Bibliography: Regional Connector
Hollywood Quadrangle

IC ID#: LA6424 **DATE:** 2002 **PAGES:** 8

AUTHOR: DUKE, CURT

FIRM: LSA Associates, Inc.

TITLE: CULTURAL RESOURCE ASSESSMENT CINGULAR WIRELESS FACILITY NO. SM 140-01 LOS ANGELES COUNTY, CALIFORNIA

AREA: < .25 AC

SITES:

QUADNAME: HOLLYWOOD

MEMO:

IC ID#: LA6449 **DATE:** 2002 **PAGES:** 30

AUTHOR: Bonner, Wayne H.

FIRM: Chamabers Group, Inc.

TITLE: Cultural Resources Survey Report for an AT&T Wireless Services Telecommunications Facility: Cell Site 7th Hill (R282) in the City of Los Angeles, Los Angeles County, California Section 106 Historic 701 S. Hill Street Los Angeles

AREA: .25 ac

SITES: 19-173189

QUADNAME: Hollywood

MEMO: 19-173189 is listed as 701 S. Hill in State Historic Resources Inventoryt but project address is lis

IC ID#: LA6440 **DATE:** 2001 **PAGES:** 7

AUTHOR: Mason, Roger D.

FIRM: Chambers Group, Inc.

TITLE: Proposed Verizon Wireless Facility: Pershing Square (99800089) in the City and County of Los Angeles, California

AREA: .25 ac

SITES: None

QUADNAME: Hollywood

MEMO: DOE:19-01-0810-0000

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA7527 **DATE:** 2006 **PAGES:** 50

AUTHOR: Feldman, Jessica B., Lemon, David, and Hope, Andrew

FIRM: Myra L. Frank & Associates, Inc./California Department of Transp

TITLE: Caltrans Statewide Historic Bridge Inventory Update Tunnels

AREA: 0

SITES: 19-187739, 19-187740, 19-187741, 19-187742, 19-187743, 19-187744, 19-187745, 19-187746

QUADNAME: Los Angeles, Malibu, Beach, Condor Peak, Agua Dulce, Mt. Baldy, Beverly Hills, Van Nuys

MEMO:

IC ID#: LA7733 **DATE:** 2006 **PAGES:** 12

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate LSANCA0739 (811 Wilshire), 811 Wilshire Boulevard, Los Angeles, Los Angeles County, California

AREA: <1 ac

SITES: 617 S. Olive, 630 W. 5th, 354-704 S. Spring, 300-849 S. Broadway, 401-411 W. 5th, btw Broadway and Hill and 6th and 7th, 830 Wilshire

QUADNAME: Hollywood

MEMO:

IC ID#: LA7774 **DATE:** 2005 **PAGES:** 11

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search Results and Site Visit for Cingular Wireless EL-038-01 (SBC Switch-Downtown LA), 433 South Olive Street & 434 Grand Avenue (aka 420 South Grand Avenue), Los Angeles, Los Angeles County, California

AREA: <1 ac

SITES: 533, 540 Grand Ave.; 449, 515 S. Olive St.; 423, 550 W. 4th St; 401, 415, 427, 501 W. 5th St.

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector
Hollywood Quadrangle

IC ID#: LA7980 **DATE:** 2006 **PAGES:** 15

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA0155A (433 S. Olive Street: AT&T Switch), 433 South Olive Street, Los Angeles, Los Angeles County, California

AREA: <1 ac

SITES: None

QUADNAME: Hollywood

MEMO: 14 NR properties located within one-half mile radius of the candidate

IC ID#: LA8026 **DATE:** 1985 **PAGES:** 17

AUTHOR: Carrico, Richard

FIRM: WESTEC Services, Inc.

TITLE: Treatment Plan for Potential Cultural Resources within Proposed Metro Rail Subway Station Locations in Metropolitan Los Angeles, California

AREA: ~80 ac

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA8252 **DATE:** 1986 **PAGES:** 113

AUTHOR: Snyder, John W.

FIRM: Caltrans

TITLE: Request for Determination of Eligibility for Inclusion in the National Register of Historic Places

AREA:

SITES: 19-173803, 19-173432, 19-174996, 19-175070, 19-171738

QUADNAME: Los Angeles, Hollywood, Pasadena

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA8754 **DATE:** 2007 **PAGES:** 13

AUTHOR: Bonner, Wayne H. and Kathleen Crawford

FIRM: Michael Brandman Associates (MBA)

TITLE: Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA03104K (California Jewelry), 607 South Hill Street, Los Angeles, Los Angeles County, California

AREA: < 1 ac

SITES: 19-166921

QUADNAME: Hollywood

MEMO:

APPENDIX B

SACRED LANDS FILE SEARCH AND NATIVE AMERICAN CONSULTATION

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

February 9, 2009

Ms. Caprice l"Kip" Harper, RPA
SWCA ENVIRONMENTAL CONSULTANTS
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

Sent by FAX to 626-240-0807
No. Pages: 2

Re: Request for a Sacred Lands File records search and Native American Contacts list for."**Regional Connector Transit Corridor Project, City and County of Los Angeles."** The project will extend the Blue Line from the 7th Street/Metro Center Terminus to the Union Station via the Little Tokyo/Arts District Station on the Metro Gold Line Extension, Los Angeles County, California

Dear Ms. Harper:

The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE). The SLF search did indicate the presence of Native American cultural resources in the project area (APE or 'area of potential effect).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes that may have knowledge of cultural resources in the project area. We recommend that you contact persons on the attached list of Native American contacts. A Native American tribe or individual may be the only source of information about a cultural resource. They may have specific knowledge as to whether or not the known cultural resources identified may be at-risk by the proposed project

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
Los Angeles County
February 11, 2009

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C Gabrielino
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
, Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Regional Connector Transit Corridor Project, City and County of Los Angeles, California; FOR the "extension from the Blue Line at the 7th Street/Metro Center terminus to Union Station via the Little Tokyo/Arts District Station on the Metro Gold Line; Los Angeles County, California for which a Sacred Lands File search and NAC list were requested.

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Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

Cindi Alvitre
Ti'At Society
6515 E. Seaside Walk, #C
Long Beach, CA 90803

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Ms. Alvitre:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

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ENVIRONMENTAL CONSULTANTS

Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,

Kip Harper

Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:
Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

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www.swca.com

April 16, 2009

Robert Dorame
Gabrielino Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Dorame:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

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SWCA
ENVIRONMENTAL CONSULTANTS

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Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,

Kip Harper

Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:
Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

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South Pasadena, CA 91030
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www.swca.com

April 16, 2009

Sam Dunlap
Gabrielino Tongva Nation
P.O. Box 86908
Los Angeles, CA 90086

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Dunlap:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

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ENVIRONMENTAL CONSULTANTS

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SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,

Kip Harper

Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:
Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

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Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

Anthony Morales
Gabrielino/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Morales:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

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Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

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April 16, 2009

John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation
tattnlaw@gmail.com

Sent Via E-mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Rosas:

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- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

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SWCA
ENVIRONMENTAL CONSULTANTS

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Sincerely,

Kip Harper

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Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration

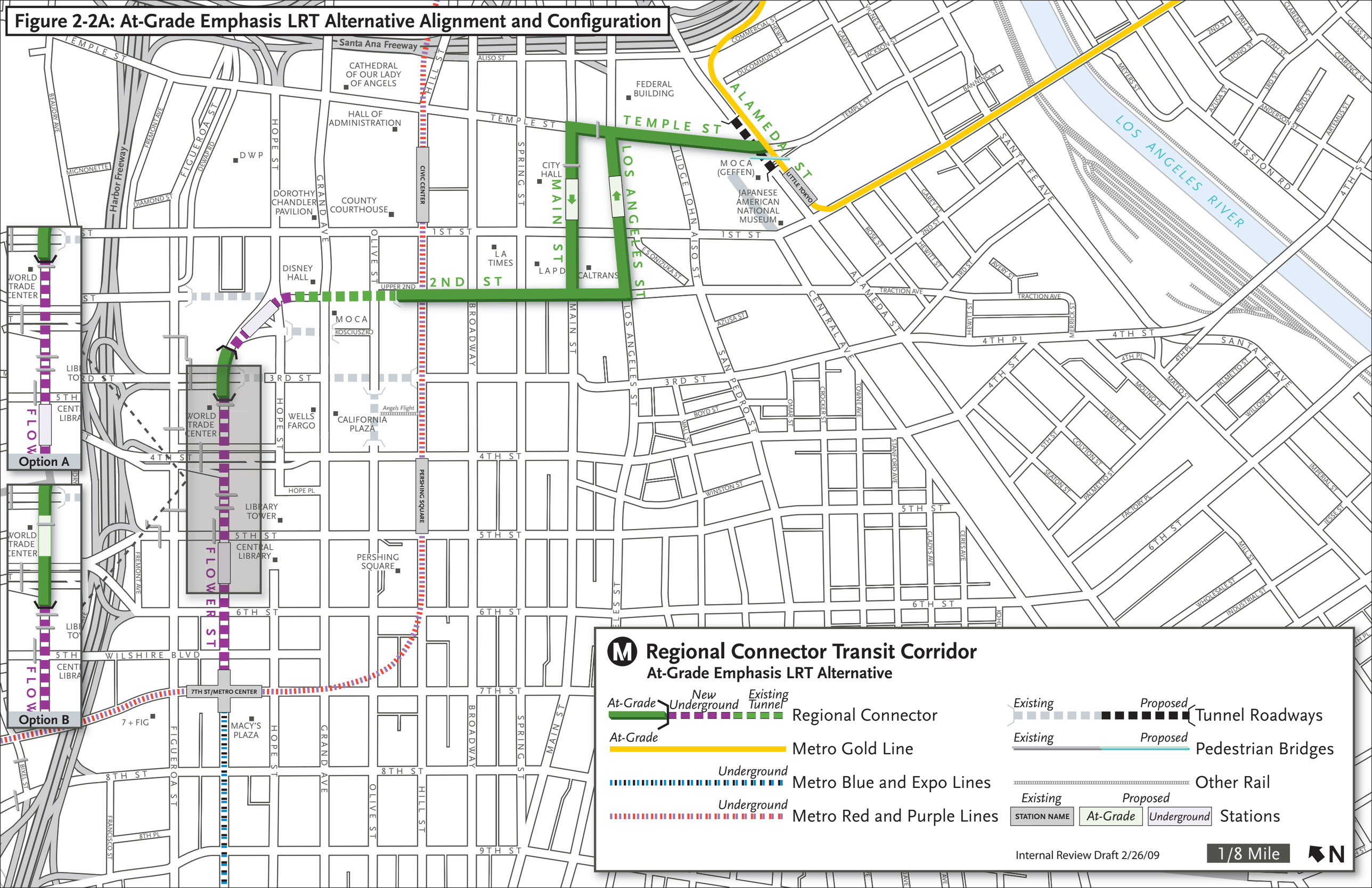
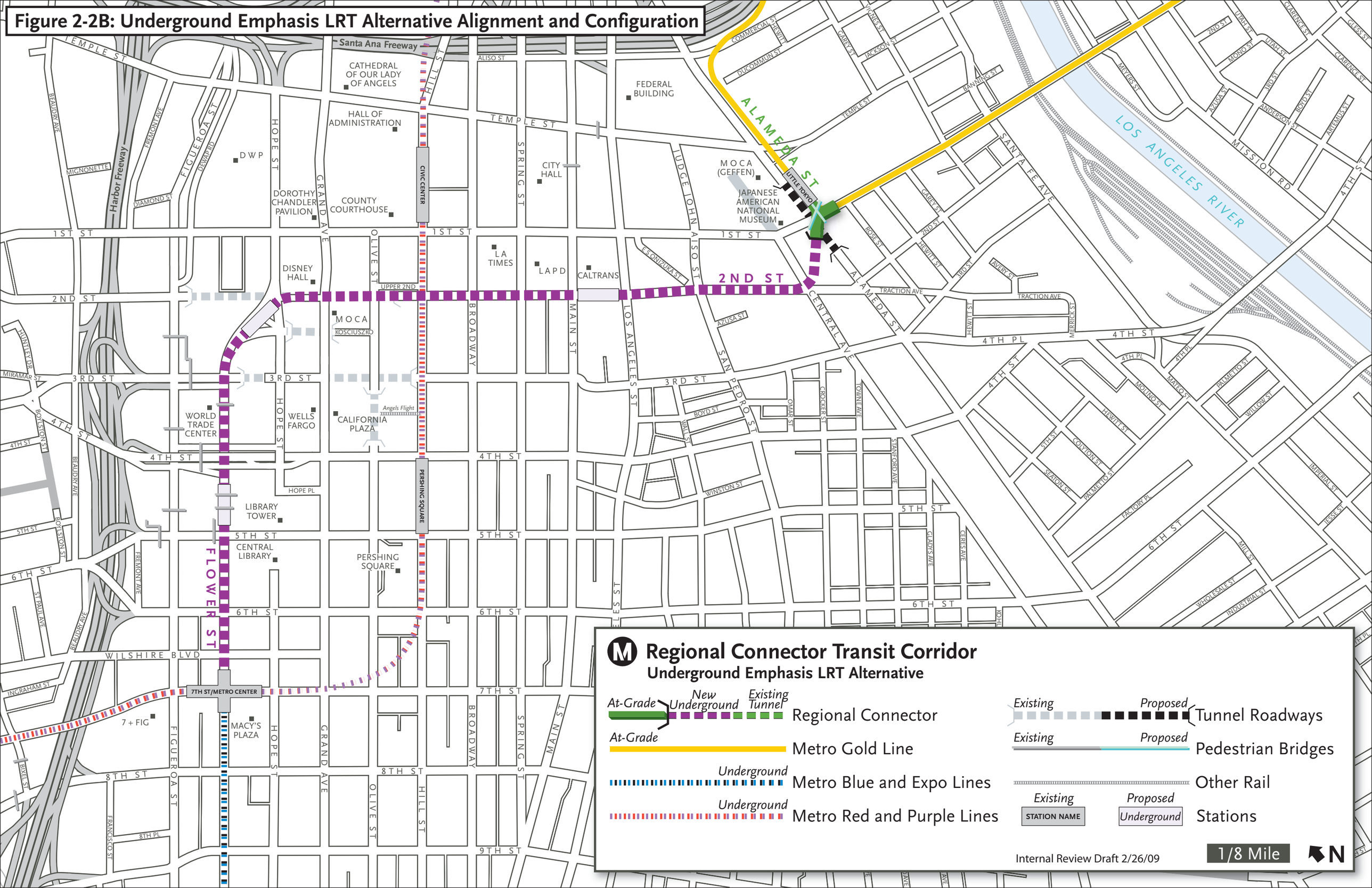


Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration



CONVERSATION RECORD

DATE 4/17/09 **TIME** 3:55 ☐ **A.M.** ☒ **P.M.**

NAME OF CONTACT Anthony Morales
COMPANY/AGENCY Gabrielino/Tongva San Gabriel Band of Mission Indians
PHONE NUMBER
PROJECT NAME Regional Connector Transit Corridor Project **PROJECT NO.** 14104

Notes:

On 4/17/09 Mr. Morales called to discuss the letter that he received regarding the proposed Regional Connector Transit Corridor Project (Regional Connector). At first he thought the letter was in regards to construction on Alameda Street related to the Gold Line Extension. Mr. Morales was concerned that so much construction is underway for that project, and he had not been contacted about it by an archaeologist (or anyone). He said that he was concerned about that project because if its proximity to the village of Yangna and the Metropolitan Water District (MWD) building. He expressed dismay that MTA had never contacted him about the project.

I explained that the project that we are working on is Regional Connector that would connect the Red Line station at 7th/Flower with the Gold Line Extension station at Alameda/Temple.

Mr. Morales said that he had similar concerns about Regional Connector's proximity to the village of Yangna. In addition, Mr. Morales said that he considers the project area to be highly sensitive for Native American resources and sacred places considering that this is in the heart of the city.

Mr. Morales said that he is aware of the fact that cultural resources have been uncovered during the construction of pipelines in the downtown area, and that human remains were uncovered during construction of the MWD [Metropolitan Water District] building.

Mr. Morales wants the MTA [Metro] to know that a local tribe—the Gabrielino--has concerns.

RECORDED BY: K. Harper

Kip Harper

From: Johntommy Rosas [tattnlaw@gmail.com]
Sent: Friday, April 17, 2009 4:00 PM
To: Kip Harper
Subject: Re: Regional Connector Transit Corridor Project

OK -I WILL BE SENDING MORE-

AND IN MORE DETAIL-

AND I TYPE IN CAPS MOST OF THE TIME SO DONT MAKE MISTAKE OF ASSUMING -I AM NOT YELLING-I DONT DO THAT-.
THANKS JOHNTOMMY

On Fri, Apr 17, 2009 at 3:52 PM, Kip Harper <KHarper@swca.com> wrote:

> Dear Mr. Rosas,
>
> Your comments have been received.
>
> Kip
>
> Caprice D. (Kip) Harper
>
> Project Manager-Cultural Resources
>
> SWCA Environmental Consultants
>
> 625 Fair Oaks Avenue, Suite 190
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>
> ---
>
> **From:** Johntommy Rosas [mailto:tattnlaw@gmail.com]
> **Sent:** Thursday, April 16, 2009 12:34 PM
> **To:** Kip Harper

Subject: Re: Regional Connector Transit Corridor Project

HI I CONFIRM RECEIPT OF YOUR DOCUMENT,

WE OBJECT AND OPPOSE THIS PROPOSED PROJECT,

ON GROUNDS THAT ITS A GROWTH INDUCING NEGATIVE IMPACTUNDER CEQA,

ON VIOLATIONS TO OUR INDIGENOUS RIGHTS,

AND THAT THE TATTN LANDS ARE OURS

AND SO THE CLAIMED LAND TITLES BY PROJECT[OWNERS] IS DEFECTIVE AND ILLEGAL.

/S/ JOHNTOMMY ROSAS

On Thu, Apr 16, 2009 at 12:02 PM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

I have attached a letter regarding the Regional Connector Transit Corridor Project for your review.

Regards,

Kip

Caprice D. (Kip) Harper

Project Manager-Cultural Resources

SWCA Environmental Consultants

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Kip Harper

From: Johntommy Rosas [tattnlaw@gmail.com]
Sent: Monday, May 11, 2009 11:10 AM
To: Kip Harper
Subject: Re: Regional Connector Transit Corridor Project

HI - YOUR INFORMATION ATTCHMENT -DOES NOT CONTAIN ANY ENVIRONMENTAL, CONSTRUCTION REPORTS OR DETAILS SO WE CAN CONTINUE OUR DETAILED RESPONSE-

ALSO YOU CANT LEGALLY IMPOSE DEADLINES ON US - SO DONT TRY OR MAKE THOSE COMMENTS TO US.

WE WILL RESPOND DIRECTLY TO LEAD AGENCY[S] NOW-

On Mon, May 11, 2009 at 11:01 AM, Kip Harper <KHarper@swca.com> wrote:

> Dear Mr. Rosas,
>
> I am following up with you regarding your last email. We haven't received a response yet.
>
> If you'd like to send a more detailed response, please do so by the end of the week.
>
> Regards,
>
> Kip
>
> Caprice D. (Kip) Harper
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ON GROUNDS THAT ITS A GROWTH INDUCING NEGATIVE IMPACTUNDER CEQA,

ON VIOLATIONS TO OUR INDIGENOUS RIGHTS,

AND THAT THE TATTN LANDS ARE OURS

AND SO THE CLAIMED LAND TITLES BY PROJECT[OWNERS] IS DEFECTIVE AND ILLEGAL.

/S/ JOHNTOMMY ROSAS

On Thu, Apr 16, 2009 at 12:02 PM, Kip Harper <KHarper@swca.com> wrote:

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APPENDIX C

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION- SERIES 523 FORMS

Appendix C removed to protect confidential locations of archeological resources.

APPENDIX D

PROJECT-RELATED FTA/SHPO CORRESPONDENCE

Preserving America's Heritage

March 31, 2009

Mr. Roger Snoble
Chief Executive Officer
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

RE: ***Regional Connector Transit Project***
Los Angeles County, California

Dear Mr. Snoble:

On March 17, 2009, the Advisory Council on Historic Preservation (ACHP) received your invitation to participate in the environmental review process for the referenced undertaking pursuant to Section 6002 of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). At this time, we do not expect to attend meetings or provide formal comments at environmental review milestones. However, we retain the right to become involved in the environmental review for this action in the future if, based on information provided by the Federal Transit Administration (FTA) or other consulting parties, we determine that our involvement is warranted.

In order to ensure compliance with Section 106 of the *National Historic Preservation Act,* the ACHP encourages FTA to initiate the Section 106 process by notifying, at its earliest convenience, the appropriate State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), Indian tribes, and other consulting parties pursuant to our regulations, "Protection of Historic Properties" (36 CFR Part 800). Through early consultation, FTA and your agency will be able to determine the appropriate strategy to ensure Section 106 compliance for this undertaking. Please note that FTA, as the federal agency, must be involved in the notification of consulting parties.

FTA and the Los Angeles County Metropolitan Transportation Authority should continue consultation with the appropriate SHPO/THPO, Indian tribes, and other consulting parties to identify and evaluate historic properties and to assess any potential adverse effects on those historic properties. If you determines through consultation with the consulting parties that the undertaking will adversely affect historic properties, or that the development of an agreement document is necessary, FTA must notify the ACHP and provide the documentation detailed at 36 CFR § 800.11(e). In the event that this undertaking is covered under the terms of an existing agreement document, you should follow the process it outlines.

Should you have any questions as to how your agency should comply with the requirements of Section 106, please contact Blythe Semmer by telephone at (202) 606-8552 or by e-mail at bsemmer@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing, and Assistance Section
Office of Federal Agency Programs

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

201 Mission Street
Suite 1650
San Francisco, CA 94105-1839
415-744-3133
415-744-2726 (fax)

Mr. Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
California State Department of Parks and Recreation
Post Office Box 942896
Sacramento, CA 94296-0001

APR - 7 2009

Attention: Dr. Susan Stratton, Supervisor, Project Review Unit

Re: Regional Connector Transit Corridor Project

Dear Mr. Donaldson:

The Federal Transit Administration (FTA), in coordination with the Los Angeles County Metropolitan Transportation Authority (LACMTA), is pleased to initiate efforts in the identification of historic properties and the analysis of effects on those properties for various components of the proposed Regional Connector Transit Corridor Project in downtown Los Angeles, California. This letter is to request your review and concurrence with the Area of Potential Effects (APE) and to delegate the authority to consult directly with the LACMTA.

Cultural resources identification and analysis will be prepared in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, as required by the Advisory Council on Historic Preservation, with regulations contained in 36 Code of Federal Regulations (CFR), Part 800, and applicable sections of the California Environmental Quality Act (CEQA).

Project Description

The Regional Connector Transit Corridor Project is a proposed light rail transit infrastructure improvement project that would construct approximately 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th Street/Metro Center Station (the terminus of the existing Metro Blue Line and Metro Expo Line under construction and opening in 2010) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in downtown Los Angeles and would create direct connections between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct connections into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- Build Alternative 1: At-Grade Emphasis Light Rail Transit (LRT) Alternative (includes two options for station locations)
- Build Alternative 2: Underground Emphasis LRT Alternative

Stations

Proposed station locations would include the following (depending on the selected alternative):

- Build Alternative 1:
    - Underground station on Flower Street, just north of 5th (Option A only)
    - At-grade station on Flower Street, just south of 3rd Street (Option B only)
    - Underground station just south of the intersection of Hope and Flower Streets
    - At-grade northbound only station on Los Angeles Street, just north of 1st Street
    - At-grade southbound only station on Main Street, just north of 1st Street
- Build Alternative 2:
    - Underground station on Flower Street, just north of 5th Street
    - Underground station just south of the intersection of Hope and Flower Streets
    - Underground station on 2nd Street between Broadway and Los Angeles Streets.

Area of Potential Effects

A proposed project-specific APE was established in accordance with 36 CFR Part 800.16 (d), which defines an APE as:

> the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

The proposed project APE (see enclosed map) was delineated to ensure identification of significant historic and architectural resources that may be directly or indirectly affected by the proposed project and are listed in or eligible for inclusion in the National Register of Historic Places (National Register) and/or California Register of Historical Resources (California Register). The APE was established using methodology consistent with those of previous LACMTA projects.

For historic and architectural resources, the proposed APE includes all parcels adjacent to both sides of the proposed project alignment, including stations, subway or open cut construction areas, and areas proposed for acquisition. In addition, the APE includes areas that may be subject to potential project-related effects, including visual or audible effects, and settlement effects that may

result from construction or implementation the proposed project. Additionally, the built environment APE includes the boundaries of two known identified historic districts that are listed in or eligible for the National Register.

For archaeological resources, the proposed APE includes the proposed at-grade and underground right-of-way and/or areas of direct ground disturbance. The APE also includes areas with permanent site improvements and areas for staging and temporary construction activities.

The proposed vertical APE extends from approximately 0 to 25 feet above the existing ground surface to approximately 100 feet below the existing ground surface.

Because the proposed project is expected to be constructed by 2018, identification efforts will be focused on parcels containing improvements constructed in or before 1968 (2018-50 years=1968). Those improvements will be evaluated for National and California register eligibility as part of the project identification phase, as well as noting all previously identified historic properties and historical resources.

Consultation Coordination

To the extent that it facilitates the review and approval process, FTA has authorized certain experienced and knowledgeable agencies to consult directly with you in addressing Section 106 requirements. In permitting this arrangement, agencies have been instructed to keep FTA informed by forwarding copies of all transmittals to our attention, and immediately contacting FTA on matters deemed to be of significant importance. Until further notice, this authority is extended to the LACMTA for the Regional Connector Transit Corridor project.

Previous scoping efforts have taken place and are expected to continue over the next several months. On behalf of FTA, the LACMTA supported by its consultants Camp Dresser and McKee (CDM) and Steven W. Carothers & Associates (SWCA), is currently contacting local historic groups, Native American groups, and other stakeholders that may have an interest in the project. The LACMTA also expects to meet with the Los Angeles Conservancy and the City of Los Angeles, Office of Historic Resources, to address their concerns.

Please let us know if you have comments on the project description, APE definition, methodology, or map. If you or your staff is interested in a site visit of the corridor, we would be pleased to accommodate your request. The LACMTA appreciates your assistance in the preservation of cultural resources related to all aspects of their transit system. If you or any members of your staff have questions, please contact Mr. Ray Tellis of our Los Angeles Metropolitan Office at (213) 202-3956.

Sincerely,

Leslie T. Rogers
Regional Administrator

Enclosure: Draft Area of Potential Effects Map

cc: Dolores Roybal Saltarelli, Project Manager, LACMTA

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

September 9, 2009

Reply In Reference To: FTA090409B

Leslie T. Rodgers
Regional Administrator
U.S. Department of Transportation
Federal Transit Administration, Region IX
201 Mission Street, Suite 1650
San Francisco, CA 94105-1839

RE: Section 106 Consultation for Proposed Regional Connector Transit Corridor Project, Los Angeles, CA

Dear Mr. Rodgers:

Thank you for initiating consultation with me pursuant to 36 CFR Part 800, the implementing regulation of Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended. On behalf of the U.S. Department of Transportation, Federal Transit Administration (FTA), you are both initiating consultation with me and seeking my comments on your initial documentation of the undertaking's Area of Potential Effect (APE).

As I understand it, the Regional Connector Transit Corridor Project is a proposed light rail transit infrastructure improvement project that will necessitate the construction of approximately 1.8 miles of new dual tracks. The project will connect four travel corridors that stretch across 50 miles of Los Angeles County. The proposed project will directly link the 7th Street/Metro Center Station located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station located at 1st and Alameda Streets. The project will include the construction of several new Metro stations in downtown Los Angeles and would create direct connections between Long Beach and Pasadena, as well as East Los Angeles and Culver City. In addition to your project description, you have submitted descriptions of route and design alternatives, detailed aerial maps of the project area, and a summary of initial consultation efforts pertaining to potentially interested Native American groups, local government entities, and local historic preservation organizations.

Having reviewed this documentation, I have the following comments:

1) The initial APE for this undertaking has been adequately determined and documented pursuant to 36 CFR Part 800.4 (a) (1);

2) As outlined in conversations between State Historian Tristan Tozer, State Associate Archaeologist William Soule and Francesca Smith of SWCA Environmental Consultants, I will be sent draft cultural resource/built environment surveys and archaeology technical reports encompassing the project area. Once I have received this information, I will provide further comment;

3) Please submit proof of public notification and consultation, including copies of notification letters and any responses you may receive.

Thank you for considering historic resources during project planning. I look forward to continuing this consultation. If you have any questions or comments, please contact staff historian Tristan Tozer at (916) 651-0304 or email at ttozer@parks.ca.gov.

Sincerely,

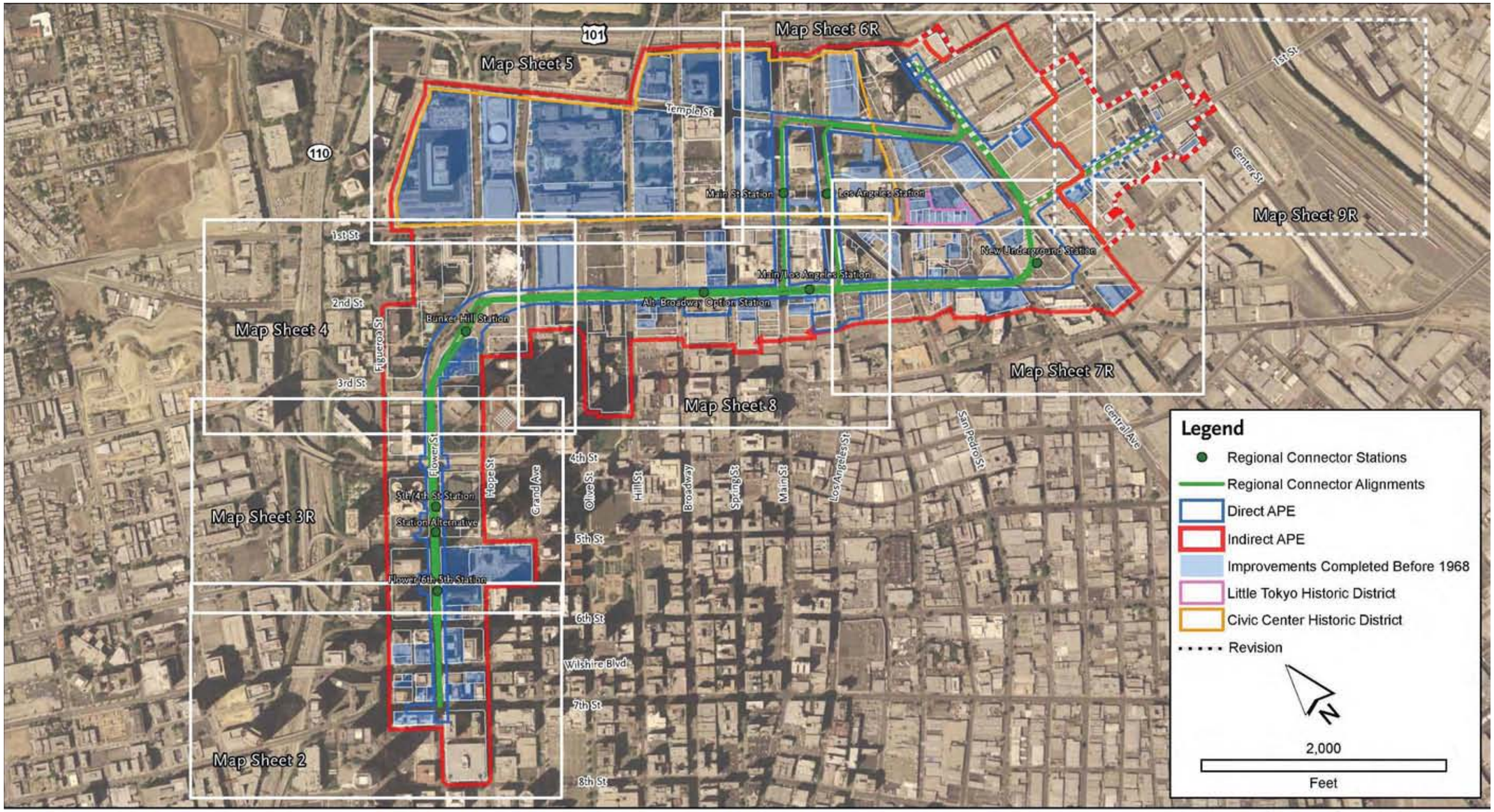
Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

APPENDIX E

PROJECT AREA OF POTENTIAL EFFECTS MAP

The following maps depict the project Area of Potential Effects. This series of maps were prepared for the Built Environment Technical Memorandum and show the locations of historic built environment features. They are included in this appendix because they also include the tax assessor's parcel numbers referred to in the archaeology survey methodology section, Section 4.4.2.



Sheet 1 of 9 Revised December 23, 2009

Figure E-1. Area of Potential Effects Map, Sheet 1

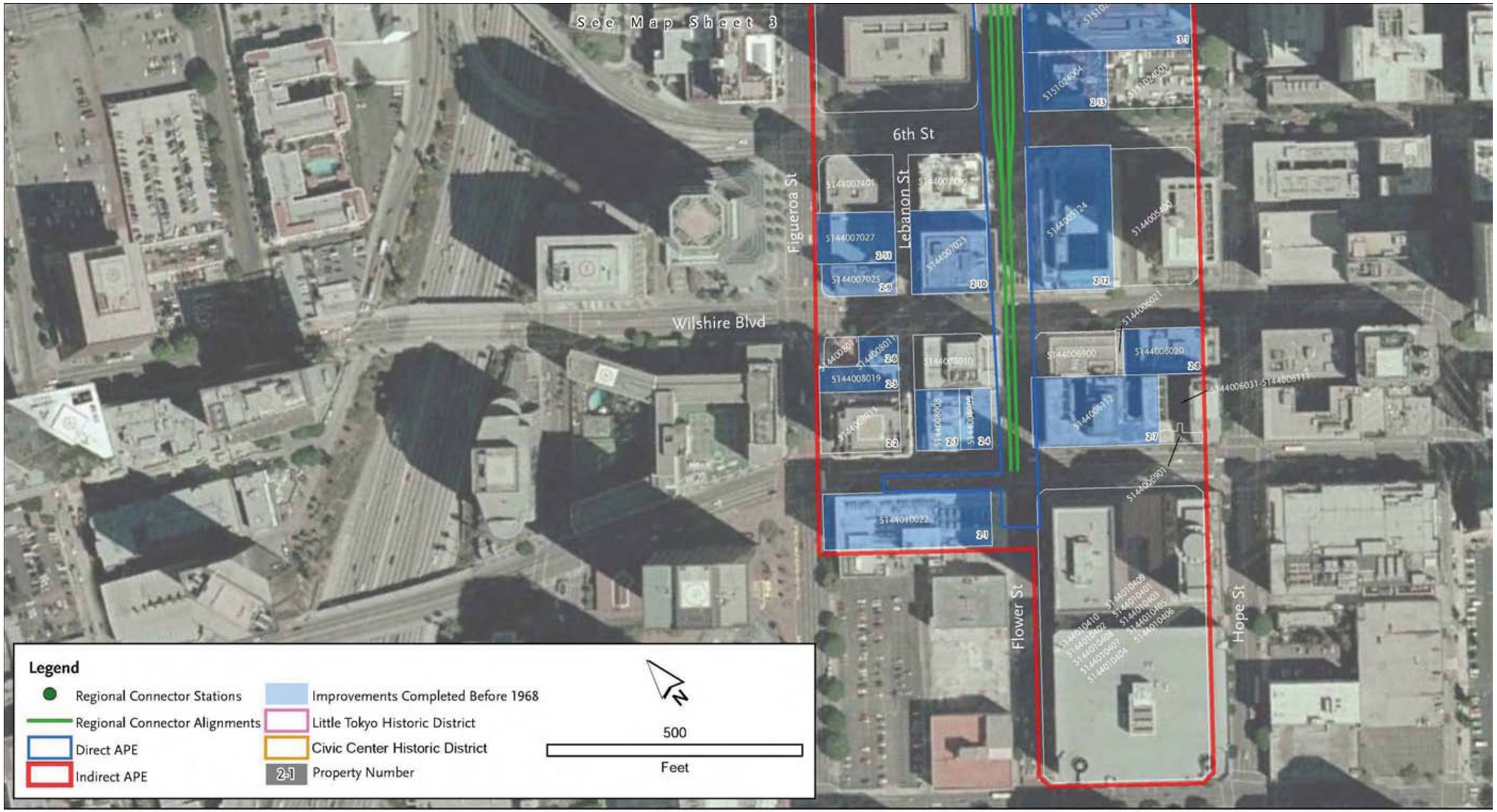
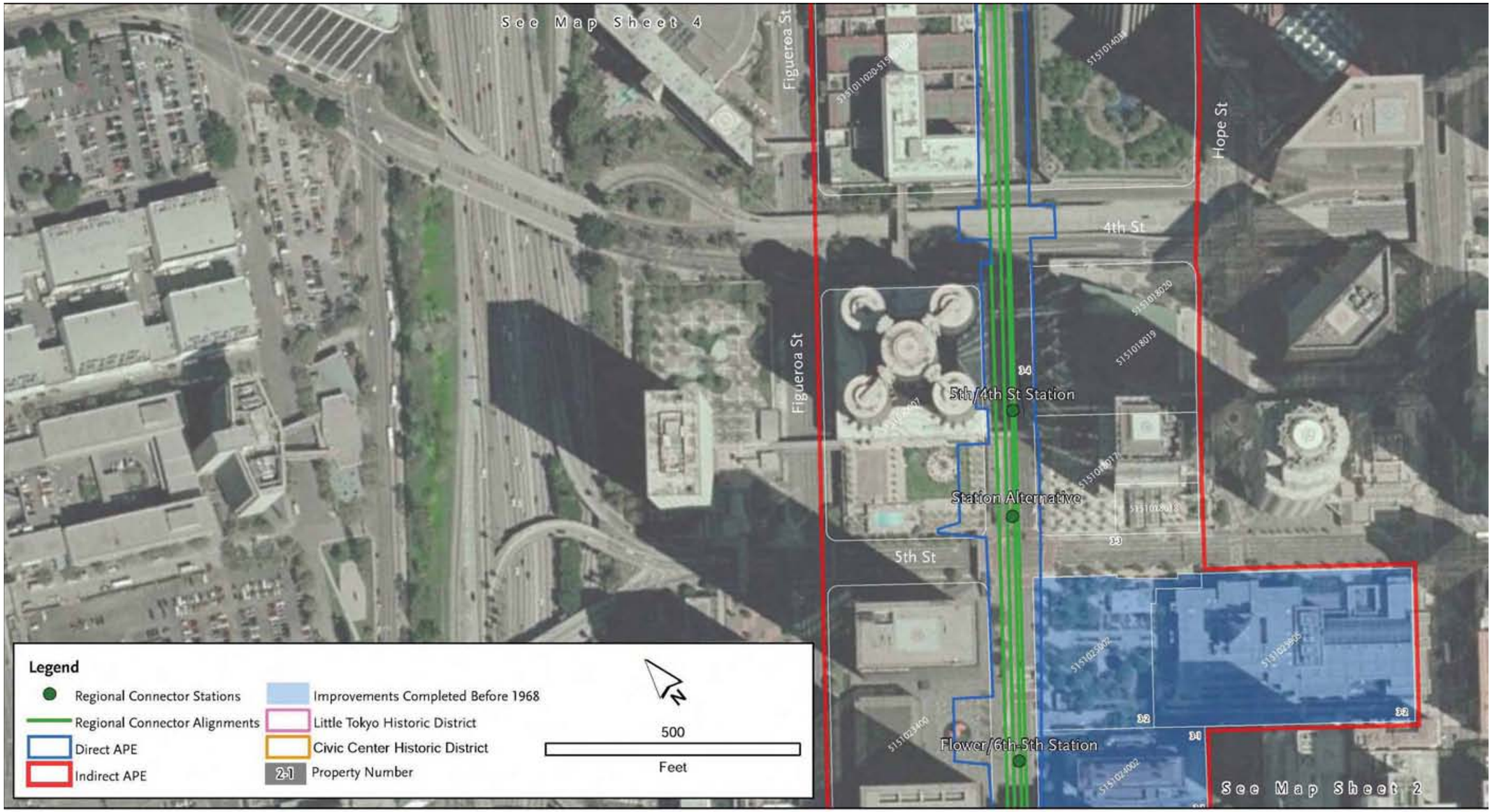


Figure E-2. Area of Potential Effects Map, Sheet 2



Sheet 3R of 9 Revised December 23, 2009

Figure E-3. Area of Potential Effects Map, Sheet 3

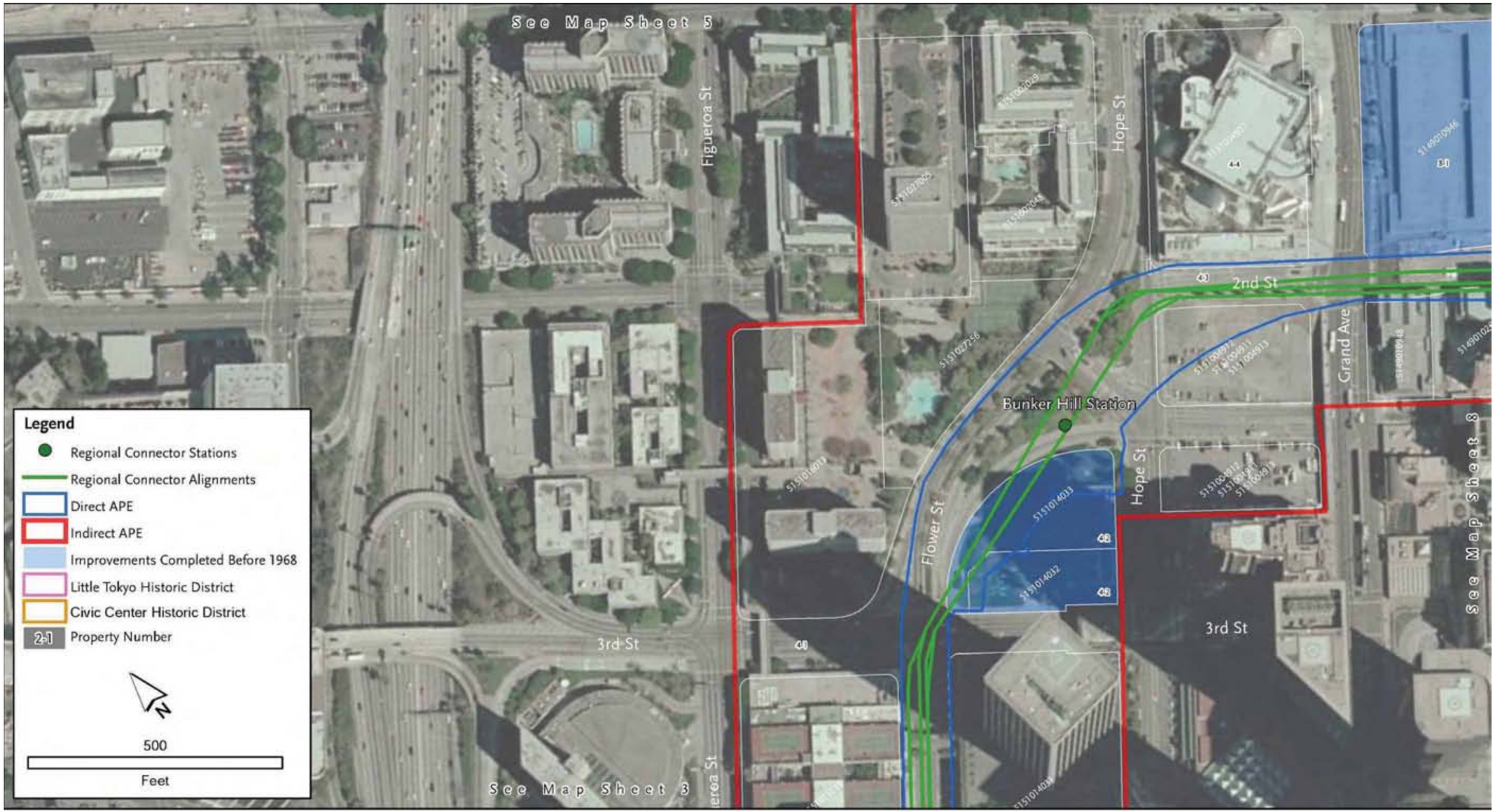


Figure E-4. Area of Potential Effects Map, Sheet 4

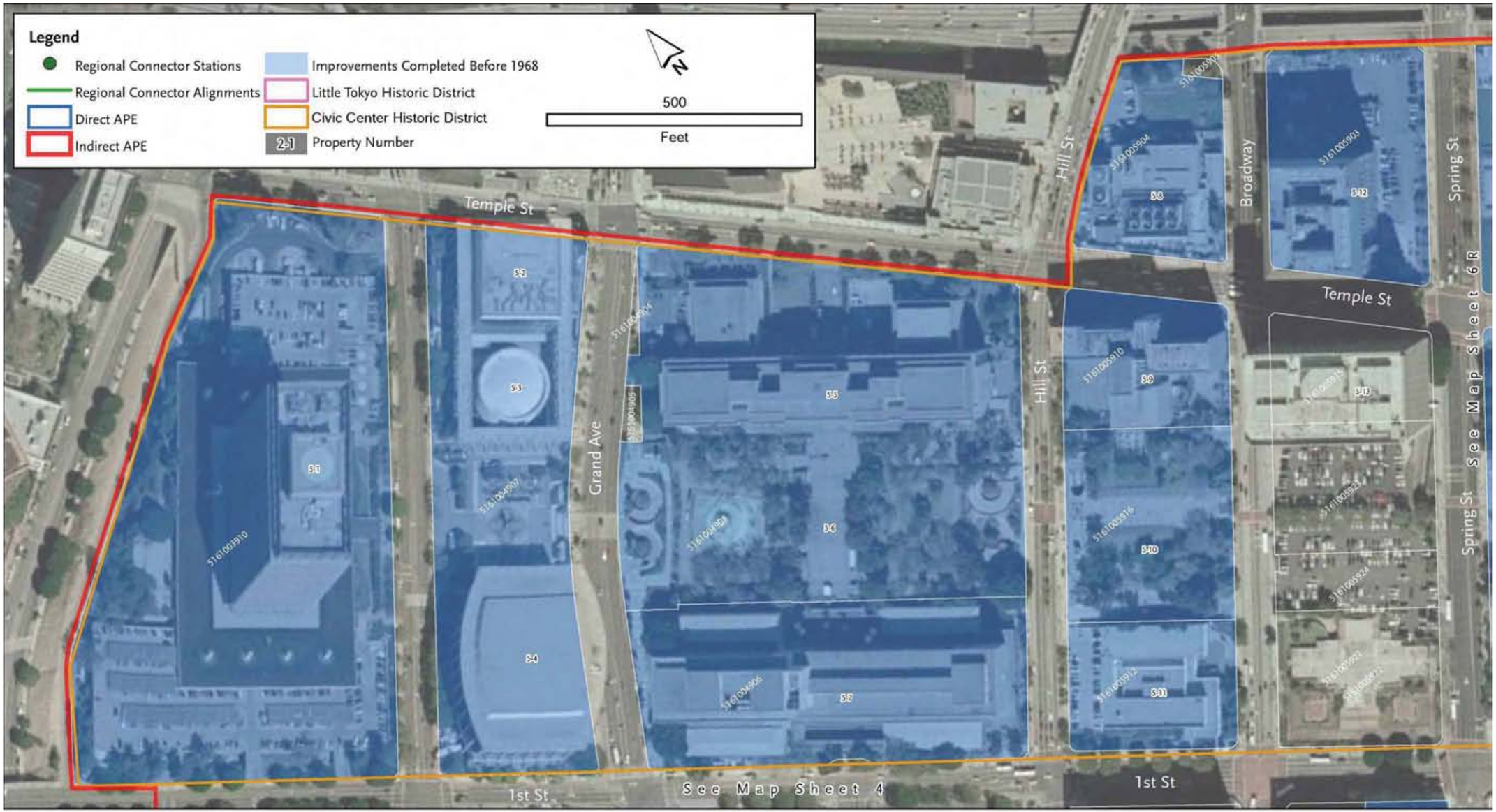


Figure E-5. Area of Potential Effects Map, Sheet 5

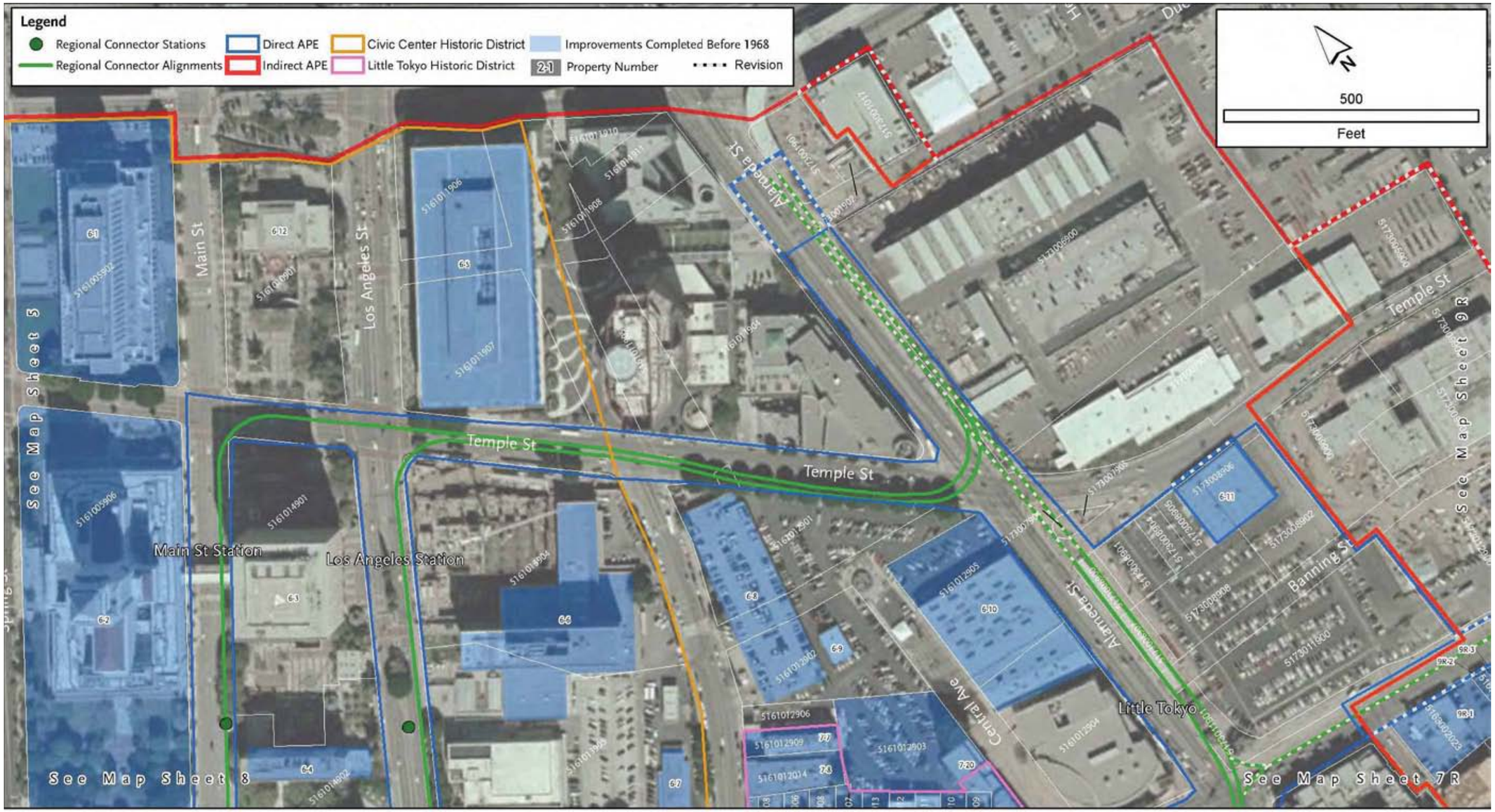


Figure E-6. Area of Potential Effects Map, Sheet 6

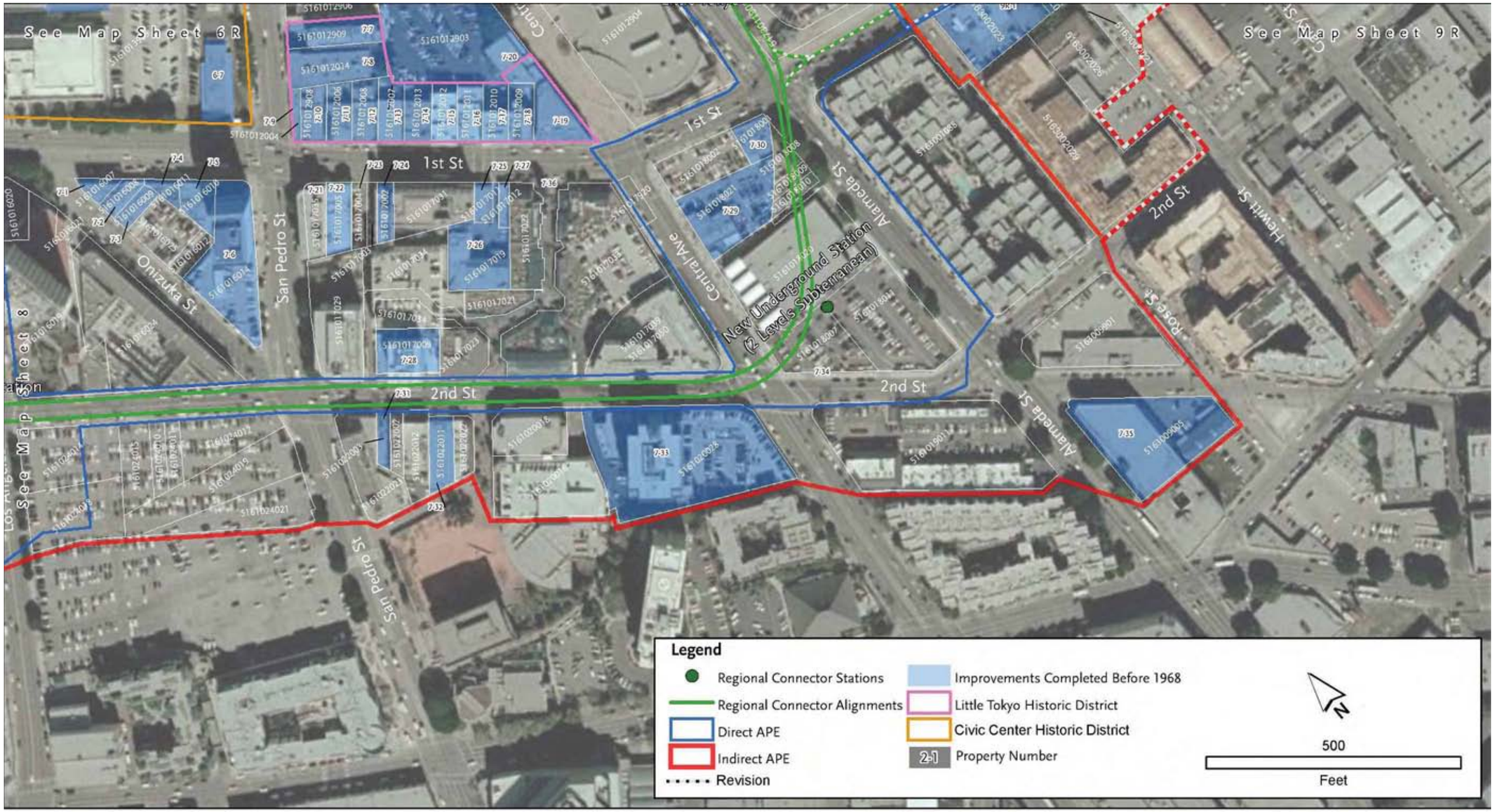
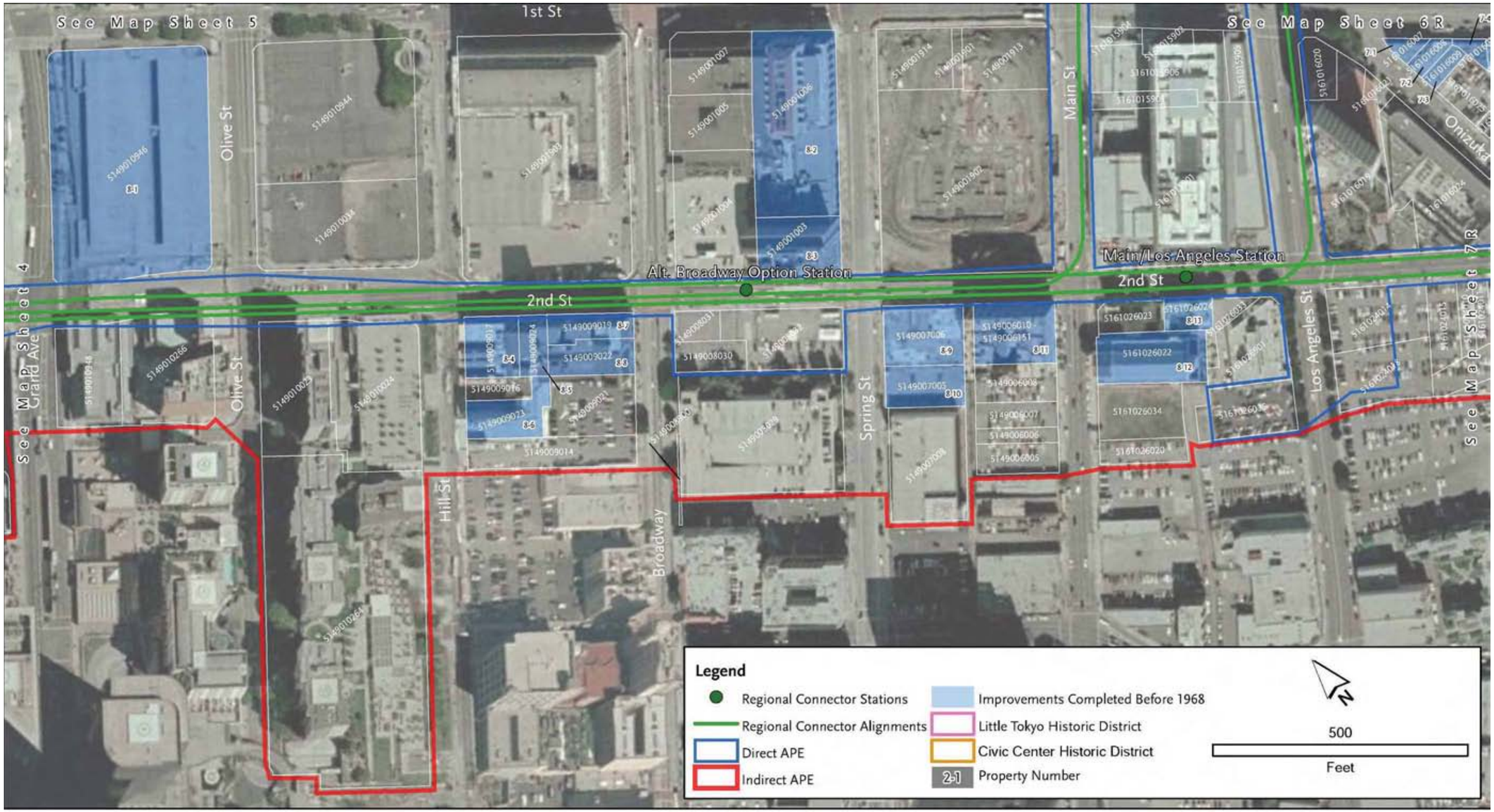


Figure E-7. Area of Potential Effects Map, Sheet 7



Sheet 8 of 9

Figure E-8. Area of Potential Effects Map, Sheet 8

Figure E-9. Area of Potential Effects Map, Sheet 9

APPENDIX F

LETTER REGARDING ZANJA MADRE NATIONAL REGISTER NOMINATION

STATE OF CALIFORNIA - THE RESOURCES AGENCY
Arnold Schwarzenegger, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov

June 4, 2009

Christeen Taniguchi
Galvin Preservation Associates, Inc.
1611 S. Pacific Coast highway, Suite 104
Redondo Beach, CA 90277

Re: Zanja Madre
National Register of Historic Places Nomination

Dear Ms. Taniguchi:

Thank you for submitting the Zanja Madre National Register nomination. The nomination provides a good overview of the history of the Zanja Madre, and discusses its beginnings in 1781 as an interconnected open ditch system, the introduction of enclosed pipes to the system, and its abandonment in 1904 as the City of Los Angeles' dominate water system. The overview introduces the context in which the system's significance can be evaluated under National Register Criterion A in the area of Engineering for important associations with the urban and agricultural development of Los Angeles. However, the nomination also indicates that the Zanja Madre water system no longer retains sufficient integrity to meet National Register eligibility, and that only a 75-foot segment of the Zanja Madre is being nominated.

Segments of linear resources can meet eligibility requirements for listing on the National Register if the nominated segment retains integrity, and is sufficiently long enough to convey the significance of the resource of which it represents. The nomination does not demonstrate how this segment of the Zanja Madre meets National Register eligibility requirements under Criterion A. While the segment is "directly associated" with the Zanja Madre, the nomination does not discuss how this small segment of the extensive water conveyance system conveys the Zanja Madre's significance for important associations with the development of Los Angeles (the historic context developed in the nomination for Criterion A eligibility).

It is possible for a segment of a larger resource to meet eligibility requirements if it can be documented to be a rare surviving element of the larger system. In this case, the nomination must establish the segment as the only or best surviving element of the system and demonstrate that the segment retains the essential physical features necessary to convey historic character of the resource. Although the nomination states, "this 75 foot long segment is by far the longest example left intact from this important period in the city's history" the nomination does not establish that as fact. A discussion of all of the components that made up the Zanja Madre system, including the

underground linear features, structures, and buildings associated with the system, and an analysis of the existing conditions of extant components would be necessary to understand the rarity of the segment. The nomination would still need to establish that enough of the property is surviving to convey significance.

If you determine the segment of the Zanja Madre might have the potential to meet National Register eligibility as a rare surviving example and will be redrafting the nomination, a few technical errors will need to be addressed. We would be happy to discuss the revision suggestions for the Zanja Madre nomination with you if you feel it would be of benefit. Please contact me at 916-653-5789, ctoffelmier@parks.ca.gov.

Sincerely,

Cynthia Toffelmier
State Historian II

CC: Wilbur Babb, Community Relations in Rail Operations, Los Angeles County Metropolitan Transportation Authority

Regional Connector Transit Corridor
Draft Environmental Impact Statement/ Draft Environmental Impact Report

APPENDIX Z

CULTURAL RESOURCES - PALEONTOLOGY (UPDATED)

State Clearinghouse Number: 2009031043

LOCALLY PREFERRED ALTERNATIVE IMPACTS TO ARCHEOLOGICAL AND PALEONTOLGICAL RESOURCES

The Draft Technical Memoranda for Archaeological Resources and Paleontological Resources were included with the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) that was released for public comment on September 3, 2010.This addendum serves to finalize the draft report. Two variations of the Fully Underground LRT Alternative (Little Tokyo Variation 1 and Little Tokyo Variation 2) were analyzed in this report. Little Tokyo Variation 2 was subsequently dropped from consideration, and Little Tokyo Variation 1 became the sole alignment for the Fully Underground LRT Alternative.

On October 28th, 2010, Metro's Board of Directors approved staff's recommendation to designate the Fully Underground LRT Alternative described in the publicly reviewed Draft EIS/EIR for the Regional Connector Transit Corridor as the Locally Preferred Alternative (LPA). After the close of the Draft EIS/EIR comment period, refinements were made to the LPA to reduce impacts and address comments received. This addendum incorporates those refinements. The LPA would provide a direct connection from 7th Street/Metro Center Station to the Metro Gold Line near 1st and Alameda Streets. The Metro Gold, Blue and Expo light rail lines would be connected allowing trains to operate between Claremont and Long Beach, and from Santa Monica to the Eastside. In the action for approval, the Board also directed staff to remove the property located on the southeast corner of 2nd and Spring Streets from the list of potential acquisitions as well as eliminate the station at 5th and Flower Streets. This was due to its close proximity to the existing 7th Street/Metro Center Station and a need to reduce costs. The designated LPA thus includes three new stations instead of the original four described in the Draft EIS/EIR. On January 4th, 2011, the Federal Transit Administration (FTA) authorized Metro to initiate Preliminary Engineering as part of FTA New Starts funding program. In its authorization, FTA requested that Metro among other items pursue the identification of appropriate mitigations and realize potential cost savings. Consistent with FTA's authorization, refinements to the Locally Preferred Alternative have been identified and are to be analyzed as part of the development of the Final EIS/EIR.

This addendum to the Technical Memoranda was developed to describe the project refinements to the LPA. The effects on archeological and paleontological resources are the same as what was described in the Draft Technical Memoranda.

1.0 UPDATED PROJECT DESCRIPTION

On October 28th, 2010, the Metro Board of Directors concurred with staff's recommendation to designate the Fully Underground LRT Alternative as the LPA. The LPA alignment is

essentially the same as the Fully Underground LRT Alternative, except it does not include the Flower/5th/4th Street station and has a modified route through Little Tokyo. However, it still travels under the intersection of 1st and Alameda Streets rather than crossing at-grade, and connects to the Metro Gold Line within 1st Street and north of Temple Street.

LPA refinements made since the Draft EIS/EIR to reduce impacts include:

- Relocation of the proposed tunnel boring machine (TBM) insertion site to the Mangrove property northeast of 1st and Alameda Streets in order to reduce community disruption due to construction activities
- Elimination of cut and cover construction on 2nd Street in Little Tokyo
- Extension of TBM machine operation from 2nd/Hope Street station to 4th and Flower Streets, allowing an additional block of cut and cover construction to be eliminated
- Slight modifications to tunnel depths
- Rerouting of the tunnels beneath Japanese Village Plaza in order to reduce acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street

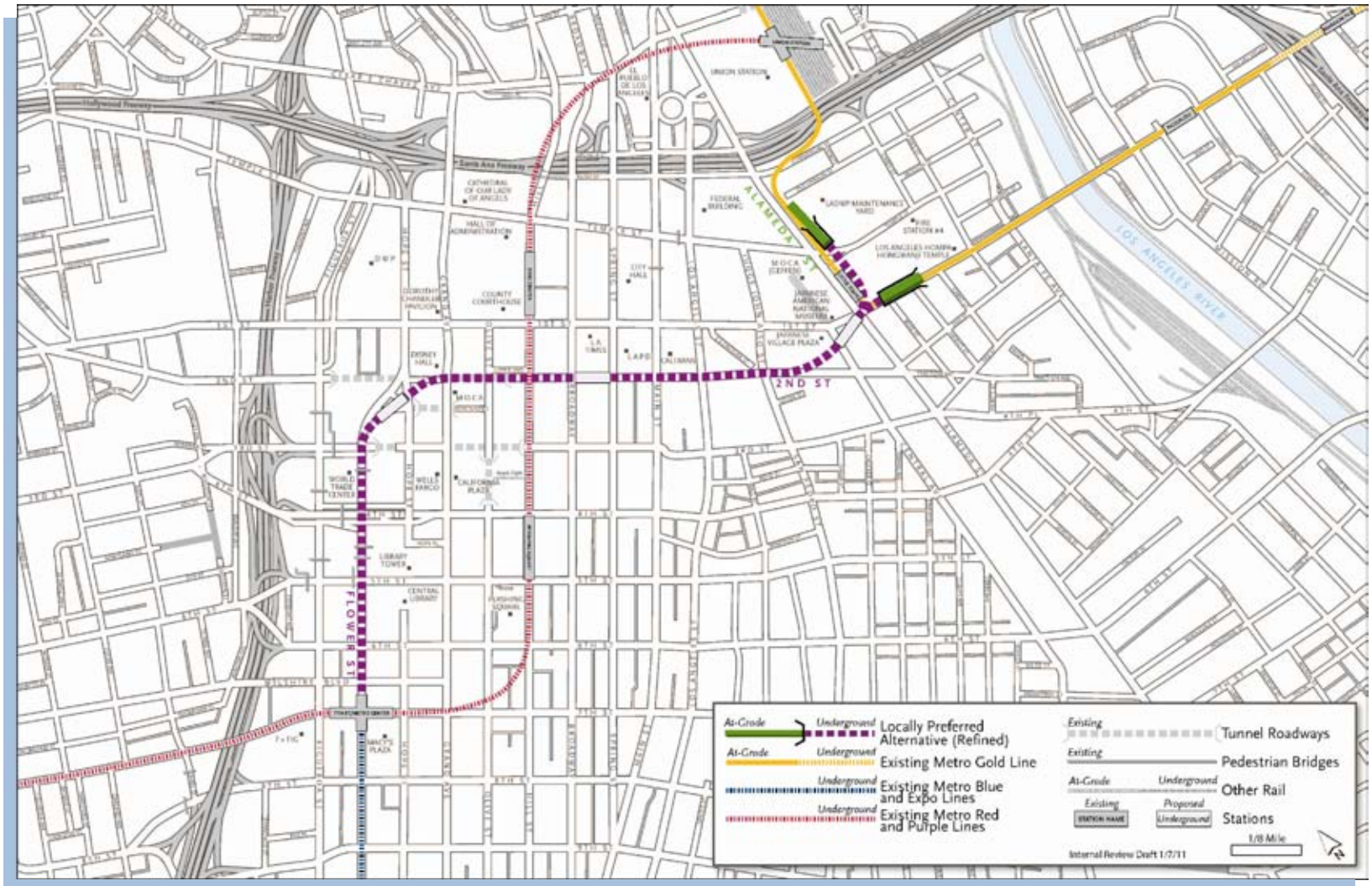


Figure 1 –Locally Preferred Alternative

1.1 Route Overview

The LPA alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station and would run underneath Flower Street. An enhanced pedestrian walkway would be provided along Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets, which would improve the pedestrian connection between the Financial District and the 7th Street/Metro Center Station. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets. A new underground station would be located just southwest of the intersection of 2nd and Hope Streets.

At 2nd and Hope Streets, a new pedestrian connection would be made to Upper Grand Avenue. A pedestrian plaza connecting to Upper Grand Avenue is currently planned above General Thaddeus Kosciuszko Way as part of the Broad Museum. Metro would construct an elevator from the station entrance to the plaza if one is not already provided. If the plaza is not built, Metro would build a pedestrian bridge to connect the elevator to Upper Grand Avenue.

Tracks would then head east underneath 2nd Street to the next proposed underground station between Broadway and Spring Street (2nd Street/Broadway station). The tracks would continue east underneath 2nd Street to just west of Central Avenue at approximately the pedestrian signal to the JVP, where the alignment would then veer northeast under privately held property and Central Avenue to a newly proposed Little Tokyo/Arts District underground station (1st/Central Avenue station). The proposed underground station would be partially located within Central Avenue and the northern half of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking would need to be acquired for construction of this station. However, the remaining businesses on that block would remain, including the Office Depot and associated parking. This station may include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed

An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Two new portals would be located to the north and east of the junction, where trains would rise to the surface to connect to the Metro Gold Line heading north to Claremont and east to I-605.

One portal would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line tracks. This portal would rise to the north within the maintenance yard of the City of Los Angeles Department of Water and Power (LADWP) and connect to the existing LRT bridge over US 101, allowing a connection to the Metro Gold Line to Claremont. Tracks would run from the junction under 1st and Alameda Streets through a new tunnel crossing beneath Temple Street and the Mangrove property (the parcel on the northeast corner of 1st and Alameda Streets) to the new portal. This new tunnel

would run immediately east of the existing Little Tokyo/Arts District Station and Metro Gold Line tracks.

The second portal would be located within 1st Street between Alameda and Garey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. The widening would start at Alameda Street and continue east, significantly tapering down as it crosses Hewitt Street, returning to the existing condition prior to the Los Angeles Hompa Hongwanji Buddhist Temple, to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

Access to property northeast of 1st and Alameda Streets, the Mangrove property, would need to be acquired for insertion of the TBM, to stage construction of both portals, to connect to the Metro Gold Line LRT bridge, and to construct the tunnels beneath Temple Street and the Mangrove property. During construction, tracks would be installed in this area at-grade to allow service to proceed on the Metro Gold Line while construction activities occur within the project area. Figure 2-10 provides a map of this alternative.

The existing Metro Gold Line Eastside Extension and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction with intermittent disruptions related to construction activities. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles and the existing, at-grade Little Tokyo/Arts District Station would terminate. In its place, Metro would initiate operations on two routes:

- Between Claremont and Long Beach
- Between East Los Angeles and Santa Monica

Crossovers could be located just east of the proposed station at 2nd and Broadway Streets, underground beneath 1st Street just east of the intersection of 1st and Alameda Streets, and underground beneath the Mangrove property, north of the rail junction. In addition, a pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. The crossovers and pocket track may not be needed at these locations and may ultimately be placed in other locations. Tunnel boring machines cannot be used for construction of crossovers since underground crossover locations require cut and cover construction. More information on these construction methods is provided in the Description of Construction, Appendix K.

1.2 Operating Characteristics

The Fully Underground LRT Alternative (LPA) consolidates the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

East-West Route (Santa Monica to I-605 via the Metro Expo Line, Regional Connector, and Metro Gold Line Eastside Extension tracks): Metro Expo Line trains from Santa Monica would travel on existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, the trains would continue north along the new Regional Connector tracks to a new junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to a new portal on 1st Street, and continue along the Metro Gold Line Eastside Extension tracks to I-605.

North-South Route (Claremont to Long Beach via the Metro Gold Line, Regional Connector, and Metro Blue Line tracks): After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to a new junction beneath 1st and Alameda Streets. Trains would then travel to a new portal on the LADWP maintenance yard site, and continue along the Pasadena Metro Gold Line and the Foothill Extension to Claremont.

The east-west and north-south routes would each operate with five minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

2.0 LPA EFFECTS, IMPACTS AND MITIGATION FOR ARCHAEOLOGICAL RESOURCES

Construction of the Fully Underground LRT Alternative (LPA) has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles Zanja System, and sites CA-LAN-3588, P-19-003338, and P-19-003339 (Details regarding these resources can be found in the body of the Technical Memorandum for Archaeology).

Archaeological features associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect. Implementation of mitigation measures described in Sections 1.2.2.1 and 1.2.2.2 would reduce potential direct impacts to identified and previously unidentified archaeological resources to a less than significant level. The LPA would not result in operational impacts to both identified and previously unidentified archaeological resources.

Given that implementation of the mitigation measure described in Section 1.2.2.1 1 would reduce potential construction impacts to previously unidentified archaeological resources to a less than significant level, the LPAwould not contribute to a cumulative impact on unidentified archaeological resources.

Potential destruction of portions of the Los Angeles Zanja System could contribute to a cumulative impact to this resource. Implementation of the mitigation measure described in Section 1.2.2.1.2 would reduce both direct and cumulative impacts to known archaeological resources, including the Zanja System, to a less than significant level.

2.1 NEPA Finding and CEQA Determination

Construction of the LPA has the potential to affect previously unknown resources. With implementation of mitigation measures, potential construction and cumulative impacts would not be adverse or significant under NEPA or CEQA. The LPA would not result in adverse or significant operational impacts to archaeological resources.

2.2.Mitigation Measures

Construction of the Regional Connector Transit Corridor project may impact one or more NRHP- or CRHR-eligible archaeological sites along with an unknown number of previously unidentified archaeological resources.

Since operational impacts to archaeological resources, including both previously recorded and undiscovered resources, are not expected for any of the project alternatives, mitigation for operation would not be required for this project.

In the event that resource avoidance is not possible, and to mitigate impacts to previously unidentified archaeological resources, the following mitigation measures related to construction activities are recommended.

Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

2.2.1 Treatment of Undiscovered Archaeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementing this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementing a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected.

If cultural resources are discovered or if previously identified resources are affected in an unexpected manner, the CRMMP would ensure that such resources receive mitigation to reduce the impact to a less than significant level. This plan would include, but not be limited to, the following elements:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains

- Reporting of monitoring and mitigation results

Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist would conduct a short awareness training session for all construction workers and supervisory personnel. The session would explain the importance of and legal basis for protecting significant archaeological resources.

Each worker would also learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of the supervisor and the archaeological monitor.

This worker education session could include visual representations of artifacts (prehistoric and historic) that might be found in the project vicinity, and it could take place on-site immediately prior to the start of ground disturbance.

Supervisory personnel may benefit from longer training sessions, while a brief training would suffice for non-supervisory workers. The brief (approximate 30- to 45-minute) training session may be conducted on-site by video, PowerPoint presentation, or similar media.

Archaeological Monitoring, Evaluation, and Mitigation

Due to poor surface visibility and high archaeological sensitivity of the direct APE, an archaeological monitor would be present during ground-disturbing activities in archaeologically sensitive areas. This would reduce the potential level of impact to buried archaeological resources to a less than significant level. This work would be completed under the direction of an archaeologist who meets the Secretary of the Interior's Standards for archaeologists. An adequate number of monitors would be present to ensure that all earth-moving activities are observed and would be on-site during all grading activities for areas to be monitored.

During the original excavation of previously undisturbed soils, the archaeological monitor(s) would be on-site at a frequency determined by the lead archaeologist. Inspection frequency may vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. Full-time monitoring is warranted within one-half block of potentially significant archaeological resources that are known or suspected to be present within the direct APE.

If potentially significant archaeological resources are exposed during ground-disturbing activities, the project manager would be notified immediately. Archaeological monitor(s) would have the authority to divert or temporarily halt ground-disturbing operations in the area of discovery to allow the resources to be evaluated. Excavation work would halt until the archaeological monitor makes a determination of the significance of the archaeological resource. Construction activities may continue in other areas.

Evaluation of such resources is typically accomplished by a test-level excavation designed to determine the horizontal and vertical extent of the resource, and to characterize its contents. If the discovery proves to be potentially eligible for listing on the NRHP or the CRHR and project plans cannot be altered to avoid affecting the site, then an adverse effect would result within the project area. This adverse effect may be resolved by implementing a Memorandum of Agreement (MOA) between Metro and the SHPO.

Before construction activities are allowed to resume in an affected area, artifacts would be recovered and features recorded using professional archaeological methods. The lead archaeologist operating under the direction of the MOA would determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the construction monitoring program would be processed using professional archaeological methods. An appropriate sample of recovered materials, selected by the lead archaeologist, would be curated at a curation facility that meets federal standards per 36 CFR Part 79 and made available to other archaeologists and researchers for further study.

Native American Participation

If Native American cultural resources (i.e., prehistoric or ethnohistoric-period artifacts, food remains, or features associated with Native Americans) are exposed during project-related ground disturbance, Metro would contact the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation. Both groups have expressed interest in the project. One or both of these groups would be asked to provide the services of a trained Native American consultant to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis, and would be intended to ensure that Native American concerns are taken into account during the construction process.

Human Remains

The discovery of human remains is always a possibility during ground disturbance. For example, an unmarked early Spanish period Native American cemetery was recently discovered near the APE (Applied Earthworks 1999).

The State of California Health and Safety Code Section 7050.5 addresses what should be done when human remains are found during construction. This code section states that when human remains are encountered, no further disturbance would occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner would be immediately notified of the find.

If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant (MLD). The MLD shall complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts to human remains may remain significant even after mitigation.

Reporting

If cultural resources are not discovered in the course of construction monitoring, a brief letter to that effect would be prepared by the consulting archaeologist, indicating that the monitoring activities have been satisfied. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report would be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.

2.2.2 Treatment of Known Archaeological Resources

Destruction of a resource that is eligible for listing in the NRFP or CRHR would be a significant adverse effect. This effect may be resolved through by implementing an MOA between FTA, Metro, and the SHPO, as well as other interested parties.

Four archaeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the NRHP and the CRHR. These include the Los Angeles Zanja System (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archaeological sites can be mitigated to a less than significant level by preparing and implementing a data recovery plan under Section 106 and CEQA. The actual mitigation measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archaeological resources within the direct APE that are eligible for listing in the NRHP or CRHR. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archaeological data recovery.

Los Angeles Zanja System

The Los Angeles Zanja system was an extensive and integrated water conveyance network that served large areas of the City for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the overall Zanja system to be evaluated, given the requirements that the OHP clarified in its recent letter (Toffelmier 2009).

It is likely that other projects (such as emergency utility repair) have damaged segments of the Zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect, particularly given the likelihood of damaging the zanjas prior to discovery during project construction process.

Inadvertent project-related damage to the zanjas may constitute an adverse effect under the Criteria of Adverse Effect, "physical destruction or damage" (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects.

Both Section 106 of the NHPA (as amended) and CEQA require identification, documentation, and evaluation of historic properties/historic resources in a project area (or direct APE). For a poorly mapped and buried linear resource like the Zanja system, identification alone is challenging.

Rather than a costly archaeological excavation program or a remote sensing (ground-penetrating radar, etc.) survey that is unlikely to produce clear-cut results, a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner is recommended.

This would include using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjas within the APE. Where these alignments are expected to be affected by the proposed project, particularly where cut-and-cover or other near-surface construction techniques (as opposed to tunneling 20 or more feet below the ground surface) are planned in the vicinity of mapped zanja segments, full-time archaeological monitoring would be instituted to ensure documentation.

The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments prior to their adequate documentation.

Documenting and evaluating the Los Angeles Zanja system would be best accomplished with a system-wide approach that incorporates historical, archaeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. Documentation of the zanja segments' alignments and slopes would have the added benefit of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles Zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archaeological testing, and architectural documentation, and would be followed by a formal evaluation of NRFP and CRHR eligibility.

It should be noted that substantial documentation already exists for the Zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is proposed here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document creation, maintenance, modification, and abandonment of the system.
- Archaeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE by using physical exposure through controlled excavation following its discovery during construction monitoring. Resources would be documented using DPR series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archaeological Resource Management Report (OHP 1990) guidelines. The report would address research questions and assess the NRHP and CRHR eligibility of the system.

- Architectural documentation of exposed zanja segments by producing narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.
- Preserving the results of the historical, archaeological, and historic architectural studies in repositories (e.g., the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter).
- Interpretation of the Los Angeles Zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

3.0 LPA EFFECTS, IMPACTS AND MITIGATION PALEONTOLOGICAL RESOURCES

The LPA involves ground disturbance associated with excavations to construct three new stations and an entirely underground tunnel located from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Any ground disturbances in areas of high sensitivity will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible resulting in significant and unavoidable impacts.

The LPA would not result in operational impacts to paleontological resources.

In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources to less than significant. In areas where mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may be unavoidable.

3.1NEPA Finding and CEQA Determination

The LPA could have adverse effects on paleontological resources. With implementation of mitigation, potential construction and cumulative impacts would not be adverse under NEPA. The LPA would not have significant effects on paleontological resources with implementation of proposed mitigation measures with the exception of areas where tunneling operations cannot be mitigated. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible and thus construction and cumulative impacts would be significant and unavoidable.

The LPA would not result in adverse or significant operational impacts to paleontological resources.

3.2 Mitigation Measures

3.2.1 Construction Mitigation Measures

The following mitigation measures have been developed in accordance with the SVP (1995) standards and guidelines and meet the paleontological requirements of CEQA. Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

- A qualified paleontologist would produce a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring would include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor would have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.

- All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these geologic sediments are determined to have a high paleontological sensitivity (Figure 4.12.3-3). Very shallow surficial excavations (less than 5 feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected (Figure 4.12.3-3). Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.

- At each fossil locality, field data forms would be used to record pertinent geologic data, stratigraphic sections would be measured, and appropriate sediment samples would be collected and submitted for analysis.

- Due to the likelihood of the presence of microfossils, matrix samples would be collected and tested within the Puente Formation and Fernando Formation. Testing for microfossils would consist of screen-washing samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests would result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.

- Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

- The paleontologist would prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository.

3.2.2 Operational Mitigation Measures

No mitigation is required because operational impacts to paleontological resources are not expected for any of the project alternatives.

Regional Connector Transit Corridor
Paleontological Resources
Technical Memorandum

April 6, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

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State Clearinghouse Number: 2009031043

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4-1. Previously Discovered Paleontological Resources in and Around the Direct APE 32

ACRONYMS

APE	Area of Potential Effects
CEQA	California Environmental Quality Act
FTA	Federal Transit Administration
LACM	Natural History Museum of Los Angeles County
LADWP	Los Angeles Department of Water and Power
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
mya	Million Years Ago
NEPA	National Environmental Policy Act
OPLA	Omnibus Public Lands Management Act
PRA	Paleontological Resources Preservation
PRPA	Paleontological Resources Preservation Act
PRMPP	Paleontological Resources Monitoring and Mitigation Plan
SVP	Society of Vertebrae Paleontology
TSM	Transportation Management System

1.0 SUMMARY

1.1 Background

This technical memorandum discusses the results of a Paleontological Resource analysis of the proposed Regional Connector Transit Corridor project. The study was performed to evaluate the paleontological sensitivity of the project area and vicinity, assess potential project-related impacts to paleontological resources, and provide recommendations. This analysis included a records search conducted at the Natural History Museum of Los Angeles County on February 5, 2008 and a literature review.

This study was conducted in accordance with the professional guidelines established by the Society of Vertebrate Paleontology (SVP) (1995). This technical memorandum will be filed with the Federal Transit Administration (FTA), Metro, CDM, and SWCA. All records related to the project will also remain on file at Metro and the South Pasadena office of SWCA.

1.2 Summary of Findings

According to geologic mapping published by Yerkes and Graham (1997a; 1997b) and records maintained by the Natural History Museum of Los Angeles County, the project area is underlain by the following geologic units, from oldest to youngest: (1) Miocene Puente Formation, (2) Pliocene Fernando Formation, (3) Quaternary terrace deposits, and (4) Quaternary alluvium. Museum records revealed that at least 12 previously recorded vertebrate fossil localities have been documented either along the proposed project alignment or within a 2-mile radius from the same sedimentary deposits underlying the project.

The combined results of the museum records search and literature review indicate that the geologic units underlying the project area have a paleontological sensitivity ranging from low to high. Therefore, construction of the project may potentially result in an adverse impact to nonrenewable fossil resources and will require implementation of paleontological resources mitigation measures, where feasible.

1.3 Mitigation and Monitoring

A qualified paleontologist would design and implement a Paleontological Resources Monitoring and Mitigation Plan (PRMPP) during any ground disturbances related to the proposed project, where feasible. All significant fossils recovered during construction monitoring would be prepared, stabilized, identified, and permanently curated in an approved repository or museum (such as the Natural History Museum of Los Angeles County).

2.0 INTRODUCTION

2.1 Project Description

The proposed project area extends 1.9 miles through downtown Los Angeles and would provide enhanced Metro service throughout four distinct travel corridors that span more than 50 miles across Los Angeles County (Figure 2-1). The proposed alternatives include from 1.6 to 1.9 miles of new dual tracks in downtown Los Angeles and would provide a direct link between the Metro Gold, Blue, and Expo Lines by bridging the gap in the regional light rail network between 7th Street/Metro Center Station and the Little Tokyo/Arts District Station. This would allow for direct trains from East Los Angeles to Culver City and from Long Beach to Pasadena.

The project also includes construction of several new stations downtown that would allow passengers on the Metro Gold, Blue, and Expo Lines to reach multiple destinations in the central business district without transferring. The following alternatives were evaluated:

- No Build Alternative
- Transportation System Management (TSM)Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT Alternative- Little Tokyo Variation 1
- Fully Underground LRT Alternative- Little Tokyo Variation 2

Each of these alternatives are described in the following sections.

2.1.1 No Build Alternative

Transit service under the No Build Alternative is focused on preserving existing services and projects. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line to Santa Monica, the Metro Purple Line to Westwood, the Metro Crenshaw Line, and the Metro Gold Line extensions to Azusa and about I-605 will have opened, and a number of bus routes will have been reorganized and expanded to provide connections with these new rail lines. All bus and rail lines would operate using a fleet of vehicles similar to those currently in service or identified for purchase in the LRTP. The transit network within the project area would otherwise be largely the same as it is now.

2.1.2 Transportation System Management (TSM) Alternative

The TSM Alternative includes all the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center and Union Stations. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. Rail service would remain the same as described for the No Build Alternative. The two new shuttle bus routes are illustrated on Figure 2-2.

2.1.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

2.1.3.1 Overview

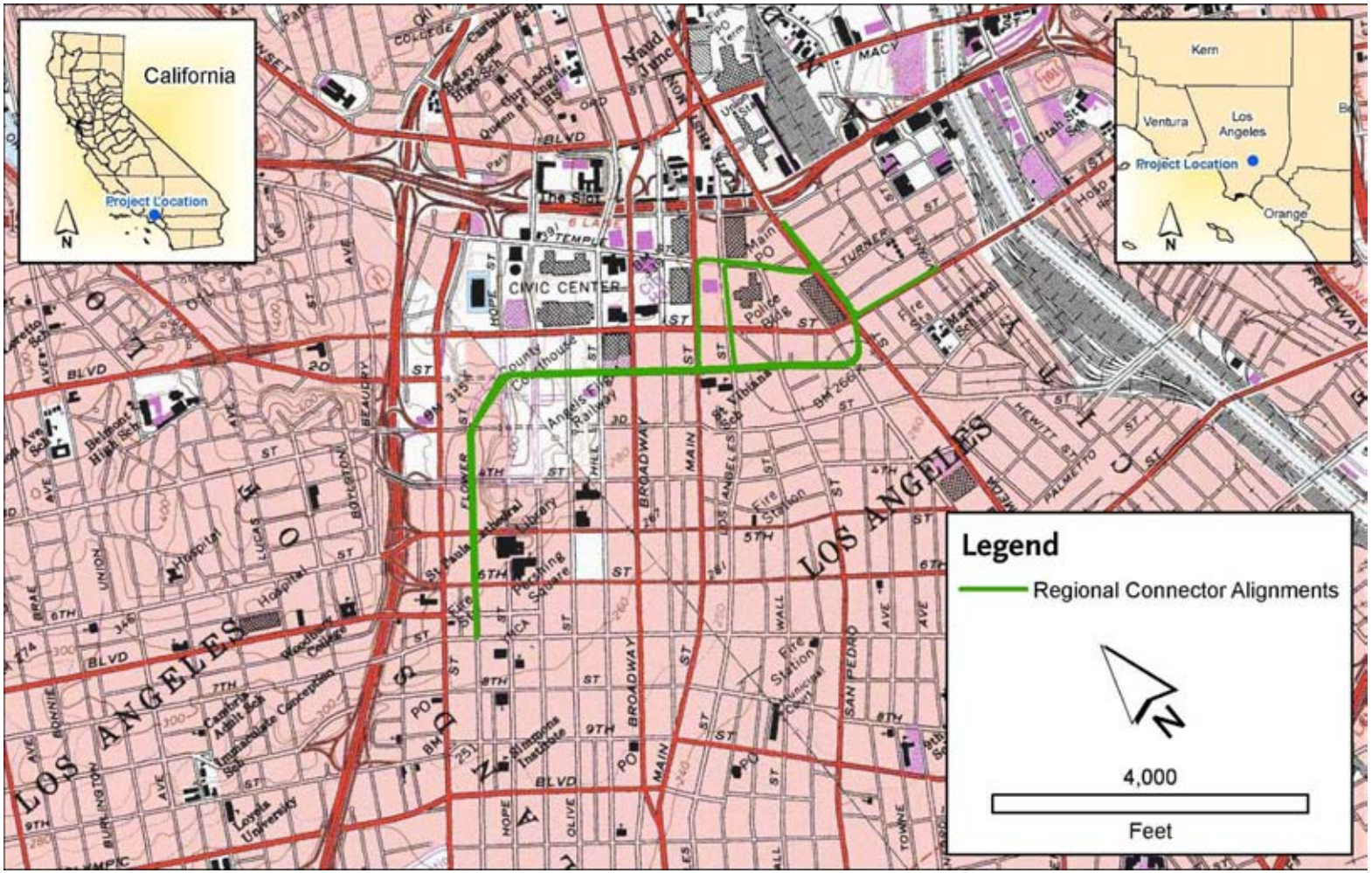
The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets with three new station locations proposed. This alignment includes a combination of underground and at-grade segments, with 46 percent of the route underground. New stations would serve the Civic Center, Grand Avenue, and Financial District.

Conversion of 2nd Street to a pedestrian-friendly transit mall is assumed. To implement this alternative, the number of traffic lanes and on-street parking spaces on 2nd Street would be reduced. As a result, traffic would be likely to divert to adjacent parallel streets such as 1st and 3rd Streets, but the roadway capacity along these streets would remain unchanged, as with the No Build Alternative. Traffic congestion along these streets would likely increase. Figure 2-3 illustrates the At-Grade Emphasis LRT Alternative.

2.1.3.2 Route Configuration

From the existing platform at the 7th Street/Metro Center Station, the tracks would extend north underneath Flower Street to a new underground station just south of 5th Street. The tracks would then continue north, surface just south of 3rd Street, cross 3rd Street at grade, and veer northeast through a portal in the hillside to an underground station at 2nd and Hope Streets. Tunnel construction would be constrained by existing buildings.

At 2nd and Hope Streets, a new pedestrian bridge would be constructed to connect the station to Upper Grand Avenue. The tracks would continue northeast, punch through the wall of the existing 2nd Street tunnel, and then travel east in the 2nd Street tunnel toward Hill Street.



Source: USGS

Figure 2-1. Project Location

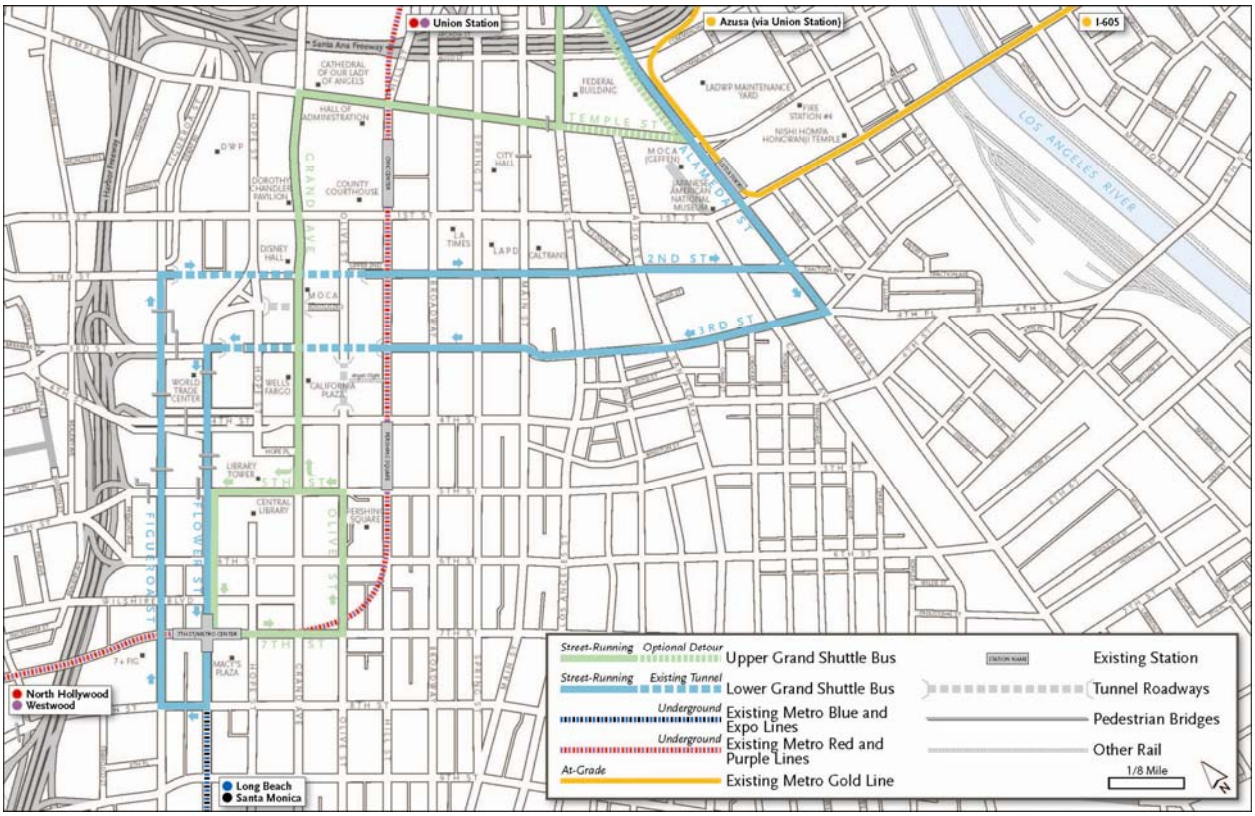


Figure 2-2. TSM Alternative

Trains would proceed east on 2nd Street to Main Street. At Main Street, the alignment would split into two single-track alignments. One track (for northbound trains) would continue east to Los Angeles Street and then north to Temple Street. The other track (for southbound trains) would travel north on Main Street and then west on Temple Street. Both tracks would have an at-grade station just north of 1st Street.

At Temple and Los Angeles Streets, the two tracks would rejoin and proceed west on Temple Street to Alameda Street, where the tracks would join the Metro Gold Line in a three-way junction.

A vehicular underpass and pedestrian overpass are proposed along Alameda Street to route through traffic beneath the rail tracks and Temple Street traffic. This would minimize potential conflicts between rail, vehicular, and pedestrian traffic, and reduce delays at the intersection of Temple and Alameda Streets. Temple Street and the rail tracks would remain at grade, and the existing at-grade segment of Alameda Street would be lowered to pass under Temple Street. The pedestrian bridge could potentially have endpoints located on each of the intersection's four corners.

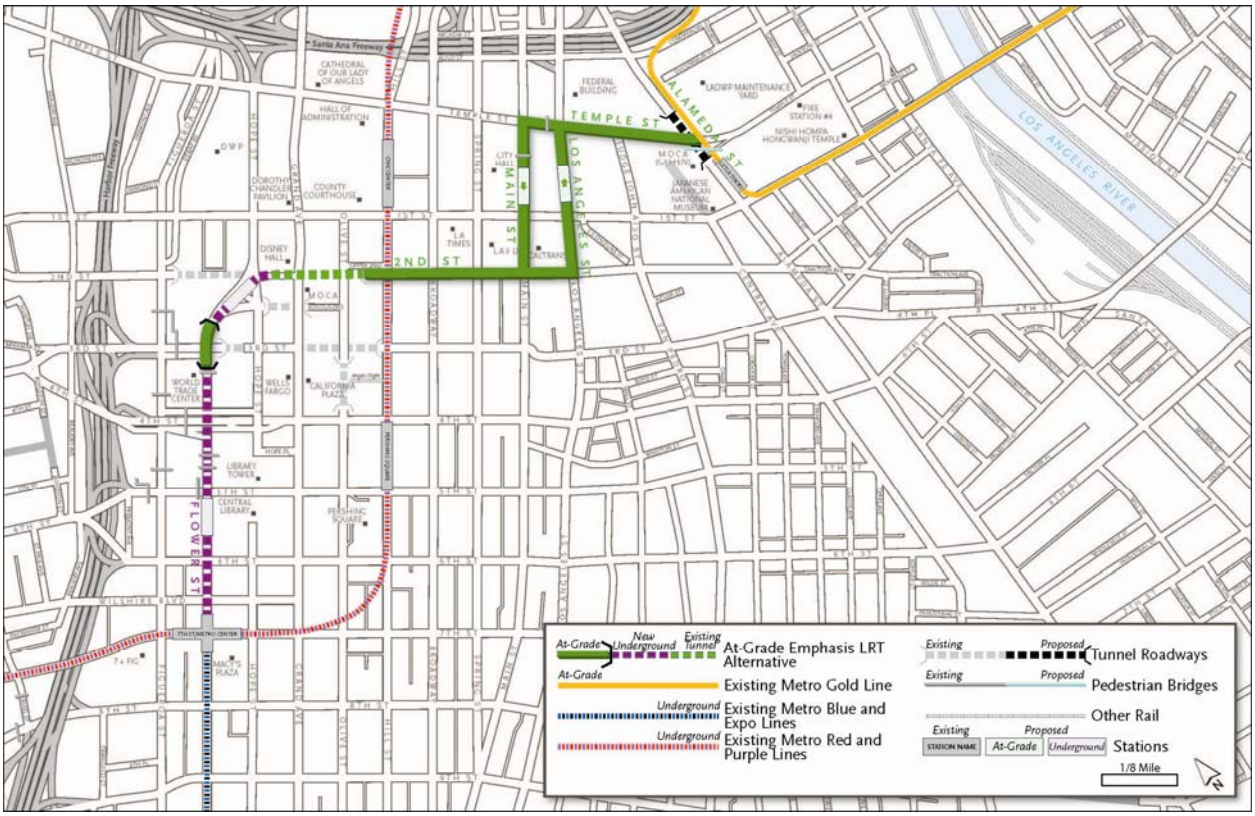


Figure 2-3. At-Grade Emphasis LRT Alternative Alignment and Configuration

Locations of new light rail right-of-way and stations proposed for the At-Grade Emphasis LRT Alternative are identified in the following sections. It should be noted that this report analyzes maximum potential effects and impacts for each proposed project facility. Thus, ultimate effects and impacts may be smaller in magnitude than the impacts discussed herein.

New light rail right-of-way

- Underground double track beneath Flower Street from the 7th Street/Metro Center Station to a new portal between 4th and 3rd Streets
- At-grade double track on Flower Street from the portal between 4th and 3rd Streets to 3rd Street, then across the intersection of 3rd and Flower Streets to a new portal into the hillside on the northeast corner
- Underground double track from the portal on the northeast corner of 3rd and Flower Streets to a new portal through the southern wall of the 2nd Street tunnel
- At-grade double track in the 2nd Street tunnel and on 2nd Street, from the new portal in the 2nd Street tunnel to Main Street

- At-grade single southbound-only track on Main Street between 2nd and Temple Streets, and on Temple Street between Main and Los Angeles Streets
- At-grade single northbound-only track on 2nd Street between Main and Los Angeles Streets, and on Los Angeles Street between 2nd and Temple Streets
- At-grade double track on Temple Street between Los Angeles and Alameda Streets

New stations

- Underground station on Flower Street just south of 5th Street
- Underground station just southwest of 2nd and Hope Streets
- At-grade southbound-only station on Main Street just north of 1st Street
- At-grade northbound-only station on Los Angeles Street just north of 1st Street

2.1.4 Underground Emphasis LRT Alternative

2.1.4.1 Overview

The Underground Emphasis LRT Alternative would provide a direct connection from 7th Street/Metro Center Station to the Gold Line tracks at the Little Tokyo/Arts District Station with three new station locations. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to a new portal on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue.

It is expected that property would need to be acquired to construct the portal and stage construction of the tunnels beneath 2nd Street. The tracks would then connect to the Gold Line tracks.

The Underground Emphasis LRT Alternative would be located primarily underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets in the same type of three-way junction as proposed for the At-Grade Emphasis LRT Alternative. Tunnel construction would be constrained by existing buildings. Figure 2-4 illustrates this alternative.

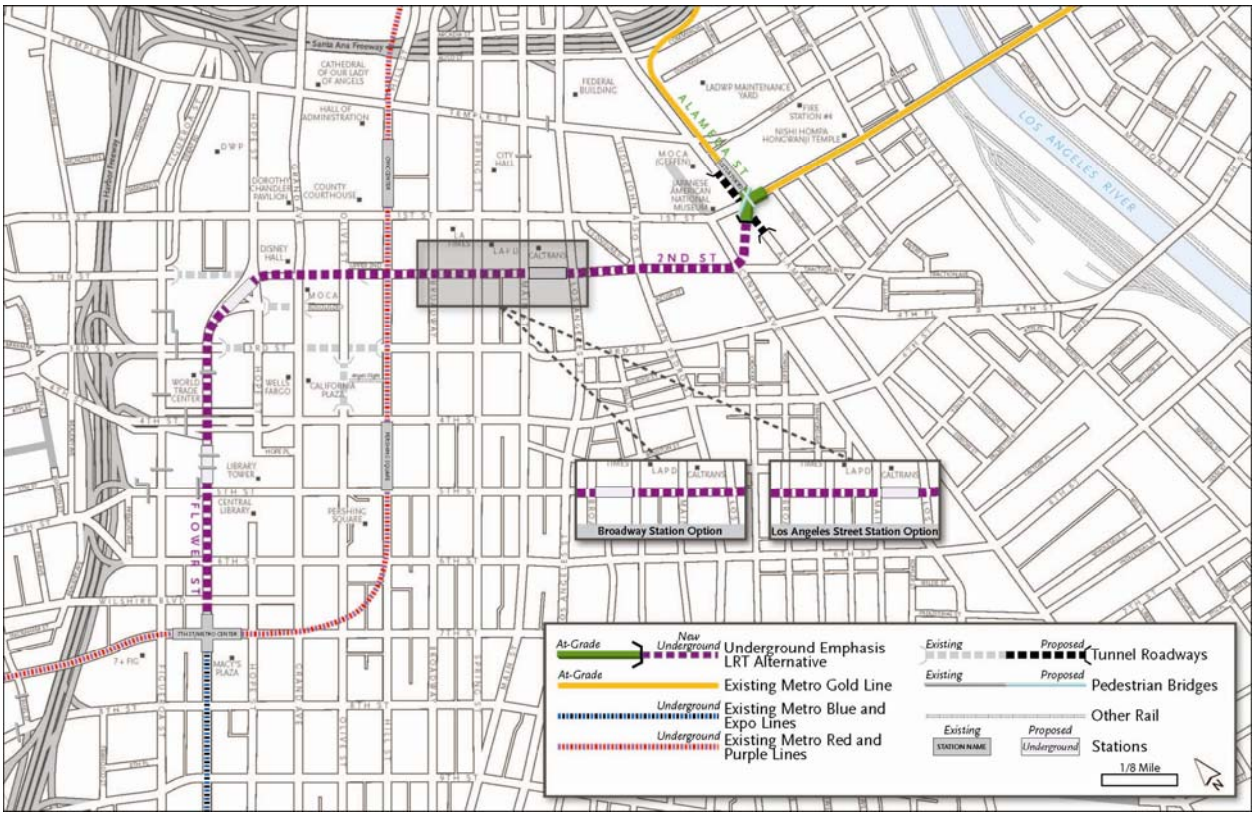


Figure 2-4. Underground Emphasis LRT Alternative Alignment and Configuration

2.1.4.2 Route Configuration

The Underground Emphasis LRT Alternative alignment would extend north from the existing platform at the 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge may be constructed to connect the station to Upper Grand Avenue. The tracks would then head east underneath 2nd Street to the next proposed station.

There are two options for a station on 2nd Street. The Broadway Station option would place an underground station on 2nd Street between Broadway and Spring Street. The Los Angeles Street Station option would include an underground station between Main and Los Angeles Streets.

The tracks continue east under 2nd Street to Central Avenue, where they would veer northeast and surface in the lot bounded by 1st, Alameda, and 2nd Streets, and Central Avenue. The tracks would then come to the surface through a portal within this block and enter an at-grade three-way junction at the intersection of 1st and Alameda Streets.

A new underpass would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction, and a new overhead pedestrian bridge structure would eliminate most potential conflicts between pedestrians and trains. The proposed pedestrian overpass could potentially have endpoints at each of the four corners of the intersection.

Crossovers would possibly be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station on 2nd Street (whether it is between Broadway and Spring Street or between Main and Los Angeles Streets). Crossovers may not be needed at both of these locations, and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel-boring machines cannot be used to construct underground crossovers.

Locations of new light rail right-of-way, stations, and crossovers proposed for the Underground Emphasis LRT Alternative are identified in the following sections. It should be noted that this report analyzes maximum potential effects and impacts for each proposed project facility. Thus, ultimate effects and impacts may be smaller in magnitude than the impacts discussed herein.

New light rail right-of-way

- Underground double track beneath Flower Street from the existing platform at the 7th Street/Metro Center Station to 3rd Street
- Underground double track curving northeast from the intersection of 3rd and Flower Streets toward 2nd and Hope Streets
- Underground double track beneath the 2nd Street tunnel and 2nd Street from Hope Street to Central Avenue
- At-grade double track from the portal on parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue to a three-way junction at the intersection of 1st and Alameda Streets

New stations

- Underground station on Flower Street just north of 5th Street
- Underground station just southwest of the intersection of 2nd and Hope Streets

- Underground station on 2nd Street either between Broadway and Spring Street (Broadway Station option) or between Main and Los Angeles Streets (Los Angeles Street option)

New crossovers

Locations are preliminary and crossovers may not be placed at both. The two locations proposed for new crossovers include:

- Underground just north of the station at 5th and Flower Street
- Underground just east of the station on 2nd Street, either between Broadway and Spring Street or between Main and Los Angeles Streets

2.1.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

2.1.5.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tunnel construction would be constrained by existing buildings.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge would possibly be constructed to connect the station to Upper Grand Avenue. The bridge would begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

The tracks would head east underneath 2nd Street to the next proposed station at Broadway. The proposed 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street. From the new station, the tracks would continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new station, potentially located within the property currently occupied by Office Depot and other small commercial uses.

Crossovers would possibly be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway.

At 2nd Street and Central Avenue, the tracks would continue underground heading northeast under 1st and Alameda Streets. A three-way junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would

rise to the surface through two new portals to connect to the Metro Gold Line heading north to Azusa and east to I-605.

From the junction, one set of tracks would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. These tracks would travel under Temple Street before surfacing through a portal in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over US 101.

The other set of tracks leaving the three-way junction would rise to the east within 1st Street through a new portal to join the existing at-grade Metro Gold Line tracks. This second portal would be located between Alameda and Vignes Streets. 1st Street would be widened to the north to accommodate the portal. Widening 1st Street would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street to join the existing 1st Street LRT tracks about one and half blocks west of the 1st Street Bridge. .

Additional property would need to be acquired in order to stage construction of both portals, connect to the Gold Line LRT Bridge, and construct the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 1 would be located entirely underground from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.1.5.2 Route Configuration

Locations of new light rail right-of-way, stations, and crossovers proposed for Fully Underground LRT Alternative – Little Tokyo Variation 1 are identified in the following sections. It should be noted that this report analyzes maximum potential effects and impacts for each proposed project facility. Thus, ultimate effects and impacts may be smaller in magnitude than the impacts discussed herein.

New light rail right-of-way

- Underground double track beneath Flower Street from the existing platform at the 7th Street/Metro Center Station to 3rd Street
- Underground double track curving northeast from the intersection of 3rd and Flower Streets toward 2nd and Hope Streets
- Underground double track beneath the 2nd Street tunnel and 2nd Street from Hope Street to Central Avenue, then to 1st and Alameda
- Underground three-way junction beneath the intersection of 1st and Alameda Streets

- Underground double track from the three-way junction to the portal located within a widened 1st Street between Vignes and Alameda Streets; then at-grade double track connecting to the existing Metro Gold Line Eastside Extension tracks toward I-605
- Underground double track from the three-way junction running north beneath the proposed Nikkei Center parcel and Temple Street, just east of the existing Little Tokyo/Arts District Station, to a new portal at the LADWP site; then at-grade double track rising from the portal on a new ramp structure to connect to the existing Metro Gold Line bridge over US 101

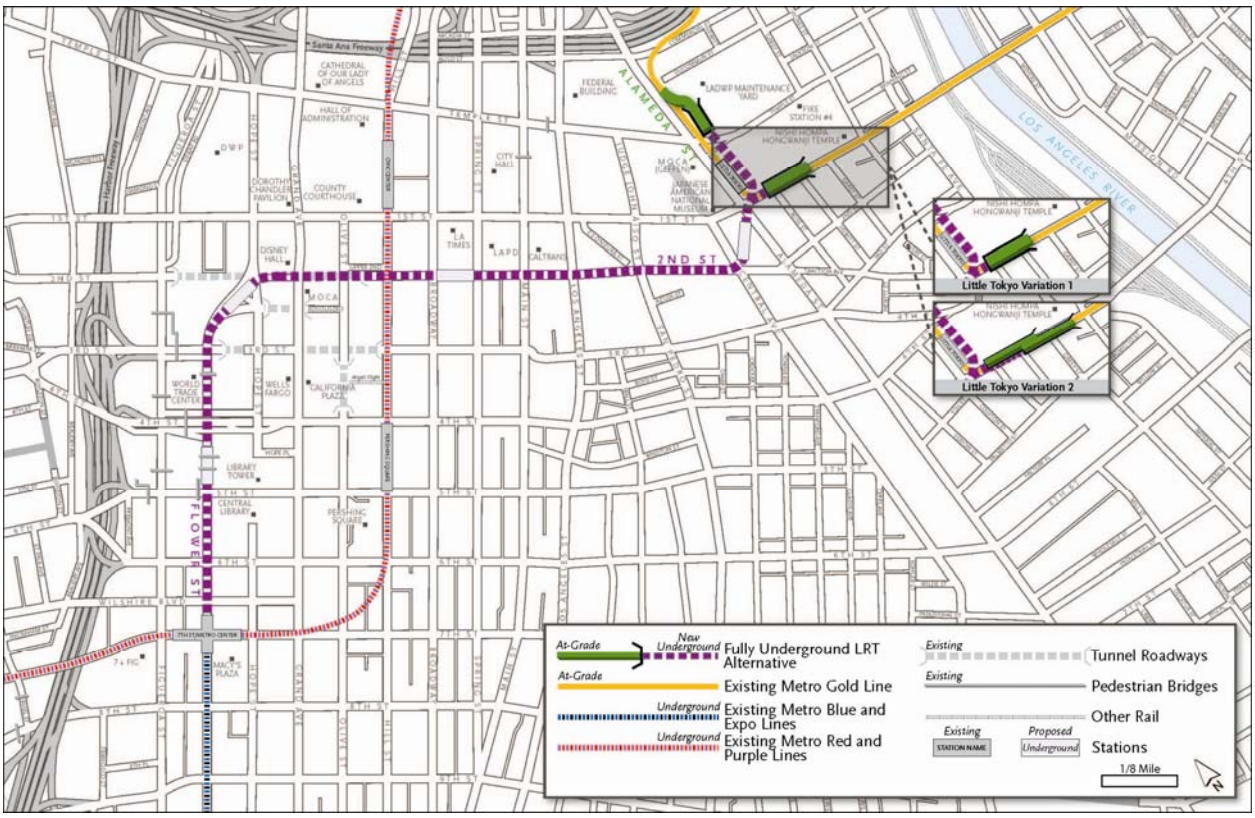


Figure 2-5. Fully Underground LRT Alternatives – Little Tokyo Variation 1 and Little Tokyo Variation 2 Alignment and Configuration

New stations

- Flower/5th/4th Street Station: Underground station on Flower Street just north of 5th Street
- 2nd/Hope Street Station: Underground Station just southwest of the intersection of 2nd and Hope Streets

- 2nd/Broadway Station: Underground station on 2nd Street between Broadway and Spring Street
- 2nd/Central Avenue Station: Underground station just northeast of the intersection at 2nd and Central. This station may include a small building at ground level on the southwest corner of 1st and Alameda streets to house ventilation fans

New crossovers

Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. These construction methods are discussed in detail in the Description of Construction Technical Memorandum.

Locations are preliminary and crossovers may not be needed at both of these locations; and ultimately they may be placed in locations that are not adjacent to stations. The two locations for new crossovers include:

- Underground just north of the station at 5th and Flower Streets.
- Underground just east of the station on 2nd Street, between Broadway and Spring Street.

2.1.6 Fully Underground LRT Alternative – Little Tokyo Variation 2

2.1.6.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue. Tunnel construction would be constrained by existing buildings.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge would possibly be constructed to connect the station to Upper Grand Avenue. The bridge would begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

The tracks would head east underneath 2nd Street to the next proposed station at Broadway. The proposed 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street. From the new station, the tracks would continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new station,

potentially located within the property currently occupied by Office Depot and other small commercial uses.

As the tunnels turn northeast from 2nd Street, the northbound tunnel would descend and the southbound tunnel would rise so that the southbound tunnel would be stacked on top of the northbound tunnel. A new proposed underground station near 2nd Street and Central Avenue would have two underground levels, each with a single-track platform. The northbound track with trains towards Azusa and I-605 would be on the lower level, and the southbound track with trains towards Long Beach and Santa Monica would be on the upper level.

The tracks would continue from the new station under the 1st and Alameda intersection into a new two-level underground junction. Separating from the junction, one track from the lower level (northbound) and one track from the upper level (southbound) would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the Metro Gold Line LRT bridge over US 101. The portal would be connected to the 1st and Alameda junction by a new cut-and-cover tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets). This would allow trains to continue along the Metro Gold Line.

A second track (westbound) leaving the upper level of the junction would rise to the east within 1st Street between Alameda and Hewitt Streets and link to the existing Metro Gold Line track. A second track (eastbound) leaving the lower level of the junction would rise to the east within 1st Street between Hewitt and Vignes Streets, adjacent to the westbound track, and link to the existing Metro Gold Line track.

Two portals, each containing one track, would rise to the east within the middle of a widened 1st Street to allow a connection to the Metro Gold Line towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

1st Street would be widened to the north to accommodate the westbound portal. Widening 1st Street would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street, where the new tracks would feed into the existing 1st Street LRT tracks, about half a block west of the 1st Street Bridge. 1st Street would also be widened to the south between Hewitt and Vignes Streets to accommodate the eastbound track portal. Widening this street would taper down as it approaches Vignes Street. No modification to the 1st Street Bridge would be necessary.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and construct the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.1.6.2 Route Configuration

Locations of new light rail right-of-way, stations, and crossovers proposed for Fully Underground LRT Alternative – Little Tokyo Variation 2 are identified in the following sections. It should be noted that this report analyzes maximum potential effects and impacts for each proposed project facility. Thus, ultimate effects and impacts may be smaller in magnitude than the impacts discussed herein.

New light rail right-of-way

- Underground double track beneath Flower Street from the existing platform at the 7th Street/Metro Center Station to 3rd Street
- Underground double track curving northeast from the intersection of 3rd and Flower Streets toward 2nd and Hope Streets
- Underground double track beneath the 2nd Street tunnel and 2nd Street from Hope Street to Central Avenue
- Two-level underground structure with a northbound single track on the lower level and a southbound single track on the upper level from 2nd Street and Central Avenue to 1st and Alameda Streets
- Underground two-level junction beneath the intersection of 1st and Alameda Streets
- Two-level underground structure leading from the two-level junction to two single-track portals located within the median of a widened 1st Street (eastbound portal between Hewitt and Vignes Streets, westbound portal between Alameda and Hewitt Streets); then at-grade double track connecting to the existing Metro Gold Line Eastside Extension tracks toward I-605
- Two-level underground structure leading from the two-level junction, running north beneath the proposed Nikkei Center parcel and Temple Street, just east of the existing Little Tokyo/Arts District Station, to a new portal in the LADWP site (tracks would begin to transition to side-by-side tunnels on a single level as they pass beneath the Nikkei parcel); then at-grade double track rising from the portal on a new ramp structure to connect to the existing Metro Gold Line bridge over the U.S.-101 freeway

New stations:

- Flower/5th /4th Street Station: Underground station on Flower Street just north of 5th Street
- 2nd/Hope Street Station: Underground Station just southwest of the intersection of 2nd and Hope Streets
- 2nd/Broadway Station: Underground station on 2nd Street between Broadway and Spring Street
- 2nd/Central Avenue Station: Underground two-level station just northeast of the intersection at 2nd and Central. Each level would have a single-track platform. Northbound trains to Azusa and Eastbound trains to I-605 would use the lower level. Southbound trains to Long Beach and westbound trains to Santa Monica would use the upper level. This station may include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans.

New Crossovers

Underground crossover locations require cut-and-cover construction; tunnel boring machines (TBMs) cannot be used to construct underground crossovers. These construction methods are discussed in detail in the Description of Construction technical memorandum.

Both locations are preliminary and crossovers may not be placed at either one. The two locations for new crossovers include:

- Underground just north of the station at 5th and Flower Streets
- Underground just east of the station on 2nd Street, between Broadway and Spring Street

3.0 METHODOLOGY FOR IMPACT EVALUATION

Paleontological resource sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. Due to the nature of the fossil record, paleontologists cannot know either the quality or quantity of fossils present in a given geologic unit prior to natural erosion or human-caused exposure. No field surveys were conducted for the proposed project; therefore, it is necessary to assess the sensitivity of rock units based on their known potential to produce scientifically significant fossils elsewhere within the same geologic unit (both within and outside of the project area) or a unit representative of the same depositional environment.

3.1 Regulatory Framework

Fossils are classified as nonrenewable scientific resources and are protected by various laws, ordinances, regulations, and standards across the country. The Society of Vertebrate Paleontology (SVP) (1995) has established professional standards for assessment and mitigation of adverse impacts to paleontological resources. This paleontological assessment was conducted in accordance with the regulations and standards that are applicable to paleontological resources within the project area. These regulations and standards are summarized in the following sections.

3.1.1 Federal

Federal protection for scientifically significant paleontological resources applies to projects if any construction or other related project impacts occur on federally owned or managed lands, involve the crossing of state lines, or are federally funded. The following federal protections may apply to paleontological resources within the project area:

- American Antiquities Act of 1906 (6 United States Code [USC] 431 433). Establishes a penalty for disturbing or excavating any historic or prehistoric ruin or monument or object of antiquity on federal lands as a maximum fine of $500 or 90 days in jail.
- The National Environmental Policy Act of 1969, as amended (Public Law [PL] 91 190, 42 USC 4321 4347, January 1, 1970, as amended by PL 94 52, July 3, 1975, PL 94 83, August 9, 1975, and PL 97 258 Section 4(b), Sept. 13, 1982). Recognizes the continuing responsibility of the federal government to "preserve important historic, cultural, and natural aspects of our national heritage." (Section 101 [42 USC Section 4321]) (No. 382).
- National Historic Preservation Act of 1966 (PL 89 665; 80 Stat. 915, 16 USC 470 et seq.). Provides for the survey, recovery, and preservation of significant paleontological

data when such data may be destroyed or lost due to a federal, federally licensed, or federally funded project.

- Federal Land Management and Policy Act of 1976 (43 USC 1712[c], 1732[b]); Section 2, Federal Land Management and Policy Act of 1962 [30 USC 611]; Subpart 3631.0 et seq.), Federal Register Vol. 47, No. 159, 1982. Defines significant fossils as: unique, rare, or particularly well preserved; an unusual assemblage of common fossils; being of high scientific interest; or providing important new data concerning (1) evolutionary trends, (2) development of biological communities, (3) interaction between or among organisms, (4) unusual or spectacular circumstances in the history of life, or (5) anatomical structure.

- Paleontological Resources Preservation Act (PRPA). Enacted as a result of the passage of the Omnibus Public Lands Management Act (OPLA) of 2009, PL 111-011. PL 111-011, Title VI, *Subtitle D. Paleontological Resources Preservation* (OPLA-PRA). The PRPA sets forth regulations and provisions pertaining to paleontological resources on all federally administered lands.

3.1.2 State

- California Environmental Quality Act. Guidelines for the Implementation of CEQA, as amended March 29, 1999 (Title 14, Chapter 3, California Code of Regulations: 15000 et seq.) define procedures, types of activities, persons, and public agencies required to comply with CEQA, and include as one of the questions to be answered in the Environmental Checklist (Section 15023, Appendix G, Section XIV, Part a) including the following: "Will the proposed project directly or indirectly destroy a significant paleontological resource or unique geologic feature?"

- Public Resources Code (Chapter 1.7), Sections 5097.5 and 30244. These statutes prohibit removal of any paleontological site or feature on public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state) lands.

3.1.3 Local

The Conservation Element of the City of Los Angeles General Plan (adopted September 2001) specifically addresses paleontological resources in Section 3 of Chapter 2. The Plan's paleontological objective is to "protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes." Moreover, its policy is to "continue to identify and protect significant archaeological and paleontological sites and/or

resources known to exist or that are identified during land development, demolition or property modification activities."

3.1.4 Professional Standards

The SVP has established standard guidelines (SVP 1995) that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. State regulatory agencies with paleontological regulations and standards typically accept and use the professional standards set forth by the SVP.

As defined by the SVP (1995:26), significant nonrenewable paleontological resources are defined as:

> Fossils and fossiliferous deposits here restricted to vertebrate fossils and their taphonomic and associated environmental indicators. This definition excludes invertebrate or paleobotanical fossils except when present within a given vertebrate assemblage. Certain invertebrate and plant fossils may be defined as significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by lead agencies or local governments.

As defined by the SVP (1995:26), significant fossiliferous deposits are defined as:

> A rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens, which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years, BP [before present].

Based on the significance definitions of the SVP (1995), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate

fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either disturb or destroy fossil remains directly or indirectly. This definition of sensitivity differs fundamentally from that for archaeological resources as follows:

> It is extremely important to distinguish between archaeological and paleontological (fossil) resource sites when defining the sensitivity of rock units. The boundaries of archaeological sites define the areal extent of the resource. Paleontologic sites, however, indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontologic potential in each case. [SVP, 1995]

Many archaeological sites contain features that are visually detectable on the surface. In contrast, fossils are contained within surficial sediments or bedrock and are therefore not observable or detectable unless exposed by erosion or human activity. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken to prevent adverse impacts to these resources.

3.2 Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources," the SVP (1995:23) defines three categories of paleontological sensitivity (potential) for sedimentary rock units:

- High Potential. Rock units from which vertebrate or significant invertebrate fossils or suites of plant fossils have been recovered and are considered to have a high potential for containing significant nonrenewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations that

contain significant nonrenewable paleontologic resources anywhere within their geographical extent and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical; and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas that contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant.

- Low Potential. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections.

- Undetermined Potential. Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials.

It should be noted that highly metamorphosed rocks and granitic rock units do not generally yield fossils and therefore have low potential to yield significant nonrenewable fossiliferous resources.

In general terms, for geologic units with high potential, full-time monitoring typically is recommended during any project-related ground disturbance. For geologic units with low potential, protection or salvage efforts typically are not required. For geologic units with undetermined potential, field surveys by a qualified paleontologist are usually recommended to specifically determine the paleontologic potential of the rock units present within the study area.

4.0 AFFECTED ENVIRONMENT

The project is located within the City of Los Angeles in Los Angeles County, California. Specifically, the Direct Area of Potential Effects (APE) extends in a northeasterly direction from the intersection of Flower and 7th Streets to the Gold Line Extension project at Alameda Street between 1st and Temple Streets within downtown Los Angeles (Figure 4-1). The project crosses several communities of downtown Los Angeles, including the Bunker Hill, Civic Center, and Little Tokyo communities.

This area is highly urbanized with commercial and public use development. Most of the native vegetation has been removed and replaced by non-native trees and grasses. Elevations range from 250 to 270 feet (76 to 82 meters) above mean sea level. The nearest natural water source includes the now-channelized course of the Los Angeles River, located approximately 0.72 mile (1.1 km) east of the project area.

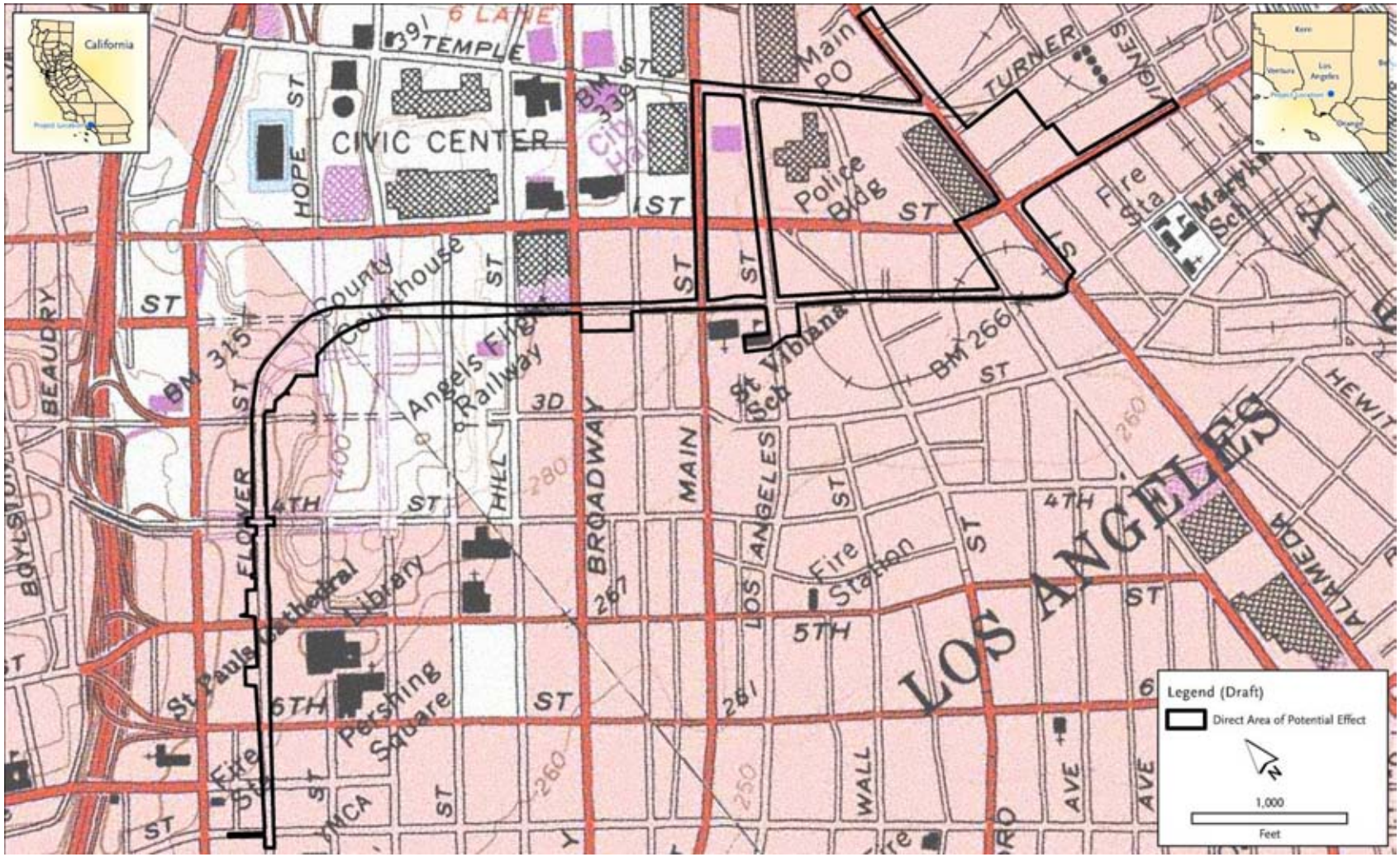
4.1 Resource Assessment Guidelines

For this project, a paleontological collections records search was conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County. A detailed review of museum collections records was performed to identify any known vertebrate fossil localities within at least 1 mile of the proposed project and to identify the geologic units within the project area and vicinity. In addition, the following published geologic maps were consulted:

- Preliminary geologic map of the Hollywood 7.5-minute quadrangle, southern California: a digital database: U.S. Geological Survey, Open-File Report OF-97-431, scale 1:24,000 (Yerkes and Graham 1997)
- Preliminary geologic map of the Los Angeles 7.5-minute quadrangle, southern California: a digital database: U.S. Geological Survey, Open-File Report OF-97-432, scale 1:24,000 (Yerkes and Graham 1997)

4.2 Geologic Setting

The project area is situated in the southwestern block of the Los Angeles basin. The Los Angeles basin is one of many basins making up the Neogene continental borderland of southern California. It extends from the Santa Ana Mountains in the north to the San Joaquin Hills to the south, and includes the southern foothills of the San Gabriel Mountains, the Puente Hills, and the Palos Verdes Hills. The southwestern block is mostly submerged by the Pacific Ocean, but is exposed in the low plain extending from Santa Monica southeast to Long Beach (Yerkes et al. 1965).



Source: USGS

Figure 4-1. Project Area of Potential Effect

The Los Angeles basin is a structural depression that has been the site of discontinuous deposition since the Late Cretaceous and of continuous subsidence and primarily marine deposition since the middle Miocene. This and other sedimentary basins formed during the Miocene and Pliocene as a result of an early San Andreas-type phase of transform motion along the western margin of North America.

At least three cycles of shallow marine transgression and regression created embayments and floodplains along the ancient coastline. During much of the middle Miocene, a northwest-trending marine embayment covered the site of the Los Angeles basin. Rivers that drained the highlands to the north and east transported and deposited huge volumes of coarse-grained sandstone and sandy cobble-boulder conglomerate into the embayment (Yerkes, et al. 1965).

Deposition continued until the end of the Pliocene, at which time the Palos Verdes Hills were an island, and large parts of the Santa Monica Mountains, the Puente Hills, the Santa Ana Mountains, and much of the southwest portions of the basin were exposed. In the early Pleistocene, the Palos Verdes Hills and southwestern areas again subsided and marine deposition resumed (Yerkes, et al. 1965).

4.3 Site-specific Geology

According to geologic mapping and museum collections records, the proposed project is immediately underlain by the following geologic units, from oldest to youngest: (1) Miocene Puente Formation, (2) Pliocene Fernando Formation, (3) Quaternary terrace deposits, and (4) Quaternary alluvium. These geologic units and their paleontological resource sensitivity are discussed in the following sections and depicted on Figure 4-2 and Figure 4-3 (respectively).

4.3.1 Puente Formation

The Puente Formation is middle to late Miocene (14 to 5 million years ago [mya]) in age, and was named in 1907 for its exposures in the Puente Hills (Yerkes 1972). The Puente Formation is isochronous (deposited at the same time) with the Monterey and Modelo Formations but consists of more terrigenous sediments because of the basin's proximity to the continental borderlands. Critelli (1995) suggests that an intrabasinal bathymetric ridge probably separated these formations.

The Puente Formation was deposited during an accumulation of sedimentary strata between 14 and 10 mya (Bjorklund 2002). Around 7 mya, north-south contractions formed the Whittier fault and the Puente Hills anticline. Today, the half-dome shape is reflected in the distribution of four members of the Puente Formation (Yerkes 1972). The oldest member, the La Vida Member, outcrops just north of the Whittier fault zone and forms the core of the half dome. In decreasing age, the Soquel, Yorba, and Sycamore Canyon Members outline this core in concentric half circles. According to Dibblee (1989), the Yorba Member underlies the

project area in the vicinity of the intersection of Flower and 3rd Streets and Hope and 2nd Streets (Figure 4-2).

The Yorba Member of the Puente Formation is as much as 2,950 feet thick and is generally made up of thin-bedded diatomaceous siltstone and mudstone as well as interbedded sandstone (Critelli et al. 1995; Yerkes 1972). Within the study area, the Yorba Member is described as a gray to light-brown silty clayey shale with interbedded fine to coarse-grained sandstone and lenses of diatomaceous shale (Dibblee 1989; Yerkes and Graham 1997b). This deep basin deposit is well known for its abundant and diverse assemblage of fossil fish (Eisentraut and Cooper 2002).

The Puente Formation is known to produce significant paleontological resources, including fossilized remains of sharks, fish, and marine and terrestrial mammals, as well as some of the most complete collections of marine algae and terrestrial flora. It has been assigned a high paleontological resource sensitivity (Eisentraut and Cooper 2002; McLeod 2008) for its proven potential to yield scientifically significant fossil resources.

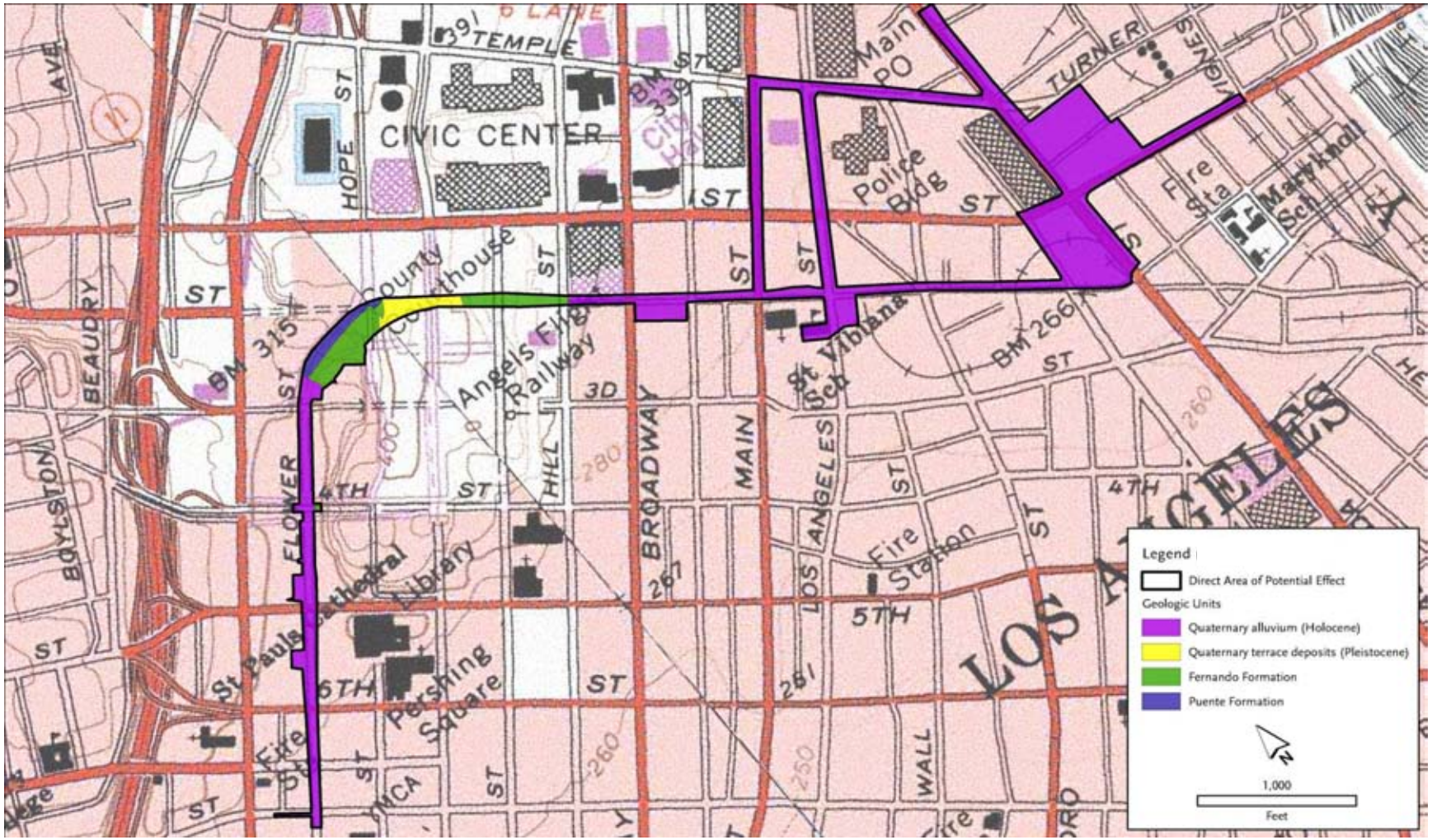
4.3.2 Fernando Formation

The Pliocene (5 to 1.8 mya) age Fernando Formation is present in the eastern Puente Hills and much of the northeastern Los Angeles basin. The formation has been divided into two members, the Pico and the Repetto Members, which are separated by an erosional unconformity.

The Repetto Member (lower member) generally consists of a light grayish-brown to olive-brown siltstone, massive to poorly bedded, and micaceous. Several thin lenticular pebble conglomerate beds are interbedded with the fine-grained strata and form prominent outcrops. The presence of this coarse-grained material within generally fine-grained strata suggests these coarse marginal basin deposits were carried to the deeper basin center by turbidity currents.

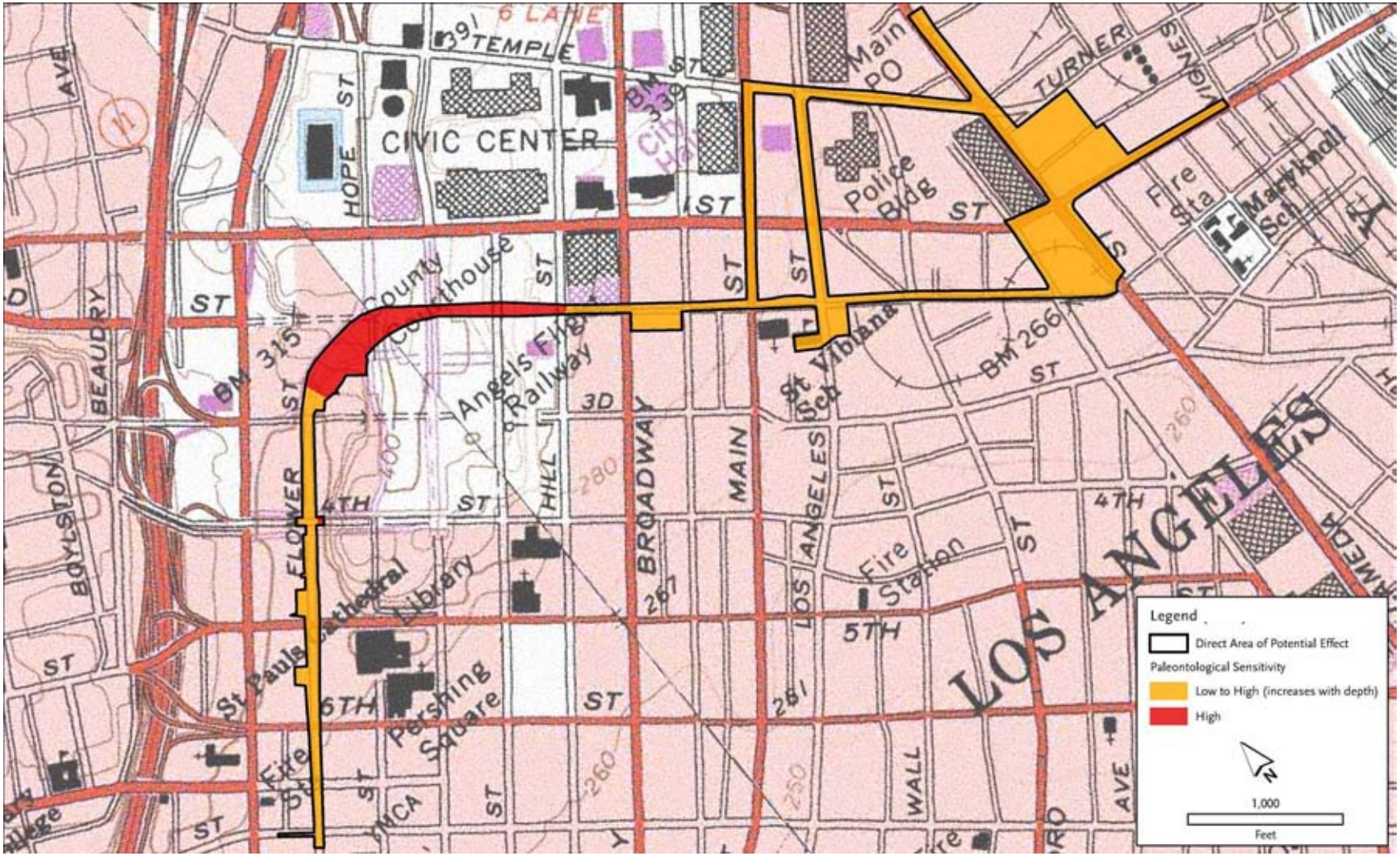
Within the project area, the Repetto Member is described as gray to greenish-gray, partly sandy, and vaguely bedded to massive marine claystone and siltstone (Dibblee 1989, 1991; Yerkes and Graham 1997). It outcrops within the project area in the vicinity of the intersection of Flower and 3rd Streets and Hope and 2nd Streets and, according to museum records, is present immediately beneath Quaternary alluvium along Flower Street (Figure 4-2).

In addition to numerous invertebrate fossils collected from the Fernando Formation, some marine vertebrate material has also been documented, including fossilized specimens of great white shark, dolphin, herring, hake, lanternfish, mackerel, swordfish, flounder, and whale (McLeod 2005). The presence of these fossils within this geologic unit, as well as its proven potential to yield vertebrate remains in the vicinity of the study area, has resulted in the designation of the Fernando Formation as having a high paleontological sensitivity.



Source: USGS

Figure 4-2. Geologic Map



Source: USGS

Figure 4-3. Paleontological Sensitivity Map

4.3.3 Quaternary Terrace Deposits

Older alluvium consists of stream channel or floodplain deposits of Pleistocene (1.8 mya to 10,000 years BP) or early Holocene (10,000 years BP to Recent) age that are no longer part of an active stream channel or its flood banks. Older alluvium in coastal southern California is usually found capping slopes and in areas of higher elevations along ridges and slopes, commonly above modern streambeds in a terrace sequence. These terrace deposits are formed by down-cutting of active stream channels and subsequent abandonment of the old channel/floodplain, resulting in a stair-step sequence of older terraces located above modern stream channels. Older alluvium generally consists of clayey sands and silts, with local concentrations of pebble to cobble conglomerate. Within the project area, Quaternary terrace deposits outcrop in the vicinity of Grand Avenue and 2nd Street (Figure 4-2).

Throughout southern California, older non-marine alluvium and terrace deposits have produced Pleistocene-age fossils from numerous localities. Sixty Pleistocene localities, exclusive of Rancho La Brea, were reviewed by Miller (1971), and many localities have been discovered since then.

Pleistocene taxa from alluvial and terrace deposits include amphibians (toad, frog, newt), reptiles (pond turtle, desert tortoise, fence lizard, alligator lizard, rattlesnake, gopher snake), birds (duck, hawk, burrowing owl, quail, coot, sparrow), and mammals (shrew, ground sloth, jack rabbit, cottontail rabbit, ground squirrel, pocket gopher, pocket mouse, kangaroo rat, deer mouse, mouse, wood rat, vole, muskrat, coyote, dire wolf, weasel, sabertooth cat, mammoth, mastodon, horse, camel, antelope, deer, bison) (Miller 1971). Older alluvium (sediments not part of an active stream channel) can provide important paleoecological data even if it does not contain the remains of extinct organisms. Older alluvium (non-marine terrace deposits) has been assigned a high paleontological resource sensitivity.

4.3.4 Quaternary Alluvium

Quaternary alluvium of Holocene age underlies the majority of the project area, from 7th and Flower Streets north to approximately 3rd and Flower Streets and from the intersection of Hill and 2nd Streets eastward (Figure 4-2). This unit consists of unconsolidated floodplain deposits of clay, silt, sand, and gravel (Dibblee 1989, 1991) that may overlie "older alluvium" of Pleistocene age at depths as shallow as 3 meters (Yerkes and Graham 1997b). Older alluvial sediments may be slightly to moderately consolidated, but are generally only distinguishable through relative dating and stratigraphic position. The Holocene-age alluvial deposits present in the western portion of the project area are estimated to be 1,000 to 10,000 years BP, and the alluvial deposits to the east are less than 1,000 years BP (Yerkes and Graham 1997b).

Holocene-age deposits contain the remains of modern organisms and are generally too young to contain fossils. Fossil localities in older Quaternary alluvium deposits throughout southern

California have yielded terrestrial vertebrates such as mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, horses, camels, and bison. Fossilized invertebrates and plant remains have also been collected from this unit. Younger alluvium is determined to have a low potential for paleontological resources, but is often underlain by older alluvium, which is determined to have a high potential for paleontological resources.

4.4 Museum Records Search Results

Museum collections records maintained by the Natural History Museum of Los Angeles County (LACM) were searched, and 12 previously recorded vertebrate fossil localities were discovered either along the proposed project area or within a 2-mile radius (Table 4-1). These significant vertebrate fossil localities were discovered within the same geologic units that are present within the proposed project area (Table 4-1). These localities yielded fossil specimens of mastodon, mammoth, shark, ray, and fish from Quaternary older alluvium, the Fernando Formation, and the Puente Formation. The depth at which these localities were discovered ranges from 5 to 60 feet below the surface (McLeod 2008).

Table 4-1. Previously Discovered Paleontological Resources In and Around the Direct APE

LACM Locality Number(s) and Approximate Location	Geologic Formation	Age	Taxa
LACM 5845; Western Avenue and Beverly Boulevard	Quaternary alluvium	Pleistocene	*Mammutidae* (fossil mastodon)
LACM 3250; east of Vermont Avenue near Madison Avenue and Middlebury Street	Quaternary alluvium	Pleistocene	*Mammuthus* (fossil mammoth)
LACM 6971; 6th and Flower Streets; LACM 4726; 4th and Hill Streets	Fernando	Pliocene	*Myliobatis* (eagle ray), *Carcharodon carcharias* (white shark), *Isurus oxyrinchus* (bonito shark), *Carcharhinus* (requiem shark), *Semicossyphus* (sheepshead)
LACM 3868; Wilshire Boulevard and Lucas Avenue	Fernando Formation	Pliocene	*Carcharodon sulcidens* (white shark)

Table 4-1. Previously Discovered Paleontological Resources In and Around the Direct APE

LACM Locality Number(s) and Approximate Location	Geologic Formation	Age	Taxa
LACM 5961; 1st and Hill Streets	Puente Formation	Late Miocene	*Cyclothone* (bristlemouth fish)
LACM 6198- 6203; Wilshire Boulevard from intersection of Alvarado Street west to past Vermont Avenue	Puente Formation	Late Miocene	*Osteichthyes* (bony fish), *Cetacea* (whale)

5.0 IMPACTS

Surface fossils may be located, evaluated, and salvaged by paleontologists during a field survey prior to a surface-disturbing action. The project area surface is largely obscured by urbanization and a field survey was not warranted. However, subsurface fossils that are not visible cannot be located and evaluated prior to ground disturbance.

Any estimates of adverse impacts to subsurface fossils can be predicted only by determining the number and types of fossils that occur in the study area, based on projections derived from similar areas. The existence of subsurface fossils can be definitively determined only by monitoring excavations during surface-disturbing actions.

Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing, typically in construction-related excavations. In areas containing paleontologically sensitive geologic units, surface disturbance has the potential to adversely impact an unknown quantity of surface and subsurface fossils. Without mitigation, these fossils, as well as the paleontological data they could provide if properly salvaged and documented, could be adversely impacted (destroyed), rendering them permanently unavailable.

Direct adverse impacts can typically be mitigated to below a level of significance by implementing paleontological mitigation. Mitigation also creates a beneficial effect because it results in the salvage of fossils that may never have been unearthed via natural processes. With mitigation, these newly salvaged fossils become available for scientific research, education, display, and preservation into perpetuity at a public museum.

Indirect adverse impacts typically include those effects that result from continued implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project area. They also occur as the result of constructing new access roads in areas that were previously less accessible. This increases public access and therefore increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. No indirect impacts are expected as the result of this project because the area of potential effect is highly urbanized.

Cumulative impacts on the environment can result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions on the cumulative effects area. They can result from individually minor, but collectively significant, actions taken over a period of time.

The incremental loss of paleontological resources over a period of time as a result of project-related ground disturbance has the potential to result in significant cumulative effects because it could result in destruction of nonrenewable paleontological resources and

irretrievable loss of scientific information. However, when paleontological monitoring and mitigation is implemented prior to and during project construction, fossils are protected and information is obtained. By implementing monitoring and mitigation where feasible, the cumulative effects to paleontological resources resulting from the project would be negligible. Further, any scientifically significant fossils discovered prior to or during ground disturbances related to the proposed project would benefit the scientific community by increasing knowledge associated with the fossils.

5.1 No Build Alternative

5.1.1 Construction Impacts

The No Build Alternative, in which the project area would remain in its existing condition, would not result in construction impacts to paleontological resources because no ground disturbance would occur.

5.1.2 Operational Impacts

The No Build Alternative would not result in operational impacts to paleontological resources.

5.1.3 Cumulative and Indirect Impacts

The No Build Alternative would not result in impacts to paleontological resources. Therefore, the No Build Alternative would not contribute to a cumulative impact on these resources.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Construction Impacts

The TSM Alternative may have the potential to adversely affect paleontological resources within the project area during ground disturbance related to construction of bus stop facilities. These facilities will be constructed every two to three blocks, but their precise locations have not yet been established. Should the facilities be constructed in areas of high sensitivity (See Figure 4-3), any excavations at the surface or at depth will have the potential to impact paleontological resources. Should the facilities be constructed in areas of sensitivity ranging from low to high (See Figure 4-3), any excavations occurring to a depth of 5 feet or greater below the ground surface will have the potential to impact paleontological resources. Implementation of the proper mitigation measures (Section 6.1) would reduce potential adverse impacts to a less than significant level.

5.2.2 Operational Impacts

The TSM Alternative would not result in operational impacts to paleontological resources.

5.2.3 Cumulative and Indirect Impacts

Construction of the TSM Alternative has the potential to directly affect paleontological resources within the project area should excavations related to the construction of new bus stations occur in paleontologically sensitive geologic units. Implementing the proper mitigation measures (Section 6.1) would reduce potential adverse impacts to a less than significant level. Therefore, the TSM Alternative would not contribute to a cumulative impact on these resources.

5.3 At-Grade Emphasis LRT Alternative

5.3.1 Construction Impacts

The At-Grade Emphasis LRT Alternative has the potential to adversely impact paleontological resources at the surface and at depth within the project area as a result of ground disturbance related to construction of new underground tunnel segments between 7th and Hope Streets and at new proposed stations at Flower/6th/5th Street, 2nd/Hope Street, Main/1st Street, and Los Angeles/1st Street. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or greater below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level.

5.3.2 Operational Impacts

The At-Grade Emphasis LRT Alternative would not result in operational impacts to paleontological resources.

5.3.3 Cumulative and Indirect Impacts

The At-Grade Emphasis LRT Alternative has the potential to adversely impact paleontological resources within the project area as a result of ground disturbance related to constructing new underground TBM segments on Flower Street between 7th and Hope Streets and at new stations at Flower/6th/5th Street, 2nd/Hope Street, Main/1st Street, Los Angeles/1st Street. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources.

5.4 Underground Emphasis LRT Alternative

5.4.1 Construction Impacts

The Underground Emphasis LRT Alternative involves ground disturbance and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations related to construction of a new underground

tunnel along most of the alignment; new underground stations at Flower/5th/4th Street, 2nd/Hope Street, 2nd Street station (either at Broadway or at Los Angeles Street); an automobile underpass on Alameda Street between 2nd Street and Temple Street; and a proposed pedestrian bridge at the intersection of Alameda and 1st Streets. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources will not be feasible and are thus unavoidable.

5.4.2 Operational Impacts

The Underground Emphasis LRT Alternative would not result in operational impacts to paleontological resources.

5.4.3 Cumulative and Indirect Impacts

The Underground Emphasis LRT Alternative involves ground disturbance, and therefore has the potential to adversely affect paleontological resources within the project area. This disturbance would result from excavations to construct a new underground tunnel along the alternative's alignment, three new underground stations, an automobile underpass, and a pedestrian bridge. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources. In areas where proper mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may not be avoidable as a result of the Underground Emphasis LRT Alternative.

5.5 Fully Underground LRT Alternative - Little Tokyo Variation 1

5.5.1 Construction Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 1 involves ground disturbance, and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations to construct four new stations and an entirely underground tunnel located from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level. In areas where

new underground TBM segments would be constructed, mitigation for paleontological resources will not be feasible and are thus unavoidable.

5.5.2 Operational Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would not result in operational impacts to paleontological resources.

5.5.3 Cumulative and Indirect Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 1 involves ground disturbance, and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations to construct four new stations and an entirely underground tunnel. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources. In areas where proper mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may not be avoidable as a result of the Fully Underground LRT Alternative- Little Tokyo Variation 1.

5.6 Fully Underground LRT Alternative - Little Tokyo Variation 2

5.6.1 Construction Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 2 involves ground disturbance, and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations to construct four new stations, a two-level junction beneath the 1st and Alameda intersection, and an entirely underground tunnel located from east of the 7th Street/Metro Center Station to the intersection of 1st and Alameda Streets. Any ground disturbances in areas of high sensitivity (See Figure 4-3) will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or greater below the ground surface. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level. In areas where the new underground tunnel will be constructed, mitigation for paleontological resources will not be feasible and are thus unavoidable.

5.6.2 Operational Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would not result in operational impacts to paleontological resources.

5.6.3 Cumulative and Indirect Impacts

The Fully Underground LRT Alternative - Little Tokyo Variation 2 involves ground disturbance and therefore has the potential to adversely impact paleontological resources within the project area. This disturbance would result from excavations to construct new stations, tunnel, and a two-level junction. In areas where proper mitigation measures (Section 6.1) can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources. In areas where proper mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may not be avoidable as a result of the Fully Underground LRT Alternative- Little Tokyo Variation 2.

6.0 POTENTIAL MITIGATION MEASURES

6.1 Construction Impact Mitigation Measures

The following mitigation measures have been developed in accordance with the SVP (1995) standards and guidelines and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

- MM-P-1. A qualified paleontologist would produce a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring would include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor would have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.

- MM-P-2. All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these geologic sediments are determined to have a high paleontological sensitivity (Figure 4-3). Very shallow surficial excavations (less than 5 feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected (Figure 4-3). Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.

- MM-P-3. At each fossil locality, field data forms would be used to record pertinent geologic data, stratigraphic sections would be measured, and appropriate sediment samples would be collected and submitted for analysis.

- MM-P-4. Due to the likelihood of the presence of microfossils, matrix samples would be collected and tested within the Puente Formation and Fernando Formation. Testing for microfossils would consist of screen-washing samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests would result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.

- MM-P-5. Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

- MM-P-6. The paleontologist would prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository.

6.2 Operational Impacts Mitigation Measures

No mitigation is required because operational impacts to paleontological resources are not expected for any of the project alternatives.

7.0 CONCLUSIONS

The potential for direct and indirect effects to paleontological resources is best estimated by the amount of ground disturbance within paleontologically sensitive units associated with a proposed action. Thus, the potential for project-related impacts to paleontological resources increases as the amount of surface disturbance within paleontologically sensitive geologic formations increases.

Construction of the project or alternatives could require substantial excavations in the paleontologically sensitive Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits. Implementing proper mitigation measures, including construction monitoring where feasible, would reduce potential impacts to paleontological resources to below the level of significance. However, tunneling operations cannot be mitigated for paleontological resources because construction monitoring is not feasible. The potential to impact unknown paleontological resources within sensitive geologic units as a result of tunneling would be unpredictable and in essence, unavoidable. Without mitigation, these fossils, as well as the paleontological data they could provide if properly salvaged and documented, could be adversely impacted (destroyed), rendering them permanently unavailable.

7.1 NEPA Findings

The results of this analysis indicate that the geologic units underlying the project area are paleontologically sensitive and that construction of each of the build alternatives has the potential to impact previously undiscovered (buried) paleontological resources. By implementing the mitigation measures identified in Section 6.0, the potential direct and cumulative effects to paleontological resources resulting from the TSM Alternative, the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, the Fully Underground LRT Alternative – Little Tokyo Variation 1, or the Fully Underground LRT Alternative - Little Tokyo Variation 2 would be negligible.

Furthermore, scientifically significant fossils discovered prior to or during ground disturbances related to the project would benefit the scientific community by increasing knowledge associated with the fossils. No cumulative effects would result from the No Build Alternative because no ground disturbance would occur.

7.2 CEQA Determinations

The CEQA threshold of significance for a significant impact to paleontological resources is reached when a project is determined to "directly or indirectly destroy a significant paleontological resource or unique geologic feature." In general, for project areas that are underlain by paleontologically sensitive geologic units, the greater the amount of ground disturbance, the higher the potential for significant impacts to paleontological resources.

By implementing the mitigation measures identified in Section 6.0, potential construction impacts to paleontological resources resulting from the TSM Alternative, the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative, and the Fully Underground LRT Alternative – Little Tokyo Variation 1, the Fully Underground LRT Alternative – Little Tokyo Variation 2 could be reduced to below the level of significance with the exception of areas where tunneling operations cannot be mitigated for paleontological resources. Should construction monitoring not be feasible, as would be the case during any tunneling activities, then the potential to impact unknown paleontological resources within sensitive geologic units would be unavoidable. Considering the CEQA threshold of significance with regard to paleontological resources, unavoidable impacts could occur should potentially unknown fossil resources be destroyed as a result of tunneling activities. Accordingly, a CEQA statement of overriding considerations with respect to paleontological resources would be necessary should the Underground Emphasis LRT Alternative, Fully Underground LRT- Little Tokyo Variation 1, or Fully Underground LRT – Little Tokyo Variation 2 be selected. No significant impacts would result in the No Build Alternative because no ground disturbance would occur.

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